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Witness: Michael W. Foster

**SOUTHERN CALIFORNIA GAS COMPANY
ADVANCED METERING INFRASTRUCTURE**

CHAPTER VII

**SOCALGAS AMI BUSINESS CASE MODELING METHODOLOGY AND
REVENUE REQUIREMENT**

Errata to

**Prepared Direct Testimony
of
Michael W. Foster**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

March 6, 2009

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I. PURPOSE AND SUMMARY

The purpose of my testimony is to describe the revenue requirement calculations based on the estimated Advanced Metering Infrastructure (“AMI”) incremental costs and benefits presented in Southern California Gas Company’s (“SoCalGas”) AMI proposal. Specifically, this testimony describes the development of the following cost-benefit analyses of SoCalGas’ AMI project over the 26-year analysis period, 2009-2034: NPV of AMI revenue requirements. The NPV results are identified for both the Hybrid and Stand Alone AMI scenarios, as described in the testimony of SoCalGas witness Mr. Edward Fong (Chapter II). My testimony also identifies the forecasted monthly and annual AMI revenue requirements proposed for recovery over the deployment period, 2009-2015, based on adoption of the Stand Alone AMI scenario, as proposed by SoCalGas (See testimony of SoCalGas witness Mr. Fong, Chapter II). Table VII-1 shows a summary of the present value of revenue requirement analysis indicating an incremental benefit to ratepayers of \$19.0 ~~\$13.2~~ million. Table VII-1 below provides a summary of the net benefits resulting from implementation of AMI compared to the status quo. The economic comparison results in a ratio of approximately 85.0% ~~84.5%~~ of operational benefits to costs. This percentage of benefits is higher than any other AMI business case approved by the California Public Utilities Commission (“Commission” or “CPUC”). Once other non-operational benefits are considered, investing in AMI provides overall benefits to SoCalGas’ ratepayers.

Table VII-1
Present Value of 26 year Revenue
Requirements and Other Rate Payer Benefits
SoCalGas Standalone Scenario
(\$ millions) 2008\$ - Costs (Benefits)

(\$ millions), 2003\$	(\$ millions)
Costs	\$ 1,039.6
Operational Benefits	\$ (883.3)
Operational Benefits as Percent of Costs	85.0%
Other Rate Payer Benefits	\$ (175.3)
Net Rate Payer Benefits	\$ (19.0)

Replaced entire Table VII-1

1 Section II of my testimony describes the costs and benefits included in the analyses, with
2 the aggregate level of costs and benefits, presented in Table II-7 (testimony of Mr. Fong, Chapter
3 II). Section III describes the revenue requirement analyses, which evaluates the merits of the
4 business case from the ratepayers' perspective. The first revenue requirement analysis provides
5 the NPV of the AMI revenue requirements over the 26-year analysis period, 2009-2034, with the
6 results presented in Attachment MF-3. The second revenue requirement analysis provides the
7 forecasted monthly and annual revenue requirements over the deployment period, 2009-2015,
8 and is proposed as the basis for recovery until SoCalGas' next general rate case ("GRC") after
9 AMI deployment has been completed. The forecasted monthly and annual revenue requirements
10 are presented in Attachment MF-4.

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12 **II. DESCRIPTION OF INCREMENTAL AMI COSTS AND BENEFITS**

13 **A. Summary**

14 The forecasted AMI revenue requirements identified in Attachments MF-3 and MF-4
15 include the incremental costs and benefits presented in the testimony of SoCalGas witnesses Mr.
16 Mark Serrano (Chapter III), Mr. Christopher Olmsted (Chapter IV), and Mr. J.C. Martin
17 (Chapter VI). The incremental capital and operating & maintenance ("O&M") costs and benefits
18 were adjusted to include applicable overhead rates, escalation rates and sales taxes. In addition,
19 the revenue requirements include "other benefits" that are not part of the revenue requirements
20 for rate making purposes but are included when evaluating the economic value of the SoCalGas
21 AMI investment. Table VII-2 shows that benefits exceed costs on a nominal basis by **\$1.892**
22 **\$1.727** billion.

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Table VII-2
Undiscounted Cash Flow
Fully loaded and Escalated, Including Sales Tax
SoCalGas Stand Alone Scenario
(\$ millions) - Costs (Benefits)

		IT Development		Gas Module and Meter Installation Years					Post Deployment
	Total	2009	2010	2011	2012	2013	2014	2015	2015-2034
Costs - Capital	1,142.0	22.2	60.4	143.0	169.7	175.1	176.3	154.2	241.1
Costs - O&M	700.8	3.2	4.0	25.2	30.7	35.5	39.5	39.9	522.6
Total Costs	1,842.8	25.5	64.4	168.2	200.5	210.6	215.8	194.1	763.7
Benefits - O&M	(2,789.0)	(2.2)	(2.3)	(6.7)	(19.5)	(35.6)	(52.6)	(69.2)	(2,600.8)
Benefits - Capital	(366.0)	-	-	(4.1)	(9.5)	(16.1)	(11.3)	(10.0)	(315.0)
Total Benefits	(3,155.0)	(2.2)	(2.3)	(10.8)	(29.0)	(51.7)	(63.9)	(79.2)	(2,915.8)
Other Ratepayer Benefits	(579.3)	-	-	(1.7)	(5.3)	(9.1)	(12.5)	(16.5)	(534.1)
Net Costs (Benefits)	(1,891.5)	23.2	62.1	155.7	166.1	149.8	139.4	98.4	(2,686.2)

Replaced entire Table VII-2

B. Direct Capital Costs and Benefits

This section describes the incremental capital costs and benefits included in the discounted cash flows and revenue requirements. The incremental capital costs and benefits, including the SoCalGas witnesses that filed testimony sponsoring the particular cost or benefit element are identified in Table II-7 (Testimony of Mr. Fong, Chapter II). The major capital costs including the witnesses that address the costs are as follows: (a) Information Technology (IT) systems development and implementation costs (SoCalGas witness Mr. Olmsted); (b) AMI network costs (SoCalGas witness Mr. Olmsted); and (c) AMI gas meter and module costs, including installation costs (SoCalGas witness Mr. Serrano).

The major capital benefits including the witnesses that address the benefits are as follows: (a) avoided replacement costs and inventory of existing gas meters (SoCalGas witness Mr. Serrano); (b) customer billing services savings (SoCalGas witness Mr. Serrano); (c) avoided meter reading IT expense (SoCalGas witness Mr. Serrano); and (d) avoided meter reading equipment and equipment maintenance costs (SoCalGas witness Mr. Serrano).

1 **C. Direct Operating and Maintenance (O&M) Costs and Benefits**

2 This section describes the incremental O&M costs and benefits included in the
3 discounted cash flows and revenue requirements. The incremental O&M costs and benefits are
4 identified in Table VII-3 below. These O&M costs and benefits comprise numerous elements
5 primarily associated with the following areas and addressed by the following witnesses: (a)
6 meter reading, billing, and customer service field costs and benefits (SoCalGas witness Mr.
7 Serrano); (b) IT and application development and integration and AMI network costs (SoCalGas
8 witness Mr. Olmsted); and (c) customer research, education and information costs (SoCalGas
9 witness Mr. Martin).

10 **Table VII-3**
11 **Undiscounted Cash Flow**
12 **Direct, Unloaded and Unescalated Costs and Benefits**
13 **SoCalGas Stand Alone Scenario**
14 **(\\$ millions) 2008\$ - Costs (Benefits)**

Unloaded, unescalated	Total	IT Development		Gas Module and Meter Installation Years					Post Deployment
		2009	2010	2011	2012	2013	2014	2015	
Costs - Capital	930.3	18.3	48.9	120.0	141.1	144.3	144.2	124.8	188.6
Costs - O&M	392.5	2.8	3.5	19.0	22.6	25.5	27.8	27.3	264.0
Total Costs	1,322.8	21.2	52.4	139.0	163.7	169.9	171.9	152.1	452.7
Benefits - O&M	(1,201.3)	(1.4)	(1.4)	(4.4)	(13.0)	(23.3)	(33.8)	(43.5)	(1,080.6)
Benefits - Capital	(270.1)	-	-	(3.7)	(8.5)	(14.0)	(9.7)	(8.5)	(225.7)
Total Benefits	(1,471.3)	(1.4)	(1.4)	(8.1)	(21.5)	(37.2)	(43.6)	(51.9)	(1,306.2)

17 Replaced entire Table VII-3

18 **D. Adjustments to Direct Costs**

19 Direct costs and benefits provided by each witness do not reflect the entirety of the cost
20 or benefit to the company. Direct costs reflect 2008 prices and do not include allocated overhead
21 or sales tax. AMI direct costs and benefits are adjusted to include appropriate overhead rates,
22 escalation factors, and sales tax, where applicable. The methodology used to adjust direct costs
23 is consistent with the San Diego Gas & Electric Company (“SDG&E”) AMI business case
24 evaluation, and is described below. Table VII-4 below shows the results of each adjustment.
25 The revenue requirements and rate impacts are based on the fully adjusted costs and benefits,
26 including overheads, escalation and sales tax.

Table VII-4
Undiscounted Cash Flow
Adjustments to Direct Costs and Benefits - Loaders, Escalation, Sales Tax
SoCalGas Stand Alone Scenario
(\\$ millions) 2008\$ - Costs (Benefits)

		IT Development		Gas Module and Meter Installation Years					Post Deployment	
		Total	2009	2010	2011	2012	2013	2014	2015	2015-2034
Unloaded, Unescalated										
Costs - Capital		930.3	18.3	48.9	120.0	141.1	144.3	144.2	124.8	188.6
Costs - O&M		392.5	2.8	3.5	19.0	22.6	25.5	27.8	27.3	264.0
Total Costs		1,322.8	21.2	52.4	139.0	163.7	169.9	171.9	152.1	452.7
Benefits - O&M		(1,201.3)	(1.4)	(1.4)	(4.4)	(13.0)	(23.3)	(33.8)	(43.5)	(1,080.6)
Benefits - Capital		(270.1)	-	-	(3.7)	(8.5)	(14.0)	(9.7)	(8.5)	(225.7)
Total Benefits		(1,471.3)	(1.4)	(1.4)	(8.1)	(21.5)	(37.2)	(43.6)	(51.9)	(1,306.2)
Loaded, Unescalated										
Costs - Capital		1,014.6	21.5	56.6	130.3	153.4	156.8	156.7	135.4	204.0
Costs - O&M		493.5	3.1	3.9	23.5	28.0	31.6	34.4	34.0	334.9
Total Costs		1,508.1	24.6	60.5	153.9	181.4	188.4	191.1	169.4	538.9
Benefits - O&M		(1,717.8)	(2.2)	(2.2)	(6.3)	(17.7)	(31.4)	(45.3)	(58.2)	(1,554.5)
Benefits - Capital		(287.9)	-	-	(3.7)	(8.5)	(14.3)	(9.7)	(8.5)	(243.2)
Total Benefits		(2,005.7)	(2.2)	(2.2)	(10.0)	(26.2)	(45.7)	(55.1)	(66.7)	(1,797.7)
Loaded, Escalated										
Costs - Capital		1,080.2	22.0	58.8	135.5	160.9	166.0	167.1	145.8	224.0
Costs - O&M		687.7	3.2	4.0	25.1	30.5	35.2	39.2	39.5	511.0
Total Costs		1,767.9	25.2	62.8	160.5	191.4	201.2	206.3	185.4	735.0
Benefits - O&M		(2,536.3)	(2.2)	(2.3)	(6.7)	(19.5)	(35.6)	(52.6)	(69.2)	(2,348.1)
Benefits - Capital		(347.0)	-	-	(4.1)	(9.5)	(15.7)	(11.3)	(10.0)	(296.4)
Total Benefits		(2,883.3)	(2.2)	(2.3)	(10.8)	(29.0)	(51.3)	(63.9)	(79.2)	(2,644.5)
Loaded, Escalated, Sales Tax*										
Costs - Capital		1,142.0	22.2	60.4	143.0	169.7	175.1	176.3	154.2	241.1
Costs - O&M		700.8	3.2	4.0	25.2	30.7	35.5	39.5	39.9	522.6
Total Costs		1,842.8	25.5	64.4	168.2	200.5	210.6	215.8	194.1	763.7
Benefits - O&M		(2,539.1)	(2.2)	(2.3)	(6.7)	(19.5)	(35.6)	(52.6)	(69.2)	(2,350.9)
Benefits - Capital		(366.0)	-	-	(4.1)	(9.5)	(16.1)	(11.3)	(10.0)	(315.0)
Total Benefits		(2,905.1)	(2.2)	(2.3)	(10.8)	(29.0)	(51.7)	(63.9)	(79.2)	(2,665.9)

* The revenue requirement evaluation is based on the figures including loading, escalation and sales tax.

Replaced entire Table VII-4

1. Overhead Rates

Applicable overhead rates are applied to both AMI capital and O&M costs and benefits.

Overhead rates are applied to each direct cost and benefit input, according to its classification as union or non-union labor, contract labor, meter reading part time labor, purchased services, warehoused materials, non-warehoused materials, and capital.

Overhead rates were estimated using 2007 actuals. Only overheads that are considered incremental to AMI are included, for example, overheads associated with incremental labor,

1 additional warehousing requirements and incremental contract administration costs. Table VII-5
2 below shows overhead rates that were applied in this case. Attachment MF-1 provides detailed
3 calculations of the overhead rate values.

Table VII-5
SoCalGas AMI Overhead Loaders

<u>Overhead Category</u>	<u>Percentage</u>	<u>Loading Base</u>
Payroll Taxes	7.79%	Direct Labor
Vacation and Sick Time	17.98%	Direct Labor
Pension and Benefits (non-balanced only)	17.15%	Direct Labor
Pension and Benefits - Part Time	3.28%	Direct Labor
Workers' Compensation	4.47%	Direct Labor
Public Liability / Property Damage	3.16%	Direct Labor
Non-Union Incentive Compensation Plan	18.29%	Non-Union Direct Labor
Purchased Services and Materials	1.85%	Contract Labor, Services and Purchased Materials
Administrative and General	5.24%	Capital Company Labor and Contract Costs
Warehousing	7.16%	Warehousing

2. Escalation Factors

12 Loaded constant-dollar values of AMI incremental costs and benefits are escalated for
13 inflation using the following escalation factors for years 2009-2034. Table VII-6 shows the
14 range of escalation rates applied to each cost or benefit type. Attachment MF-2 provides annual
15 escalation rates and escalation factors for each cost or benefit type.

Table VII-6
SoCalGas AMI Escalation Factors

<u>Cost/Benefit Category</u>	<u>Escalation Factor</u>	<u>Range of Annual % Change</u>
Capital – Gas Utility	Gas Distribution Plant	1.8 – 3.9%
Construction, Distribution	Construction	
O&M – Labor	Gas Utility Labor O&M	2.4 – 2.6%
O&M – Non-labor	Gas Utility O&M non-labor	2.3 – 3.6%

25 Certain costs such as AMI modules are not escalated. This is because the nominal costs
26 of silicon based AMI technologies are expected to decline enough over time to maintain their

1 current real price level. Historically, similar technology prices have decreased over time in real
2 dollars, and SoCalGas expects efficiency improvements in producing the AMI modules to result
3 in a similar trend.

4 Factors shown above are from escalation indices published in Global Insight's 1st Quarter
5 2008 Utility Cost Forecast.

3. Sales Taxes

Sales taxes of 8.25 ~~7.75~~ percent are applied to purchased materials and services. SoCalGas witnesses Mr. Serrano and Mr. Olmsted identify the costs which require the application of sales taxes.

