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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**

Prepared Direct Testimony
of
Michael W. Foster

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

September 29, 2008

TABLE OF CONTENTS

I.	PURPOSE AND SUMMARY	1
II.	DESCRIPTION OF INCREMENTAL AMI COSTS AND BENEFITS	2
A.	Summary	2
B.	Direct Capital Costs and Benefits.....	3
C.	Direct Operating and Maintenance (O&M) Costs and Benefits.....	3
D.	Adjustments to Direct Costs.....	4
1.	Overhead Rates.....	5
2.	Escalation Factors.....	6
3.	Sales Taxes	7
III.	REVENUE REQUIREMENTS	9
A.	Revenue Requirement Components	10
1.	Net O&M Costs	10
2.	Return on Rate Base	11
3.	Depreciation.....	11
4.	Taxes.....	12
5.	Working Cash.....	13
6.	Allowance for Funds Used During Construction (AFUDC).....	13
7.	Franchise Fees and Uncollectable (FF&U).....	14
B.	AMI Revenue Requirements over Analysis Period, 2009-2034	14
C.	Monthly AMI Revenue Requirements over Deployment Period, 2009-2015	14
IV.	WITNESS QUALIFICATIONS	15

1 **I. PURPOSE AND SUMMARY**

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

20
21 **Table VII-1**
22 **Present Value of 26 Year Annual Revenue**
23 **Requirements and Other Ratepayer Benefits**
24 **SoCalGas Stand Alone Scenario**
25 **(\$ millions) 2008\$ - Costs (Benefits)**

26	Costs	\$ 1,051.0
27	Operational Benefits	\$ (888.6)
28	Operational Benefits as Percent of Costs	84.5%
	Other Rate Payer Benefits	\$ (175.5)
	Net Rate Payer Benefits	\$ (13.2)

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-6 (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.

11 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 NPV of the cash flows and revenue requirements include "other benefits" that are not part of
20 the revenue requirements for rate making purposes but are included when evaluating the
21 economic value of the SoCalGas AMI investment. Table VII-2 shows that benefits exceed costs
22 on a nominal basis by \$1.727 billion.

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

	Total	IT Development		Gas Module and Meter Installation Years					Post
		2009	2010	2011	2012	2013	2014	2015	Deployment 2015-2034
Costs - Capital	1,150.7	21.6	56.7	141.5	171.2	177.1	178.7	155.7	248.2
Costs - O&M	793.4	3.1	3.7	25.1	31.3	37.3	42.7	43.8	606.4
Total Costs	1,944.1	24.7	60.4	166.7	202.4	214.4	221.4	199.6	854.5
Benefits - O&M	(2,731.7)	(2.2)	(2.3)	(6.6)	(19.2)	(34.9)	(51.6)	(67.9)	(2,546.9)
Benefits - Capital	(359.9)	-	-	(6.8)	(8.9)	(14.4)	(9.7)	(7.4)	(312.7)
Total Benefits	(3,091.7)	(2.2)	(2.3)	(13.5)	(28.1)	(49.3)	(61.3)	(75.3)	(2,859.6)
Other Ratepayer Benefits	(579.3)	-	-	(1.7)	(5.3)	(9.1)	(12.5)	(16.5)	(534.1)
Net Costs (Benefits)	(1,726.8)	22.5	58.1	151.4	169.0	156.1	147.6	107.7	(2,539.2)

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-6 (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).

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

This section describes the incremental O&M costs and benefits included in the discounted cash flows and revenue requirements. The incremental O&M costs and benefits are

1 identified in Table VII-3 below. These O&M costs and benefits comprise numerous elements
 2 primarily associated with the following areas and addressed by the following witnesses: (a)
 3 meter reading, billing, and customer service field costs and benefits (SoCalGas witness Mr.
 4 Serrano); (b) IT and application development and integration and AMI network costs (SoCalGas
 5 witness Mr. Olmsted); and (c) customer research, education and information costs (SoCalGas
 6 witness Mr. Martin).

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

Unloaded, unescalated	Total	IT Development		Gas Module and Meter Installation Years					Post
		2009	2010	2011	2012	2013	2014	2015	Deployment
Costs - Capital	940.7	17.8	45.8	119.0	142.9	146.5	146.7	126.6	195.5
Costs - O&M	432.4	2.7	3.1	18.8	22.9	26.7	29.8	29.7	298.7
Total Costs	1,373.1	20.5	48.8	137.8	165.7	173.2	176.5	156.3	494.2
Benefits - O&M	(1,164.7)	(1.4)	(1.4)	(4.3)	(12.7)	(22.7)	(33.1)	(42.5)	(1,046.6)
Benefits - Capital	(266.8)	-	-	(6.3)	(8.0)	(12.6)	(8.3)	(6.2)	(225.4)
Total Benefits	(1,431.5)	(1.4)	(1.4)	(10.6)	(20.7)	(35.3)	(41.4)	(48.8)	(1,272.0)

D. Adjustments to Direct Costs

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

Unloaded, Unescalated	Total	IT Development		Gas Module and Meter Installation Years					Post Deployment
		2009	2010	2011	2012	2013	2014	2015	2015-2034
Costs - Capital	940.7	17.8	45.8	119.0	142.9	146.5	146.7	126.6	195.5
Costs - O&M	432.4	2.7	3.1	18.8	22.9	26.7	29.8	29.7	298.7
Total Costs	1,373.1	20.5	48.8	137.8	165.7	173.2	176.5	156.3	494.2
Benefits - O&M	(1,164.7)	(1.4)	(1.4)	(4.3)	(12.7)	(22.7)	(33.1)	(42.5)	(1,046.6)
Benefits - Capital	(266.8)	-	-	(6.3)	(8.0)	(12.6)	(8.3)	(6.2)	(225.4)
Total Benefits	(1,431.5)	(1.4)	(1.4)	(10.6)	(20.7)	(35.3)	(41.4)	(48.8)	(1,272.0)

Loaded, Unescalated	Total	IT Development		Gas Module and Meter Installation Years					Post Deployment
		2009	2010	2011	2012	2013	2014	2015	2015-2034
Costs - Capital	1,026.0	20.9	53.2	129.3	155.2	159.2	159.4	137.3	211.5
Costs - O&M	554.5	3.0	3.5	23.4	28.5	33.2	37.2	37.3	388.5
Total Costs	1,580.5	23.9	56.7	152.7	183.7	192.4	196.6	174.6	599.9
Benefits - O&M	(1,677.1)	(2.2)	(2.2)	(6.2)	(17.4)	(30.8)	(44.5)	(57.1)	(1,516.8)
Benefits - Capital	(285.0)	-	-	(6.3)	(8.0)	(12.9)	(8.3)	(6.3)	(243.2)
Total Benefits	(1,962.1)	(2.2)	(2.2)	(12.4)	(25.4)	(43.7)	(52.8)	(63.4)	(1,760.1)

Loaded, Escalated	Total	IT Development		Gas Module and Meter Installation Years					Post Deployment
		2009	2010	2011	2012	2013	2014	2015	2015-2034
Costs - Capital	1,092.6	21.4	55.4	134.5	163.0	168.6	170.2	147.9	231.6
Costs - O&M	780.6	3.1	3.6	25.0	31.0	37.0	42.4	43.4	595.0
Total Costs	1,873.2	24.5	59.1	159.5	194.0	205.6	212.6	191.3	826.6
Benefits - O&M	(2,476.5)	(2.2)	(2.3)	(6.6)	(19.2)	(34.9)	(51.6)	(67.9)	(2,291.8)
Benefits - Capital	(343.7)	-	-	(6.8)	(8.9)	(14.0)	(9.7)	(7.4)	(296.8)
Total Benefits	(2,820.2)	(2.2)	(2.3)	(13.5)	(28.1)	(48.9)	(61.3)	(75.3)	(2,588.6)

Loaded, Escalated, Sales Tax*	Total	IT Development		Gas Module and Meter Installation Years					Post Deployment
		2009	2010	2011	2012	2013	2014	2015	2015-2034
Costs - Capital	1,150.7	21.6	56.7	141.5	171.2	177.1	178.7	155.7	248.2
Costs - O&M	793.4	3.1	3.7	25.1	31.3	37.3	42.7	43.8	606.4
Total Costs	1,944.1	24.7	60.4	166.7	202.4	214.4	221.4	199.6	854.5
Benefits - O&M	(2,480.1)	(2.2)	(2.3)	(6.6)	(19.2)	(34.9)	(51.6)	(67.9)	(2,295.3)
Benefits - Capital	(359.9)	-	-	(6.8)	(8.9)	(14.4)	(9.7)	(7.4)	(312.7)
Total Benefits	(2,840.1)	(2.2)	(2.3)	(13.5)	(28.1)	(49.3)	(61.3)	(75.3)	(2,608.0)

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

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.

4 **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

10
 11 **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.

16
 17 **Table VII-6**
 18 **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%

24
 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
 27

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.

7 **3. Sales Taxes**

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

11 **a. Other Benefits**

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

19 The benefits from reduced gas theft, conservation and reduced carbon dioxide gas
20 emissions are not part of the revenue requirements that need to be recovered from ratepayers.
21 However, these benefits are included as "other benefits" in the NPV calculations for determining
22 the economic value of the SoCalGas AMI project since these are benefits to ratepayers and/or
23 society in general. Gas theft reductions and increased conservation both have beneficial impacts
24 on customer bills. Reduced carbon dioxide gas emissions do not directly impact customer bills,
25 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)

	Total	IT Development		Gas Module and Meter Installation Years					Post Deployment
		2009	2010	2011	2012	2013	2014	2015	2015-2034
Reduced Gas Theft	(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	(251.6)	-	-	-	-	-	-	-	(251.6)
Total Other Ratepayer Benefits	(830.8)	-	-	(1.7)	(5.3)	(9.1)	(12.5)	(16.5)	(534.1)
CO2 Reduction Benefits	(29.2)	-	-	(0.1)	(0.4)	(0.6)	(0.9)	(1.2)	(26.0)
Total Other Societal Benefits	(860.1)	-	-	(1.8)	(5.7)	(9.7)	(13.4)	(17.7)	(560.2)

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 in Attachment MF-3.

