

Company: Southern California Gas Company (U904G)  
Proceeding: 2016 General Rate Case  
Application: A.14-11-004  
Exhibit: SCG-239-Garcia

**SOCALGAS**

**REBUTTAL TESTIMONY OF RENE F. GARCIA**

**(ADVANCED METERING INFRASTRUCTURE POLICY)**

June 2015

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





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2                                   **(ADVANCED METERING INFRASTRUCTURE POLICY)**

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4 **I. INTRODUCTION**

5                   Office of Ratepayer Advocates (“ORA”) issued its revised report on SoCalGas Advanced  
6 Metering Infrastructure (“AMI”) Policy on May 11, 2015.<sup>1</sup> The following is a summary of  
7 ORA’s position(s):

- 8                   • ORA agrees with SoCalGas’ request to “extend the Advanced Metering Infrastructure  
9 Balancing Account (“AMIBA”) beyond project completion through 2018 or until the  
10 full AMI costs and benefits can be reflected in a subsequent GRC”;<sup>2</sup> and
- 11                   • ORA recommends that the California Public Utilities Commission (“Commission”)  
12 require SoCalGas to file a Tier 3 advice letter in the unlikely event the Commission  
13 adopts Test Year (“TY”) 2016 General Rate Case (“GRC”) operating and  
14 maintenance (“O&M”) expense levels that reflect AMI benefits already included in  
15 the AMI revenue requirement.<sup>3</sup>

16 ORA also issued its report on SoCalGas’ Customer Services and Gas Distribution on April 24,  
17 2015.<sup>4, 5</sup> Though these reports do not explicitly discuss AMI, the following is a summary of  
18 ORA’s positions as it relates to SoCalGas’ AMI Policy.

- 19                   • ORA claims that SoCalGas should “incorporate/reallocate” meter reading savings in  
20 order to fund Department of Transportation (“DOT”) mandated meter set assembly  
21 (“MSA”) inspections and associated call volume increases in the TY 2016;<sup>6</sup> and
- 22                   • ORA claims that SoCalGas’ capital expenditure forecast request for meter  
23 replacements is “excessive and inadequately supported.”<sup>7</sup>

24  

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<sup>1</sup> Exhibit ORA-23-A Post-Test Year Ratemaking (“PTYR”) and SCG AMI, (“ORA-23-A”).

<sup>2</sup> Exhibit ORA-23-A, at p.23, lines 5-7.

<sup>3</sup> Exhibit ORA-23-A, at pp.24-25, lines 23,1-2.

<sup>4</sup> Exhibit ORA-13 Customer Services (“ORA-13”).

<sup>5</sup> Exhibit ORA-10 SoCalGas Gas Distribution (“ORA-10”).

<sup>6</sup> Exhibit ORA-13, at p.60, lines 14-17 “SCG’s testimony does not discuss why it is not able to incorporate/reallocate embedded costs associated with activities performed by its meter reader positions (that will be phased out and have historically performed DOT MSA inspections) to fund its FSAs that will take over the compliance work.” and Exhibit ORA-13, at p. 77, lines 5-16.

<sup>7</sup> Exhibit ORA-10, at p.62, lines 4-5.

1 **II. REBUTTAL TO PARTIES’ O&M PROPOSALS**

2 **A. SoCalGas proposes to file a Tier 2 advice letter in lieu of a Tier 3 advice**  
3 **letter shall the need to revise the per meter benefit arise.**

4 ORA agreed with SoCalGas’ request to extend the AMIBA beyond project completion  
5 through 2018 or until the full AMI costs and benefits can be reflected in a subsequent GRC.<sup>8</sup>  
6 ORA also agrees with SoCalGas’ proposal to file an advice letter seeking to revise the per meter  
7 benefit used to calculate AMI benefits “in the unlikely event the Commission adopts TY 2016  
8 O&M expense levels that reflect AMI benefits already included in the AMI revenue  
9 requirement.”<sup>9</sup>

10 However, ORA recommends that the Commission require SoCalGas to file a Tier 3  
11 advice letter if the situation were to arise.<sup>10</sup> SoCalGas disagrees with ORA’s recommendation to  
12 file a Tier 3 advice letter and requests that the Commission allow SoCalGas to file a Tier 2  
13 advice letter instead. Advice Letter (“AL”) 4110,<sup>11</sup> a Tier 1 advice letter, established the  
14 AMIBA, updated the revenue requirement and modified existing tariffs to implement Decision  
15 (“D”) 10-04-027 per Ordering Paragraph (“OP”) 7. AL 4110 was filed after an extensive AMI  
16 business case proceeding which entailed thorough Commission review and an intervening  
17 process including discovery, data requests and hearings prior to being authorized in D.10-04-  
18 027. The Commission determined that AL 4110 was appropriate for Tier 1 advice letter filing  
19 and any advice letter submitted for purposes to revise the per meter benefit would simply be a  
20 modification of what was already submitted and approved in 2010. Use of a Tier 2 advice letter  
21 to extend the AMIBA is appropriate because revising the AMIBA would not result in a rate  
22 increase but would instead offset costs not authorized in the TY 2016 GRC decision that would  
23 be associated to AMI benefits.<sup>12</sup>

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<sup>8</sup> Exhibit ORA-23-A PTYR and SCG AMI Policy, at p.5, lines 15-17.