F Other Benefits

13 SoCalGas' AMI provides "other benefits" that, while ancillary to revenue, need to be
14 considered when determining the economic value of the AMI project. These "other benefits"
15 include reductions in gas theft, gas conservation impacts, reductions in carbon dioxide gas
16 emissions, and the terminal value of gas meter modules that have useful lives beyond the 26-year
17 analysis period (i.e., 2034). The testimony of SoCalGas witness Mr. Serrano addresses the
18 benefits from reduced gas theft due to AMI. The testimony of SoCalGas witness Mr. Martin
19 addresses benefits from gas conservation and reduced carbon dioxide gas emissions due to AMI

The benefits from reduced gas theft, conservation and reduced carbon dioxide gas emissions are not part of the revenue requirements that need to be recovered from ratepayers. However, these benefits are included as “other benefits” in the NPV calculations for determining the economic value of the SoCalGas AMI project since these are benefits to ratepayers and/or society in general. Gas theft reductions and increased conservation both have beneficial impacts on customer bills. Reduced carbon dioxide gas emissions do not directly impact customer bills, but they are considered a benefit to society as a whole.

Table VII-7
Undiscounted Cash Flow
Other Benefits
SoCalGas Stand Alone Scenario
(\\$ millions) - Costs (Benefits)

		IT Development							Gas Module and Meter Installation Years		Post Deployment
		2009	2010	2011	2012	2013	2014	2015	2015-2034		
Reduced Gas Theft	Total	(3.6)	-	-	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(3.2)	
	Gas Conservation Benefits	(575.7)	-	-	(1.7)	(5.3)	(9.0)	(12.4)	(16.4)	(530.9)	
	Terminal Value	(249.9)	-	-	-	-	-	-	-	(249.9)	
Total Other Ratepayer Benefits		(829.2)	-	-	(1.7)	(5.3)	(9.1)	(12.5)	(16.5)	(784.0)	
CO2 Reduction Benefits		(29.2)	-	-	(0.1)	(0.4)	(0.6)	(0.9)	(1.2)	(26.0)	
Total Other Societal Benefits		(858.4)	-	-	(1.8)	(5.7)	(9.7)	(13.4)	(17.7)	(810.1)	

Replaced entire Table VII-7

In addition, the terminal value of AMI gas meter modules installed after 2015 is also included as “other benefits” in the NPV calculations. Although the last AMI gas meter module installed during the AMI deployment period is in 2015, additional gas modules will need to be deployed after 2015 to meet customer growth and meter module failures during the analysis period, as addressed in the testimony of SoCalGas witness Mr. Serrano. Since AMI meter modules deployed for growth and meter failure in years 2016-2034 will have remaining value beyond the 26-year analysis period (beyond 2034) based on the 20-year useful life of gas modules, the NPV calculations should include the remaining value or terminal value of the modules installed after year 2015. Meter deployments for customer growth and meter failure are assumed to cease in 2034. Meter populations are assumed to decline beginning in 2030, as the first meters deployed in 2009 are assumed to come to the end of their useful life. Meter populations decline to zero in 2054

The terminal value is the stream of annual benefits per gas meter module, based on the declining meter population, discounted back to 2034 dollars. The benefits beyond 2034 are calculated by multiplying the estimated remaining meter population in each year by the estimated net benefit per meter. The average net benefit per meter module is a conservative estimate of these benefits based on the 5-year historical average of net benefits per meter from 2026-2030, with 2030 used as the end point of the average since it reflects the peak in AMI meter modules installed under the 26-year analysis period.

The “other benefits” identified above are included in the revenue requirements presented

1 in Attachment MF-3.

2 **III. REVENUE REQUIREMENTS**

3 Forecasted AMI revenue requirements represent the incremental monthly and annual
4 revenue required to recover the incremental AMI costs and benefits. The revenue requirement
5 evaluation assumes all capital is recovered through depreciation over its book life, and assumes
6 that O&M is recovered in the period it is spent. In addition to the actual expenditure amounts,
7 the revenue requirement includes all other expenses required to support the capital investment,
8 including authorized return on investment, income and property taxes, allowance for funds used
9 during construction (“AFUDC”) and working cash associated with O&M.

10 For rate impact analysis over the pre-deployment and deployment period (2009-2015)
11 monthly revenue requirement methodology is used. For business case evaluation from the
12 ratepayers’ perspective over the entire 26 year analysis period, the annual revenue requirement
13 methodology is used. A summary of the results of the annual revenue requirement evaluation is
14 presented in Table VII-8 and VII-9. Table VII-8 shows the undiscounted revenue requirement
15 over the 26 year analysis period, and Table VII-9 shows the discounted or present value of
16 revenue requirements. The summary shows that with a total present value of ratepayer benefit of
17 \$19.0 \$13.2 million, and a societal benefit of \$27.3 \$21.5 million, the SoCalGas proposed AMI
18 project is expected to create value for ratepayers. The societal benefit includes all ratepayer
19 benefits, plus estimated benefits associated with reduced carbon dioxide gas emissions.

20
21 **Table VII-8**
Undiscounted Annual Revenue Requirements
SoCalGas Stand Alone Scenario
(\$ millions) 2008\$ - Costs (Benefits)

	Total	IT Development		Gas Module and Meter Installation Years					Post Deployment
		2009	2010	2011	2012	2013	2014	2015	
Undiscounted Revenue Requirement									
Costs	3,006.6	(7.4)	(10.5)	87.9	117.5	149.3	181.5	203.2	2,285.1
Operating Benefits (111% of Costs)	(3,338.3)	(2.3)	(2.3)	(7.4)	(21.7)	(41.0)	(59.8)	(77.8)	(3,126.0)
Terminal Value	(249.9)	-	-	-	-	-	-	-	(249.9)
Conservation Benefits	(575.7)	-	-	(1.7)	(5.3)	(9.0)	(12.4)	(16.4)	(530.9)
Reduced Losses (theft)	(3.6)	-	-	(0.0)	(0.0)	(0.1)	(0.1)	(0.1)	(3.2)
Revenue Requirement & Other Rate Payer Costs (Benefits)									
	(1,160.9)	(9.7)	(12.8)	78.8	90.5	99.2	109.3	108.8	(1,624.9)
Societal Benefits									
Reduced Emissions	(29.2)	-	-	(0.1)	(0.4)	(0.6)	(0.9)	(1.2)	(26.0)
Societal Costs (Benefits)									
	(1,190.1)	(9.7)	(12.8)	78.7	90.2	98.5	108.3	107.6	(1,650.9)

Table VII-9
Present Value of Annual Revenue Requirements
SoCalGas Stand Alone Scenario
(\$ millions) 2008\$ - Costs (Benefits)

	IT Development		Gas Module and Meter Installation Years						Post Deployment
	Total	2009	2010	2011	2012	2013	2014	2015	2016-2034
Present Value Revenue Requirement									
Costs	1,039.6	(6.3)	(8.2)	63.0	77.5	90.6	101.4	104.4	617.1
Operating Benefits (85% of Costs)	(883.3)	(1.9)	(1.8)	(5.3)	(14.3)	(24.9)	(33.4)	(40.0)	(761.7)
Terminal Value	(26.4)	-	-	-	-	-	-	-	(26.4)
Conservation Benefits	(148.0)	-	-	(1.2)	(3.5)	(5.5)	(6.9)	(8.4)	(122.4)
Reduced Losses (theft)	(1.0)	-	-	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	(0.8)
NPV Revenue Requirement & Other Rate Payer Costs (Benefits)	(19.0)	(8.2)	(10.0)	56.5	59.7	60.2	61.0	55.9	(294.2)
PV Societal Benefits									
Reduced Emissions	(8.3)	-	-	(0.1)	(0.2)	(0.4)	(0.5)	(0.6)	(6.5)
NPV Societal Costs (Benefits)	(27.3)	(8.2)	(10.0)	56.4	59.5	59.8	60.5	55.3	(300.6)

Replaced entire Tables VII-8 and VII-9

In the following two sections, I provide a detailed description of the components of the AMI revenue requirements and appropriate period of the analysis for both the economic comparison, which is based on a 26-year period 2009-2034, and the revenue requirement recovery period during the 6-year deployment from 2009-2015. As per the testimony of Ms. Allison Smith (Chapter VIII), gas transportation rates will be adjusted annually until SoCalGas' next general rate case after SoCalGas' AMI deployment has been completed.

A. Revenue Requirement Components

The various components of the SoCalGas AMI revenue requirements are derived using methodologies consistent with the methodologies employed in SDG&E's AMI business case. They are discussed in more detail below:

1. Net O&M Costs

Net O&M costs reflect the sum of AMI O&M costs minus benefits. The net O&M costs used in the calculation of the AMI revenue requirements were described in Section II and presented in Attachments MF-3 and MF-4.

2. Return on Rate Base

Return on Rate Base reflects the cost of capital SoCalGas incurs to finance the AMI investment. Net rate base used in the calculation reflects the sum of all AMI capital costs minus AMI capital benefits, and is used in the calculation of the return on rate base. The average net rate base used in the calculation of the AMI revenue requirements is presented in Attachment MF-3. The return on rate base is calculated by multiplying SoCalGas' authorized weighted average cost of capital of 8.68 percent by the AMI average net rate base for each year.

Table VII-10

	<u>Capital Ratio</u> (%)	<u>Cost</u>	<u>Authorized</u> <u>Weighted Cost</u>
Long Term Debt	45.61%	6.96%	3.17%
Preferred Equity	6.39%	4.83%	0.31%
Common equity	48.00%	10.82%	5.19%
			8.68%

3. Depreciation

Depreciation expense reflects the charge that SoCalGas takes each year to allow for recovery of the AMI investment over its book life. Depreciation expense is calculated by multiplying the weighted average plant in service for each asset type by the depreciation rate for that asset type.

The proposed depreciation uses the straight-line remaining life depreciation method consistent with Standard Practice U-4, Determination of Straight-Line Remaining Life Depreciation Accruals. The CPUC issued this standard practice in 1961 as a guide for determining proper depreciation accruals.

1 SoCalGas proposes depreciable lives of 5 years for IT assets, 15 years for communication
2 equipment, 20 years for AMI gas modules, and 31 years for gas meters. As stated in the
3 testimony of SoCalGas witness Mr. Serrano (Chapter III), gas modules are estimated to have a
4 useful life of 20 years, based on vendor provided estimates. The resulting depreciation rates
5 equal 20 percent for IT assets, 6.67 percent for communication equipment, 5 percent for gas
6 modules, and 3.23 percent for gas meters.

7

8 **4. Taxes**

9 Tax expenses include property taxes and income taxes.

10 (a) Property Taxes

11 The forecasted property tax expenses for AMI assets are calculated by multiplying the
12 projected assessed annual value of the assets as of the given year by the estimated tax rate of
13 ~~1.210~~ 1.198 percent.

14 The assessed value is based on a Historical Cost Less Depreciation (HCLD) indicator of
15 value, which is the primary value indicator for rate base regulated utility property. HCLD is the
16 estimated cost of property that is subject to assessment by the State Board of Equalization (SBE)
17 less depreciation on this property. The deferred federal income tax reserve related to taxable
18 property further reduces the HCLD indicator.

19 (b) Income Taxes

20 This section provides SoCalGas' estimate of income taxes that will be incurred due to
21 AMI investments, and discusses the assumptions and methodology used to make the income tax
22 estimates.

23 California Corporation Franchise Tax (CCFT) and federal income tax expense are
24 estimated based on net operating income before income taxes. The estimated federal and state
25 income tax expenses are identified in the forecasted AMI revenue requirements provided in
26 Attachments MF-3 (annual) and MF-4 (monthly).

27

28

1 Current tax law has been utilized to compute income taxes for AMI investments. Federal
2 income tax expense, including deferred income tax, is calculated by multiplying the currently
3 effective corporate federal income tax rate of 35 percent by applicable federal taxable income.
4 Similarly, state income tax expense is calculated by multiplying the statutory rate of 8.84 percent
5 of state taxable income.

Following established Commission policy, federal income taxes are computed on a normalized basis. Deferred federal income taxes are calculated as the difference between book depreciation and federal tax depreciation times the federal tax rate. The Accumulated Deferred Federal Income Tax Reserve is included as a credit in rate base. State income taxes are calculated on a flow through basis.

For AMI federal tax depreciation is calculated in accordance with the Tax Reform Act of 1986, as amended. State tax depreciation is based on the Asset Depreciation Range system specified by California Law.

5. Working Cash

The revenue requirements include a Working Cash requirement. The Working Cash requirement is computed by multiplying total estimated annual O&M expenses (excluding depreciation and fuel costs) by one-eighth. The resulting amount represents 45 days of O&M expenses. This method, which is accepted by the Federal Energy Regulatory Commission (“FERC”), is used for this filing because a traditional working cash study based on historical data related to AMI operations is not available.

6. Allowance for Funds Used During Construction (AFUDC)

The revenue requirements include projected AFUDC which is the financing costs of AMI related IT capital projects that are in Construction Work in Progress (“CWIP”). AFUDC has been applied using SoCalGas’ currently authorized CPUC ROR of 8.68 percent based. AFUDC is applied until such time as the project is completed and transferred into service at which time

1 AFUDC is no longer applied since the capital project then earns SoCalGas' authorized return on
2 rate base.

3

4 **7. Franchise Fees and Uncollectable (FF&U)**

5 Franchise Fees and Uncollectable ("FF&U") is the revenue requirement needed to pay
6 required franchise fees on gas sales and to recover estimated uncollectible expenses. The FF&U
7 factor used in calculating the proposed revenue requirement for rate impact analysis and
8 recovery during the deployment period is 1.7258%. This rate was adopted in D.08-07-046,
9 SoCalGas' general rate case.

10

11 **B. AMI Revenue Requirements over Analysis Period, 2009-2034**

12 The value of SoCalGas' AMI project from the ratepayer perspective is evaluated by
13 calculating the NPV of the annual AMI revenue requirements over the 26-year analysis period,
14 2009-2034, expressed in 2008 dollars. As described in Section III the 26-year analysis period is
15 used for the NPV calculation since 26 years covers the AMI deployment period (2009-2015) and
16 the full 20-year useful life of the gas meter modules installed in the last year of deployment
17 (2015). Also, the NPV of the revenue requirements was calculated with and without the gas
18 theft, gas conservation impacts, and reductions in carbon dioxide gas emissions since these
19 "other benefits" are not part of the revenue requirement but are benefits of the AMI investment.

20 Attachment MF-3 presents the NPV calculation of the AMI revenue requirements from
21 the ratepayers' over the analysis period (2009-2034), expressed in 2008 dollars, under
22 implementation of both the Hybrid and Stand Alone AMI systems.

23

24 **C. Monthly AMI Revenue Requirements over Deployment Period, 2009-2015**

25 The forecasted monthly AMI revenue requirements proposed for recovery during the
26 AMI deployment period of (2009-2015), expressed in nominal dollars, based on adoption of the
27

1 proposed Stand Alone AMI scenario, are presented in Attachment MF-4. An annual summary of
2 those results are presented below in Table VII-11.

The resulting average benefits of \$1,0304 \$1,0118 per AMI gas meter installed is presented in Attachment MF-5. This is based on the monthly meter/module deployment schedule discussed by SoCalGas Witness Mr. Serrano (chapter III). This was derived by dividing the estimated revenue requirement associated with deployment period benefits by the total number of months new meters/modules are in service on an aggregate basis.

For rate impact analysis, the monthly revenue requirement is used to determine rate impacts for the pre-deployment and deployment period (2009-2015), and the annual revenue requirements are used to determine rate impacts for the post deployment period.