1 **III. REVENUE REQUIREMENTS**

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

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

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

	Total	IT Development		Gas Module and Meter Installation Years					Post
		2009	2010	2011	2012	2013	2014	2015	Deployment
				2011	2012	2013	2014	2015	2016-2034
Undiscounted Revenue Requirement									
Costs	3,091.4	(7.7)	(11.6)	80.5	111.8	145.2	179.2	201.8	2,392.0
Operating Benefits (114% of Costs)	(3,510.7)	(2.3)	(2.3)	(7.7)	(21.6)	(40.4)	(58.6)	(76.0)	(3,301.8)
Terminal Value	(251.6)	-	-	-	-	-	-	-	(251.6)
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)	(1,250.2)	(10.0)	(13.9)	71.1	84.9	95.7	108.2	109.3	(1,695.5)
Societal Benefits									
Reduced Emissions	(29.2)	-	-	(0.1)	(0.4)	(0.6)	(0.9)	(1.2)	(26.0)
Societal Costs (Benefits)	(1,279.4)	(10.0)	(13.9)	71.0	84.5	95.1	107.2	108.2	(1,721.5)

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

	Total	IT Development		Gas Module and Meter Installation Years					Post
		2009	2010	2011	2012	2013	2014	2015	Deployment
Present Value Revenue Requirement									
Costs	1,051.0	(6.5)	(9.0)	57.7	73.8	88.1	100.1	103.7	643.1
Operating Benefits (85% of Costs)	(888.6)	(1.9)	(1.8)	(5.5)	(14.3)	(24.5)	(32.7)	(39.0)	(768.8)
Terminal Value	(26.6)	-	-	-	-	-	-	-	(26.6)
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 Benefits	(13.2)	(8.4)	(10.8)	51.0	56.0	58.1	60.4	56.2	(275.5)
PV Societal Benefits									
Reduced Emissions	(8.3)	-	-	(0.1)	(0.2)	(0.4)	(0.5)	(0.6)	(6.5)
NPV Societal Costs (Benefits)	(21.5)	(8.4)	(10.8)	50.9	55.8	57.7	59.9	55.6	(282.0)

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.

1 **2. Return on Rate Base**

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

8
9 **Table VII-10**

10 SoCalGas Authorized Capital Structure and Cost of Capital

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

17
18 **3. Depreciation**

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

23 The proposed depreciation uses the straight-line remaining life depreciation method
24 consistent with Standard Practice U-4, Determination of Straight-Line Remaining Life
25 Depreciation Accruals. The CPUC issued this standard practice in 1961 as a guide for
26 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.

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 1.198 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).

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.

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

11 For AMI federal tax depreciation is calculated in accordance with the Tax Reform Act of
12 1986, as amended. State tax depreciation is based on the Asset Depreciation Range system
13 specified by California Law.

14 15 **5. Working Cash**

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

22 23 **6. Allowance for Funds Used During Construction (AFUDC)**

24 The revenue requirements include projected AFUDC which is the financing costs of AMI
25 related IT capital projects that are in Construction Work in Progress ("CWIP"). AFUDC has
26 been applied using SoCalGas' currently authorized CPUC ROR of 8.68 percent based. AFUDC
27 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.

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

5 Franchise Fees and Uncollectible ("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.

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.

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.

3 The resulting average benefits of \$1.0118 per AMI gas meter installed is presented in
 4 Attachment MF-5. This is based on the monthly meter/module deployment schedule discussed
 5 by SoCalGas Witness Mr. Serrano (chapter III). This was derived by dividing the estimated
 6 revenue requirement associated with deployment period benefits by the total number of months
 7 new meters/modules are in service on an aggregate basis.

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

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

	Deployment Period Total	Deployment Period						
		2009	2010	2011	2012	2013	2014	2015
Costs	647.5	(5.8)	(9.4)	62.5	101.6	135.2	168.1	195.3
Operating Benefits	(195.3)	(2.3)	(2.4)	(6.8)	(19.8)	(37.3)	(54.9)	(71.7)
Net Revenue Requirement	452.2	(8.1)	(11.8)	55.7	81.8	97.9	113.1	123.5

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 18
 19 **IV. WITNESS QUALIFICATIONS**

20 My name is Michael W. Foster. My business address is 8326 Century Park Court, San
 21 Diego, California 92123-1530. I am employed as a principal analyst in the Regulatory Case
 22 Financial area of the Finance department of SDG&E. I have worked for SDG&E since
 23 December 2001. In my current capacity, I am responsible for providing financial analysis of
 24 various utility projects and initiatives. In addition, I provide regulatory financial support and
 25 have been extensively involved in regulatory proceedings such as SDG&E's phase I and phase II
 26 cost of capital proceedings, the Sunrise Powerlink Phase II proceeding, and the SDG&E AMI

1 proceeding. I am also responsible for updating the utilities' project evaluation guide and toolkit,
2 which provides the standard financial analysis required for each new utility project.

3 I received a Bachelor of Science degree in Economics from the University of California,
4 Santa Barbara in 1995. I received a Master of Business Administration degree from the Darden
5 School of Business at the University of Virginia, Charlottesville in 2000.

6
7 I have not previously testified before this Commission.

8
9 This concludes my testimony.
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ATTACHMENTS

ATTACHMENT MF-1

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

ATTACHMENT MF-1

SoCalGas AMI - 2007 Actual Overheads

V&S								
	<u>Recorded Expense - Recorded Expense</u>		<u>Total Recorded Expense</u>	<u>V&S Base</u>	<u>V&S Percent</u>		<u>Expense Less Adjustments</u>	<u>V&S Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>			<u>Before Adj</u>	<u>Adjustments</u>		
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	
2 May	3,761,186.19		3,761,186.19	34,560,160.54			3,761,186.19	
0 June	5,476,252.65		5,476,252.65	29,415,307.33			5,476,252.65	
0 July	9,540,150.68		9,540,150.68	28,025,783.53			9,540,150.68	
7 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	
	<u>68,869,641.56</u>	<u>-</u>	<u>68,869,641.56</u>	<u>383,129,272.53</u>	<u>17.98%</u>	<u>-</u>	<u>68,869,641.56</u>	<u>17.98%</u>

Payroll Tax								
	<u>Recorded Expense - Recorded Expense</u>		<u>Total Recorded Expense</u>	<u>PR Tax Base</u>	<u>PR Tax Percent</u>		<u>Expense Less Adjustments</u>	<u>PR Tax Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>			<u>Before Adj</u>	<u>Adjustments</u>		
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	
2 May	3,162,656.88		3,162,656.88	42,675,284.78			3,162,656.88	
0 June	2,904,470.77		2,904,470.77	39,318,977.89			2,904,470.77	
0 July	3,174,112.86		3,174,112.86	41,836,021.53			3,174,112.86	
7 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	
	<u>40,057,845.02</u>	<u>-</u>	<u>40,057,845.02</u>	<u>513,894,270.50</u>	<u>7.79%</u>	<u>-</u>	<u>40,057,845.02</u>	<u>7.79%</u>

Pension & Benefit (non-balanced)								
	<u>Recorded Expense - Recorded Expense</u>		<u>Total Recorded Expense</u>	<u>P&B Base</u>	<u>P&B Percent</u>		<u>Expense Less Adjustments</u>	<u>P&B Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>			<u>Before Adj</u>	<u>Adjustments</u>		
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	
2 May	18,149.20	6,073,496.44	6,091,645.64	37,016,165.59			6,091,645.64	
0 June	18,471.80	5,535,505.73	5,553,977.53	31,442,609.68			5,553,977.53	
0 July	10,538.73	5,537,445.09	5,547,983.82	30,307,811.85			5,547,983.82	
7 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	
	<u>160,305.67</u>	<u>70,115,347.13</u>	<u>70,275,652.80</u>	<u>409,792,566.94</u>	<u>17.15%</u>	<u>-</u>	<u>70,275,652.80</u>	<u>17.15%</u>

ATTACHMENT MF-1

SoCalGas AMI - 2007 Actual Overheads

Workers' Compensation

	<u>Recorded Expense - Recorded Expense</u>		<u>Total Recorded Expense</u>	<u>WC Base</u>	<u>WC</u>		<u>Expense Less Adjustments</u>	<u>WC Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>			<u>Percent Before Adj</u>	<u>Quarterly True-up of Liability</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	
2 May	6,910.81	1,184,178.89	1,191,089.70	35,069,660.86			1,191,089.70	
0 June	5,854.63	1,374,454.61	1,380,309.24	30,056,813.43			1,380,309.24	
0 July	4,491.52	294,513.64	299,005.16	29,097,685.43			299,005.16	
7 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				
	<u>101,044.23</u>	<u>16,752,317.44</u>	<u>16,853,361.67</u>	<u>389,443,106.05</u>	4.33%	<u>(572,655.00)</u>	<u>17,426,016.67</u>	<u>4.47%</u>

Public Liability/Property Damage

	<u>Recorded Expense - Recorded Expense</u>		<u>Total Recorded Expense</u>	<u>PLPD Base</u>	<u>PLPD</u>		<u>Expense Less Adjustments</u>	<u>PLPD Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>			<u>Percent Before Adj</u>	<u>True-up of Liability</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	
2 May	15,294.05	947,978.24	963,272.29	35,007,032.09			963,272.29	
0 June	16,790.25	924,391.58	941,181.83	30,005,914.42			941,181.83	
0 July	15,601.89	614,735.26	630,337.15	29,051,480.00			630,337.15	
7 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	
	<u>199,187.52</u>	<u>10,556,668.94</u>	<u>10,755,856.46</u>	<u>388,650,843.13</u>	2.77%	<u>(1,543,869.00)</u>	<u>12,299,725.46</u>	<u>3.16%</u>

Purchased Services and Materials

	<u>Recorded Expense - Recorded Expense</u>		<u>Total Recorded Expense</u>	<u>Purchasing Base</u>	<u>Purchasing</u>		<u>Expense Less Adjustments</u>	<u>Purchasing Percent After Adj</u>
	<u>Labor</u>	<u>- Non-Labor</u>			<u>Percent Before Adj</u>	<u>Adjustments</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	
2 May	115,541.38	755,456.10	870,997.48	37,699,482.50			870,997.48	
0 June	235,733.66	571,995.61	807,729.27	41,203,087.22			807,729.27	
0 July	101,793.23	335,435.32	437,228.55	29,410,165.00			437,228.55	
7 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	
	<u>1,670,104.69</u>	<u>6,801,024.81</u>	<u>8,471,129.50</u>	<u>457,305,855.77</u>	1.85%	<u>-</u>	<u>8,471,129.50</u>	<u>1.85%</u>