<sup>9</sup> Exhibit ORA-23-A, at p. 24, lines 19-23.

<sup>10</sup> Exhibit ORA-23-A, at pp.24-25, lines 23, 1-2.

<sup>11</sup> AL 4110, U 904 G, effective April 8, 2010. AL 4110 was approved by letter dated August 4, 2010.

<sup>12</sup> SoCalGas assumes that ORA recommends filing a Tier 3 advice letter under the rules established in GO 96-B 5.3 (4) where the change would result in an increase to rates. Except for a change that may be submitted by advice letter pursuant to Industry Rules 5.1(1), 5.1(3), 5.1(7), 5.2(1), or 5.2(2), a change that would result in an increase to a rate or charge or a more restrictive term or condition, which change has been authorized by statute or by other Commission order to be requested by advice letter.

1 **B. ORA mistakenly claims that SoCalGas can reallocate meter reading funding**  
2 **for MSA inspections; AMI-related meter reading savings are already**  
3 **accounted for in customer rates.**<sup>13</sup>

4 Once AMI deployment is completed, the meter reading function will be all but  
5 eliminated.<sup>14</sup> During deployment, costs that are “phased out” that are associated to the attrition  
6 of the meter reading workforce are tracked as benefits in the AMIBA.<sup>15</sup> ORA claims that  
7 SoCalGas should reallocate meter reading savings in order to fund DOT MSA inspections in the  
8 TY 2016, stating:

9 SCG’s testimony does not discuss why it is not able to incorporate/reallocate  
10 embedded costs associated with activities performed by its meter reader positions  
11 (that will be phased out and have historically performed DOT MSA inspections)  
12 to fund its FSAs that will take over the compliance work.<sup>16</sup>

13 ORA also states that meter reading funding can be re-allocated to SoCalGas’ CCC – Operations  
14 to cover costs of incremental calls resulting from the MSA inspection program, stating:

15 Additional funding over 2013 expense levels is not required for this activity.  
16 SCG’s Meter Reading Department currently handles DOT MSA inspection  
17 activity. SCG plans to eliminate its Meter Reading department, and the ratepayer  
18 funding currently used by this department can be reallocated to SCG’s CCC –  
19 Operations when the work is transferred to CCC – Operations.<sup>17</sup>

20 As AMI benefits associated with the meter reading function are already accounted for in  
21 customer rates, meter reading funding is not available for SoCalGas to reallocate to MSA  
22 inspections. ORA’s recommendation to reallocate meter reading funding that is already  
23 accounted for as benefits in customer rates would essentially “double count” those savings. In  
24 D.13-05-010, the Commission concluded that adopting certain O&M forecasts which already  
25 incorporate AMI operating benefits would “result in a double reduction to SoCalGas’ revenue  
26 requirement.”<sup>18</sup> In addition, ORA’s recommendation contradicts Witness C. Tang’s position in  
27 Exhibit ORA–23-A where it was acknowledged that it would be “unlikely” that the Commission

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<sup>13</sup> As a result of D.10-04-027, authorized project costs of \$1.05 billion and O&M benefits of \$184.8 million are currently being collected in rates, while actual costs and benefits are recorded in the AMIBA.

<sup>14</sup> By 2018, SoCalGas customers, except those customers enrolled in the Opt-Out Program, will receive monthly bills based on AMI’s automated meter reads and no longer require a manual read done by a meter reader.

<sup>15</sup> Exhibit ORA-13, at p. 60, line 16.

<sup>16</sup> Exhibit ORA-13, at p. 60, lines 14-17.

<sup>17</sup> Exhibit ORA-13, at p. 77, lines 9-14.

<sup>18</sup> D.13-05-010, at p. 508.

1 would adopt TY 2016 O&M expense levels that reflect AMI benefits already included in the  
2 AMI revenue requirement.<sup>19</sup> Hence, benefits associated with AMI, including meter reading  
3 benefits, are already embedded in rates and therefore cannot be considered available funding in  
4 TY 2016 GRC. To further clarify, the MSA inspection related costs forecasted by Witness Sara  
5 Franke in Exhibit SCG-10 and by Witness Evan Goldman in Exhibit SCG-11 are incremental to  
6 costs already authorized in D.10-04-027. As stated by Witness Franke, the “additional costs are  
7 associated with performing required MSA inspections, post-AMI implementation.”<sup>20</sup>

### 8 **III. REBUTTAL TO PARTIES’ CAPITAL PROPOSALS**

#### 9 **A. SoCalGas’ size 1-3 replacement meter purchases for 2014-2016 should be** 10 **authorized as requested since ORA ignored the impacts of AMI during Base** 11 **Year (“BY”) 2013.**

12 In D.10-04-027, AMI was authorized funding to replace 650,000 “accelerated” PMCs  
13 during the project deployment period, through 2017. Accelerated PMCs are meters that would  
14 normally have been replaced in the five-year period after AMI deployment (2018 through 2022).  
15 By accelerating PMCs into the deployment period, SoCalGas avoids additional costs related to  
16 revisiting the retrofitted meter (i.e. the existing meter in the field with a gas meter module  
17 installed on it during deployment) to install a replacement meter (with a module married to it)  
18 within five years after the AMI deployment period.