Table VII-11
Annual Summary of Monthly Revenue Requirement - 2009-2015
All Deployment Costs & Operational Benefits
SoCalGas Stand Alone Scenario
(\\$ millions) - Costs (Benefits)

	Deployment Period Total	Deployment Period						
		2009	2010	2011	2012	2013	2014	2015
Costs	658.6	(7.9)	(11.1)	76.5	104.1	137.9	168.3	190.8
Operating Benefits	(212.2)	(2.3)	(2.4)	(7.2)	(21.4)	(40.2)	(60.1)	(78.5)
Net Revenue Requirement	446.4	(10.2)	(13.5)	69.2	82.8	97.7	108.3	112.2

Replaced entire Table VII-11

1

2 **IV. WITNESS QUALIFICATIONS**

3 My name is Michael W. Foster. My business address is 8326 Century Park Court, San
4 Diego, California 92123-1530. I am employed as a principal analyst in the Regulatory Case
5 Financial area of the Finance department of SDG&E. I have worked for SDG&E since
6 December 2001. In my current capacity, I am responsible for providing financial analysis of
7 various utility projects and initiatives. In addition, I provide regulatory financial support and
8 have been extensively involved in regulatory proceedings such as SDG&E's phase I and phase II
9 cost of capital proceedings, the Sunrise Powerlink Phase II proceeding, and the SDG&E AMI
10 proceeding. I am also responsible for updating the utilities' project evaluation guide and toolkit,
11 which provides the standard financial analysis required for each new utility project.

12 I received a Bachelor of Arts degree in Economics from the University of California,
13 Santa Barbara in 1995. I received a Master of Business Administration degree from the Darden
14 School of Business at the University of Virginia, Charlottesville in 2000.

15

16 I have not previously testified before this Commission.

17

18 This concludes my testimony.

19

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ATTACHMENTS

SoCalGas AMI
Overhead Summary

Overhead Category	Percentage	Loading Base
Payroll Taxes	7.79%	Direct Labor
Vacation and Sick Time	17.98%	Direct Labor
Pension and Benefits (non-balanced only)	17.15%	Direct Labor
Pension and Benefits - Part Time	3.28%	Direct Labor
'Workers' Compensation	4.47%	Direct Labor
Public Liability / Property Damage	3.16%	Direct Labor
Non-Union Incentive Compensation Plan	18.29%	Non-Union Direct Labor
Purchased Services and Materials	1.85%	Contract Labor, Services and Purchased Materials
Administrative and General	5.24%	Capital Company Labor and Contract Costs
Warehousing	7.16%	Warehousing

Category	Sub-category	Expense-Type	Total Loader - Multiplier	Core Labor	ICP	Contract	Capital	Warehousing
				Loader 1	Loader 2	Loader 3	Loader 4	Loader 5
Labor	Contractor - PT	Capital	1.0709				1.85%	5.24%
Labor	Contractor - PT	O&M	1.0185				1.85%	5.24%
Labor	Contractor	Capital	1.0709				1.85%	5.24%
Labor	Contractor	O&M	1.0185				1.85%	5.24%
Labor	Non-Union - PT	Capital	1.2395	18.71%			1.85%	5.24%
Labor	Non-Union - PT	O&M	1.1871	18.71%			1.85%	5.24%
Labor	Non-Union	Capital	1.7409	50.56%	18.29%		1.85%	5.24%
Labor	Non-Union	O&M	1.6885	50.56%	18.29%		1.85%	5.24%
Labor	Non-Warehousing	Capital	1.0185				1.85%	5.24%
Labor	Non-Warehousing	O&M	1.0185				1.85%	5.24%
Labor	Union - PT	Capital	1.2395	18.71%			1.85%	5.24%
Labor	Union - PT	O&M	1.1871	18.71%			1.85%	5.24%
Labor	Union	Capital	1.5580	50.56%			1.85%	5.24%
Labor	Union	O&M	1.5056	50.56%			1.85%	5.24%
Non-Labor (or NL-Non Escalating)	Warehousing	Capital	1.0901				7.16%	7.16%
Non-Labor (or NL-Non Escalating)	Warehousing	O&M	1.0901				7.16%	7.16%

ATTACHMENT MF-1

SoCalGas AMI - 2007 Actual Overheads

			V&S		V&S	
	Recorded Expense -	Recorded Expense	Total Recorded	Percent	Expense Less	
	Labor	- Non-Labor	Expense	V&S Base	Adjustments	Adjustments
January	12,553,941.33		12,553,941.33	27,807,231.67		12,553,941.33
February	3,996,190.04		3,996,190.04	29,296,900.90		3,996,190.04
March	3,880,377.73		3,880,377.73	33,590,474.93		3,880,377.73
April	4,694,511.96		4,694,511.96	30,274,410.68		4,694,511.96
May	3,761,186.19		3,761,186.19	34,560,160.54		3,761,186.19
June	5,476,252.65		5,476,252.65	29,415,307.33		5,476,252.65
July	9,540,150.68		9,540,150.68	28,025,783.53		9,540,150.68
August	3,251,172.42		3,251,172.42	36,156,084.50		3,251,172.42
September	5,284,361.54		5,284,361.54	29,096,530.30		5,284,361.54
October	3,896,641.93		3,896,641.93	36,294,677.86		3,896,641.93
November	5,386,793.14		5,386,793.14	34,825,762.99		5,386,793.14
December	7,148,061.95		7,148,061.95	33,785,947.30		7,148,061.95
	68,869,641.56	-	68,869,641.56	383,129,272.53	17.98%	-
					68,869,641.56	17.98%

Payroll Tax						
				PR Tax		PR Tax
	Recorded Expense - Recorded Expense	Total Recorded		Percent		Expense Less
	Labor	- Non-Labor	Expense	PR Tax Base	Before Adj	Adjustments
January		5,676,066.01	5,676,066.01	50,858,295.52		5,676,066.01
February		2,822,263.44	2,822,263.44	37,207,103.39		2,822,263.44
March		3,024,849.53	3,024,849.53	41,995,900.17		3,024,849.53
April		2,911,021.78	2,911,021.78	39,071,551.31		2,911,021.78
May		3,162,656.88	3,162,656.88	42,675,284.78		3,162,656.88
June		2,904,470.77	2,904,470.77	39,318,977.89		2,904,470.77
July		3,174,112.86	3,174,112.86	41,836,021.53		3,174,112.86
August		3,215,072.68	3,215,072.68	43,917,877.74		3,215,072.68
September		3,022,091.84	3,022,091.84	40,424,403.03		3,022,091.84
October		3,317,881.86	3,317,881.86	44,884,645.81		3,317,881.86
November		3,010,157.12	3,010,157.12	43,626,919.27		3,010,157.12
December		3,817,200.25	3,817,200.25	48,077,290.06		3,817,200.25
		40,057,845.02	40,057,845.02	513,894,270.50	7.79%	-
						40,057,845.02
						7.79%

Pension & Benefit (non-balanced)							P&B Percent	P&B Percent
	Recorded Expense - Labor	Recorded Expense - Non-Labor	Total Recorded Expense	P&B Base	P&B Percent Before Adj	Expense Less Adjustments	P&B Percent After Adj	
January	1,032.87	7,096,503.29	7,097,536.16	29,778,303.19			7,097,536.16	
February	(3,079.70)	5,734,351.25	5,731,271.55	31,352,432.35			5,731,271.55	
March	25,540.81	5,876,301.35	5,901,842.16	35,848,668.44			5,901,842.16	
April	22,364.60	5,259,251.66	5,281,616.26	32,479,830.35			5,281,616.26	
May	18,149.20	6,073,496.44	6,091,645.64	37,016,165.59			6,091,645.64	
June	18,471.80	5,535,505.73	5,553,977.53	31,442,609.68			5,553,977.53	
July	10,538.73	5,537,445.09	5,547,983.82	30,307,811.85			5,547,983.82	
August	21,179.64	5,506,071.00	5,527,250.64	38,678,997.88			5,527,250.64	
September	18,269.43	5,615,946.12	5,634,215.55	31,082,654.49			5,634,215.55	
October	18,909.88	5,984,589.61	6,003,499.49	38,771,959.88			6,003,499.49	
November	(14,572.58)	5,792,944.90	5,778,372.32	36,877,196.13			5,778,372.32	
December	23,500.99	6,102,940.69	6,126,441.68	36,155,937.11			6,126,441.68	
	160,305.67	70,115,347.13	70,275,652.80	409,792,566.94	17.15%	-	70,275,652.80	17.15%

ATTACHMENT MF-1

SoCalGas AMI - 2007 Actual Overheads

Workers' Compensation

	<u>Recorded Expense - Recorded Expense</u>	<u>Total Recorded</u>	<u>WC Base</u>	<u>WC Percent Before Adj</u>	<u>Quarterly True-up of Liability</u>	<u>Expense Less Adjustments</u>	<u>WC Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>	<u>Expense</u>				
January	5,911.97	2,193,156.30	2,199,068.27	27,445,299.52	(1,816,807.00)	4,015,875.27	
February	5,997.86	225,770.52	231,768.38	28,877,851.84		231,768.38	
March	6,704.79	233,691.21	240,396.00	32,975,477.44		240,396.00	
April	6,427.38	2,226,554.91	2,232,982.29	30,882,916.00		2,232,982.29	
May	6,910.81	1,184,178.89	1,191,089.70	35,069,660.86		1,191,089.70	
June	5,854.63	1,374,454.61	1,380,309.24	30,056,813.43		1,380,309.24	
July	4,491.52	294,513.64	299,005.16	29,097,685.43		299,005.16	
August	10,423.94	1,664,180.07	1,674,604.01	36,228,071.00		1,674,604.01	
September	12,253.47	830,715.77	842,969.24	29,158,009.67		842,969.24	
October	13,471.69	3,354,979.41	3,368,451.10	37,265,612.67		3,368,451.10	
November	12,894.99	1,381,977.61	1,394,872.60	35,338,893.00		1,394,872.60	
December	9,701.18	1,788,144.50	1,797,845.68	37,046,815.20		553,693.68	
	101,044.23	16,752,317.44	16,853,361.67	389,443,106.05	4.33%	(572,655.00)	17,426,016.67
							4.47%

Public Liability/Property Damage

	<u>Recorded Expense - Recorded Expense</u>	<u>Total Recorded</u>	<u>PLPD Base</u>	<u>PLPD Percent Before Adj</u>	<u>True-up of Liability</u>	<u>Expense Less Adjustments</u>	<u>PLPD Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>	<u>Expense</u>				
January	14,283.41	1,897,860.92	1,912,144.33	27,434,966.00	(1,462,092.00)	3,374,236.33	
February	14,246.46	418,413.38	432,659.84	28,837,784.00		432,659.84	
March	13,762.43	1,120,819.62	1,134,582.05	32,924,895.50		1,134,582.05	
April	23,074.10	151,754.09	174,828.19	30,832,546.51		174,828.19	
May	15,294.05	947,978.24	963,272.29	35,007,032.09		963,272.29	
June	16,790.25	924,391.58	941,181.83	30,005,914.42		941,181.83	
July	15,601.89	614,735.26	630,337.15	29,051,480.00		630,337.15	
August	18,517.85	1,092,011.88	1,110,529.73	36,109,737.92		1,110,529.73	
September	17,821.82	1,020,732.33	1,038,554.15	29,097,715.42		1,038,554.15	
October	20,944.55	732,513.23	753,457.78	37,155,172.31		753,457.78	
November	20,076.75	960,373.34	980,450.09	35,303,337.24		980,450.09	
December	8,773.96	675,085.07	683,859.03	36,890,261.72		(81,777.00)	765,636.03
	199,187.52	10,556,668.94	10,755,856.46	388,650,843.13	2.77%	(1,543,869.00)	12,299,725.46
							3.16%

Purchased Services and Materials

	<u>Recorded Expense - Recorded Expense</u>	<u>Total Recorded</u>	<u>Purchasing Base</u>	<u>Purchasing Percent Before Adj</u>	<u>Expense Less Adjustments</u>	<u>Purchasing Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>	<u>Expense</u>			
January	80,655.00	273,415.35	354,070.35	19,737,409.09		354,070.35
February	99,807.06	1,603,649.35	1,703,456.41	30,827,891.82		1,703,456.41
March	112,958.11	401,272.42	514,230.53	27,709,456.88		514,230.53
April	112,638.06	355,176.14	467,814.20	29,861,257.50		467,814.20
May	115,541.38	755,456.10	870,997.48	37,699,482.50		870,997.48
June	235,733.66	571,995.61	807,729.27	41,203,087.22		807,729.27
July	101,793.23	335,435.32	437,228.55	29,410,165.00		437,228.55
August	128,342.52	571,609.35	699,951.87	36,632,383.33		699,951.87
September	99,476.69	376,438.80	475,915.49	37,477,472.22		475,915.49
October	271,825.63	945,421.22	1,217,246.85	33,732,688.33		1,217,246.85
November	208,208.76	225,808.83	434,017.59	40,362,057.50		434,017.59
December	103,124.59	385,346.32	488,470.91	92,652,504.38		488,470.91
	1,670,104.69	6,801,024.81	8,471,129.50	457,305,855.77	1.85%	-
					8,471,129.50	1.85%

ATTACHMENT MF-1

SoCalGas AMI - 2007 Actual Overheads

Administrative & General

	<u>Recorded Expense -</u>	<u>Recorded Expense</u>	<u>Total Recorded</u>	<u>A&G</u>	<u>Percent</u>	<u>ARS Reserve</u>	<u>Expense Less</u>	<u>A&G</u>
	<u>Labor</u>	<u>- Non-Labor</u>	<u>Expense</u>	<u>A&G Base</u>	<u>Before Adj</u>	<u>Update</u>	<u>Adjustments</u>	<u>Percent</u>
January	206,094.99	338,845.35	544,940.34	8,087,424.22				544,940.34
February	144,413.18	359,189.67	503,602.85	9,933,690.76				503,602.85
March	278,004.73	999,080.45	1,277,085.18	11,343,619.61				1,277,085.18
April	258,162.28	388,055.76	646,218.04	12,164,770.48				646,218.04
May	290,553.23	433,677.53	724,230.76	13,494,667.60				724,230.76
June	238,999.71	681,429.96	920,429.67	15,988,869.98				920,429.67
July	240,348.52	361,075.35	601,423.87	12,995,901.92				601,423.87
August	312,912.71	458,884.77	771,797.48	17,243,285.02				771,797.48
September	227,160.41	754,814.73	981,975.14	10,702,939.58				981,975.14
October	290,366.32	651,233.83	941,600.15	15,430,175.99				941,600.15
November	269,833.82	(383,045.84)	(113,212.02)	15,919,301.47				(113,212.02)
December	252,302.88	795,137.27	1,047,440.15	25,570,773.88				1,047,440.15
	3,009,152.78	5,838,378.83	8,847,531.61	168,875,420.51	5.24%	-	8,847,531.61	5.24%

Warehousing

	<u>Recorded Expense -</u>	<u>Recorded Expense</u>	<u>Total Recorded</u>	<u>A&G</u>	<u>Percent</u>	<u>Expense Less</u>	<u>WH</u>	<u>Percent</u>
	<u>Labor</u>	<u>- Non-Labor</u>	<u>Expense</u>	<u>A&G Base</u>	<u>Before Adj</u>	<u>Adjustments</u>	<u>Adjustments</u>	<u>After Adj</u>
January	188,614.05	26,873.84	215,487.89	4,716,260.80				215,487.89
February	228,889.53	19,486.06	248,375.59	4,010,315.20				248,375.59
March	259,851.28	18,296.96	278,148.24	4,503,967.00				278,148.24
April	256,209.12	20,818.08	277,027.20	4,214,940.60				277,027.20
May	288,978.71	50,743.72	339,722.43	4,513,498.40				339,722.43
June	240,814.67	37,097.58	277,912.25	4,462,275.09				277,912.25
July	238,990.18	14,921.20	253,911.38	3,537,475.45				253,911.38
August	298,947.70	34,319.14	333,266.84	4,841,771.27				333,266.84
September	233,981.87	30,392.91	264,374.78	3,694,053.27				264,374.78
October	290,645.68	35,495.12	326,140.80	4,175,591.50				326,140.80
November	253,503.00	73,221.47	326,724.47	4,365,627.46				326,724.47
December	245,062.49	149,626.40	394,688.89	2,336,628.25				394,688.89
	3,024,488.28	511,292.48	3,535,780.76	49,372,404.31	7.16%	-	3,535,780.76	7.16%