ATTACHMENT MF-1

SoCalGas AMI - 2007 Actual Overheads

Administrative & General										
	Recorded Expense -		Total Recorded Expense	A&G Base	A&G Percent		ARS Reserve Update	Expense Less Adjustments		A&G Percent After Adj
	Labor	- Non-Labor			Before Adj	Update		Adjustments		
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		
2 May	290,553.23	433,677.53	724,230.76	13,494,667.60				724,230.76		
0 June	238,999.71	681,429.96	920,429.67	15,988,869.98				920,429.67		
0 July	240,348.52	361,075.35	601,423.87	12,995,901.92				601,423.87		
7 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										
	Recorded Expense -		Total Recorded Expense	A&G Base	A&G Percent		Adjustments	Expense Less Adjustments		WH Percent After Adj
	Labor	- Non-Labor			Before Adj	Adjustments		Adjustments		
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		
2 May	288,978.71	50,743.72	339,722.43	4,513,498.40				339,722.43		
0 June	240,814.67	37,097.58	277,912.25	4,462,275.09				277,912.25		
0 July	238,990.18	14,921.20	253,911.38	3,537,475.45				253,911.38		
7 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%
			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	2022
% Change															
Capital	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%	2.1%
Labor	2.5%	2.4%	2.6%	2.5%	2.6%	2.6%	2.5%	2.4%	2.4%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Non-Escalating	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%	0.0%
Non-Labor	3.6%	2.6%	2.5%	2.3%	2.3%	2.4%	2.5%	2.5%	2.5%	2.5%	2.6%	2.6%	2.5%	2.6%	2.6%
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	1.3693
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	1.4117
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	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	1.4114
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-indices 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-3

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

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenue Requirement Associated with Project Cost									
Total Rev Req:	3,091,357	(11,572)	80,506	111,822	145,156	179,237	201,848	156,212	152,091
PV of Rev Req:	1,050,977	(9,016)	57,714	73,764	88,108	100,109	103,737	73,873	66,182
O&M:	793,425	3,683	25,136	31,267	37,281	42,746	43,828	23,464	24,028
Working Capital:	13,341	58	269	495	593	691	742	553	400
Depreciation:	1,017,689	177	23,653	31,963	40,701	49,369	59,037	42,682	43,017
Return on Common:	488,644	186	10,989	18,263	25,284	31,959	37,000	34,429	32,142
Return on Preferred:	29,038	11	653	1,085	1,503	1,899	2,199	2,046	1,910
Return On Debt:	298,671	114	6,716	11,163	15,465	19,534	22,615	21,044	19,646
Federal Taxes:	258,478	(12,493)	8,987	10,907	14,985	19,598	21,359	18,833	18,296
State Taxes:	72,434	(3,352)	1,696	2,605	3,646	6,184	6,653	5,154	5,080
Property Taxes:	119,636	42	2,406	4,074	5,708	7,258	8,417	8,008	7,572

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenue Requirement Associated with Operational Benefits									
Total Rev Req:	(3,510,713)	(2,344)	(7,696)	(21,823)	(40,384)	(58,565)	(75,970)	(117,055)	(141,409)
PV of Rev Req:	(888,611)	(1,826)	(5,517)	(14,264)	(24,513)	(32,710)	(39,044)	(55,355)	(61,534)
O&M:	(2,731,715)	(2,306)	(6,644)	(19,186)	(34,902)	(51,821)	(67,899)	(101,445)	(110,759)
Working Capital:	(40)	(39)	(81)	(235)	(482)	(761)	(1,042)	(1,486)	(1,831)
Depreciation:	(44,225)	-	-	-	(1,006)	(1,022)	(1,039)	(2,415)	(5,433)
Return on Common:	(179,385)	-	(356)	(820)	(1,535)	(1,973)	(2,292)	(4,280)	(8,712)
Return on Preferred:	(209,515)	-	(21)	(49)	(91)	(117)	(136)	(254)	(518)
Return On Debt:	(12,451)	-	(217)	(501)	(938)	(1,206)	(1,401)	(2,616)	(5,325)
Federal Taxes:	(128,061)	-	(235)	(508)	(900)	(1,163)	(1,333)	(2,735)	(5,331)
State Taxes:	(120,354)	-	(59)	(134)	(180)	(249)	(298)	(842)	(1,513)
Property Taxes:	(33,045)	-	(82)	(189)	(349)	(453)	(530)	(980)	(1,987)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net Revenue Requirement									
Total Rev Req:	(419,356)	(13,917)	72,810	90,199	104,772	120,672	125,879	39,159	10,682
PV of Rev Req:	(162,366)	(10,843)	52,197	59,500	63,595	67,399	64,693	18,519	4,648
O&M:	(1,938,290)	1,378	18,491	12,081	2,379	(8,875)	(24,072)	(77,982)	(86,731)
Working Capital:	(30,884)	20	188	259	111	(70)	(301)	(933)	(1,431)
Depreciation:	838,304	177	23,653	31,963	39,695	48,346	57,999	40,267	37,583
Return on Common:	278,129	186	10,633	17,442	23,750	29,986	34,708	30,149	23,430
Return on Preferred:	16,588	11	632	1,037	1,411	1,782	2,063	1,792	1,392
Return On Debt:	170,611	114	6,499	10,661	14,517	18,328	21,214	18,428	14,321
Federal Taxes:	138,124	(12,493)	8,782	10,399	14,084	18,435	20,026	16,099	12,965
State Taxes:	39,389	(3,352)	1,637	2,471	3,466	5,935	6,355	4,311	3,567
Property Taxes:	67,674	42	2,324	3,885	5,359	6,804	7,887	7,028	5,585

ATTACHMENT MF-3

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

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Revenue Requirement Associated with Project Cost										
Total Rev Req:	158,359	154,159	150,399	148,549	144,309	140,429	134,955	130,689	128,186	123,569
PV of Rev Req:	63,408	56,798	50,989	48,340	41,424	37,092	32,800	29,227	26,378	23,398
O&M:	24,977	25,646	26,461	29,770	30,789	31,757	32,741	33,847	34,917	36,700
Working Capital:	420	433	446	484	519	535	552	570	588	604
Depreciation:	45,033	46,174	46,193	46,601	46,948	47,297	46,845	47,272	48,059	48,000
Return on Common:	32,921	30,886	29,214	26,914	24,603	22,331	20,099	18,465	16,581	14,536
Return on Preferred:	1,956	1,835	1,736	1,599	1,462	1,327	1,194	1,097	985	864
Return On Debt:	20,122	18,879	17,856	16,450	15,038	13,649	12,285	11,286	10,135	8,885
Federal Taxes:	19,222	17,410	16,407	15,270	14,012	12,868	11,317	9,844	9,289	8,119
State Taxes:	5,900	5,511	5,030	4,876	4,834	5,054	4,778	3,497	3,200	2,879
Property Taxes:	7,807	7,383	7,056	6,584	6,104	5,621	5,144	4,810	4,422	3,981

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Revenue Requirement Associated with Operational Benefits										
Total Rev Req:	(190,358)	(159,740)	(169,006)	(165,978)	(160,728)	(163,377)	(166,681)	(169,634)	(176,586)	(176,202)
PV of Rev Req:	(60,204)	(58,854)	(57,297)	(51,778)	(46,137)	(43,153)	(40,510)	(37,936)	(36,338)	(33,364)
O&M:	(114,500)	(118,541)	(122,686)	(116,914)	(113,310)	(117,960)	(121,553)	(125,849)	(133,504)	(134,435)
Working Capital:	(1,929)	(1,995)	(2,065)	(2,040)	(1,960)	(1,972)	(2,045)	(2,118)	(2,223)	(2,290)
Depreciation:	(5,827)	(7,146)	(8,485)	(10,353)	(10,372)	(10,400)	(10,429)	(10,458)	(9,578)	(9,578)
Return on Common:	(10,760)	(12,222)	(13,632)	(14,075)	(13,444)	(12,849)	(12,285)	(11,775)	(11,822)	(11,279)
Return On Debt:	(639)	(726)	(810)	(836)	(799)	(764)	(731)	(700)	(703)	(670)
Federal Taxes:	(6,577)	(7,470)	(8,332)	(8,603)	(8,217)	(7,854)	(7,515)	(7,197)	(7,226)	(6,894)
State Taxes:	(6,137)	(7,083)	(7,885)	(7,989)	(7,632)	(7,314)	(7,131)	(6,895)	(6,712)	(6,389)
Property Taxes:	(2,477)	(2,838)	(3,193)	(3,326)	(3,222)	(3,121)	(3,021)	(2,921)	(2,860)	(2,860)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Net Revenue Requirement										
Total Rev Req:	8,001	(5,582)	(18,607)	(17,429)	(16,419)	(22,948)	(31,726)	(38,945)	(48,401)	(52,633)
PV of Rev Req:	3,204	(2,056)	(6,308)	(5,437)	(4,713)	(6,061)	(7,711)	(9,709)	(12,960)	(16,966)
O&M:	(89,522)	(92,895)	(96,225)	(87,144)	(82,520)	(85,603)	(88,812)	(92,002)	(98,587)	(98,735)
Working Capital:	(1,509)	(1,562)	(1,619)	(1,557)	(1,441)	(1,437)	(1,493)	(1,548)	(1,635)	(1,687)
Depreciation:	39,206	39,028	37,708	36,248	36,576	36,897	36,417	36,814	38,481	38,422
Return on Common:	22,161	18,664	15,563	12,839	11,159	9,482	7,803	6,690	4,759	3,257
Return On Debt:	1,317	1,109	926	763	663	563	464	398	283	194
Federal Taxes:	13,545	11,408	9,524	7,848	6,820	5,796	4,770	4,089	2,909	1,981
State Taxes:	13,084	10,327	8,522	7,282	6,381	5,544	4,186	3,148	2,587	1,720
Property Taxes:	4,389	3,794	3,112	3,033	3,061	3,311	2,818	1,577	1,340	1,084
Net Revenue Requirement:	5,330	4,544	3,862	3,258	2,882	2,500	2,123	1,889	1,462	1,121

ATTACHMENT MF-3

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

	2028	2029	2030	2031	2032	2033	2034
Revenue Requirement Associated with Project Cost							
Total Rev Req:	119,355	115,403	109,871	96,743	85,272	75,817	67,681
PV of Rev Req:	20,796	18,502	16,209	13,132	10,651	8,714	7,158
O&M:	37,050	38,387	39,868	36,823	34,873	33,313	31,966
Working Capital:	623	646	670	652	609	580	555
Depreciation:	47,121	46,217	45,305	39,345	32,834	26,917	20,842
Return on Common:	12,501	10,761	9,893	8,965	7,461	6,595	5,971
Return on Preferred:	743	639	588	509	443	392	355
Return On Debt:	7,641	6,577	6,047	5,235	4,560	4,031	3,650
Federal Taxes:	7,188	6,141	4,285	4,148	3,932	3,729	3,703
State Taxes:	2,984	2,989	466	(904)	(1,506)	(1,567)	(1,016)
Property Taxes:	3,505	3,045	2,749	2,371	2,067	1,827	1,653