19 During the AMI deployment period Gas Distribution must also purchase 650,000 meters  
20 for PMCs, as requested in TY 2012 GRC and as is being requested in TY 2016 GRC, i.e.  
21 “business as usual” meters. Since funding for "business as usual" meter installations and  
22 replacements is forecasted in a GRC, these meters would have been installed or replaced absent  
23 AMI deployment. Since the two GRC periods overlap with the AMI deployment period, the  
24 650,000 PMC meters equate to 130,000 meters per year as requested in TY 2012 GRC and  
25 authorized in D.13-05-010 as well as 130,000 meters per year as requested in TY 2016 GRC. In  
26 addition, RMCs continue to be worked by SoCalGas’ Customer Services Field and funded by  
27 Gas Distribution. RMC purchases, as authorized in D.13-05-010, and as requested in TY 2016  
28 GRC equate to a total of 250,000 meters or 50,000 meters per year for the five-year deployment  
29 period.

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<sup>19</sup> Exhibit ORA-23-A, at p. 24, lines 19-23.

<sup>20</sup> SCG-10, at SAF-10, lines 23-26.

1 In Exhibit ORA-10, ORA takes issue with SoCalGas' capital forecast for meter purchases  
2 due to relatively low activity in BY 2013. ORA claims that SoCalGas' proposal, which is "84%  
3 above the 2013 recorded level, is excessive and inadequately supported."<sup>21</sup> ORA states:

4 In the base year of 2013, SoCalGas replaced less than 100,000 meters from both  
5 the PMC and RMC programs, yet for the test year period SoCalGas proposes to  
6 purchase almost 200,000 meters, close to twice the number of meters replaced in  
7 2013.<sup>22</sup>

8 SoCalGas disagrees with ORA's position. Compared to prior GRC periods, annual meter  
9 purchases are lower for regular operations in 2013. However, 2013 represents the first full year  
10 of the AMI deployment. In addition, in previous data request responses to ORA, SoCalGas  
11 explained the relationship between SoCalGas' AMI and GRC funded meter purchases<sup>23</sup> where  
12 size 1-3 meter purchases and replacement timelines for regular operations are affected by the  
13 AMI project deployment.<sup>24</sup>

14 For example, as explained in response to ORA-SCG-DR-12-DAO, Question 5.a,<sup>25</sup> the  
15 majority of the small meters that were purchased in 2013 were funded by AMI. While AMI  
16 funded more meters in 2013 and the GRC funded fewer meters in 2013, purchase quantities will  
17 ultimately balance out during the full AMI deployment period (2013-2017). The response to  
18 Question 4.a in ORA-SCG-DR-12-DAO further explains the reason as to why there were fewer  
19 GRC funded meters in 2013, as stated:

20 Note, in addition to CSF-completed small meter replacements, the Advanced  
21 Metering Infrastructure (AMI) project team has also been performing small meter  
22 replacements in order to fully integrate with the scheduling and routing of AMI  
23 deployment. The number of small meter changes completed by CSF in 2013  
24 excludes a total of 241,041 small meter changes that were completed as part of  
25 SoCalGas' Advanced Metering Infrastructure (AMI) implementation.

26 In order to adhere to the AMI implementation schedule, beginning in 2013, the  
27 AMI project assumed responsibility for above-ground PMCs, including both  
28 planned and accelerated meter changes, and Customer Service Field ("CSF")  
29 shifted its focus to curb meter changes. This trade-off (i.e., the AMI project team  
30 focusing on above-ground meters and CSF focusing on curb meters) enabled a

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<sup>21</sup> Exhibit ORA-10, at p. 62, lines 3-4.

<sup>22</sup> ORA-10, p. 60, lines 12-15.

<sup>23</sup> See SoCalGas' response to ORA-SCG-DR-064-DAO, Question 29 in Appendix A, Attachment A1 and ORA-SCG-DR-064-DAO, Question 42 in Appendix A, Attachment A2.

<sup>24</sup> Size 1-3 meters include planned meter changes ("PMCs") and routine meter changes ("RMCs").

<sup>25</sup> See SoCalGas' response to ORA-SCG-DR-012-DAO, Question 5.a in Appendix A, Attachment A3.



1 better match between the work and employee skill sets. Over the course of the  
 2 AMI deployment period (2013-2017), all GRC- and AMI-funded PMCs will be  
 3 completed.<sup>26</sup>

4 Although AMI purchased the majority of the size 1-3 meters in 2013, AMI will fund no  
 5 more than the 650,000 meters for accelerated PMCs as authorized in D.10-04-027 and the GRC  
 6 will fund the purchase of 650,000 “current” year PMCs over the five-year deployment period.  
 7 Table 1 below, as provided in the response to ORA-SCG-DR-012-DAO, Question 5.a, illustrates  
 8 the authorized or forecasted small meter replacements by year.<sup>27</sup>

9 **Table RFG-1**  
 10 **Authorized or Forecasted Small Meter Replacements**  
 11

	2013	2014	2015	2016	2017	Total
GRC- PMCs	130,000	130,000	130,000	130,000	130,000	650,000
GRC-RMCs	50,000	50,000	50,000	50,000	50,000	250,000
GRC Total	180,000	180,000	180,000	180,000	180,000	900,000
AMI-Accelerated PMCs (2018-2022)	130,000	130,000	130,000	130,000	130,000	650,000

12 As provided in ORA-SCG-DR-012-DAO, Question 5.a, Table 2 below illustrates the actual and  
 13 estimated distribution of meter purchases during the AMI deployment period. SoCalGas would  
 14 like to clarify that the 91,107 GRC funded meters in 2013 as provided in ORA-SCG-DR-012-  
 15 DAO, Question 5.a represents size 1-3 RMCs and PMCs as well as size 4+ PMCs. In Exhibit  
 16 ORA-10, Table 10-35, the 91,107 meters for 2013 suggests that it only includes size 1-3 meters  
 17 and excludes size 4+ PMCs.