ICP - management only

2	2007 Target ICP Rate for Management Employees (15.00%)	15.00%
0	Gross up by 1-VS rate (1 - VS rate of 17.98% = 82.02%) - Productivity Factor	82.02%
0		
7	Gross up for direct labor loading base (15% / 82.02%)	18.29%

Part Time Labor

2	Medical	1.27%
0	Savings Plan Match	1.36%
0	Personal Business	0.66%
7		3.28%

ATTACHMENT MF-2

SoCalGas AMI Escalation Factors		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
% Change		3.2%	2.8%	3.9%	2.4%	2.2%	2.1%	1.8%	2.0%	2.0%	2.1%	2.2%	2.1%	2.1%	2.1%
Capital		2.5%	2.4%	2.6%	2.5%	2.6%	2.6%	2.5%	2.4%	2.4%	2.4%	2.5%	2.5%	2.5%	2.5%
Labor		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Escalating		3.6%	2.6%	2.5%	2.3%	2.3%	2.4%	2.4%	2.5%	2.5%	2.5%	2.5%	2.6%	2.6%	2.6%
Non-Labor															
Factor (2008 base)															
Capital		1.0000	1.0282	1.0684	1.0938	1.1178	1.1408	1.1617	1.1844	1.2085	1.2339	1.2612	1.2877	1.3144	1.3416
Labor		1.0000	1.0242	1.0507	1.0771	1.1048	1.1330	1.1609	1.1892	1.2181	1.2480	1.2788	1.3106	1.3435	1.3773
Non-Escalating		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Non-Labor		1.0000	1.0262	1.0518	1.0755	1.1005	1.1267	1.1548	1.1835	1.2129	1.2434	1.2753	1.3084	1.3414	1.3758

Factors shown above are from escalation indices published in Global Insight's 1st Quarter 2008 Utility Cost Forecast.

- Gas Utility Construction-Distribution: calculated as a simple average of the 13 distribution plant sub-indexes in Global Insight's forecast.

- Labor: Global Insight series CEU4422000006 (Wages, Utility Service Workers)

- Non-Labor (gas): Global Insight series JGTOTALMS (Gas Expenses, Total O&M Cost Index, Materials and Services)

ATTACHMENT MF-2

Southern California Gas Company
 Annual Revenue Requirements associated with Capital and
 O&M costs, and Capital and O&M Benefits not including
 "other benefits"

Stand Alone AMI scenario

(\$ thousands) - Increase (Decrease), in revenue

Errata Version - March 6, 2009

Revenue Requirement Associated with Project Costs

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Total Rev Req:	153,517	148,984	145,041	143,027	138,603	134,577	128,986	124,424	121,712	117,188
PV of Rev Req:	61,469	54,891	49,172	44,618	39,786	35,546	31,349	27,826	25,046	22,190
O&M:	21,172	21,675	22,332	25,485	26,314	27,114	27,927	28,826	28,708	30,610
Working Capital:	356	367	377	412	444	458	471	486	501	517
Depreciation:	44,867	45,932	45,930	46,315	46,655	46,997	46,579	46,999	47,695	47,555
Return on Common:	32,580	30,514	28,843	26,551	24,253	21,994	19,773	18,155	16,288	14,272
Return on Preferred:	1,936	1,813	1,714	1,578	1,441	1,307	1,175	1,079	968	848
Return On Debt:	19,914	18,651	17,630	16,229	14,824	13,443	12,086	11,097	9,955	8,723
Federal Taxes:	19,025	17,195	16,194	15,064	13,809	12,667	11,132	9,627	9,131	7,964
State Taxes:	5,863	5,470	4,987	4,834	4,785	5,008	4,733	3,379	3,080	2,751
Property Taxes:	7,803	7,367	7,035	6,559	6,077	5,591	5,111	4,776	4,387	3,948

Revenue Requirement Associated with Operational Benefits

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Total Rev Req:	(154,860)	(164,335)	(173,890)	(170,010)	(164,575)	(167,262)	(170,609)	(173,604)	(180,764)	(180,362)
PV of Rev Req:	(62,007)	(60,547)	(58,035)	(53,035)	(47,241)	(44,179)	(41,465)	(38,824)	(34,152)	(34,152)
O&M:	(117,746)	(121,891)	(126,139)	(119,748)	(116,014)	(120,153)	(124,436)	(128,825)	(136,386)	(137,569)
Working Capital:	(1,936)	(2,053)	(2,125)	(2,095)	(2,008)	(2,021)	(2,036)	(2,170)	(2,277)	(2,346)
Depreciation:	(5,887)	(7,212)	(8,556)	(10,432)	(10,451)	(10,479)	(10,508)	(10,538)	(9,692)	(9,692)
Return on Common:	(11,184)	(12,638)	(14,038)	(14,467)	(13,818)	(13,204)	(12,631)	(12,092)	(12,160)	(11,595)
Return on Preferred:	(665)	(751)	(834)	(860)	(821)	(785)	(751)	(719)	(723)	(689)
Return On Debt:	(6,836)	(7,724)	(8,580)	(8,842)	(8,446)	(8,071)	(7,721)	(7,391)	(7,433)	(7,087)
Federal Taxes:	(6,377)	(7,319)	(8,116)	(8,211)	(7,843)	(7,515)	(6,322)	(6,847)	(6,908)	(6,576)
State Taxes:	(1,578)	(1,782)	(1,982)	(1,904)	(1,831)	(1,798)	(2,015)	(1,971)	(1,917)	(1,846)
Property Taxes:	(2,600)	(2,965)	(3,320)	(3,451)	(3,342)	(3,236)	(3,131)	(3,025)	(3,069)	(2,963)

Net Revenue Requirement

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Total Rev Req:	(1,343)	(15,351)	(28,649)	(25,972)	(32,685)	(41,623)	(49,181)	(49,181)	(55,051)	(63,175)
PV of Rev Req:	(5,656)	(9,713)	(8,417)	(7,455)	(8,633)	(10,116)	(10,989)	(12,152)	(11,962)	
O&M:	(96,574)	(100,216)	(103,807)	(94,264)	(89,700)	(93,039)	(99,999)	(106,959)	(106,878)	
Working Capital:	(1,629)	(1,686)	(1,748)	(1,683)	(1,564)	(1,624)	(1,584)	(1,776)	(1,829)	
Depreciation:	38,980	38,720	37,374	35,883	36,204	36,158	36,071	36,462	38,003	37,863
Return on Common:	21,396	17,876	14,805	12,085	10,435	8,790	7,142	6,063	4,127	2,677
Return on Preferred:	1,271	1,062	880	718	620	522	424	360	245	159
Return On Debt:	13,078	10,926	9,049	7,386	5,373	4,365	3,706	2,523	1,636	
Federal Taxes:	12,648	9,876	8,078	6,854	5,966	5,152	3,810	2,753	2,223	1,388
State Taxes:	4,285	3,688	3,005	2,930	2,954	3,209	2,718	1,408	1,164	905
Property Taxes:	5,203	4,402	3,714	3,108	2,735	2,355	1,980	1,751	1,318	985

Southern California Gas Company
 Annual Revenue Requirements associated with Capital and
 O&M costs, and Capital and O&M Benefits not including
 "other benefits"

Stand Alone AMI scenario

Errata Version - March 6, 2009

Revenue Requirement Associated with Project Costs

	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
Total Rev Req:	112,641	108,218	102,801	90,669	80,178	71,676	64,219
PV of Rev Req:	19,626	17,350	15,136	12,308	10,015	8,238	6,792
O&M:	31,731	32,851	34,115	32,137	30,975	30,079	29,178
Working Capital:	534	553	574	564	537	520	505
Depreciation:	46,586	45,486	44,285	38,322	31,929	26,194	20,340
Return on Common:	12,258	10,539	9,706	8,413	7,340	6,498	5,891
Return on Preferred:	728	626	577	500	436	386	350
Return On Debt:	7,493	6,442	5,933	5,142	4,486	3,972	3,601
Federal Taxes:	7,036	5,964	4,279	4,110	3,873	3,691	3,651
State Taxes:	2,832	2,742	406	(875)	(1,457)	(1,487)	(948)
Property Taxes:	3,472	3,014	2,727	2,355	2,057	1,822	1,651

Revenue Requirement Associated with Operational Benefits

	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
Total Rev Req:	(183,944)	(190,165)	(194,170)	(179,643)	(159,510)	(137,205)	(364,100)
PV of Rev Req:	(32,050)	(30,488)	(28,845)	(24,386)	(19,924)	(15,770)	(38,507)
O&M:	(142,492)	(147,218)	(152,829)	(140,075)	(121,249)	(100,766)	(328,828)
Working Capital:	(2,398)	(2,482)	(2,571)	(2,490)	(2,209)	(1,889)	(3,910)
Depreciation:	(9,692)	(11,560)	(11,560)	(11,560)	(11,560)	(11,560)	(9,692)
Return on Common:	(11,027)	(10,888)	(10,206)	(9,536)	(8,938)	(8,437)	(8,022)
Return on Preferred:	(655)	(647)	(607)	(567)	(531)	(501)	(477)
Return On Debt:	(6,740)	(6,655)	(6,238)	(5,829)	(5,463)	(5,157)	(4,903)
Federal Taxes:	(6,271)	(6,159)	(5,790)	(5,407)	(4,782)	(4,458)	(4,188)
State Taxes:	(1,810)	(1,713)	(1,654)	(1,592)	(1,558)	(1,500)	(1,582)
Property Taxes:	(2,858)	(2,843)	(2,715)	(2,583)	(2,460)	(2,333)	(2,229)

Net Revenue Requirement

	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
Total Rev Req:	(71,303)	(81,946)	(91,869)	(88,974)	(79,332)	(65,530)	(29,881)
PV of Rev Req:	(12,423)	(13,138)	(13,509)	(12,073)	(9,909)	(7,532)	(3,1,715)
O&M:	(110,761)	(114,367)	(118,714)	(107,938)	(90,273)	(70,687)	(29,649)
Working Capital:	(1,864)	(1,929)	(1,997)	(1,926)	(1,671)	(1,349)	(3,405)
Depreciation:	36,865	33,927	32,725	26,763	20,370	14,634	10,648
Return on Common:	1,231	(348)	(500)	(1,123)	(1,598)	(1,939)	(2,130)
Return on Preferred:	73	(21)	(30)	(67)	(95)	(115)	(127)
Return On Debt:	752	(213)	(306)	(687)	(977)	(1,185)	(1,302)
Federal Taxes:	765	(195)	(1,511)	(1,297)	(1,369)	(1,091)	(808)
State Taxes:	1,022	1,029	(1,248)	(2,466)	(3,315)	(3,287)	(2,530)
Property Taxes:	614	171	12	(232)	(403)	(511)	(578)

Southern California Gas Company
**Annual Rate Base Balance associated with Capital costs
and benefits and Working Cash requirements, not including**

"other benefits"

Stand Alone AMI scenario

Rate base Associated with Project Costs							2018				
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Plant		2,488	7,675	230,585	400,295	575,389	751,644	905,901	912,717	833,611	897,385
Working Cash		405	505	3,153	3,843	4,435	4,943	4,991	4,988	2,548	2,647
Accumulated Depreciation		(114)	(487)	(24,517)	(56,811)	(97,429)	(147,279)	(206,429)	(249,056)	(207,617)	(252,494)
Accumulated Deferred Taxes		(4)	(47)	(2,290)	(6,769)	(13,560)	(16,984)	(22,391)	(31,121)	(37,924)	(42,104)
Total Rate Base		2,776	7,646	206,931	340,558	468,505	592,324	682,072	635,038	590,618	605,443

Net Rate base Associated with Project Costs and Operational Benefits		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Plant		2,488	7,675	226,495	390,803	559,286	735,158	890,605	862,754	705,674	723,496
Working Cash		125	218	2,309	1,399	(11)	(1,633)	(3,656)	(10,542)	(11,691)	(12,072)
Accumulated Depreciation		(114)	(487)	(24,517)	(60,901)	(110,305)	(169,704)	(239,018)	(289,115)	(253,849)	(293,508)
Accumulated Deferred Taxes		(4)	(4)	(4)	(6,769)	(13,319)	(16,473)	(21,655)	(32,651)	(30,707)	(30,707)
Total Rate Base		2,485	7,359	201,997	324,533	435,651	547,323	626,276	532,446	403,427	379,3612

Southern California Gas Company
**Annual Rate Base Balance associated with Capital costs
and benefits and Working Cash requirements, not including**

"other benefits"

Stand Alone AMI scenario

Rate base Associated with Project Costs		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028	
Plant		906,356		924,849		918,188		924,989		931,833		938,718		954,250		957,729		949,215		936,465	
Working Cash		2,709		2,792		3,186		3,289		3,389		3,491		3,603		3,713		3,826		3,966	
Accumulated Depreciation		(29,533)		(34,463)		(51,564)		(37,612)		(42,275)		(46,697)		(56,435)		(59,537)		(62,594)		(64,954)	
Accumulated Deferred Taxes		(46,422)		(51,564)		(56,415)		(60,697)		(63,463)		(66,403)		(70,911)		(74,628)		(75,845)		(72,563)	
Total Rate Base		585,110		532,614		488,837		444,807		401,988		359,455		327,406		291,615		254,242		218,356	

Rate base Associated with Operational Benefits										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Plant	(197,972)	(235,125)	(255,529)	(256,140)	(257,022)	(257,939)	(258,878)	(271,249)	(264,009)	(264,028)
Working Cash	(15,236)	(15,767)	(14,969)	(14,502)	(15,554)	(16,103)	(17,073)	(17,196)	(17,196)	(17,812)
Accumulated Depreciation	(47,038)	(39,278)	(29,664)	(20,503)	(10,432)	(8,845)	(7,625)	(19,117)	(17,846)	(27,846)
Accumulated Deferred Taxes	6,771	10,013	13,704	17,017	19,886	21,672	23,297	25,367	27,606	29,797
Total Rate Base	(253,476)	(280,159)	(286,457)	(273,678)	(262,578)	(252,620)	(242,839)	(245,331)	(234,482)	(224,193)

Net Rate base Associated with Project Costs and Operational Benefits		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Plant	708,383 (12,527)	689,724 (12,976)	662,658 (11,783)	668,849 (11,212)	674,811 (11,630)	680,779 (10,064)	695,372 (12,500)	686,480 (13,360)	685,205 (13,370)	672,437 (13,845)	
Working Cash											
Accumulated Depreciation	(344,571) (382,742) (39,652)	(405,781) (421,522)	(405,781) (421,522)	(442,829) (43,567)	(442,829) (43,567)	(517,150) (43,768)	(505,692) (44,730)	(577,576) (47,614)	(603,837) (49,239)	(621,663) (48,239)	
Accumulated Deferred Taxes											
Total Rate Base	311,634	252,455	202,380	171,128	139,410	106,735	84,567	46,284	19,760	(5,787)	