	2028	2029	2030	2031	2032	2033	2034
Revenue Requirement Associated with Operational Benefits							
Total Rev Req:	(179,741)	(185,713)	(189,735)	(175,679)	(156,068)	(134,324)	(363,830)
PV of Rev Req:	(31,317)	(29,774)	(27,991)	(23,848)	(19,494)	(15,439)	(38,478)
O&M:	(139,257)	(143,835)	(149,362)	(137,020)	(118,677)	(98,691)	(329,189)
Working Capital:	(2,342)	(2,423)	(2,510)	(2,433)	(2,159)	(1,829)	(3,893)
Depreciation:	(9,578)	(11,338)	(11,338)	(11,338)	(11,338)	(11,338)	(9,578)
Return on Common:	(10,736)	(10,596)	(9,946)	(9,305)	(8,729)	(8,244)	(7,839)
Return on Preferred:	(638)	(630)	(591)	(553)	(519)	(490)	(466)
Return On Debt:	(6,562)	(6,476)	(6,079)	(5,687)	(5,336)	(5,039)	(4,791)
Federal Taxes:	(6,107)	(5,996)	(5,644)	(5,277)	(5,115)	(4,674)	(4,361)
State Taxes:	(1,763)	(1,672)	(1,618)	(1,559)	(1,810)	(1,756)	(1,549)
Property Taxes:	(2,761)	(2,746)	(2,626)	(2,506)	(2,386)	(2,264)	(2,163)

	2028	2029	2030	2031	2032	2033	2034
Net Revenue Requirement							
Total Rev Req:	(60,386)	(70,310)	(79,864)	(78,936)	(70,796)	(58,507)	(296,149)
PV of Rev Req:	(10,521)	(11,272)	(11,782)	(10,715)	(8,843)	(6,725)	(31,320)
O&M:	(102,206)	(105,448)	(109,515)	(100,197)	(83,805)	(65,378)	(297,223)
Working Capital:	(1,719)	(1,777)	(1,840)	(1,781)	(1,550)	(1,249)	(3,338)
Depreciation:	37,544	34,879	33,968	28,007	21,496	15,579	11,264
Return on Common:	1,765	165	(53)	(740)	(1,269)	(1,649)	(1,868)
Return on Preferred:	105	10	(3)	(44)	(75)	(98)	(111)
Return On Debt:	1,079	101	(33)	(453)	(775)	(1,008)	(1,142)
Federal Taxes:	1,081	145	(1,359)	(1,129)	(1,183)	(844)	(658)
State Taxes:	1,221	1,317	(1,151)	(2,464)	(3,316)	(3,322)	(2,565)
Property Taxes:	744	299	123	(135)	(319)	(437)	(510)

ATTACHMENT MF-3

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)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Rate base Associated with Project Costs										
Plant	1,906	3,776	224,792	395,954	573,073	751,756	907,533	916,062	838,856	903,489
Working Cash	388	460	3,142	3,908	4,660	5,343	5,478	2,933	3,003	3,122
Accumulated Depreciation	(85)	(263)	(23,916)	(55,879)	(96,580)	(145,948)	(204,986)	(247,668)	(206,773)	(251,806)
Accumulated Deferred Taxes	(4)	(38)	(2,211)	(6,618)	(13,390)	(16,892)	(22,424)	(31,258)	(38,173)	(42,474)
Total Rate Base	2,206	3,936	201,807	337,365	467,764	594,259	685,602	640,088	596,913	612,331

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Rate base Associated with Operational Benefits										
Plant			(6,850)	(8,948)	(14,370)	(14,715)	(12,530)	(45,188)	(126,780)	(172,596)
Working Cash	(281)	(288)	(831)	(2,398)	(4,363)	(6,453)	(8,487)	(12,681)	(13,845)	(14,312)
Accumulated Depreciation	-	-	-	(6,850)	(14,791)	(23,108)	(31,673)	(36,593)	(39,077)	(34,148)
Accumulated Deferred Taxes	-	-	-	-	235	473	716	460	1,201	3,764
Total Rate Base	(281)	(288)	(7,680)	(18,196)	(33,289)	(43,803)	(51,975)	(94,003)	(178,501)	(217,292)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net Rate base Associated with Project Costs and Operational Benefits										
Plant	1,906	3,776	217,942	387,007	558,703	737,040	895,003	870,893	712,076	730,893
Working Cash	107	172	2,311	1,510	297	(1,109)	(3,009)	(9,748)	(10,841)	(11,190)
Accumulated Depreciation	(85)	(263)	(23,916)	(62,729)	(111,371)	(169,057)	(236,659)	(284,262)	(245,851)	(285,954)
Accumulated Deferred Taxes	(4)	(38)	(2,211)	(6,618)	(13,155)	(16,418)	(21,708)	(30,798)	(36,972)	(38,710)
Total Rate Base	1,925	3,648	194,127	319,170	434,475	550,456	633,627	546,085	418,412	395,038

ATTACHMENT MF-3

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)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Rate base Associated with Project Costs										
Plant	913,348	932,177	925,789	932,718	939,691	946,705	962,118	965,742	958,722	947,769
Working Cash	3,206	3,308	3,721	3,849	3,970	4,083	4,231	4,365	4,463	4,631
Accumulated Depreciation	(297,039)	(343,232)	(376,236)	(423,184)	(470,481)	(517,326)	(560,569)	(596,668)	(626,410)	(655,199)
Accumulated Deferred Taxes	(46,913)	(52,163)	(57,117)	(61,469)	(64,306)	(67,325)	(71,927)	(75,771)	(77,070)	(73,800)
Total Rate Base	572,602	540,090	496,157	451,914	408,873	366,147	333,832	297,667	259,705	223,402

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Rate base Associated with Operational Benefits										
Plant	(196,687)	(233,701)	(254,037)	(254,656)	(255,544)	(256,467)	(257,412)	(263,965)	(261,766)	(261,793)
Working Cash	(14,816)	(15,336)	(14,614)	(14,164)	(14,670)	(15,194)	(15,731)	(16,688)	(16,804)	(17,407)
Accumulated Depreciation	(40,309)	(32,856)	(23,562)	(14,281)	(5,000)	4,283	13,567	21,941	23,047	31,353
Accumulated Deferred Taxes	6,716	9,940	13,614	16,911	19,777	21,544	23,160	25,220	27,436	29,606
Total Rate Base	(245,086)	(271,952)	(278,996)	(266,189)	(255,438)	(245,835)	(236,416)	(238,493)	(228,087)	(218,242)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Net Rate base Associated with Project Costs and Operational Benefits										
Plant	716,661	698,476	671,752	678,062	684,147	690,236	704,705	696,778	696,956	685,976
Working Cash	(11,612)	(12,028)	(10,893)	(10,315)	(10,700)	(11,102)	(11,500)	(12,323)	(12,342)	(12,776)
Accumulated Depreciation	(337,349)	(376,088)	(399,798)	(437,465)	(475,481)	(513,044)	(547,022)	(574,728)	(603,363)	(623,845)
Accumulated Deferred Taxes	(40,197)	(42,222)	(43,503)	(44,558)	(44,530)	(45,780)	(48,767)	(50,552)	(49,634)	(44,194)
Total Rate Base	327,503	268,138	217,558	165,724	153,436	120,312	97,416	59,175	31,618	5,160

ATTACHMENT MF-3

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)

	2029	2030	2031	2032	2033	2034
Rate base Associated with Project Costs						
Plant	936,879	937,125	911,319	817,100	698,386	579,480
Working Cash	4,798	4,983	4,603	4,359	4,164	3,996
Accumulated Depreciation	(682,704)	(707,624)	(713,396)	(644,585)	(545,880)	(441,476)
Accumulated Deferred Taxes	(66,386)	(56,956)	(48,423)	(42,137)	(35,841)	(31,057)
Total Rate Base	192,587	177,529	154,103	134,738	120,829	110,943

	2029	2030	2031	2032	2033	2034
Rate base Associated with Operational Benefits						
Plant	(270,617)	(270,646)	(270,611)	(270,555)	(270,494)	(270,429)
Working Cash	(17,979)	(18,673)	(17,128)	(14,835)	(12,336)	(41,149)
Accumulated Depreciation	41,392	51,407	61,393	71,414	81,492	89,871
Accumulated Deferred Taxes	32,146	34,652	36,799	36,660	35,211	33,605
Total Rate Base	(215,059)	(203,260)	(189,547)	(177,315)	(166,127)	(188,102)

	2029	2030	2031	2032	2033	2034
Net Rate base Associated with Project Costs and Operational Benefits						
Plant	666,262	666,478	640,707	546,545	427,892	309,051
Working Cash	(13,181)	(13,689)	(12,525)	(10,476)	(8,172)	(37,153)
Accumulated Depreciation	(641,313)	(656,217)	(652,003)	(573,170)	(464,388)	(351,605)
Accumulated Deferred Taxes	(34,240)	(22,303)	(11,624)	(5,476)	(630)	2,548
Total Rate Base	(22,472)	(25,731)	(35,444)	(42,577)	(45,298)	(77,159)

ATTACHMENT MF-4

Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008

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

	2009	2010	2011	2012	2013	2014	2015
Electric Meters & Gas Modules							
Franchise Fees & Uncollectibles	(39.5)	(40.5)	(116.1)	(335.2)	(632.1)	(932.2)	(1,217.1)
O&M expenses	(2,287.2)	(2,344.4)	(6,725.5)	(19,421.6)	(35,384.5)	(52,381.9)	(68,941.6)
Property Taxes	-	-	-	-	(40.1)	(62.4)	(53.9)
Preferred Equity Interest	-	-	-	-	(10.3)	(16.1)	(13.9)
Interest Expense	-	-	-	-	(106.2)	(165.3)	(142.9)
Depreciation Expense	-	-	-	-	(779.7)	(1,014.9)	(1,031.3)
Federal Tax Expense	-	-	-	-	(111.5)	(128.3)	(132.1)
State Tax Expense	-	-	-	-	(23.0)	25.3	27.7
Return on Equity	-	-	-	-	(173.8)	(270.4)	(233.8)
Revenue Requirement	(2,326.7)	(2,384.8)	(6,841.6)	(19,756.8)	(37,261.1)	(54,946.0)	(71,738.9)
Return on Ratebase (ROR)	-	-	-	-	(290.3)	(451.7)	(390.6)
Weighted Average Ratebase	-	-	-	-	(1,606)	(2,499)	(2,161)
ROE Proof	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	10.820%	10.820%	10.820%