18 **Table RFG-2**  
 19 **Actual or Estimated Small Meter Purchases for Meter Replacements, by Year**  
 20

	Actual 2013	Estimated				Total
		2014	2015	2016	2017	
GRC Funded	91,107	160,000	216,298	216,298	216,298	900,000
AMI Funded	288,232	195,000	166,768	-	-	650,000

\*GRC meters purchased in 2013 include size 4 meters which are typically purchased in small volumes

<sup>26</sup> See SoCalGas response to ORA-SCG-DR-012-DAO, Question 4.a in Appendix A, Attachment A4.

<sup>27</sup> See SoCalGas’ response to ORA-SCG-DR-012-DAO, Question 5.a in Appendix A, Attachment A3.

1 Subsequently, ORA-SCG-DR-064-DAO was issued requesting 2014 meter purchases; SoCalGas  
 2 provided actual purchases at that time. Table 3 below is consistent with what was provided in  
 3 the response to ORA-SCG-DR-064-DAO, Question 29.<sup>28</sup>

4 **Table RFG-3**  
 5 **Meter Purchases in 2014**  
 6

	Provided in the table in the response to ORA-SCG-DR-064-DAO, Question 29		
	GRC Funded-New Business Meter Sets	GRC Funded-Historical PMCs and RMCs (Meters Purchased in 2014 Less New Meter Sets)	GRC Funded Total Meters Purchased
Size 1 - 3 Meters	29,934	191,945	221,879
Size 4+ Meters	2,524	7,376	9,900
Total	32,458	199,321	231,779

7 As illustrated in Table 3, GRC-funded size 1 through 3 meter purchases for PMCs and RMCs in  
 8 2014 exceed the GRC forecast of 180,000 annual meter purchases which is consistent with  
 9 SoCalGas’ response to ORA-SCG-DR-012-DAO, Questions 4.a. and 5.a.<sup>29</sup> SoCalGas is also on  
 10 track to purchase the amount of meters authorized in D.10-04-027 for AMI. Ultimately, AMI  
 11 and GRC meter purchases will balance out by the end of the full AMI deployment period (2013-  
 12 2017). Meaning, by the end of the AMI deployment, AMI will purchase 650,000 meters for the  
 13 “accelerated” PMCs and regular operations will purchase 650,000 meters for the “current year”  
 14 PMCs and 250,000 meters for RMCs. Therefore, the size 1 through 3 replacement meter  
 15 purchases requested by Witness Frank B. Ayala, Exhibit SCG-04, are consistent with planned  
 16 forecasts and ORA’s proposed disallowance should be rejected.

17 **IV. CONCLUSION**

18 SoCalGas appreciates ORA’s acceptance of the AMI Policy proposals. In the unlikely  
 19 event the Commission adopts TY 2016 O&M expense levels that reflect AMI benefits already  
 20 included in the AMI revenue requirement, SoCalGas requests authorization to file a Tier 2  
 21 Advice Letter. In addition, SoCalGas disagrees with ORAs recommendation in the Customer

<sup>28</sup>See SoCalGas response to ORA-SCG-DR-064-DAO, Question 29 in Appendix A, Attachment A1.

<sup>29</sup> See Appendix A, Attachment A3 and Attachment A2.

1 Services area, represented by Witness Sara Franke (Exhibit SCG-10) and by Witness Evan  
2 Goldman (Exhibit SCG-11), to reallocate avoided meter reading funds to the proposed MSA  
3 inspection program as meter reading benefits are already in rates and are not available for  
4 reallocation. Moreover, doing so would result in a double counting of benefits and would  
5 require an adjustment to the current AMIBA and benefits per meter calculation via advice letter.  
6 Finally, SoCalGas rejects the suggested decrease in capital funding in the Gas Distribution area  
7 for small meter replacements (sizes 1-3) since ORA ignored relevant and supporting facts  
8 provided to them in Data Requests. As such, SoCalGas requests authorization of capital funding  
9 for small replacement meters as presented in the Gas Distribution Testimony of Witness Frank  
10 Ayala (Exhibit SCG-04).