Southern California Gas Company
 Annual Rate Base Balance associated with Capital costs
 and benefits and Working Cash requirements, not including
 "other benefits"
 Stand Alone AMI scenario
 (\$ thousands)

Errata Version - March 6, 2009

Rate base Associated with Project Costs					
	2029	2030	2031	2032	2033
Plant	923,668	921,526	890,447	796,290	680,474
Working Cash	4,106	4,264	4,017	3,872	3,760
Accumulated Depreciation	(674,588)	(696,177)	(695,792)	(626,279)	(529,895)
Accumulated Deferred Taxes	(65,224)	(55,976)	(47,676)	(41,620)	(35,505)
Total Rate Base	187,962	173,637	150,997	132,263	118,834
					109,244

Rate base Associated with Operational Benefits					
	2029	2030	2031	2032	2033
Plant	(273,378)	(273,391)	(273,409)	(273,427)	(273,446)
Working Cash	(18,402)	(19,104)	(17,509)	(15,156)	(12,596)
Accumulated Depreciation	38,430	49,000	59,556	70,094	80,615
Accumulated Deferred Taxes	32,381	34,928	37,105	36,920	35,418
Total Rate Base	(220,970)	(208,568)	(194,258)	(181,569)	(170,008)
					(191,523)

Net Rate base Associated with Project Costs and Operational Benefits					
	2029	2030	2031	2032	2033
Plant	650,290	648,134	617,038	522,862	407,028
Working Cash	(14,296)	(14,839)	(13,392)	(11,284)	(8,836)
Accumulated Depreciation	(636,158)	(647,177)	(636,236)	(556,184)	(449,280)
Accumulated Deferred Taxes	(32,844)	(21,049)	(10,571)	(4,701)	(87)
Total Rate Base	(33,007)	(34,931)	(43,262)	(49,307)	(51,174)
					(82,279)

Southern California Gas Company Advanced Metering Infrastructure

Advanced Metering Infrastructure

Application September 22, 2008 Errata, March 6, 2009

All Property and O&M Total Costs & Benefits

Annual Summary of Monthly Revenue Requirement - 2009-2015

**Southern California Gas Company
Advanced Metering Infrastructure**

Application-September-22, 2008 Errata, March 6, 2009

All Property and O&M - Total O&M & Capital Costs

Annual Summary of Monthly Revenue Requirement - 2009-2015

	2009	2010	2011	2012	2013	2014	2015
Franchise Fees & Uncollectibles	(134.4)	(188.9)	1,297.0	1,766.9	2,340.3	2,855.9	3,236.7
O&M expenses	3,298.7	4,103.4	25,494.9	31,232.1	36,052.9	40,187.6	40,606.8
Property Taxes	7.4	58.9	1,762.0	3,353.3	5,045.4	6,490.0	7,637.1
Preferred Equity Interest	1.9	15.0	449.4	855.3	1,286.9	1,655.4	1,948.0
Interest Expense	19.3	154.5	4,622.7	8,797.6	13,236.7	17,026.7	20,036.1
Depreciation Expense	33.3	254.0	20,583.6	28,506.4	37,155.9	45,591.5	53,876.3
Federal Tax Expense	(8,925.0)	(12,441.2)	11,897.6	12,482.4	17,258.5	21,081.1	23,714.2
State Tax Expense	(2,257.5)	(3,344.7)	2,782.3	2,759.2	3,911.7	5,594.2	6,950.6
Return on Equity	31.6	252.8	7,563.0	14,393.3	21,656.0	27,856.7	32,780.3
Revenue Requirement	(7,924.9)	(11,136.0)	76,452.6	104,146.5	137,944.5	168,339.1	190,786.1
Return on Ratebase (ROR)	52.8	422.4	12,635.2	24,046.2	36,179.7	46,538.9	54,764.4
Weighted Average Ratebase	292	2,337	69,899	133,025	200,148	257,456	302,960
ROE Proof	10.820%	10.820%	10.820%	10.820%	10.820%	10.820%	10.820%
Alternate Proof	292	2,337	69,899	133,025	200,148	257,456	302,960

Southern California Gas Company
Advanced Metering Infrastructure

Application-September-22, 2008 Errata, March 6, 2009

All Property and O&M - Total O&M, Avoided & Deferred Benefits (Net of Deferred Costs)
Annual Summary of Monthly Revenue Requirement - 2009-2015

	2009	2010	2011	2012	2013	2014	2015
Franchise Fees & Uncollectibles	1.73%	(39.4)	(40.4)	(122.9)	(363.0)	(682.7)	(1,019.1)
O&M expenses	1.21%	(2,281.5)	(2,338.5)	(6,831.6)	(19,789.0)	(36,060.1)	(53,381.0)
Property Taxes	0.31%	-	-	(24.7)	(106.9)	(258.7)	(411.8)
Preferred Equity Interest	3.17%	-	-	(6.3)	(27.3)	(66.0)	(105.0)
Interest Expense	-	-	-	(64.9)	(280.5)	(678.7)	(1,080.4)
Depreciation Expense	-	-	-	-	-	(560.5)	(1,043.7)
Federal Tax Expense	-	-	-	(70.1)	(292.9)	(673.6)	(1,043.5)
State Tax Expense	-	-	-	(17.7)	(75.6)	(150.1)	(215.4)
Return on Equity	5.19%	-	-	(106.2)	(458.9)	(1,110.4)	(1,767.6)
Revenue Requirement	(2,320.9)	(2,378.9)	(7,244.5)	(21,394.0)	(40,241.0)	(60,067.4)	(78,542.8)
Return on Ratebase (ROR)	-	-	(177.4)	(766.7)	(1,855.2)	(2,953.0)	(3,765.4)
Weighted Average Ratebase	48.00%	-	-	(982)	(4,241)	(10,263)	(16,336)
ROE Proof	#DIV/0!	#DIV/0!	10.820%	10.820%	10.820%	10.820%	10.820%
Alternate Proof	-	-	(982)	(4,241)	(10,263)	(16,336)	(20,830)

Southern California Gas Company
Advanced Metering Infrastructure
Application-September-22, 2008 Errata, March 6, 2009
All Property and O&M - Total Costs & Benefits
Monthly Revenue Requirement - 2009-2015

Description	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total 2009
	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Total 2010
Franchise Fees & Uncollectibles	(16.1)	(16.1)	(16.1)	(16.1)	(16.1)	(16.1)	(16.1)	(13.0)	(12.9)	(12.8)	(12.7)	(12.6)	(173.8)
O&M expenses	-	-	-	-	-	-	-	169.5	169.5	169.5	169.5	169.5	1,017.2
Property Taxes	-	-	-	-	-	-	-	0.2	0.6	1.0	1.4	1.8	7.4
Preferred Equity Interest	-	-	-	-	-	-	-	0.1	0.2	0.3	0.4	0.5	1.9
Interest Expense	-	-	-	-	-	-	-	0.5	1.6	2.7	3.8	4.8	19.3
Depreciation Expense	-	-	-	-	-	-	-	1.6	3.2	4.8	6.3	7.9	33.3
Income Tax Expense	(933.6)	(933.6)	(933.6)	(933.6)	(933.6)	(933.6)	(933.6)	(930.2)	(930.2)	(930.2)	(930.2)	(930.2)	(1,182.6)
Return on Equity	-	-	-	-	-	-	-	0.9	2.6	4.4	6.1	7.9	31.6
Revenue Requirement	(950)	(950)	(950)	(950)	(950)	(949.7)	(770.5)	(765.4)	(760.4)	(755.4)	(750.5)	(745.5)	(10,245.8)
Return on Ratebase (ROR)	-	-	-	-	-	-	-	1.5	4.4	7.4	10.3	13.2	52.8
Revenue Requirement	(1,155.0)	(1,149.7)	(1,144.5)	(1,139.2)	(1,134.0)	(1,128.8)	(1,123.6)	(1,118.4)	(1,113.2)	(1,108.0)	(1,102.9)	(1,097.7)	(13,514.9)
Return on Ratebase (ROR)	19.0	22.0	25.0	27.9	30.9	33.8	36.7	39.6	42.5	45.4	48.3	51.1	422.4
Description	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Total 2011
Franchise Fees & Uncollectibles	19.6	(19.5)	(19.4)	(19.3)	(19.2)	(19.1)	(19.0)	(18.9)	(18.8)	(18.7)	(18.6)	(18.6)	(229.3)
O&M expenses	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	1,764.9
Property Taxes	2.7	3.1	3.5	3.9	4.3	4.7	5.1	5.5	5.9	6.3	6.7	7.1	58.9
Preferred Equity Interest	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	15.0
Interest Expense	7.0	8.0	9.1	10.2	11.3	12.4	13.4	14.5	15.6	16.6	17.7	18.7	154.5
Depreciation Expense	11.3	13.1	14.9	16.7	18.5	20.3	22.1	23.9	25.6	27.4	29.2	31.0	254.0
Income Tax Expense	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(15,785.9)
Return on Equity	11.4	13.2	14.9	16.7	18.5	20.2	22.0	23.7	25.5	27.2	28.9	30.6	252.8
Revenue Requirement	(1,155.0)	(1,149.7)	(1,144.5)	(1,139.2)	(1,134.0)	(1,128.8)	(1,123.6)	(1,118.4)	(1,113.2)	(1,108.0)	(1,102.9)	(1,097.7)	(13,514.9)
Return on Ratebase (ROR)	19.0	22.0	25.0	27.9	30.9	33.8	36.7	39.6	42.5	45.4	48.3	51.1	422.4
Description	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Total 2011
Franchise Fees & Uncollectibles	80.0	87.9	90.1	92.7	94.9	97.1	99.6	101.8	104.0	106.5	108.7	110.8	1,174.1
O&M expenses	1,555.3	1,555.3	1,555.3	1,555.3	1,555.3	1,555.3	1,555.3	1,555.3	1,555.3	1,555.3	1,555.3	1,555.3	18,663.3
Property Taxes	53.1	103.7	113.4	123.6	133.8	143.3	153.4	163.4	172.8	182.7	192.5	201.8	1,737.3
Preferred Equity Interest	13.5	26.4	28.9	31.5	34.1	36.6	39.1	41.7	44.1	46.6	49.1	51.5	443.1
Interest Expense	139.2	272.0	297.4	324.3	350.9	376.0	402.4	428.6	453.3	479.3	505.1	529.3	4,557.8
Depreciation Expense	1,428.1	1,475.2	1,522.4	1,588.1	1,635.3	1,682.5	1,748.1	1,795.3	1,842.5	1,908.2	1,955.4	2,002.5	20,583.6
Income Tax Expense	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	1,216.0	14,592.1
Return on Equity	227.7	444.9	486.6	530.5	574.1	615.2	658.3	701.3	741.6	784.1	826.4	866.0	7,456.8
Revenue Requirement	4,712.8	5,181.4	5,310.2	5,461.9	5,594.4	5,721.9	5,872.3	6,003.4	6,129.5	6,278.6	6,408.4	6,533.2	69,208.1
Return on Ratebase (ROR)	380.5	743.3	813.0	886.3	959.2	1,027.7	1,099.9	1,171.6	1,239.0	1,310.0	1,380.5	1,446.8	12,457.8

Southern California Gas Company
Advanced Metering Infrastructure
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All Property and O&M - Total Costs & Benefits
Monthly Revenue Requirement - 2009-2015

Description	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total
Franchise Fees & Uncollectibles	103.3	105.8	108.3	110.8	113.3	115.8	118.3	120.8	123.2	125.7	128.1	130.6	1,403.9
O&M expenses	953.6	953.6	953.6	953.6	953.6	953.6	953.6	953.6	953.6	953.6	953.6	953.6	11,443.1
Property Taxes	211.8	222.7	233.5	244.3	254.9	265.6	276.2	286.7	297.2	307.6	317.9	328.2	3,246.4
Preferred Equity Interest	54.0	56.8	59.6	62.3	65.0	67.7	70.4	73.1	75.8	78.4	81.1	83.7	828.1
Interest Expense	555.7	584.2	612.6	640.8	668.9	696.8	724.5	752.1	779.6	806.9	834.0	861.0	8,517.1
Depreciation Expense	2,059.9	2,117.9	2,174.7	2,232.1	2,289.5	2,346.8	2,404.2	2,461.6	2,519.0	2,576.4	2,633.8	2,691.1	28,506.4
Income Tax Expense	1,239.4	1,239.4	1,239.4	1,239.4	1,239.4	1,239.4	1,239.4	1,239.4	1,239.4	1,239.4	1,239.4	1,239.4	14,873.1
Return on Equity	909.1	955.8	1,002.2	1,048.4	1,094.3	1,140.0	1,185.4	1,230.5	1,275.4	1,320.1	1,364.5	1,408.7	13,934.4
Revenue Requirement	6,086.9	6,235.6	6,383.9	6,531.6	6,678.9	6,825.7	6,972.0	7,117.9	7,263.2	7,408.0	7,552.4	7,696.3	82,752.5
Return on Ratebase (ROR)	1,518.9	1,596.8	1,674.4	1,751.5	1,828.2	1,904.5	1,980.3	2,055.8	2,130.8	2,205.4	2,279.6	2,353.4	23,299.6
Description	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total
Franchise Fees & Uncollectibles	124.7	127.7	130.7	133.7	136.0	137.9	139.8	141.6	143.5	145.4	147.2	149.4	1,657.6
O&M expenses	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(7.2)
Property Taxes	340.1	353.8	367.3	380.9	391.5	399.1	406.8	414.4	421.9	429.4	436.9	444.7	4,786.7
Preferred Equity Interest	86.8	90.2	93.7	97.1	99.9	101.8	103.8	105.7	107.6	109.5	111.4	113.4	1,221.0
Interest Expense	892.4	928.1	963.7	999.2	1,027.0	1,047.2	1,067.2	1,087.1	1,106.8	1,126.6	1,146.2	1,166.6	12,558.0
Depreciation Expense	2,753.0	2,814.8	2,876.6	2,939.7	2,986.3	3,032.9	3,079.5	3,126.1	3,172.7	3,220.6	3,267.2	3,326.1	36,595.4
Income Tax Expense	1,695.5	1,695.5	1,695.5	1,695.5	1,695.5	1,695.5	1,695.5	1,695.5	1,695.5	1,695.5	1,695.5	1,695.5	20,346.5
Return on Equity	1,460.0	1,518.5	1,576.6	1,634.7	1,680.3	1,713.2	1,746.0	1,778.5	1,810.9	1,843.2	1,875.3	1,908.6	20,545.6
Revenue Requirement	7,351.9	7,528.0	7,703.6	7,880.2	8,015.8	8,127.0	8,237.9	8,348.3	8,458.4	8,569.6	8,679.2	8,803.6	97,703.5
Return on Ratebase (ROR)	2,439.1	2,536.8	2,634.0	2,731.0	2,807.1	2,862.2	2,916.9	2,971.3	3,025.3	3,079.3	3,132.9	3,188.6	34,324.5
Description	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total
Franchise Fees & Uncollectibles	140.0	142.4	144.8	147.2	149.6	151.9	154.3	156.7	159.0	161.4	163.7	166.0	1,836.9
O&M expenses	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(1,099.5)	(13,945.5)
Property Taxes	453.6	463.4	473.2	482.9	492.5	502.1	511.6	521.1	530.5	539.8	549.1	558.3	6,078.2
Preferred Equity Interest	115.7	118.2	120.7	123.2	125.6	128.1	130.5	132.9	135.3	137.7	140.1	142.4	1,550.4
Interest Expense	1,190.1	1,215.9	1,241.5	1,266.9	1,292.2	1,317.3	1,342.3	1,367.1	1,391.7	1,416.2	1,440.5	1,464.7	15,946.3
Depreciation Expense	3,385.5	3,444.9	3,504.3	3,563.8	3,623.2	3,682.6	3,742.0	3,801.5	3,860.9	3,920.3	3,979.7	4,039.2	44,547.8
Income Tax Expense	2,118.0	2,118.0	2,118.0	2,118.0	2,118.0	2,118.0	2,118.0	2,118.0	2,118.0	2,118.0	2,118.0	2,118.0	25,416.4
Return on Equity	1,947.1	1,989.2	2,031.1	2,072.7	2,114.1	2,155.2	2,196.0	2,236.6	2,276.9	2,317.0	2,356.8	2,396.3	26,089.2
Revenue Requirement	8,250.6	8,392.6	8,534.2	8,675.2	8,815.8	8,955.8	9,095.3	9,234.4	9,372.9	9,511.0	9,648.5	9,785.5	108,271.7
Return on Ratebase (ROR)	3,252.9	3,323.3	3,393.3	3,462.8	3,531.9	3,600.6	3,668.8	3,736.6	3,804.0	3,870.9	3,937.4	4,003.5	43,585.9