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	-	-	-	-	-	-	(23.1)	(23.1)	(23.0)	(22.9)	(22.9)	(22.8)	(137.8)
O&M expenses	-	-	-	-	-	-	145.8	145.8	145.8	145.8	145.8	145.8	874.8
Property Taxes	-	-	-	-	-	-	0.2	0.5	0.8	1.1	1.4	1.7	5.6
Preferred Equity Interest	-	-	-	-	-	-	0.0	0.1	0.2	0.3	0.4	0.4	1.4
Interest Expense	-	-	-	-	-	-	0.4	1.2	2.1	2.9	3.7	4.5	14.8
Depreciation Expense	-	-	-	-	-	-	1.2	2.4	3.5	4.7	5.9	7.1	24.8
Income Tax Expense	-	-	-	-	-	-	(1,488.1)	(1,488.1)	(1,488.1)	(1,488.1)	(1,488.1)	(1,488.1)	(8,928.4)
Return on Equity	-	-	-	-	-	-	0.7	2.0	3.4	4.7	6.0	7.4	24.2
Revenue Requirement	-	-	-	-	-	-	(1,362.9)	(1,359.1)	(1,355.3)	(1,351.5)	(1,347.7)	(1,344.0)	(8,120.6)
Return on Ratebase (ROR)	-	-	-	-	-	-	1.1	3.4	5.6	7.9	10.1	12.3	40.4

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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	(16.7)	(16.7)	(16.7)	(16.7)	(16.7)	(16.7)	(16.7)	(16.7)	(16.6)	(16.5)	(16.5)	(16.4)	(199.7)
O&M expenses	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	1,397.2
Property Taxes	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.3	2.7	3.0	3.4	27.3
Preferred Equity Interest	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.9	7.0
Interest Expense	5.0	5.0	5.1	5.2	5.3	5.4	5.5	5.6	6.1	7.1	8.0	8.9	72.3
Depreciation Expense	7.3	7.5	7.7	7.9	8.1	8.2	8.4	8.6	10.2	11.7	13.2	14.8	113.6
Income Tax Expense	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(13,306.1)
Return on Equity	8.1	8.3	8.4	8.6	8.7	8.9	9.0	9.1	10.0	11.5	13.1	14.6	118.3
Revenue Requirement	(986.4)	(986.0)	(985.5)	(985.0)	(984.5)	(984.0)	(983.5)	(983.1)	(979.9)	(975.3)	(970.7)	(966.2)	(11,770.1)
Return on Ratebase (ROR)	13.5	13.8	14.1	14.3	14.5	14.8	15.0	15.3	16.7	19.3	21.9	24.4	197.6

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
All Property and O&M - Total Costs & Benefits
Monthly Revenue Requirement - 2009-2015

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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	60.8	68.7	70.9	73.5	75.8	78.0	80.5	82.8	84.9	87.5	89.7	91.9	945.0
O&M expenses	1,556.6	1,556.6	1,556.6	1,556.6	1,556.6	1,556.6	1,556.6	1,556.6	1,556.6	1,556.6	1,556.6	1,556.6	18,679.1
Property Taxes	48.8	98.9	108.8	119.1	129.4	139.2	149.4	159.5	169.1	179.1	189.1	198.5	1,688.8
Preferred Equity Interest	12.6	25.5	28.0	30.7	33.3	35.8	38.5	41.1	43.6	46.1	48.7	51.1	435.1
Interest Expense	129.2	262.1	288.2	315.7	343.0	368.7	395.8	422.7	448.0	474.6	501.1	526.0	4,475.0
Depreciation Expense	1,404.5	1,451.0	1,497.5	1,562.4	1,608.9	1,655.4	1,720.3	1,766.8	1,813.3	1,878.2	1,924.6	1,971.1	20,254.1
Income Tax Expense	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	1,903.6
Return on Equity	211.3	428.7	471.5	516.5	561.2	603.3	647.5	691.5	732.9	776.5	819.8	860.6	7,321.4
Revenue Requirement	3,582.4	4,050.1	4,180.2	4,333.1	4,466.9	4,595.6	4,747.2	4,879.6	5,007.0	5,157.3	5,288.3	5,414.4	55,702.2

Return on Ratebase (ROR)	353.1	716.3	787.8	862.8	937.5	1,007.8	1,081.8	1,155.3	1,224.5	1,297.3	1,369.6	1,437.7	12,231.5
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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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	101.2	103.9	106.5	109.2	111.8	114.4	117.1	119.7	122.3	124.9	127.5	130.0	1,388.4
O&M expenses	1,028.3	1,028.3	1,028.3	1,028.3	1,028.3	1,028.3	1,028.3	1,028.3	1,028.3	1,028.3	1,028.3	1,028.3	12,340.2
Property Taxes	209.1	220.8	232.4	244.0	255.6	267.0	278.5	289.8	301.1	312.4	323.6	334.7	3,268.8
Preferred Equity Interest	53.9	56.9	59.9	62.9	65.8	68.8	71.7	74.7	77.6	80.5	83.4	86.2	842.1
Interest Expense	554.0	585.0	615.9	646.6	677.2	707.6	737.8	768.0	797.9	827.7	857.3	886.8	8,661.8
Depreciation Expense	2,028.8	2,086.5	2,144.2	2,201.9	2,259.7	2,317.4	2,375.1	2,432.8	2,490.5	2,548.2	2,605.9	2,663.6	28,154.5
Income Tax Expense	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	13,013.8
Return on Equity	906.3	957.1	1,007.6	1,057.9	1,107.9	1,157.6	1,207.2	1,256.4	1,305.4	1,354.2	1,402.7	1,450.9	14,171.2
Revenue Requirement	5,966.1	6,123.0	6,279.4	6,435.3	6,590.7	6,745.7	6,900.2	7,054.1	7,207.6	7,360.6	7,513.1	7,665.1	81,840.9

Return on Ratebase (ROR)	1,514.2	1,599.0	1,683.4	1,767.3	1,850.9	1,934.0	2,016.7	2,099.0	2,180.9	2,262.3	2,343.4	2,424.0	23,675.1
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ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
All Property and O&M - Total Costs & Benefits
Monthly Revenue Requirement - 2009-2015

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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	123.7	127.1	130.5	134.0	136.5	138.4	140.3	142.2	144.1	146.1	148.0	150.1	1,661.2
O&M expenses	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	2,489.8
Property Taxes	348.3	364.5	380.6	396.7	408.7	416.6	424.5	432.3	440.1	447.9	455.6	463.6	4,979.6
Preferred Equity Interest	89.7	93.9	98.1	102.2	105.3	107.3	109.4	111.4	113.4	115.4	117.4	119.4	1,282.9
Interest Expense	923.0	965.9	1,008.5	1,051.2	1,083.0	1,104.0	1,124.9	1,145.6	1,166.2	1,186.8	1,207.3	1,228.5	13,195.0
Depreciation Expense	2,728.4	2,793.3	2,858.1	2,924.6	2,970.8	3,017.0	3,063.1	3,109.3	3,155.4	3,203.3	3,249.4	3,307.9	36,380.6
Income Tax Expense	1,361.7	1,361.7	1,361.7	1,361.7	1,361.7	1,361.7	1,361.7	1,361.7	1,361.7	1,361.7	1,361.7	1,361.7	16,340.4
Return on Equity	1,510.1	1,580.2	1,650.0	1,719.8	1,771.9	1,806.2	1,840.4	1,874.3	1,908.0	1,941.7	1,975.2	2,009.9	21,587.8
Revenue Requirement	7,292.5	7,494.1	7,695.1	7,897.7	8,045.5	8,158.8	8,271.7	8,384.3	8,496.4	8,610.4	8,722.1	8,848.6	97,917.2
Return on Ratebase (ROR)	2,522.9	2,640.0	2,756.7	2,873.2	2,960.3	3,017.6	3,074.6	3,131.2	3,187.6	3,243.9	3,299.9	3,357.8	36,065.6

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 2014
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	145.9	148.5	151.0	153.6	156.2	158.7	161.2	163.8	166.3	168.8	171.3	173.8	1,919.0
O&M expenses	(745.5)	(745.5)	(745.5)	(745.5)	(745.5)	(745.5)	(745.5)	(745.5)	(745.5)	(745.5)	(745.5)	(745.5)	(8,945.6)
Property Taxes	482.1	492.9	503.7	514.5	525.2	535.8	546.4	556.9	567.3	577.7	588.0	598.3	6,488.6
Preferred Equity Interest	124.2	127.0	129.8	132.5	135.3	138.0	140.8	143.5	146.2	148.8	151.5	154.1	1,671.7
Interest Expense	1,277.4	1,306.2	1,334.8	1,363.3	1,391.6	1,419.7	1,447.7	1,475.6	1,503.2	1,530.8	1,558.1	1,585.3	17,193.6
Depreciation Expense	3,368.0	3,428.0	3,488.1	3,548.2	3,608.3	3,668.4	3,728.5	3,788.5	3,848.6	3,908.7	3,968.8	4,028.9	44,380.9
Income Tax Expense	1,856.5	1,856.5	1,856.5	1,856.5	1,856.5	1,856.5	1,856.5	1,856.5	1,856.5	1,856.5	1,856.5	1,856.5	22,278.1
Return on Equity	2,089.8	2,136.9	2,183.8	2,230.4	2,276.7	2,322.8	2,368.6	2,414.1	2,459.4	2,504.4	2,549.2	2,593.6	28,129.8
Revenue Requirement	8,598.3	8,750.6	8,902.3	9,053.5	9,204.2	9,354.5	9,504.2	9,653.4	9,802.0	9,950.2	10,097.9	10,245.1	113,116.1
Return on Ratebase (ROR)	3,491.4	3,570.1	3,648.4	3,726.2	3,803.6	3,880.6	3,957.1	4,033.1	4,108.8	4,184.0	4,258.7	4,333.1	46,995.0

Total

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	164.2	166.0	167.7	169.5	171.3	173.1	174.8	176.5	178.2	184.1	186.6	189.0	2,100.9
O&M expenses	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(2,031.0)	(24,372.3)
Property Taxes	625.9	632.4	639.0	645.6	652.2	658.8	665.1	671.2	677.4	689.3	701.2	708.3	7,966.5
Preferred Equity Interest	161.2	162.9	164.6	166.3	168.0	169.7	171.4	172.9	174.5	177.6	180.7	182.5	2,052.4
Interest Expense	1,658.4	1,675.8	1,693.3	1,710.7	1,728.2	1,745.6	1,762.5	1,778.7	1,794.8	1,826.5	1,858.1	1,876.9	21,109.5
Depreciation Expense	4,077.0	4,125.1	4,173.3	4,221.4	4,269.6	4,317.7	4,365.9	4,414.0	4,462.2	4,705.1	4,753.2	4,833.2	52,717.7
Income Tax Expense	2,310.6	2,310.6	2,310.6	2,310.6	2,310.6	2,310.6	2,310.6	2,310.6	2,310.6	2,310.6	2,310.6	2,310.6	27,726.8
Return on Equity	2,713.2	2,741.8	2,770.3	2,798.9	2,827.4	2,856.0	2,883.5	2,910.0	2,936.5	2,988.2	3,040.0	3,070.6	34,536.4
Revenue Requirement	9,679.4	9,783.6	9,887.8	9,992.0	10,096.2	10,200.4	10,302.6	10,402.8	10,503.0	10,850.3	10,999.4	11,140.0	123,837.8
Return on Ratebase (ROR)	4,532.8	4,580.5	4,628.2	4,675.9	4,723.6	4,771.3	4,817.3	4,861.6	4,905.8	4,992.3	5,078.8	5,130.0	57,698.3