11 This concludes my prepared rebuttal testimony.

**APPENDIX  
TO  
REBUTTAL TESTIMONY  
OF RENE F. GARCIA  
ON BEHALF OF SOCALGAS  
ADVANCED METERING INFRASTRUCTURE POLICY**

## **APPENDIX ATTACHMENTS**

### **A. Responses to Data Requests**

1. ORA-SCG-DR-064-DAO, Question 29
2. ORA-SCG-DR-064-DAO, Question 42
3. ORA-SCG-DR-012-DAO, Question 5.a
4. ORA-SCG-DR-012-DAO, Question 4.a

Attachment A1

ORA-SCG-DR-064-DAO, Question 29

**ORA DATA REQUEST  
 ORA-SCG-DR-064-DAO  
 SOCALGAS 2016 GRC – A.14-11-004  
 SOCALGAS FINAL RESPONSE  
 DATE RECEIVED: FEBRUARY 12, 2015  
 DATE RESPONDED: MARCH 18, 2015**

29. Referring to page 163 of the workpapers, please provide the number of meters purchased by size for (i) installation at new customers’ premises, (ii) replacements due to meter accuracy, age or operation, (iii) replacements due to a pre-determined replacement cycle based on meter capacity, size, and performance.

**SoCalGas Response:**

The number of meters purchased is not tracked by the type of installation. An *estimated* breakdown of the meter purchases by installation type is shown in the table below. This is the same estimation method that was used for the historical meters in Supplemental Workpaper SCG-FBA-CAP-SUP-009 beginning at page 171 of the capital workpapers exhibit SCG-04-CWP\_GDIST.

Meter Size	New Business Meter Sets	Historical PMCs and RMCs (Meters Purchased in 2014 Less New Meter Sets)	Total Meters Purchased
Size 1 - 3 Meters	29,934	191,945	221,879
Size 4+ Meters	2,524	7,376	9,900
Total	32,458	199,321	231,779

The numbers presented in the above table are those that are funded in the GRC. In addition, 294,583 small meters (above- ground and curb) and 2,248 size 4+ meters were purchased in 2014 that were funded by SoCalGas AMI. Please refer to the response to ORA-SCG-DR-012-DAO, Question 5.a., for discussion of how SoCalGas is managing the purchase of small meters during the AMI deployment period (2013-2017).

Attachment A2

ORA-SCG-DR-064-DAO, Question 42



**ORA DATA REQUEST  
 ORA-SCG-DR-064-DAO  
 SOCALGAS 2016 GRC – A.14-11-004  
 SOCALGAS FINAL RESPONSE  
 DATE RECEIVED: FEBRUARY 12, 2015  
 DATE RESPONDED: MARCH 18, 2015**

42. Provide the total amount of funding SoCalGas receives for AMI deployment each year from 2013-2017. Of this total, provide the annual amount received for meters and for regulators broken down by labor and non-labor elements.

**SoCalGas Response:**

**Prepared by AMI Policy Witness Rene Garcia (Exhibit SCG-39)**

See attachment “ORA-SCG-DR-064-DAO-Q.42 Attachment.xlsx” for:

1. A high-level summary of SoCalGas’ funding for AMI deployment between 2010-2017 (Refer to the tab titled: ORA-SCG-DR-064-DAO Q42 Attach A);
2. The detailed funding by year authorized in SoCalGas AMI D.10-04-027 (Refer to the tab titled: ORA-SCG-DR-064-DAO Q42 Attach B); and
3. The amount funded for meters and regulators for years 2013-2017, broken down by labor and non-labor (Refer to the tab titled: ORA-SCG-DR-064-DAO Q42 Attach C).

The table below is a high-level summary of SoCalGas’ funding and the associated projected unit counts for AMI deployment.

	AMI Deployment Plan by Unit Type	AMI Funding by Unit Type - In 2013 \$000s <sup>4</sup> In 2013 Direct Dollars (with Vacation & Sick)
	Total	Total
<b>AMI Module Purchases &amp; Module Installations</b>		
Module Purchases (for both Field & Factory retrofits)	6,047,397	\$300,174
Module Installation - Field Retrofit	3,695,441	\$83,026
Module Installation - Factory Retrofit	2,351,956	\$11,153
<b>Meter Replacements Due to AMI Deployment <sup>1</sup></b>	1,052,092	\$160,931
<b>"Business As Usual" Meter Installations/Replacements <sup>2</sup></b>	1,299,864	\$ -
<b>Regulator Replacements</b>	233,502	\$19,591
<b>Other AMI Funding (Network, Information Technology, etc.)</b>	N/A	\$364,119
<b>Total <sup>5</sup></b>		<b>\$938,994</b>

<sup>1</sup> AMI requested and was approved funding for the cost of meters being replaced as a result of AMI deployment that would not have been replaced otherwise

<sup>2</sup> Funding for "Business As Usual" meter installations and replacements is forecasted in a GRC; these meters would have been installed or replaced absent AMI deployment; e.g., growth meters, PMCs, RMCs. Only the cost of the modules and the factory retrofit (i.e., the marrying of the communications module to the meter) associated with these meters are included in AMI funding.

**ORA DATA REQUEST  
ORA-SCG-DR-064-DAO  
SOCALGAS 2016 GRC – A.14-11-004  
SOCALGAS FINAL RESPONSE  
DATE RECEIVED: FEBRUARY 12, 2015  
DATE RESPONDED: MARCH 18, 2015**

**Response to Question 42 (Continued)**

<sup>3</sup> AMI requested and was approved funding for regulators associated with the meter replacements being performed as a result of AMI deployment; regulator replacements performed as a normal course of business regardless of AMI deployment are forecast in a GRC.

<sup>4</sup> Although ORA did not request approved funding for 2011-2012, it is included in this response in order to tie to total approved funding for SoCalGas AMI per Decision 10-04-027.