Southern California Gas Company
Advanced Metering Infrastructure

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**All Property and O&M - Total Costs & Benefits
Monthly Revenue Requirement - 2009-2015**

Description	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	2015
Franchise Fees & Uncollectibles	148.6	150.2	151.8	153.4	155.0	156.6	158.2	159.9	161.5	167.3	169.7	172.0	1,904.2
O&M expenses	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)	(2,469.5)
Property Taxes	559.5	565.1	570.7	576.2	581.8	587.3	592.9	598.5	604.0	615.5	627.0	633.5	7,112.0
Preferred Equity Interest	142.7	144.1	145.6	147.0	148.4	149.8	151.2	152.7	154.1	157.0	159.9	161.6	1,814.1
Interest Expense	1,467.9	1,482.5	1,497.1	1,511.7	1,526.3	1,540.9	1,555.5	1,570.1	1,584.7	1,614.8	1,644.9	1,662.0	18,658.5
Depreciation Expense	4,086.9	4,134.7	4,182.5	4,230.3	4,278.1	4,325.9	4,373.7	4,421.5	4,469.2	4,712.6	4,760.4	4,840.2	52,816.1
Income Tax Expense	2,420.5	2,420.5	2,420.5	2,420.5	2,420.5	2,420.5	2,420.5	2,420.5	2,420.5	2,420.5	2,420.5	2,420.5	29,046.2
Return on Equity	2,401.6	2,425.5	2,449.4	2,473.3	2,497.1	2,521.0	2,544.9	2,568.8	2,592.6	2,641.9	2,691.2	2,719.2	30,526.4
Revenue Requirement	8,758.3	8,853.2	8,948.0	9,042.9	9,137.7	9,232.6	9,327.4	9,422.3	9,517.1	9,610.1	10,004.1	10,139.6	112,243.2
Return on Ratebase (ROR)	4,012.3	4,052.2	4,092.1	4,131.9	4,171.8	4,211.7	4,251.6	4,291.5	4,331.4	4,413.7	4,496.0	4,542.8	50,999.0

Southern California Gas Company
Advanced Metering Infrastructure
Application September 22, 2008 Errata, March 6, 2009
All Property and O&M - Total O&M & Capital Costs
Monthly Revenue Requirement - 2009-2015

Description	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total 2009
	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Total 2010
Franchise Fees & Uncollectibles	(16.1)	(16.1)	(16.1)	(16.1)	(16.1)	(16.1)	(16.1)	(16.4)	(6.3)	(6.2)	(6.1)	(134.4)	
O&M expenses	-	-	-	-	-	-	-	549.8	549.8	549.8	549.8	549.8	3,298.7
Property Taxes	-	-	-	-	-	-	-	0.2	0.6	1.0	1.4	1.8	2.2
Preferred Equity Interest	-	-	-	-	-	-	-	0.1	0.2	0.3	0.4	0.5	1.9
Interest Expense	-	-	-	-	-	-	-	0.5	1.6	2.7	3.8	4.8	19.3
Depreciation Expense	(933.6)	(933.6)	(933.6)	(933.6)	(933.6)	(933.6)	(933.6)	1.6	3.2	4.8	6.3	7.9	33.3
Income Tax Expense	-	-	-	-	-	-	-	1.6	3.2	4.8	6.3	7.9	33.3
Return on Equity	-	-	-	-	-	-	-	0.9	2.6	4.4	6.1	7.9	31.6
Revenue Requirement	(950)	(950)	(950)	(950)	(950)	(949.7)	(949.7)	(378.6)	(373.6)	(368.6)	(363.6)	(358.7)	(7,924.9)
Return on Ratebase (ROR)	-	-	-	-	-	-	-	1.5	4.4	7.4	10.3	13.2	52.8
Franchise Fees & Uncollectibles	(16.2)	(16.1)	(16.1)	(16.0)	(15.9)	(15.8)	(15.7)	(15.6)	(15.5)	(15.4)	(15.3)	(15.3)	(188.9)
O&M expenses	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0	342.0	4,103.4
Property Taxes	2.7	3.1	3.5	3.9	4.3	4.7	5.1	5.5	5.9	6.3	6.7	7.1	58.9
Preferred Equity Interest	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	15.0
Interest Expense	7.0	8.0	9.1	10.2	11.3	12.4	13.4	14.5	15.6	16.6	17.7	18.7	154.5
Depreciation Expense	11.3	13.1	14.9	16.7	18.5	20.3	22.1	23.9	25.6	27.4	29.2	31.0	254.0
Income Tax Expense	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(1,315.5)	(15,785.9)
Return on Equity	11.4	13.2	14.9	16.7	18.5	20.2	22.0	23.7	25.5	27.2	28.9	30.6	252.8
Revenue Requirement	(956.8)	(931.5)	(946.2)	(941.0)	(925.7)	(930.5)	(925.3)	(920.1)	(914.9)	(909.8)	(904.6)	(899.5)	(11,136.0)
Return on Ratebase (ROR)	19.0	22.0	25.0	27.9	30.9	33.8	36.7	39.6	42.5	45.4	48.3	51.1	422.4
Franchise Fees & Uncollectibles	89.9	97.9	100.2	102.8	105.1	107.3	109.9	112.2	114.4	116.9	119.2	121.3	1,297.0
O&M expenses	2,124.6	2,124.6	2,124.6	2,124.6	2,124.6	2,124.6	2,124.6	2,124.6	2,124.6	2,124.6	2,124.6	2,124.6	25,494.9
Property Taxes	53.2	104.2	114.2	124.8	135.3	145.2	155.6	166.0	175.7	185.9	196.1	205.7	1,762.0
Preferred Equity Interest	13.6	26.6	29.1	31.8	34.5	37.0	39.7	42.3	44.8	47.4	50.0	52.5	449.4
Interest Expense	139.7	273.3	299.7	327.4	355.0	381.0	408.3	435.4	461.0	487.8	514.6	539.7	4,622.7
Depreciation Expense	1,428.1	1,475.2	1,522.4	1,588.1	1,635.3	1,682.5	1,748.1	1,795.3	1,842.5	1,908.2	1,955.4	2,002.5	20,583.6
Income Tax Expense	1,223.3	1,223.3	1,223.3	1,223.3	1,223.3	1,223.3	1,223.3	1,223.3	1,223.3	1,223.3	1,223.3	1,223.3	14,679.9
Return on Equity	228.5	447.1	490.3	535.7	580.8	623.3	667.9	712.3	754.2	798.1	841.8	882.9	7,563.0
Revenue Requirement	5,300.8	5,772.2	5,903.9	6,058.5	6,193.9	6,324.1	6,477.4	6,611.4	6,740.4	6,892.3	7,025.0	7,152.6	76,452.6
Return on Ratebase (ROR)	381.7	747.0	819.2	894.9	970.3	1,041.3	1,115.9	1,190.1	1,259.9	1,333.4	1,406.4	1,475.1	12,635.2

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All Property and O&M - Total O&M & Capital Costs
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Description	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total
	2012												2012
Franchise Fees & Uncollectibles	132.9	135.5	138.2	140.8	143.4	146.0	148.6	151.2	153.7	156.3	158.9	161.4	1,766.9
O&M expenses	2,602.7	2,602.7	2,602.7	2,602.7	2,602.7	2,602.7	2,602.7	2,602.7	2,602.7	2,602.7	2,602.7	2,602.7	31,232.1
Property Taxes	216.3	228.0	239.6	251.2	262.7	274.1	285.5	296.8	308.1	319.3	330.4	341.5	3,353.3
Preferred Equity Interest	55.2	58.2	61.1	64.1	67.0	69.9	72.8	75.7	78.6	81.4	84.3	87.1	855.3
Interest Expense	567.6	598.2	628.6	658.9	689.1	719.1	748.9	778.6	808.2	837.6	866.8	895.9	8,797.6
Depreciation Expense	2,059.9	2,117.3	2,174.7	2,232.1	2,289.5	2,346.8	2,404.2	2,461.6	2,519.0	2,576.4	2,633.8	2,691.1	28,506.4
Income Tax Expense	1,270.1	1,270.1	1,270.1	1,270.1	1,270.1	1,270.1	1,270.1	1,270.1	1,270.1	1,270.1	1,270.1	1,270.1	15,241.5
Return on Equity	928.6	978.6	1,028.5	1,078.1	1,127.4	1,176.5	1,225.3	1,273.9	1,322.2	1,370.3	1,418.2	1,465.7	14,393.3
Revenue Requirement	7,833.3	7,988.6	8,143.5	8,297.9	8,451.8	8,605.2	8,758.2	8,910.6	9,062.6	9,214.1	9,365.1	9,515.6	104,146.5
Return on Ratebase (ROR)	1,551.3	1,635.0	1,718.2	1,801.1	1,883.5	1,965.5	2,047.1	2,128.3	2,209.0	2,289.3	2,369.2	2,448.7	24,046.2
Description	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total
	2013												2013
Franchise Fees & Uncollectibles	179.9	183.2	186.5	189.8	192.4	194.6	196.8	199.0	201.2	203.4	205.5	207.9	2,340.3
O&M expenses	3,004.4	3,004.4	3,004.4	3,004.4	3,004.4	3,004.4	3,004.4	3,004.4	3,004.4	3,004.4	3,004.4	3,004.4	36,052.9
Property Taxes	354.5	369.5	384.3	399.2	411.1	420.1	429.0	437.9	446.7	455.5	464.3	473.3	5,045.4
Preferred Equity Interest	90.4	94.2	98.0	101.8	104.9	107.2	109.4	111.7	113.9	116.2	118.4	120.7	1,286.9
Interest Expense	930.1	969.3	1,008.3	1,047.3	1,078.6	1,102.1	1,125.5	1,148.8	1,172.0	1,195.1	1,218.0	1,241.7	13,256.7
Depreciation Expense	2,760.1	2,829.1	2,898.2	2,968.4	3,022.2	3,076.0	3,129.8	3,183.6	3,237.4	3,292.5	3,346.3	3,412.3	37,155.9
Income Tax Expense	1,764.2	1,764.2	1,764.2	1,764.2	1,764.2	1,764.2	1,764.2	1,764.2	1,764.2	1,764.2	1,764.2	1,764.2	21,170.3
Return on Equity	1,521.6	1,585.8	1,649.7	1,713.4	1,764.6	1,803.1	1,841.5	1,879.5	1,917.4	1,955.2	1,992.7	2,031.5	21,656.0
Revenue Requirement	10,605.3	10,799.8	10,993.7	11,188.5	11,342.4	11,471.7	11,600.7	11,729.2	11,857.2	11,986.4	12,113.8	12,256.0	137,944.5
Return on Ratebase (ROR)	2,542.1	2,649.3	2,756.1	2,862.5	2,948.0	3,012.4	3,076.4	3,140.1	3,203.3	3,266.4	3,329.2	3,393.9	36,179.7
Description	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	2014
	2014												2014
Franchise Fees & Uncollectibles	224.2	226.8	229.3	231.8	234.3	236.8	239.3	241.8	244.2	246.7	249.2	251.6	2,855.9
O&M expenses	3,349.0	3,349.0	3,349.0	3,349.0	3,349.0	3,349.0	3,349.0	3,349.0	3,349.0	3,349.0	3,349.0	3,349.0	40,181.6
Property Taxes	483.3	494.0	504.6	515.1	525.6	536.0	546.4	556.7	566.9	577.1	587.2	597.2	6,490.0
Preferred Equity Interest	123.3	126.0	128.7	131.4	134.1	136.7	139.4	142.0	144.6	147.2	149.8	152.3	1,655.4
Interest Expense	1,268.0	1,295.9	1,323.8	1,351.4	1,378.9	1,406.2	1,433.4	1,460.4	1,487.3	1,514.0	1,540.5	1,566.9	17,026.7
Depreciation Expense	3,471.8	3,531.4	3,590.9	3,650.4	3,710.0	3,769.5	3,829.1	3,888.6	3,948.1	4,007.7	4,067.2	4,126.8	45,591.5
Income Tax Expense	2,222.9	2,222.9	2,222.9	2,222.9	2,222.9	2,222.9	2,222.9	2,222.9	2,222.9	2,222.9	2,222.9	2,222.9	26,675.2
Return on Equity	2,074.5	2,120.2	2,165.7	2,211.0	2,256.0	2,300.7	2,345.1	2,389.3	2,433.3	2,477.0	2,520.4	2,563.5	27,856.7
Revenue Requirement	13,217.0	13,366.2	13,514.9	13,663.0	13,810.7	13,957.9	14,104.5	14,250.7	14,396.3	14,541.5	14,686.1	14,830.3	168,339.1
Return on Ratebase (ROR)	3,465.7	3,542.2	3,618.2	3,693.8	3,768.9	3,843.6	3,917.9	3,991.8	4,065.2	4,138.1	4,210.7	4,282.8	46,538.9

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Description	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	2015
Franchise Fees & Uncollectibles	259.0	260.8	262.5	264.2	265.9	267.6	269.3	271.0	272.8	278.7	281.2	283.6	3,236.7
O&M expenses	3,383.9	3,383.9	3,383.9	3,383.9	3,383.9	3,383.9	3,383.9	3,383.9	3,383.9	3,383.9	3,383.9	3,383.9	40,606.8
Property Taxes	599.3	605.6	611.8	618.1	624.4	630.7	637.0	643.3	649.6	661.8	674.0	681.3	7,637.1
Preferred Equity Interest	152.9	154.5	156.1	157.7	159.3	160.9	162.5	164.1	165.7	168.8	171.9	173.8	1,948.0
Interest Expense	1,572.2	1,588.7	1,605.2	1,621.7	1,638.2	1,654.7	1,671.3	1,687.8	1,704.3	1,736.3	1,768.4	1,787.4	20,056.1
Depreciation Expense	4,174.7	4,222.6	4,270.5	4,318.4	4,366.3	4,414.2	4,462.1	4,510.0	4,557.9	4,801.4	4,849.3	4,929.2	53,876.3
Income Tax Expense	2,555.4	2,555.4	2,555.4	2,555.4	2,555.4	2,555.4	2,555.4	2,555.4	2,555.4	2,555.4	2,555.4	2,555.4	30,664.8
Return on Equity	2,572.1	2,599.2	2,626.2	2,653.2	2,680.2	2,707.2	2,734.3	2,761.3	2,788.3	2,840.7	2,893.2	2,924.3	32,780.3
Revenue Requirement	15,269.4	15,370.5	15,471.5	15,572.6	15,673.6	15,774.7	15,875.7	15,976.8	16,077.9	16,427.1	16,577.3	16,719.0	190,786.1
Return on Ratebase (ROR)	4,297.1	4,342.3	4,387.4	4,432.6	4,477.7	4,522.9	4,568.0	4,613.2	4,658.3	4,745.9	4,833.5	4,885.5	54,764.4