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	-	-	-	-	-	-	(16.5)	(16.5)	(16.4)	(16.4)	(16.3)	(16.2)	(98.3)
O&M expenses	-	-	-	-	-	-	527.0	527.0	527.0	527.0	527.0	527.0	3,162.0
Property Taxes	-	-	-	-	-	-	0.2	0.5	0.8	1.1	1.4	1.7	5.6
Preferred Equity Interest	-	-	-	-	-	-	0.0	0.1	0.2	0.3	0.4	0.4	1.4
Interest Expense	-	-	-	-	-	-	0.4	1.2	2.1	2.9	3.7	4.5	14.8
Depreciation Expense	-	-	-	-	-	-	1.2	2.4	3.5	4.7	5.9	7.1	24.8
Income Tax Expense	-	-	-	-	-	-	(1,488.1)	(1,488.1)	(1,488.1)	(1,488.1)	(1,488.1)	(1,488.1)	(8,928.4)
Return on Equity	-	-	-	-	-	-	0.7	2.0	3.4	4.7	6.0	7.4	24.2
Revenue Requirement	-	-	-	-	-	-	(975.1)	(971.3)	(967.5)	(963.7)	(960.0)	(956.2)	(5,793.9)
Return on Ratebase (ROR)	-	-	-	-	-	-	1.1	3.4	5.6	7.9	10.1	12.3	40.4

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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	(13.4)	(13.4)	(13.3)	(13.3)	(13.3)	(13.3)	(13.3)	(13.3)	(13.3)	(13.2)	(13.1)	(13.0)	(159.2)
O&M expenses	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	311.8	3,741.6
Property Taxes	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.3	2.7	3.0	3.4	27.3
Preferred Equity Interest	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.9	7.0
Interest Expense	5.0	5.0	5.1	5.2	5.3	5.4	5.5	5.6	6.1	7.1	8.0	8.9	72.3
Depreciation Expense	7.3	7.5	7.7	7.9	8.1	8.2	8.4	8.6	10.2	11.7	13.2	14.8	113.6
Income Tax Expense	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(1,108.8)	(13,306.1)
Return on Equity	8.1	8.3	8.4	8.6	8.7	8.9	9.0	9.1	10.0	11.5	13.1	14.6	118.3
Revenue Requirement	(787.7)	(787.2)	(786.7)	(786.2)	(785.8)	(785.3)	(784.8)	(784.3)	(781.1)	(776.6)	(772.0)	(767.5)	(9,385.3)
Return on Ratebase (ROR)	13.5	13.8	14.1	14.3	14.5	14.8	15.0	15.3	16.7	19.3	21.9	24.4	197.6

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
All Property and O&M - Total O&M & Capital Costs
Monthly Revenue Requirement - 2009-2015

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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	70.4	78.4	80.6	83.2	85.5	87.6	90.2	92.5	94.6	97.2	99.4	101.5	1,061.1
O&M expenses	2,117.1	2,117.1	2,117.1	2,117.1	2,117.1	2,117.1	2,117.1	2,117.1	2,117.1	2,117.1	2,117.1	2,117.1	25,404.6
Property Taxes	48.8	98.9	108.8	119.1	129.4	139.2	149.4	159.5	169.1	179.1	189.1	198.5	1,688.8
Preferred Equity Interest	12.6	25.5	28.0	30.7	33.3	35.8	38.5	41.1	43.6	46.1	48.7	51.1	435.1
Interest Expense	129.2	262.1	288.2	315.7	343.0	368.7	395.8	422.7	448.0	474.6	501.1	526.0	4,475.0
Depreciation Expense	1,404.5	1,451.0	1,497.5	1,562.4	1,608.9	1,655.4	1,720.3	1,766.8	1,813.3	1,878.2	1,924.6	1,971.1	20,254.1
Income Tax Expense	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	158.6	1,903.6
Return on Equity	211.3	428.7	471.5	516.5	561.2	603.3	647.5	691.5	732.9	776.5	819.8	860.6	7,321.4
Revenue Requirement	4,152.5	4,620.3	4,750.3	4,903.3	5,037.0	5,165.7	5,317.4	5,449.8	5,577.2	5,727.4	5,858.5	5,984.5	62,543.8
Return on Ratebase (ROR)	353.1	716.3	787.8	862.8	937.5	1,007.8	1,081.8	1,155.3	1,224.5	1,297.3	1,369.6	1,437.7	12,231.5
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	129.1	131.8	134.5	137.1	139.7	142.4	145.0	147.6	150.2	152.8	155.4	158.0	1,723.6
O&M expenses	2,646.8	2,646.8	2,646.8	2,646.8	2,646.8	2,646.8	2,646.8	2,646.8	2,646.8	2,646.8	2,646.8	2,646.8	31,761.8
Property Taxes	209.1	220.8	232.4	244.0	255.6	267.0	278.5	289.8	301.1	312.4	323.6	334.7	3,268.8
Preferred Equity Interest	53.9	56.9	59.9	62.9	65.8	68.8	71.7	74.7	77.6	80.5	83.4	86.2	842.1
Interest Expense	554.0	585.0	615.9	646.6	677.2	707.6	737.8	768.0	797.9	827.7	857.3	886.8	8,661.8
Depreciation Expense	2,028.8	2,086.5	2,144.2	2,201.9	2,259.7	2,317.4	2,375.1	2,432.8	2,490.5	2,548.2	2,605.9	2,663.6	28,154.5
Income Tax Expense	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	1,084.5	13,013.8
Return on Equity	906.3	957.1	1,007.6	1,057.9	1,107.9	1,157.6	1,207.2	1,256.4	1,305.4	1,354.2	1,402.7	1,450.9	14,171.2
Revenue Requirement	7,612.5	7,769.4	7,925.8	8,081.7	8,237.1	8,392.1	8,546.6	8,700.5	8,854.0	9,007.0	9,159.5	9,311.5	101,597.7
Return on Ratebase (ROR)	1,514.2	1,599.0	1,683.4	1,767.3	1,850.9	1,934.0	2,016.7	2,099.0	2,180.9	2,262.3	2,343.4	2,424.0	23,675.1

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
All Property and O&M - Total O&M & Capital Costs
Monthly Revenue Requirement - 2009-2015

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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	175.2	179.0	182.8	186.7	189.3	191.3	193.2	195.2	197.1	199.1	201.1	203.2	2,293.3
O&M expenses	3,156.2	3,156.2	3,156.2	3,156.2	3,156.2	3,156.2	3,156.2	3,156.2	3,156.2	3,156.2	3,156.2	3,156.2	37,874.3
Property Taxes	348.8	366.0	383.0	400.1	412.6	420.6	428.5	436.4	444.2	452.0	459.8	467.8	5,019.7
Preferred Equity Interest	89.9	94.3	98.7	103.1	106.3	108.3	110.4	112.4	114.4	116.4	118.5	120.5	1,293.2
Interest Expense	924.3	969.8	1,015.0	1,060.1	1,093.3	1,114.4	1,135.4	1,156.3	1,177.0	1,197.7	1,218.3	1,239.6	13,301.2
Depreciation Expense	2,745.2	2,826.8	2,908.4	2,991.7	3,040.0	3,088.2	3,136.5	3,184.7	3,233.0	3,282.9	3,331.2	3,391.7	37,160.3
Income Tax Expense	1,372.9	1,372.9	1,372.9	1,372.9	1,372.9	1,372.9	1,372.9	1,372.9	1,372.9	1,372.9	1,372.9	1,372.9	16,474.8
Return on Equity	1,512.2	1,586.6	1,660.6	1,734.4	1,788.7	1,823.2	1,857.6	1,891.7	1,925.6	1,959.5	1,993.3	2,028.1	21,761.5
Revenue Requirement	10,324.7	10,551.5	10,777.6	11,005.2	11,159.2	11,275.1	11,390.6	11,505.7	11,620.4	11,736.9	11,851.2	11,980.1	135,178.3
Return on Ratebase (ROR)	2,526.4	2,650.6	2,774.2	2,897.6	2,988.3	3,046.0	3,103.3	3,160.4	3,217.0	3,273.7	3,330.1	3,388.3	36,355.9

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 2014
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	223.6	226.2	228.8	231.3	233.9	236.4	238.9	241.4	243.9	246.4	248.9	251.4	2,851.2
O&M expenses	3,619.7	3,619.7	3,619.7	3,619.7	3,619.7	3,619.7	3,619.7	3,619.7	3,619.7	3,619.7	3,619.7	3,619.7	43,436.4
Property Taxes	487.8	498.6	509.3	519.9	530.5	541.0	551.5	561.9	572.3	582.5	592.8	602.9	6,551.0
Preferred Equity Interest	125.7	128.4	131.2	133.9	136.7	139.4	142.1	144.8	147.4	150.1	152.7	155.3	1,687.7
Interest Expense	1,292.5	1,321.1	1,349.5	1,377.7	1,405.7	1,433.6	1,461.4	1,489.0	1,516.4	1,543.6	1,570.7	1,597.6	17,358.9
Depreciation Expense	3,451.9	3,512.1	3,572.3	3,632.5	3,692.7	3,752.9	3,813.1	3,873.3	3,933.5	3,993.7	4,053.9	4,114.1	45,395.8
Income Tax Expense	1,865.1	1,865.1	1,865.1	1,865.1	1,865.1	1,865.1	1,865.1	1,865.1	1,865.1	1,865.1	1,865.1	1,865.1	22,381.0
Return on Equity	2,114.7	2,161.4	2,207.8	2,254.0	2,299.9	2,345.5	2,390.9	2,436.0	2,480.9	2,525.5	2,569.8	2,613.8	28,400.1
Revenue Requirement	13,181.0	13,332.5	13,483.6	13,634.1	13,784.1	13,933.6	14,082.7	14,231.1	14,379.1	14,526.6	14,673.6	14,820.0	168,062.2
Return on Ratebase (ROR)	3,532.9	3,610.9	3,688.5	3,765.6	3,842.3	3,918.6	3,994.4	4,069.7	4,144.7	4,219.2	4,293.2	4,366.8	47,446.7