<sup>5</sup> In order to be comparable to the TY 2016 GRC, the amounts provided are shown in 2013 direct dollars with Vacation and Sick, excluding overheads; whereas, the authorized \$1.05 billion is in nominal dollars with all overheads.

	AMI Deployment Plan by Unit Type						Total	
	2011	2012	2013	2014	2015	2016		2017
<b>AMI Module Purchases &amp; Module Installations</b>								
Module Purchases (for both Field & Factory retrofits)			1,040,718	1,322,806	1,343,640	1,347,114	993,119	6,047,397
Module Installation - Field Retrofit			592,056	844,269	860,717	862,277	536,122	3,695,441
Module Installation - Factory Retrofit			448,662	478,537	482,923	484,837	456,997	2,351,956
<b>Meter Replacements Due to AMI Deployment <sup>1</sup></b>			196,887	219,844	221,425	221,627	192,309	1,052,092
<b>"Business As Usual" Meter Installations/Replacements <sup>2</sup></b>			251,775	258,693	261,497	263,211	264,688	1,299,864
<b>Regulator Replacements</b>			42,558	49,533	50,030	50,104	41,276	233,502
<b>Other AMI Funding (Network, Information Technology, etc.)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	AMI Funding by Unit Type - In 2013 \$000s <sup>4</sup>						Total
	In 2013 Direct Dollars (with Vacation & Sick)						
	2011	2012	2013	2014	2015	2016	2017
<b>AMI Module Purchases &amp; Module Installations</b>							
Module Purchases (for both Field & Factory retrofits)	\$ -	\$ -	\$ 50,211	\$ 65,552	\$ 67,026	\$ 67,229	\$ 50,155
Module Installation - Field Retrofit	\$ -	\$ -	\$ 13,302	\$ 18,968	\$ 19,338	\$ 19,373	\$ 12,045
Module Installation - Factory Retrofit	\$ -	\$ -	\$ 2,127	\$ 2,270	\$ 2,291	\$ 2,300	\$ 2,166
<b>Meter Replacements Due to AMI Deployment <sup>1</sup></b>	\$ -	\$ -	\$ 29,785	\$ 33,751	\$ 34,073	\$ 34,155	\$ 29,166
<b>"Business As Usual" Meter Installations/Replacements <sup>2</sup></b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Regulator Replacements</b>	\$ -	\$ -	\$ 3,587	\$ 4,142	\$ 4,182	\$ 4,189	\$ 3,491
<b>Other AMI Funding (Network, Information Technology, etc.)</b>	\$ 24,472	\$ 58,206	\$ 50,697	\$ 52,205	\$ 55,388	\$ 57,038	\$ 66,113
	\$ <b>24,472</b>	\$ <b>58,206</b>	\$ <b>149,708</b>	\$ <b>176,889</b>	\$ <b>182,299</b>	\$ <b>184,283</b>	\$ <b>163,137</b>
							\$ <b>938,994</b>

<sup>1</sup> AMI requested and was approved funding for the costs of meters being replaced as a result of AMI deployment that would not have been replaced otherwise

<sup>2</sup> Funding for "Business As Usual" meter installations and replacements is forecasted in a GRC; these meters would have been installed or replaced absent AMI deployment; e.g., growth meters, PMCs, RMCs. Only the cost of the modules and the factory retrofit (i.e. the marrying of the communications module to the meter) associated to these meters are included in the Advanced Meter Business Case.

<sup>3</sup> AMI requested and was approved funding for regulators associated with the meter replacements being performed as a result of AMI deployment; regulator replacements performed as a normal course of business regardless of AMI deployment are forecast in a GRC

<sup>4</sup> Although ORA did not request approved funding for 2011-2012, it is included in this response in order to tie to total approved funding for SoCalGas AMI per Decision 10-04-027

<sup>5</sup> In order to be comparable to the TY 2016 GRC, the amounts provided are shown in 2013 direct dollars with Vacation and Sick, excluding overheads; whereas, the authorized \$1.05 billion is in nominal dollars with all overheads.



ORA-SCG-DR-064-DAO Question 42 Workpaper  
 Attachment "C" - SoCalGas Approved Funding for Meters & Regulators Broken Down by Labor & Non-labor Elements 2013-2017

		AMI Funding In 2013 Direct Dollars (with Vacation & Sick) In 000s					Total
		2013	2014	2015	2016	2017	Total
<b>AMI Funded Gas Meter Replacements</b>							
Labor	\$	8,167	\$ 9,244	\$ 9,337	\$ 9,364	\$ 8,025	\$ 44,138
Non-labor	\$	21,618	\$ 24,507	\$ 24,736	\$ 24,791	\$ 21,141	\$ 116,793
<b>Total</b>	<b>\$</b>	<b>29,785</b>	<b>\$ 33,751</b>	<b>\$ 34,073</b>	<b>\$ 34,155</b>	<b>\$ 29,166</b>	<b>\$ 160,931</b>