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All Property and O&M - Total O&M, Avoided & Deferred Benefits (Net of Deferred Costs)
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Description	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total 2009
Franchise Fees & Uncollectibles	-	-	-	-	-	-	(6.6)	(6.6)	(6.6)	(6.6)	(6.6)	(6.6)	(39.4)
O&M expenses	-	-	-	-	-	-	(380.2)	(380.2)	(380.2)	(380.2)	(380.2)	(380.2)	(2,281.5)
Property Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-
Preferred Equity Interest	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Return on Equity	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenue Requirement	-	-	-	-	-	-	(386.8)	(386.8)	(386.8)	(386.8)	(386.8)	(386.8)	(2,320.9)
Return on Ratebase (ROR)	-												
Description	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Total 2010
Franchise Fees & Uncollectibles	(3.4) (194.9)												
O&M expenses	-	-	-	-	-	-	-	-	-	-	-	-	-
Property Taxes	-	-	-	-	-	-	-	-	-	-	-	-	-
Preferred Equity Interest	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Return on Equity	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenue Requirement	(198.2)	(198.2)	(198.2)	(198.2)	(198.2)	(198.2)	(198.2)	(198.2)	(198.2)	(198.2)	(198.2)	(198.2)	(2,378.9)
Return on Ratebase (ROR)	-												
Description	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Total 2011
Franchise Fees & Uncollectibles	(10.0) (569.3)	(10.1) (569.3)	(10.1) (569.3)	(10.2) (569.3)	(10.2) (569.3)	(10.3) (569.3)	(10.3) (569.3)	(10.3) (569.3)	(10.4) (569.3)	(10.4) (569.3)	(10.4) (569.3)	(10.4) (569.3)	(10.4) (569.3)
O&M expenses	(0.2)	(0.5)	(0.9)	(1.2)	(1.5)	(1.9)	(2.2)	(2.6)	(2.9)	(3.3)	(3.6)	(4.0)	(24.7)
Property Taxes	(0.0)	(0.1)	(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	(0.7)	(0.7)	(0.8)	(0.9)	(1.0)	(6.3)
Preferred Equity Interest	(0.5)	(1.4)	(2.3)	(3.2)	(4.1)	(5.0)	(5.9)	(6.8)	(7.7)	(8.6)	(9.5)	(10.4)	(64.9)
Interest Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation Expense	(7.3) (0.7)	(7.3) (2.2)	(7.3) (3.7)	(7.3) (5.2)	(7.3) (6.6)	(7.3) (8.1)	(7.3) (9.5)	(7.3) (11.1)	(7.3) (11.1)	(7.3) (12.5)	(7.3) (14.0)	(7.3) (15.5)	(7.3) (17.0)
Income Tax Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Return on Equity	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenue Requirement	(588.0)	(590.9)	(593.7)	(596.6)	(599.4)	(602.3)	(605.1)	(608.0)	(610.8)	(613.7)	(616.6)	(619.4)	(7,244.5)
Return on Ratebase (ROR)	(1.2)	(3.7)	(6.2)	(8.6)	(11.1)	(13.6)	(16.0)	(18.5)	(20.9)	(23.4)	(25.9)	(28.3)	(17.4)

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Description	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total
Franchise Fees & Uncollectibles	(29.6)	(29.7)	(29.9)	(30.0)	(30.1)	(30.2)	(30.3)	(30.4)	(30.5)	(30.6)	(30.8)	(30.9)	(363.0)
O&M expenses	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(1,649.1)	(19,789.0)
Property Taxes	(4.5)	(5.3)	(6.1)	(6.9)	(7.7)	(8.5)	(9.3)	(10.1)	(10.9)	(11.7)	(12.5)	(13.3)	(106.9)
Preferred Equity Interest	(1.2)	(1.4)	(1.6)	(1.8)	(2.0)	(2.2)	(2.4)	(2.6)	(2.8)	(3.0)	(3.2)	(3.4)	(27.3)
Interest Expense	(11.9)	(14.0)	(16.1)	(18.1)	(20.2)	(22.3)	(24.4)	(26.5)	(28.6)	(30.7)	(32.8)	(34.9)	(280.5)
Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax Expense	(30.7)	(30.7)	(30.7)	(30.7)	(30.7)	(30.7)	(30.7)	(30.7)	(30.7)	(30.7)	(30.7)	(30.7)	(368.5)
Return on Equity	(19.4)	(22.8)	(26.3)	(29.7)	(33.1)	(36.5)	(40.0)	(43.4)	(46.8)	(50.2)	(53.6)	(57.1)	(458.9)
Revenue Requirement	(1,746.4)	(1,753.0)	(1,759.6)	(1,766.3)	(1,772.9)	(1,779.5)	(1,786.1)	(1,792.8)	(1,799.4)	(1,806.0)	(1,812.7)	(1,819.3)	(21,394.0)
Return on Ratebase (ROR)	(32.4)	(38.2)	(43.9)	(49.6)	(55.3)	(61.0)	(66.7)	(72.5)	(78.2)	(83.9)	(89.6)	(95.3)	(766.7)
Total	 												
Description	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total
Franchise Fees & Uncollectibles	(55.2)	(55.5)	(55.8)	(56.1)	(56.4)	(56.7)	(57.1)	(57.4)	(57.7)	(58.0)	(58.3)	(58.6)	(682.7)
O&M expenses	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(3,005.0)	(36,060.1)
Property Taxes	(14.4)	(15.7)	(17.0)	(18.3)	(19.6)	(21.0)	(22.2)	(23.5)	(24.8)	(26.1)	(27.4)	(28.6)	(258.7)
Preferred Equity Interest	(3.7)	(4.0)	(4.3)	(4.7)	(5.0)	(5.3)	(5.7)	(6.0)	(6.3)	(6.7)	(7.0)	(7.3)	(66.0)
Interest Expense	(37.7)	(41.2)	(44.6)	(48.1)	(51.5)	(55.0)	(58.4)	(61.8)	(65.1)	(68.5)	(71.8)	(75.1)	(678.7)
Depreciation Expense	(7.2)	(14.4)	(21.6)	(28.7)	(35.9)	(43.1)	(50.3)	(57.5)	(64.7)	(71.9)	(79.0)	(86.2)	(560.5)
Income Tax Expense	(68.6)	(68.6)	(68.6)	(68.6)	(68.6)	(68.6)	(68.6)	(68.6)	(68.6)	(68.6)	(68.6)	(68.6)	(823.8)
Return on Equity	(61.6)	(67.4)	(73.0)	(78.7)	(84.3)	(89.9)	(95.5)	(101.0)	(106.5)	(112.0)	(117.5)	(122.9)	(1,110.4)
Revenue Requirement	(3,253.4)	(3,271.8)	(3,290.1)	(3,308.3)	(3,326.6)	(3,344.7)	(3,362.8)	(3,380.8)	(3,398.8)	(3,416.7)	(3,434.6)	(3,452.4)	(40,241.0)
Return on Ratebase (ROR)	(103.0)	(112.5)	(122.0)	(131.5)	(140.9)	(150.2)	(159.5)	(168.8)	(178.0)	(187.1)	(196.2)	(205.3)	(1,355.2)
Total	 												
Description	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total
Franchise Fees & Uncollectibles	(84.3)	(84.4)	(84.5)	(84.6)	(84.7)	(84.9)	(85.0)	(85.1)	(85.2)	(85.3)	(85.5)	(85.6)	(1,019.1)
O&M expenses	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(4,448.4)	(53,381.0)
Property Taxes	(29.7)	(30.5)	(31.4)	(32.2)	(33.1)	(33.9)	(34.7)	(35.6)	(36.4)	(37.3)	(38.1)	(38.9)	(411.8)
Preferred Equity Interest	(7.6)	(7.8)	(8.0)	(8.2)	(8.4)	(8.6)	(8.8)	(9.1)	(9.3)	(9.5)	(9.7)	(9.9)	(105.0)
Interest Expense	(77.9)	(80.1)	(82.3)	(84.5)	(86.7)	(88.9)	(91.1)	(93.3)	(95.6)	(97.8)	(100.0)	(102.2)	(1,080.4)
Depreciation Expense	(86.3)	(86.5)	(86.6)	(86.7)	(86.8)	(86.9)	(87.0)	(87.1)	(87.3)	(87.5)	(87.5)	(87.5)	(1,043.7)
Income Tax Expense	(104.9)	(104.9)	(104.9)	(104.9)	(104.9)	(104.9)	(104.9)	(104.9)	(104.9)	(104.9)	(104.9)	(104.9)	(1,258.9)
Return on Equity	(127.4)	(131.0)	(134.6)	(138.3)	(141.9)	(145.5)	(149.1)	(152.7)	(156.3)	(160.0)	(163.6)	(167.2)	(1,767.6)
Revenue Requirement	(4,966.5)	(4,973.6)	(4,980.7)	(4,987.8)	(4,994.9)	(5,002.1)	(5,009.2)	(5,016.3)	(5,023.4)	(5,030.5)	(5,037.7)	(5,044.8)	(60,067.4)
Return on Ratebase (ROR)	(212.8)	(218.9)	(224.9)	(231.0)	(237.0)	(243.1)	(249.1)	(255.1)	(261.2)	(267.2)	(273.3)	(279.3)	(2,953.0)

Southern California Gas Company
Advanced Metering Infrastructure

Application-September-22, 2008 Errata, March 6, 2009

All Property and O&M - Total O&M, Avoided & Deferred Benefits (Net of Deferred Costs)
Monthly Revenue Requirement - 2009-2015

Description	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	2015
Franchise Fees & Uncollectibles	(110.5)	(110.6)	(110.7)	(110.8)	(110.9)	(111.0)	(111.1)	(111.2)	(111.3)	(111.4)	(111.5)	(111.6)	(1,332.5)
O&M expenses	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(5,853.4)	(70,241.1)
Property Taxes	(39.7)	(40.5)	(41.2)	(41.9)	(42.7)	(43.4)	(44.1)	(44.9)	(45.6)	(46.3)	(47.1)	(47.8)	(625.1)
Preferred Equity Interest	(10.1)	(10.3)	(10.5)	(10.7)	(10.9)	(11.1)	(11.3)	(11.4)	(11.6)	(11.8)	(12.0)	(12.2)	(133.9)
Interest Expense	(104.2)	(106.1)	(108.1)	(110.0)	(111.9)	(113.8)	(115.8)	(117.7)	(119.6)	(121.5)	(123.5)	(125.4)	(1,377.6)
Depreciation Expense	(87.7)	(87.8)	(87.9)	(88.1)	(88.2)	(88.3)	(88.4)	(88.5)	(88.6)	(88.7)	(88.9)	(89.0)	(1,060.2)
Income Tax Expense	(134.9)	(134.9)	(134.9)	(134.9)	(134.9)	(134.9)	(134.9)	(134.9)	(134.9)	(134.9)	(134.9)	(134.9)	(1,618.6)
Return on Equity	(170.5)	(173.7)	(176.8)	(180.0)	(183.1)	(186.2)	(189.4)	(192.5)	(195.7)	(198.8)	(202.0)	(205.1)	(2,253.8)
Revenue Requirement	(6,511.1)	(6,517.3)	(6,523.5)	(6,529.7)	(6,535.9)	(6,542.1)	(6,548.3)	(6,554.6)	(6,560.8)	(6,567.0)	(6,573.2)	(6,579.4)	(78,542.8)
Return on Ratebase (ROR)	(284.9)	(290.1)	(295.4)	(300.6)	(305.9)	(311.2)	(316.4)	(321.7)	(326.9)	(332.2)	(337.4)	(342.7)	(3,765.4)

Annual Property Tax rate 1.2100%
Monthly Property Tax rate 0.1008%

SUMMARY OF RATEBASE

Year	Month	Utility	Plant	Acc.	Acc. Def.	Net	Property Tax	ROR	Pref. Equity	Int. Exp.	Net Inc.
				Taxes		Ratebase	0.1008%	0.72%	0.03%	0.26%	0.43%
2009	Beg Bal	-	-	-	-	-	-	-	-	-	-
	Jan	-	-	-	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-	-	-	-
	Jul	415	(2)	(5)	408	0	1	0	1	1	1
	Aug	829	(5)	(10)	814	1	4	0	2	3	3
	Sep	1,244	(10)	(16)	1,219	1	7	0	3	4	4
	Oct	1,659	(16)	(21)	1,622	1	10	0	4	6	6
	Nov	2,074	(24)	(26)	2,023	2	13	0	5	8	8
	Dec	2,488	(33)	(32)	2,423	2	16	1	6	10	10
2009	Total	622	(6)	(8)	608	7	53	2	19	32	32
2010	Beg Bal	2,488	(33)	(32)	2,423	-	-	-	-	-	-
	Jan	2,921	(45)	(39)	2,837	3	19	1	7	11	11
	Feb	3,353	(58)	(46)	3,249	3	22	1	8	13	13
	Mar	3,785	(73)	(53)	3,659	3	25	1	9	15	15
	Apr	4,217	(89)	(60)	4,068	4	28	1	10	17	17
	May	4,649	(108)	(67)	4,474	4	31	1	11	18	18
	Jun	5,081	(128)	(74)	4,879	5	34	1	12	20	20
	Jul	5,514	(150)	(81)	5,282	5	37	1	13	22	22
	Aug	5,946	(174)	(88)	5,684	6	40	1	15	24	24
	Sep	6,378	(200)	(95)	6,083	6	43	2	16	25	25
	Oct	6,810	(227)	(102)	6,481	6	45	2	17	27	27
	Nov	7,242	(256)	(109)	6,877	7	48	2	18	29	29
	Dec	7,675	(287)	(116)	7,271	7	51	2	19	31	31
2010	Total	5,081	(139)	(74)	4,868	59	422	15	155	253	253
2011	Beg Bal	7,675	(287)	(116)	7,271	-	-	-	-	-	-
	Jan	100,215	(1,715)	(187)	98,312	53	382	14	140	228	228
	Feb	111,763	(3,191)	(258)	108,315	104	747	27	273	447	447
	Mar	123,312	(4,713)	(330)	118,269	114	819	29	300	490	490
	Apr	135,972	(6,301)	(400)	129,271	125	895	32	327	536	536
	May	147,521	(7,936)	(471)	139,113	135	970	35	355	581	581
	Jun	159,070	(9,619)	(542)	148,908	145	1,041	37	381	623	623
	Jul	171,730	(11,367)	(613)	159,750	156	1,116	40	408	668	668
	Aug	183,278	(13,162)	(684)	169,432	166	1,190	42	435	712	712
	Sep	194,827	(15,005)	(755)	179,067	176	1,260	45	461	754	754
	Oct	207,487	(16,913)	(826)	189,749	186	1,333	47	488	798	798
	Nov	219,036	(18,868)	(896)	199,271	196	1,406	50	515	842	842
	Dec	230,585	(20,871)	(967)	208,746	206	1,475	52	540	883	883
2011	Total	156,112	(9,947)	(542)	145,622	1,762	12,635	449	4,623	7,563	7,563