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
All Property and O&M - Total O&M & Capital 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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	265.7	267.5	269.2	271.0	272.7	274.5	276.2	277.9	279.6	285.5	288.0	290.3	3,318.0
O&M expenses	3,714.1	3,714.1	3,714.1	3,714.1	3,714.1	3,714.1	3,714.1	3,714.1	3,714.1	3,714.1	3,714.1	3,714.1	44,569.4
Property Taxes	630.9	637.4	643.9	650.4	656.8	663.3	669.6	675.6	681.6	693.4	705.3	712.2	8,020.4
Preferred Equity Interest	162.5	164.2	165.9	167.5	169.2	170.9	172.5	174.0	175.6	178.6	181.7	183.5	2,066.3
Interest Expense	1,671.7	1,688.9	1,706.1	1,723.3	1,740.5	1,757.7	1,774.2	1,790.2	1,806.1	1,837.5	1,868.9	1,887.3	21,252.4
Depreciation Expense	4,162.3	4,210.6	4,258.8	4,307.1	4,355.4	4,403.6	4,451.9	4,500.1	4,548.4	4,791.4	4,839.7	4,919.8	53,749.0
Income Tax Expense	2,319.3	2,319.3	2,319.3	2,319.3	2,319.3	2,319.3	2,319.3	2,319.3	2,319.3	2,319.3	2,319.3	2,319.3	27,831.2
Return on Equity	2,735.1	2,763.2	2,791.3	2,819.4	2,847.6	2,875.7	2,902.8	2,928.8	2,954.9	3,006.2	3,057.6	3,087.8	34,770.2
Revenue Requirement	15,661.6	15,765.1	15,868.6	15,972.1	16,075.6	16,179.0	16,280.5	16,380.0	16,479.5	16,826.0	16,974.4	17,114.3	195,576.8
Return on Ratebase (ROR)	4,569.3	4,616.3	4,663.3	4,710.3	4,757.3	4,804.2	4,849.5	4,893.0	4,936.6	5,022.3	5,108.1	5,158.6	58,088.9

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
All Property and O&M - Total O&M, Avoided & Deferred Benefits
Monthly Revenue Requirement - 2009-2015

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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	(51.4)	(51.9)	(52.3)	(52.7)	(52.8)	(52.9)	(52.9)	(53.0)	(53.0)	(53.0)	(53.1)	(53.1)	(632.1)
O&M expenses	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(2,948.7)	(35,384.5)
Property Taxes	(0.5)	(1.5)	(2.4)	(3.4)	(3.9)	(3.9)	(4.0)	(4.0)	(4.1)	(4.1)	(4.2)	(4.2)	(40.1)
Preferred Equity Interest	(0.1)	(0.4)	(0.6)	(0.9)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.1)	(1.1)	(1.1)	(10.3)
Interest Expense	(1.3)	(3.9)	(6.4)	(8.9)	(10.2)	(10.4)	(10.5)	(10.7)	(10.8)	(10.9)	(11.0)	(11.1)	(106.2)
Depreciation Expense	(16.8)	(33.5)	(50.3)	(67.1)	(69.2)	(71.3)	(73.4)	(75.5)	(77.5)	(79.6)	(81.7)	(83.8)	(779.7)
Income Tax Expense	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(11.2)	(134.5)
Return on Equity	(2.1)	(6.4)	(10.5)	(14.6)	(16.8)	(17.0)	(17.2)	(17.4)	(17.6)	(17.8)	(18.0)	(18.2)	(173.8)
Revenue Requirement	(3,032.2)	(3,057.4)	(3,082.5)	(3,107.5)	(3,113.8)	(3,116.3)	(3,118.9)	(3,121.5)	(3,124.0)	(3,126.5)	(3,129.0)	(3,131.5)	(37,261.1)
Return on Ratebase (ROR)	(3.6)	(10.6)	(17.6)	(24.4)	(28.0)	(28.4)	(28.8)	(29.1)	(29.5)	(29.8)	(30.1)	(30.4)	(290.3)
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	(77.7)	(77.7)	(77.7)	(77.7)	(77.7)	(77.7)	(77.7)	(77.7)	(77.7)	(77.6)	(77.6)	(77.6)	(932.2)
O&M expenses	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(4,365.2)	(52,381.9)
Property Taxes	(5.7)	(5.6)	(5.5)	(5.4)	(5.3)	(5.2)	(5.1)	(5.1)	(5.0)	(4.9)	(4.8)	(4.7)	(62.4)
Preferred Equity Interest	(1.5)	(1.5)	(1.4)	(1.4)	(1.4)	(1.4)	(1.3)	(1.3)	(1.3)	(1.3)	(1.2)	(1.2)	(16.1)
Interest Expense	(15.2)	(14.9)	(14.7)	(14.4)	(14.2)	(13.9)	(13.6)	(13.4)	(13.1)	(12.9)	(12.6)	(12.4)	(165.3)
Depreciation Expense	(83.9)	(84.1)	(84.2)	(84.3)	(84.4)	(84.5)	(84.6)	(84.7)	(84.9)	(85.0)	(85.1)	(85.2)	(1,014.9)
Income Tax Expense	(8.6)	(8.6)	(8.6)	(8.6)	(8.6)	(8.6)	(8.6)	(8.6)	(8.6)	(8.6)	(8.6)	(8.6)	(103.0)
Return on Equity	(24.8)	(24.4)	(24.0)	(23.6)	(23.2)	(22.7)	(22.3)	(21.9)	(21.5)	(21.1)	(20.6)	(20.2)	(270.4)
Revenue Requirement	(4,582.7)	(4,582.0)	(4,581.3)	(4,580.6)	(4,579.9)	(4,579.2)	(4,578.5)	(4,577.8)	(4,577.1)	(4,576.4)	(4,575.7)	(4,575.0)	(54,946.0)
Return on Ratebase (ROR)	(41.5)	(40.8)	(40.1)	(39.4)	(38.7)	(38.0)	(37.3)	(36.6)	(35.9)	(35.2)	(34.5)	(33.8)	(451.7)

ATTACHMENT MF-4
Southern California Gas Company
Advanced Metering Infrastructure
Application September 29, 2008
All Property and O&M - Total O&M, Avoided & Deferred 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
Electric Meters & Gas Modules													
Franchise Fees & Uncollectibles	(101.5)	(101.5)	(101.5)	(101.4)	(101.4)	(101.4)	(101.4)	(101.4)	(101.4)	(101.4)	(101.4)	(101.4)	(1,217.1)
O&M expenses	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(5,745.1)	(68,941.6)
Property Taxes	(5.0)	(4.9)	(4.8)	(4.7)	(4.6)	(4.5)	(4.4)	(4.3)	(4.2)	(4.1)	(4.0)	(3.9)	(53.9)
Preferred Equity Interest	(1.3)	(1.3)	(1.2)	(1.2)	(1.2)	(1.2)	(1.1)	(1.1)	(1.1)	(1.1)	(1.0)	(1.0)	(13.9)
Interest Expense	(13.4)	(13.1)	(12.8)	(12.6)	(12.3)	(12.0)	(11.8)	(11.5)	(11.3)	(11.0)	(10.7)	(10.5)	(142.9)
Depreciation Expense	(85.3)	(85.4)	(85.5)	(85.7)	(85.8)	(85.9)	(86.0)	(86.1)	(86.2)	(86.3)	(86.5)	(86.6)	(1,031.3)
Income Tax Expense	(8.7)	(8.7)	(8.7)	(8.7)	(8.7)	(8.7)	(8.7)	(8.7)	(8.7)	(8.7)	(8.7)	(8.7)	(104.4)
Return on Equity	(21.8)	(21.4)	(21.0)	(20.6)	(20.1)	(19.7)	(19.3)	(18.8)	(18.4)	(18.0)	(17.5)	(17.1)	(233.8)
Revenue Requirement	(5,982.2)	(5,981.5)	(5,980.8)	(5,980.0)	(5,979.3)	(5,978.6)	(5,977.9)	(5,977.2)	(5,976.5)	(5,975.7)	(5,975.0)	(5,974.3)	(71,738.9)
Return on Ratebase (ROR)	(36.5)	(35.8)	(35.1)	(34.4)	(33.6)	(32.9)	(32.2)	(31.5)	(30.8)	(30.0)	(29.3)	(28.6)	(390.6)

ATTACHMENT MF-4

Summary of Rate Base Associated with SoCalGas AMI Costs

Annual Property Tax rate 1.1980%

Monthly Property Tax rate 0.0998%

SUMMARY OF RATEBASE

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2009	Beg Bal	-	-	-	-	-	-	-	-	-
	Jan	-	-	-	-	-	-	-	-	-
	Feb	-	-	-	-	-	-	-	-	-
	Mar	-	-	-	-	-	-	-	-	-
	Apr	-	-	-	-	-	-	-	-	-
	May	-	-	-	-	-	-	-	-	-
	Jun	-	-	-	-	-	-	-	-	-
	Jul	318	(1)	(4)	313	0	1	0	0	1
	Aug	635	(4)	(8)	624	0	3	0	1	2
	Sep	953	(7)	(12)	934	1	6	0	2	3
	Oct	1,271	(12)	(16)	1,243	1	8	0	3	5
	Nov	1,588	(18)	(20)	1,550	1	10	0	4	6
	Dec	1,906	(25)	(25)	1,857	2	12	0	5	7
2009	Total	477	(4)	(6)	466	6	40	1	15	24

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2010	Beg Bal	1,906	(25)	(25)	1,857	-	-	-	-	-
	Jan	1,953	(32)	(29)	1,891	2	14	0	5	8
	Feb	2,000	(40)	(34)	1,926	2	14	0	5	8
	Mar	2,046	(47)	(39)	1,960	2	14	0	5	8
	Apr	2,093	(55)	(43)	1,995	2	14	1	5	9
	May	2,140	(63)	(48)	2,029	2	15	1	5	9
	Jun	2,187	(71)	(53)	2,062	2	15	1	5	9
	Jul	2,233	(80)	(57)	2,096	2	15	1	6	9
	Aug	2,280	(88)	(62)	2,129	2	15	1	6	9
	Sep	2,654	(99)	(67)	2,488	2	17	1	6	10
	Oct	3,028	(110)	(72)	2,846	3	19	1	7	12
	Nov	3,402	(124)	(76)	3,202	3	22	1	8	13
	Dec	3,776	(138)	(81)	3,556	3	24	1	9	15
2010	Total	2,405	(74)	(53)	2,278	27	198	7	72	118