<b>AMI Funded Regulators<sup>1</sup></b>							
Curb Regulators	\$	1,915	\$ 2,435	\$ 2,473	\$ 2,479	\$ 1,827	\$ 11,129
Above Ground Regulators	\$	1,672	\$ 1,707	\$ 1,709	\$ 1,710	\$ 1,664	\$ 8,462
<b>Total Non-labor</b>	<b>\$</b>	<b>3,587</b>	<b>\$ 4,142</b>	<b>\$ 4,182</b>	<b>\$ 4,189</b>	<b>\$ 3,491</b>	<b>\$ 19,591</b>

<sup>1</sup> The regulator replacements included in the AMI business case are assumed to be performed in conjunction with an incremental meter replacement. The time and labor costs associated with the regulator replacement is embedded in the meter replacement labor costs

Attachment A3

ORA-SCG-DR-012-DAO, Question 5.a

**ORA DATA REQUEST  
ORA-SCG-DR-012-DAO  
SOCALGAS 2016 GRC – A.14-11-004  
SOCALGAS RESPONSE  
DATE RECEIVED: NOVEMBER 24, 2014  
DATE RESPONDED: DECEMBER 15, 2014**

5. Referring to page 171 of the workpapers, please provide the following:
- a. An explanation for the significant increase from 91,107 meters SoCalGas replaced in 2013 and the utility's forecast of 180,000 replacement each year from 2014-2016. Please include any and all workpapers and/or calculations used to support SoCalGas' forecasts.
  - b. Provide a breakdown of the 180,000 size 1-3 meter replacements planned for each year from 2014-2016 for the (i) RMC and (ii) the PMC.
  - c. Did SoCalGas perform any replacement of size 4+ meters as part of its PMC program? If yes, please provide the number of size 4+ meters replaced each year from 2009-2014 YTD as part of the PMC program. If no, please explain why it has not done so in previous years.
  - d. Did SoCalGas perform any replacement of size 1-3 meters as part of its PMC program? If yes, please provide the number of size 1-3 meters replaced as part of its PMC program. If no, please explain why it has not done so in previous years.

**SoCalGas Response:**

NOTE: This question raises issues that extend beyond the scope and subject matter expertise of the Gas Distribution area. As stated on page FBA-125 of Exhibit SCG-04, "Field labor costs associated with SoCalGas' planned small meter replacement program are covered in the prepared direct testimony of Sara Franke, Exhibit SCG-10." As such, SoCalGas' response has been bifurcated as such:

- response to 5a was prepared by the Customer Services Field and AMI Policy witnesses (Sara Franke and Rene Garcia);
- responses to 5b and 5d were prepared by Customer Services Field;
- response to 5c was prepared by Gas Distribution.

Any further inquiries should therefore be addressed to the responsible witness areas.

**ORA DATA REQUEST  
ORA-SCG-DR-012-DAO  
SOCALGAS 2016 GRC – A.14-11-004  
SOCALGAS RESPONSE  
DATE RECEIVED: NOVEMBER 24, 2014  
DATE RESPONDED: DECEMBER 15, 2014**

**Response to Question 5.a.:**

**Prepared by Customer Services Field (SCG-10) and AMI Policy (SCG-39):**

To clarify, the 91,107 meters shown in column [D] of Table 1 on page 171 of SCG-04-CWP are the number of meters purchased in 2013 with GRC capital funding. This is different than the number of small meters that were replaced in 2013. The number of meters replaced varies from year to year but, on average, SoCalGas expects to incur the cost of replacing approximately 180,000 meters per year, which consists of approximately 130,000 PMCs and 50,000 RMCs. The forecast is consistent with projected meter failure/replacement rates adopted by the Commission in Decision 13-05-010.

As explained in response to question 4.a. above, the vast majority of small meters replaced in 2013 were performed by the AMI project team. In addition, the majority of the small meters that were purchased in 2013 were funded by AMI. While AMI funded the purchase of more meters in 2013 and the GRC funded fewer meters in 2013, the timing of the purchases will ultimately balance out during the AMI deployment period (2013-2017) such that AMI will fund only the AMI authorized 650,000 meter replacements (explained below) and GRC will fund a comparable 650,000.

AMI was authorized funding to replace 650,000 “accelerated” PMCs in Decision (D.) 10-04-027. These accelerated PMCs are meters that would normally have been replaced in the 5 year period following AMI deployment (2018 through 2022) or approximately 130,000 accelerated PMCs each year of deployment. In conjunction with this, SoCalGas was authorized funding to replace 130,000 small meters (PMCs) annually in the 2012 GRC. In 2013, AMI purchased the majority of the meters, however, AMI will fund no more than the 650,000 meters that were authorized in D.10-04-027 and the GRC will fund the purchase of 650,000 “current” year PMCs over the 5-year deployment period (approximately 130,000 each year). The following tables provide an illustration of this.