<u>Annual Property Tax rate</u>	1.2100%
<u>Monthly Property Tax rate</u>	0.1008%

SUMMARY OF RATEBASE

Year	Month	Utility	Plant	Acc.	Acc. Def.	Net	Property Tax	ROR	Pref. Equity	Int. Exp.	Net Inc.
				Taxes		Ratebase	0.1008%	0.72%	0.03%	0.26%	0.43%
2012 Beg Bal											
Jan		230,585	(20,871)	(967)	208,746	-	1,551	55	568	929	
Feb		244,727	(22,931)	(1,448)	220,348	216	1,635	58	598	979	
Mar		258,870	(25,048)	(1,929)	231,892	228	1,718	61	629	1,028	
Apr		273,012	(27,223)	(2,411)	243,378	240	1,801	64	659	1,078	
May		287,155	(29,455)	(2,894)	254,806	251	1,884	67	689	1,127	
Jun		301,297	(31,744)	(3,376)	266,176	263	1,966	70	719	1,176	
Jul		315,440	(34,091)	(3,860)	277,488	274	2,047	73	749	1,225	
Aug		329,582	(36,495)	(4,344)	288,743	285	2,128	76	779	1,274	
Sep		343,725	(38,957)	(4,828)	299,939	297	2,209	79	808	1,322	
Oct		357,867	(41,476)	(5,313)	311,078	308	2,289	81	838	1,370	
Nov		372,010	(44,052)	(5,799)	322,158	319	2,369	84	867	1,418	
Dec		386,152	(46,6386)	(6,285)	333,181	330	2,449	87	896	1,466	
2012 Total		400,295	(49,377)	(6,772)	344,145	-	2,542	90	930	1,522	
2013 Beg Bal											
Jan		400,295	(49,377)	(6,772)	344,145	-	2,542	90	930	1,522	
Feb		418,584	(52,137)	(7,436)	359,011	355	2,649	94	969	1,586	
Mar		436,874	(54,067)	(8,102)	373,805	369	2,756	98	1,008	1,650	
Apr		455,163	(57,865)	(8,770)	388,528	384	2,862	102	1,047	1,713	
May		473,527	(60,833)	(9,446)	403,248	399	2,948	105	1,079	1,765	
Jun		486,159	(63,855)	(10,122)	412,181	411	3,012	107	1,102	1,803	
Jul		498,791	(66,931)	(10,797)	421,062	420	3,076	109	1,126	1,841	
Aug		511,422	(70,061)	(11,472)	429,889	429	3,140	112	1,149	1,880	
Sep		524,054	(73,245)	(12,147)	438,662	438	3,203	114	1,172	1,917	
Oct		536,685	(76,482)	(12,820)	447,383	447	3,266	116	1,195	1,955	
Nov		549,392	(79,775)	(13,494)	456,123	456	3,329	118	1,218	1,993	
Dec		562,023	(83,121)	(14,167)	464,735	464	3,394	121	1,242	2,031	
2013 Total		575,389	(86,333)	(14,839)	474,017	-	3,466	123	1,268	2,074	
2014 Beg Bal											
Jan		575,389	(86,333)	(14,839)	474,017	-	3,466	123	1,268	2,074	
Feb		590,077	(90,005)	(15,452)	484,619	483	3,542	126	1,296	2,120	
Mar		604,765	(93,536)	(16,066)	495,162	494	3,618	129	1,324	2,166	
Apr		619,453	(97,127)	(16,680)	505,645	505	3,694	131	1,351	2,211	
May		634,141	(100,778)	(17,295)	516,067	515	3,769	134	1,379	2,256	
Jun		648,829	(104,388)	(17,911)	526,430	526	3,844	137	1,406	2,301	
Jul		663,517	(108,257)	(18,527)	536,732	536	3,918	139	1,433	2,345	
Aug		678,205	(112,086)	(19,144)	546,974	546	3,992	142	1,460	2,389	
Sep		692,893	(115,975)	(19,761)	557,157	557	4,065	145	1,487	2,433	
Oct		707,581	(119,923)	(20,379)	567,278	567	4,138	147	1,514	2,477	
Nov		722,269	(123,931)	(20,997)	577,340	577	4,211	150	1,541	2,520	
Dec		736,957	(127,998)	(21,617)	587,342	587	4,283	152	1,567	2,564	
2014 Total		663,517	(108,619)	(18,531)	536,367	536,367	46,539	1,655	17,027	27,857	

<u>Annual Property Tax rate</u>	1.2100%
<u>Monthly Property Tax rate</u>	0.1008%

SUMMARY OF RATEBASE

Year	Month	Utility	Acc.	Acc. Def:	Net	Property Tax	ROR	Pref. Equity	Int. Exp.	Net Inc.
		Plant	Depreciation	Taxes	Ratebase	0.1008%	0.72%	0.03%	0.26%	0.43%
2015 Beg Bal		751,644	(136,769)	(23,695)	591,180	-	-	-	-	-
Jan		763,361	(141,610)	(24,327)	597,424	599	4,297	153	1,572	2,572
Feb		775,078	(146,451)	(24,959)	603,667	606	4,342	154	1,589	2,599
Mar		786,794	(151,293)	(25,591)	609,911	612	4,387	156	1,605	2,626
Apr		798,511	(156,134)	(26,223)	616,154	618	4,433	158	1,622	2,653
May		810,228	(160,975)	(26,855)	622,398	624	4,478	159	1,638	2,680
Jun		821,944	(165,816)	(27,487)	628,641	631	4,523	161	1,655	2,707
Jul		833,661	(170,657)	(28,119)	634,885	637	4,568	162	1,671	2,734
Aug		845,378	(175,499)	(28,751)	641,128	643	4,613	164	1,688	2,761
Sep		857,094	(180,340)	(29,383)	647,372	650	4,658	166	1,704	2,788
Oct		880,548	(185,181)	(30,015)	665,352	662	4,746	169	1,736	2,841
Nov		892,264	(190,022)	(30,646)	671,595	674	4,833	172	1,768	2,893
Dec		905,901	(194,864)	(31,278)	679,759	681	4,886	174	1,787	2,924
2015 Total		824,470	(165,816)	(27,487)	631,167	7,637	54,764	1,948	20,036	32,780

Annual Property Tax rate
Monthly Property Tax rate
 1.2100%
 0.1008%

SUMMARY OF RATEBASE

Year	Month	Utility	Plant	Acc.	Acc. Def.	Net	Property Tax	ROR	Pref. Equity	Int. Exp.	Net Inc.
				Taxes	Ratbase	0.1008%	0.72%	0.03%	0.26%	0.43%	
2009	Beg Bal	-	-	-	-	-	-	-	-	-	
	Jan	-	-	-	-	-	-	-	-	-	
	Feb	-	-	-	-	-	-	-	-	-	
	Mar	-	-	-	-	-	-	-	-	-	
	Apr	-	-	-	-	-	-	-	-	-	
	May	-	-	-	-	-	-	-	-	-	
	Jun	-	-	-	-	-	-	-	-	-	
	Jul	-	-	-	-	-	-	-	-	-	
	Aug	-	-	-	-	-	-	-	-	-	
	Sep	-	-	-	-	-	-	-	-	-	
	Oct	-	-	-	-	-	-	-	-	-	
	Nov	-	-	-	-	-	-	-	-	-	
	Dec	-	-	-	-	-	-	-	-	-	
2009	Total	-	-	-	-	-	-	-	-	-	
2010	Beg Bal	-	-	-	-	-	-	-	-	-	
	Jan	-	-	-	-	-	-	-	-	-	
	Feb	-	-	-	-	-	-	-	-	-	
	Mar	-	-	-	-	-	-	-	-	-	
	Apr	-	-	-	-	-	-	-	-	-	
	May	-	-	-	-	-	-	-	-	-	
	Jun	-	-	-	-	-	-	-	-	-	
	Jul	-	-	-	-	-	-	-	-	-	
	Aug	-	-	-	-	-	-	-	-	-	
	Sep	-	-	-	-	-	-	-	-	-	
	Oct	-	-	-	-	-	-	-	-	-	
	Nov	-	-	-	-	-	-	-	-	-	
	Dec	-	-	-	-	-	-	-	-	-	
2010	Total	-	-	-	-	-	-	-	-	-	
2011	Beg Bal	-	-	-	-	-	-	-	-	-	
	Jan	341	-	-	-	341	0	1	0	0	1
	Feb	682	-	-	-	682	1	4	0	1	2
	Mar	1,022	-	-	-	1,022	1	6	0	2	4
	Apr	1,363	-	-	-	1,363	1	9	0	3	5
	May	1,704	-	-	-	1,704	2	11	0	4	7
	Jun	2,045	-	-	-	2,045	2	14	0	5	8
	Jul	2,386	-	-	-	2,386	2	16	1	6	10
	Aug	2,727	-	-	-	2,727	3	18	1	7	11
	Sep	3,067	-	-	-	3,067	3	21	1	8	13
	Oct	3,408	-	-	-	3,408	3	23	1	9	14
	Nov	3,749	-	-	-	3,749	4	26	1	9	15
	Dec	4,090	-	-	-	4,090	4	28	1	10	17
2011	Total	2,045	-	-	-	2,045	25	177	6	65	106

Annual Property Tax rate
 1.2100%
Monthly Property Tax rate
 0.1008%

SUMMARY OF RATEBASE

Year	Month	Utility	Plant	Acc.	Acc. Def.	Net	Property Tax	ROR	Pref. Equity	Int. Exp.	Net Inc.
				Taxes		Ratebase	0.1008%	0.72%	0.03%	0.26%	0.43%
2012 Beg Bal		4,090	-	-	-	4,090	-				
Jan		4,881	-	-	-	4,881	5	32	1	12	19
Feb		5,672	-	-	-	5,672	5	38	1	14	23
Mar		6,463	-	-	-	6,463	6	44	2	16	26
Apr		7,254	-	-	-	7,254	7	50	2	18	30
May		8,045	-	-	-	8,045	8	55	2	20	33
Jun		8,836	-	-	-	8,836	9	61	2	22	37
Jul		9,627	-	-	-	9,627	9	67	2	24	40
Aug		10,418	-	-	-	10,418	10	72	3	27	43
Sep		11,209	-	-	-	11,209	11	78	3	29	47
Oct		12,000	-	-	-	12,000	12	84	3	31	50
Nov		12,791	-	-	-	12,791	12	90	3	33	54
Dec		13,582	-	-	-	13,582	13	95	3	35	57
2012 Total		8,836	-	-	-	8,836	107	767	27	280	459
2013 Beg Bal		13,582	-	-	-	13,582	-				
Jan		14,924	(7)	(11)	14,905	14	103	4	38	62	62
Feb		16,266	(22)	(22)	16,222	16	113	4	41	67	67
Mar		17,608	(43)	(32)	17,532	17	122	4	45	73	73
Apr		18,949	(72)	(42)	18,836	18	131	5	48	79	79
May		20,291	(108)	(51)	20,132	20	141	5	52	84	84
Jun		21,633	(151)	(60)	21,422	21	150	5	55	90	90
Jul		22,975	(201)	(69)	22,705	22	160	6	58	95	95
Aug		24,317	(259)	(77)	23,981	24	169	6	62	101	101
Sep		25,659	(323)	(85)	25,251	25	178	6	65	107	107
Oct		27,001	(395)	(92)	26,514	26	187	7	68	112	112
Nov		28,343	(474)	(99)	27,770	27	196	7	72	117	117
Dec		29,685	(560)	(106)	29,019	29	205	7	75	123	123
2013 Total		21,633	(195)	(58)	21,381	259	1,855	66	679	1,110	
2014 Beg Bal		29,685	(560)	(106)	29,019	-					
Jan		30,628	(647)	(126)	29,885	30	213	8	78	127	127
Feb		31,570	(733)	(146)	30,691	31	219	8	80	131	131
Mar		32,513	(820)	(167)	31,527	31	225	8	82	135	135
Apr		33,456	(907)	(187)	32,363	32	231	8	85	138	138
May		34,399	(993)	(207)	33,198	33	237	8	87	142	142
Jun		35,342	(1,080)	(227)	34,034	34	243	9	89	145	145
Jul		36,284	(11,167)	(248)	34,869	35	249	9	91	149	149
Aug		37,227	(12,54)	(268)	35,705	36	255	9	93	153	153
Sep		38,170	(1,342)	(288)	36,540	36	261	9	96	156	156
Oct		39,113	(1,429)	(308)	37,375	37	267	10	98	160	160
Nov		40,055	(1,517)	(329)	38,210	38	273	10	100	164	164
Dec		40,998	(1,604)	(349)	39,045	39	279	10	102	167	167
2014 Total		35,342	(1,081)	(227)	34,033	412	2,953	105	1,080	1,768	

Annual Property Tax rate
 1.2100%
Monthly Property Tax rate
 0.1008%

SUMMARY OF RATEBASE

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.1008%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.45%
2015 Beg Bal		40,998	(1,613)	(350)	39,035	-				
Jan		41,835	(1,702)	(371)	39,761	40	285	10	104	171
Feb		42,672	(1,791)	(392)	40,488	40	290	10	106	174
Mar		43,508	(1,880)	(413)	41,215	41	295	11	108	177
Apr		44,345	(1,969)	(433)	41,942	42	301	11	110	180
May		45,182	(2,058)	(454)	42,669	43	306	11	112	183
Jun		46,018	(2,147)	(475)	43,396	43	311	11	114	186
Jul		46,855	(2,236)	(496)	44,123	44	316	11	116	189
Aug		47,692	(2,325)	(517)	44,850	45	322	11	118	193
Sep		48,528	(2,414)	(537)	45,577	46	327	12	120	196
Oct		49,365	(2,503)	(558)	46,304	46	332	12	122	199
Nov		50,202	(2,592)	(579)	47,031	47	337	12	123	202
Dec		51,039	(2,681)	(600)	47,758	48	343	12	125	205
2015 Total		46,018	(2,147)	(475)	43,396	525	3,765	134	1,378	2,254

Southern California Gas Company
Advanced Metering Infrastructure
Calculation of Benefits per Meter/Module per Month during deployment period
Errata Version - March 6, 2009

	Total	2009	2010	2011	2012	2013	2014	2015
Meter Deployments	6,047,397	-	1,040,718	1,322,806	1,343,640	1,347,114	993,119	
Revenue Requirement of O&M Benefits	(190,923)	(2,281)	(2,339)	(6,832)	(19,789)	(36,060)	(53,381)	(70,241)
Meter Months - Current Year	39,308,079	-	-	6,764,666	8,598,239	8,733,660	8,756,243	6,455,270
Number of Subsequent Years	6	5	4	4	3	2	1	-
Meter Months Subsequent Years	145,988,205	-	-	49,954,460	47,621,014	32,247,359	16,165,373	-
Total Meter Month Years	185,296,284	-	-	56,719,127	56,219,252	40,981,018	24,921,616	6,455,270
Benefits Per Meter Per Month \$								
	1,0304							

Monthly Deployments as a Percent of Annual Deployments

January	8%	8%	8%	8%	8%	8%	8%	8%
February	8%	8%	8%	8%	8%	8%	8%	8%
March	8%	8%	8%	8%	8%	8%	8%	8%
April	8%	8%	8%	8%	8%	8%	8%	8%
May	8%	8%	8%	8%	8%	8%	8%	8%
June	8%	8%	8%	8%	8%	8%	8%	8%
July	8%	8%	8%	8%	8%	8%	8%	8%
August	8%	8%	8%	8%	8%	8%	8%	8%
September	8%	8%	8%	8%	8%	8%	8%	8%
October	8%	8%	8%	8%	8%	8%	8%	8%
November	8%	8%	8%	8%	8%	8%	8%	8%
December	8%	8%	8%	8%	8%	8%	8%	8%

Monthly Deployments

January	12	11	10	9	8	7	6	5	4	3	2	1
February	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
March	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
April	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
May	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
June	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
July	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
August	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
September	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
October	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
November	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726
December	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726	86,726

Months Remaining in Current year