ATTACHMENT MF-4

Summary of Rate Base Associated with SoCalGas AMI Costs

Annual Property Tax rate 1.1980%

Monthly Property Tax rate 0.0998%

SUMMARY OF RATEBASE

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2011	Beg Bal	3,776	(138)	(81)	3,556	-				
	Jan	95,797	(1,543)	(146)	94,108	49	353	13	129	211
	Feb	107,223	(2,994)	(212)	104,017	99	716	25	262	429
	Mar	118,648	(4,491)	(278)	113,879	109	788	28	288	472
	Apr	131,180	(6,054)	(343)	124,783	119	863	31	316	516
	May	142,605	(7,663)	(409)	134,534	129	938	33	343	561
	Jun	154,031	(9,318)	(475)	144,238	139	1,008	36	369	603
	Jul	166,563	(11,039)	(540)	154,984	149	1,082	38	396	648
	Aug	177,988	(12,805)	(606)	164,577	160	1,155	41	423	692
	Sep	189,413	(14,619)	(672)	174,123	169	1,224	44	448	733
	Oct	201,941	(16,497)	(737)	184,707	179	1,297	46	475	777
	Nov	213,367	(18,421)	(803)	194,142	189	1,370	49	501	820
	Dec	224,792	(20,393)	(870)	203,530	199	1,438	51	526	861
2011	Total	151,087	(9,642)	(475)	140,970	1,689	12,232	435	4,475	7,321
2012	Beg Bal	224,792	(20,393)	(870)	203,530	-				
	Jan	239,056	(22,421)	(1,345)	215,290	209	1,514	54	554	906
	Feb	253,319	(24,508)	(1,820)	226,991	221	1,599	57	585	957
	Mar	267,583	(26,652)	(2,297)	238,634	232	1,683	60	616	1,008
	Apr	281,846	(28,854)	(2,773)	250,219	244	1,767	63	647	1,058
	May	296,110	(31,114)	(3,251)	261,745	256	1,851	66	677	1,108
	Jun	310,373	(33,431)	(3,729)	273,213	267	1,934	69	708	1,158
	Jul	324,637	(35,806)	(4,208)	284,623	278	2,017	72	738	1,207
	Aug	338,900	(38,239)	(4,687)	295,974	290	2,099	75	768	1,256
	Sep	353,164	(40,729)	(5,167)	307,267	301	2,181	78	798	1,305
	Oct	367,427	(43,278)	(5,647)	318,502	312	2,262	80	828	1,354
	Nov	381,691	(45,883)	(6,128)	329,679	324	2,343	83	857	1,403
	Dec	395,954	(48,547)	(6,610)	340,797	335	2,424	86	887	1,451
2012	Total	310,373	(33,782)	(3,733)	272,858	3,269	23,675	842	8,662	14,171

ATTACHMENT MF-4

Summary of Rate Base Associated with SoCalGas AMI Costs

Annual Property Tax rate 1.1980%

Monthly Property Tax rate 0.0998%

SUMMARY OF RATEBASE

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2013	2013 Beg Bal	395,954	(48,547)	(6,610)	340,797	-				
	Jan	416,578	(51,292)	(7,269)	358,017	349	2,526	90	924	1,512
	Feb	437,201	(54,119)	(7,929)	375,153	366	2,651	94	970	1,587
	Mar	457,825	(57,027)	(8,591)	392,206	383	2,774	99	1,015	1,661
	Apr	478,551	(60,019)	(9,254)	409,277	400	2,898	103	1,060	1,734
	May	490,261	(63,059)	(9,918)	417,284	413	2,988	106	1,093	1,789
	Jun	501,971	(66,147)	(10,581)	425,243	421	3,046	108	1,114	1,823
	Jul	513,682	(69,284)	(11,245)	433,153	428	3,103	110	1,135	1,858
	Aug	525,392	(72,469)	(11,909)	441,015	436	3,160	112	1,156	1,892
	Sep	537,103	(75,702)	(12,573)	448,828	444	3,217	114	1,177	1,926
	Oct	548,916	(78,984)	(13,237)	456,694	452	3,274	116	1,198	1,960
	Nov	560,626	(82,316)	(13,902)	464,409	460	3,330	118	1,218	1,993
	Dec	573,073	(85,707)	(14,566)	472,800	468	3,388	121	1,240	2,028
2013	Total	496,052	(66,462)	(10,583)	419,006	5,020	36,356	1,293	13,301	21,762

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2014	2014 Beg Bal	573,073	(75,313)	(14,566)	483,194	-				
	Jan	587,963	(78,765)	(15,185)	494,014	488	3,533	126	1,293	2,115
	Feb	602,854	(82,277)	(15,804)	504,772	499	3,611	128	1,321	2,161
	Mar	617,744	(85,850)	(16,424)	515,470	509	3,688	131	1,349	2,208
	Apr	632,634	(89,482)	(17,044)	526,108	520	3,766	134	1,378	2,254
	May	647,524	(93,175)	(17,666)	536,684	531	3,842	137	1,406	2,300
	Jun	662,414	(96,928)	(18,288)	547,199	541	3,919	139	1,434	2,346
	Jul	677,305	(100,741)	(18,910)	557,654	552	3,994	142	1,461	2,391
	Aug	692,195	(104,614)	(19,533)	568,048	562	4,070	145	1,489	2,436
	Sep	707,085	(108,547)	(20,157)	578,381	572	4,145	147	1,516	2,481
	Oct	721,975	(112,541)	(20,782)	588,653	583	4,219	150	1,544	2,525
	Nov	736,866	(116,595)	(21,407)	598,864	593	4,293	153	1,571	2,570
	Dec	751,756	(120,709)	(22,032)	609,014	603	4,367	155	1,598	2,614
2014	Total	662,414	(97,294)	(18,291)	546,829	6,551	47,447	1,688	17,359	28,400

ATTACHMENT MF-4

Summary of Rate Base Associated with SoCalGas AMI Costs

Annual Property Tax rate 1.1980%

Monthly Property Tax rate 0.0998%

SUMMARY OF RATEBASE

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2015	Beg Bal	751,756	(99,543)	(23,516)	628,697	-				
	Jan	763,604	(104,379)	(24,030)	635,195	631	4,569	163	1,672	2,735
	Feb	775,453	(109,216)	(24,544)	641,693	637	4,616	164	1,689	2,763
	Mar	787,301	(114,052)	(25,058)	648,191	644	4,663	166	1,706	2,791
	Apr	799,149	(118,888)	(25,572)	654,688	650	4,710	168	1,723	2,819
	May	810,997	(123,725)	(26,087)	661,186	657	4,757	169	1,740	2,848
	Jun	822,846	(128,561)	(26,601)	667,684	663	4,804	171	1,758	2,876
	Jul	834,694	(133,398)	(27,115)	673,704	670	4,850	173	1,774	2,903
	Aug	846,542	(138,234)	(27,629)	679,724	676	4,893	174	1,790	2,929
	Sep	858,391	(143,070)	(28,143)	685,744	682	4,937	176	1,806	2,955
	Oct	870,240	(147,907)	(28,657)	691,776	689	4,980	177	1,822	2,981
	Nov	882,089	(152,743)	(29,171)	697,805	695	5,022	179	1,837	3,006
	Dec	893,938	(157,580)	(29,685)	706,773	702	5,064	181	1,852	3,031
	2015 Total	825,360	(128,561)	(27,317)	669,482	8,020	58,089	2,066	21,252	34,770

ATTACHMENT MF-4

Summary of Rate Base Associated with SoCalGas AMI Benefits

Annual Property Tax rate 1.1980%

Monthly Property Tax rate 0.0998%

SUMMARY OF RATEBASE

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2013										
	Beg Bal	-	-	-	-	-	-	-	-	-
	Jan	1,006	(17)	(5)	985	0	4	0	1	2
	Feb	2,012	(50)	(8)	1,954	1	11	0	4	6
	Mar	3,018	(101)	(11)	2,907	2	18	1	6	11
	Apr	4,024	(168)	(12)	3,844	3	24	1	9	15
	May	4,150	(237)	(14)	3,899	4	28	1	10	17
	Jun	4,276	(308)	(15)	3,952	4	28	1	10	17
	Jul	4,401	(381)	(16)	4,004	4	29	1	11	17
	Aug	4,527	(457)	(17)	4,053	4	29	1	11	17
	Sep	4,653	(534)	(18)	4,100	4	29	1	11	18
	Oct	4,779	(614)	(19)	4,145	4	30	1	11	18
	Nov	4,904	(696)	(20)	4,189	4	30	1	11	18
	Dec	5,030	(780)	(21)	4,230	4	30	1	11	18
	2013 Total	3,689	(329)	(14)	3,346	40	290	10	106	174

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2014										
	Beg Bal	5,030	780	(21)	5,789	-	-	-	-	-
	Jan	5,037	696	(40)	5,692	6	42	1	15	25
	Feb	5,044	612	(60)	5,595	6	41	1	15	24
	Mar	5,051	527	(80)	5,498	6	40	1	15	24
	Apr	5,057	443	(99)	5,401	5	39	1	14	24
	May	5,064	359	(119)	5,304	5	39	1	14	23
	Jun	5,071	274	(139)	5,207	5	38	1	14	23
	Jul	5,078	190	(159)	5,109	5	37	1	14	22
	Aug	5,085	105	(178)	5,011	5	37	1	13	22
	Sep	5,092	20	(198)	4,914	5	36	1	13	21
	Oct	5,098	(65)	(218)	4,816	5	35	1	13	21
	Nov	5,105	(150)	(237)	4,718	5	34	1	13	21
	Dec	5,112	(235)	(257)	4,620	5	34	1	12	20
	2014 Total	5,071	274	(139)	5,206	62	452	16	165	270

ATTACHMENT MF-4

Summary of Rate Base Associated with SoCalGas AMI Benefits

Annual Property Tax rate 1.1980%

Monthly Property Tax rate 0.0998%

SUMMARY OF RATEBASE

Year	Month	Utility Plant	Acc. Depreciation	Acc. Def. Taxes	Net Ratebase	Property Tax 0.0998%	ROR 0.72%	Pref. Equity 0.03%	Int. Exp. 0.26%	Net Inc. 0.43%
2015	Beg Bal	5,112	244	(259)	5,098	-				
	Jan	5,119	158	(278)	4,999	5	37	1	13	22
	Feb	5,126	71	(297)	4,899	5	36	1	13	21
	Mar	5,133	(16)	(317)	4,800	5	35	1	13	21
	Apr	5,140	(102)	(336)	4,701	5	34	1	13	21
	May	5,146	(189)	(356)	4,602	5	34	1	12	20
	Jun	5,153	(275)	(375)	4,503	5	33	1	12	20
	Jul	5,160	(362)	(395)	4,403	4	32	1	12	19
	Aug	5,167	(448)	(415)	4,303	4	31	1	12	19
	Sep	5,174	(535)	(435)	4,203	4	31	1	11	18
	Oct	5,181	(622)	(456)	4,103	4	30	1	11	18
	Nov	5,187	(708)	(476)	4,004	4	29	1	11	18
	Dec	5,194	(795)	(496)	3,904	4	29	1	10	17
2015	Total	5,153	(275)	(376)	4,502	54	391	14	143	234