**ORA DATA REQUEST  
 ORA-SCG-DR-012-DAO  
 SOCALGAS 2016 GRC – A.14-11-004  
 SOCALGAS RESPONSE  
 DATE RECEIVED: NOVEMBER 24, 2014  
 DATE RESPONDED: DECEMBER 15, 2014**

**SoCalGas Response to Question 5.a., (Continued):**

**Prepared by Customer Services Field (SCG-10) and AMI Policy (SCG-39):**

Authorized or Forecasted Small Meter Replacements

	2013	2014	2015	2016	2017	Total
GRC- PMCs	130,000	130,000	130,000	130,000	130,000	650,000
GRC- RMCs	50,000	50,000	50,000	50,000	50,000	250,000
GRC Total	180,000	180,000	180,000	180,000	180,000	900,000
AMI- Accelerated PMCs (2018-2022)	130,000	130,000	130,000	130,000	130,000	650,000

Actual or Estimated Small Meter Purchases for Meter Replacements \*

	Actual 2013	Estimated				Total
		2014	2015	2016	2017	
GRC Funded	91,107	160,000	216,298	216,298	216,298	900,000
AMI Funded	288,232	195,000	166,768	-	-	650,000

\* GRC meters purchased in 2013 include size 4 meters which are typically purchased in small volumes

Note: Currently, AMI funded meters are used to replace current year PMCs and accelerated PMCs that are completed by AMI. Once the AMI funding for the total number of accelerated PMC meters that was authorized in SoCalGas' AMI D.10-04-027 is exhausted, GRC will fund the remaining small meter replacements (current year PMCs and RMCs and the accelerated PMCs that have not been completed).

Attachment A4

ORA-SCG-DR-012-DAO, Question 4.a

**ORA DATA REQUEST  
ORA-SCG-DR-012-DAO  
SOCALGAS 2016 GRC – A.14-11-004  
SOCALGAS RESPONSE  
DATE RECEIVED: NOVEMBER 24, 2014  
DATE RESPONDED: DECEMBER 15, 2014**

4. Please respond to the following:
- a. Provide the 2009-2014 YTD labor and non-labor expenses and the number of meters replaced associated with SoCalGas' planned small meter replacement program as referenced on lines 23-24 of page FBA-125.
  - b. When did SoCalGas first begin to capture field labor expenses for the small meter replacement program with Customer Services Field Department?
  - c. Is the small meter replacement program different and separate from the Planned Meter Change-outs Program (PMC) or the Routine Meter Change-Outs Program (RMC)? Please identify and explain why there is a separation between this program and the PMC or RMC in SoCalGas forecasts.

**SoCalGas Response:**

NOTE: This question raises issues that extend beyond the scope and subject matter expertise of the Gas Distribution area. As stated on page FBA-125 of Exhibit SCG-04, "Field labor costs associated with SoCalGas' planned small meter replacement program are covered in the prepared direct testimony of Sara Franke, Exhibit SCG-10." As such, SoCalGas' response has been bifurcated as such:

- response to 4a was prepared by the Customer Services Field and AMI Policy witnesses (Sara Franke and Rene Garcia);
- response to 4b was prepared by Customer Services Field;
- response to 4c was prepared by Gas Distribution.

Any further inquiries should therefore be addressed to the responsible witness areas.

**ORA DATA REQUEST  
 ORA-SCG-DR-012-DAO  
 SOCALGAS 2016 GRC – A.14-11-004  
 SOCALGAS RESPONSE  
 DATE RECEIVED: NOVEMBER 24, 2014  
 DATE RESPONDED: DECEMBER 15, 2014**

**Response to Question 4.a.:**

**Prepared by Customer Services Field (SCG-10) and AMI Policy (SCG-39):**

Customer Services Field (CSF) can provide the number of meter replacements for 2009-2013, but does not track expenses at the level of detail requested. Notwithstanding, to provide some estimate of associated labor expenses for those years, please see below. Estimates of non-labor expenses are not available. 2014 data is not available.

Small Meter Replacements Completed by CSF					
	2009	2010	2011	2012	2013
Number of Small Meter Replacements*	160,715	163,639	137,864	116,196	77,899
Estimated CSF Labor Costs** (Shown in Thousands of 2013 Dollars)	\$3,461	\$3,612	\$2,933	\$2,475	\$2,173

\*Small meter replacements include planned meter changes (PMCs) and routine meter changes (RMCs).

\*\* The estimated labor expenses for the small meter replacements completed by CSF are derived by using the average recorded on premise time per small meter change and the average 2013 labor rate for CSF technicians who perform small meter replacements. The costs exclude drive time and other ancillary costs not associated with the time to perform the activity. In 2009-2012 all labor was charged to O&M. Beginning in 2013, for curb meter replacements only, labor was split 50/50 between O&M and capital. Labor is charged 50/50 capital/O&M for curb meter replacements because the existing curb meters are incompatible with AMI technology.

Note, in addition to CSF-completed small meter replacements, the Advanced Metering Infrastructure (AMI) project team has also been performing small meter replacements in order to fully integrate with the scheduling and routing of AMI deployment. The number of small meter changes completed by CSF in 2013 excludes a total of 241,041 small meter changes that were completed as part of SoCalGas' Advanced Metering Infrastructure (AMI) implementation.

In order to adhere to the AMI implementation schedule, beginning in 2013, the AMI project assumed responsibility for above-ground PMCs, including both planned and accelerated meter changes, and CSF shifted its focus to curb meter changes. This trade-off (i.e., the AMI project team focusing on above-ground meters and CSF focusing on curb meters) enabled a better match between the work and employee skill sets. Over the course of the AMI deployment period (2013-2017), all GRC- and AMI-funded PMCs will be completed.

Please refer to the testimony and workpapers of witness Sara Franke, Ex. SCG-10 and SCG-10-WP, CSF and Meter Reading, for additional information regarding forecasted CSF meter changes (testimony pages SAF-9, SAF-11, and workpaper pages 52-54).