DATE RESPONDED: JANUARY 22, 2018

Exhibit Reference: SCG-04-R, Testimony and Workpapers

SCG Witness: Gina Orozco-Mejia

Subject: Gas Distribution Capital, Remote Meter Reading

Please provide the following:

1. Referring to SCG's SCG-04-R workpapers, page 231, SCG referenced an ORA data request in the SoCalGas 2016 GRC, A. 14-11-004. Please provide clarification of this statement by identifying the specific information in the data request SCG referenced because this data request contains multiple questions and responses.

SoCalGas Response 1:

The information in the data request SoCalGas referenced in page 231 is the response to question 4.a of ORA-SCG-DR-012-DAO.

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- 2. Referring to SCG's SCG-04-R workpapers, page 231, please provide the following:
 - a. Please explain the reason SCG seeks funding for the Remote Meter Reading work category to change out curb meters for 2018 if the deployment period was scheduled to be completed in 2017;
 - b. How many AMI-funded planned meter changes were completed each year from 2013-2017?
 - c. How many GRC-funded planned meter changes were completed each year from 2012-2017?
 - d. How many meter replacement programs, including the planned meter changes associated with the Advanced Metering Infrastructure implementation, are assigned to Customer Services Field?
 - e. For each year from 2013-2017, provide the following:
 - i. The number of curb meters replaced as part of the AMI implementation program;
 - ii. The number of curb meters replaced as part of the GRC funding;
 - iii. How many AMI-related planned curb meter replacements are remaining?
 - iv. The O&M costs; and
 - v. The Capital costs.
 - f. Please state whether or not the AMI-funded planned meter changes have been completed in 2017 as SCG proposed? If not, please explain why not. If yes, please state how SCG plans to fund future meter changes associated with above-ground Planned Meter Changes (PMC) and with curb meter replacements, and provide a reference to SCG's testimony or workpapers showing the forecast costs;
 - g. Please provide a citation to the SCG testimony of SCG witness Gwen Marelli, Ex. SCG-18, as referenced under Project Justification.

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SOCALGAS 2019 GRC – A.17-10-008 SOCALGAS RESPONSE

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SoCalGas Response 2:

- 2.a. As indicated in the testimony of Rene Garcia, Exhibit SCG-17-R, Section III.B.2.b, a manufacturing issue was identified with MTUs located in curb meter vaults. Consequently, the deployment of curb meter MTUs that were pending installation at the time the issue was identified was put on hold until the replacement MTU curb meter product is available. Consequently, the deployment period was extended beyond 2017 into 2018.
- 2.b. Response to be submitted at a later date.
- 2.c. Response to be submitted at a later date.
- 2.d. There is only one meter replacement program and this is the Meter Performance Control Program (MPCP), which was approved by the Commission in 1960. The planned meter change (PMC) work volume assigned to CS-F is based on the meters subject to removal and replacement in accordance with the MPCP.
- 2.e. Below are the responses to each item requested in question 2.e.
 - 2.e.i. Response to be submitted at a later date.
 - 2.e.ii. Response to be submitted at a later date.
 - 2.e.iii. Response to be submitted at a later date.
 - 2.e.iv. SoCalGas is unable to provide the O&M costs for curb meter replacements since CS-F does not track O&M expenses at the order type detail requested.
 - 2.e.v. The capital costs for curb meter replacements from 2013 to 2017 are provided below.

Capital Cost – Constant 2016 \$ in 000s Adjusted Recorded						
Year	2013	2014	2015	2016	2017	
Cost	\$ 745	\$1,468	\$5,835	\$ 4,665	*	

^{*}The 2017 financial information will not be available until after SoCalGas makes its 10-K filing with the SEC in early 2018. It is currently expected that SoCalGas will provide the adjusted recorded 2017 financial information to ORA in March 2018.

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SoCalGas Response 2:-Continued

2.f. All AMI-funded PMCs have been completed in 2017 as SoCalGas proposed.

All PMC work, whether it is above ground or a curb meter, is driven by SoCalGas' Meter Performance Control Program (MPCP). In the testimony of Gwen Marelli, Exhibit SCG-18-R, Section III.B.1.e, pages GRM-21 to GRM-22, CS-F is requesting \$3.958 million in TY 2019 to replace meter families that are failing the accuracy parameters and subject to removal in accordance with the MPCP. The above-referenced request relating to MPCP required meter changes are distinct from the meter changes done as part of the AMI project.

2.g. The O&M forecast for 2017 & 2018 are included in the workpapers of Marelli, Workpaper 2FC001.000 – Customer Services Field – Operations, Exhibit SCG-18-WP as shown in the table below.

In 2016 \$ (000)						
SCG-18-WP Page Reference	Labor	NLbr	Total			
2017 O&M forecast is shown on page 7 of 174. See line item, "2017 Other"	\$ 377	\$ 170	\$ 547			
2018 O&M forecast is shown on page 8 of 174. See line item, "2018 Other"	\$ 1,276	\$ 388	\$ 1,664			

The explanation for each line item above states, "CS-Field Operations labor and non-labor costs for performing curb meter replacement work as part of the planned meter changes associated with AMI implementation. This was not included in the CS-Field Operations order volume based cost model forecast."

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SOCALGAS 2019 GRC – A.17-10-008 SOCALGAS RESPONSE

DATE RECEIVED: JANUARY 5, 2018 DATE RESPONDED: JANUARY 26, 2018

Exhibit Reference: SCG-04-R, Testimony and Workpapers

SCG Witness: Gina Orozco-Mejia

Subject: Gas Distribution Capital, Remote Meter Reading

Please provide the following:

- 2. Referring to SCG's SCG-04-R workpapers, page 231, please provide the following:
 - b. How many AMI-funded planned meter changes were completed each year from 2013-2017?
 - c. How many GRC-funded planned meter changes were completed each year from 2012-2017?
 - e. For each year from 2013-2017, provide the following:
 - i. The number of curb meters replaced as part of the AMI implementation program;
 - ii. The number of curb meters replaced as part of the GRC funding;
 - iii. How many AMI-related planned curb meter replacements are remaining?
 - g. Please provide a citation to the SCG testimony of SCG witness Gwen Marelli, Ex. SCG-18, as referenced under Project Justification.

SoCalGas Response 2:

2.b. The number of AMI-funded above-ground planned meter changes completed each year from 2013 to 2017 is shown in the table below.

Year	2013	2013	2014	2015	2016	2017
Volume	5,714	234,701	343,171	313,858	256,662	*

^{*2017} data is not yet available

2.c. The number of GRC funded above-ground planned meter changes completed by Customer Services – Field (CS-F) each year from 2012 to 2017 is shown in the table below:

Year	2012	2013	2014	2015	2016	2017
Volume	69,513	0	0	0	0	*

^{*2017} data is not yet available

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SoCalGas Response 2 Continued:

- 2.e. Below are the responses to each item requested in question 2.e.
 - 2.e.i. All curb meters need to be replaced and upgraded with the AMI technology. The number of curb meters replaced and upgraded with AMI technology as part of the AMI implementation from 2013 2017 is shown below. The labor cost to complete the curb meter replacements are not funded by the AMI project and is GRC funded.

Year	2013	2014	2015	2016	2017
Volume	10,589	22,402	82,526	68,975	*

^{*2017} data is not yet available

- 2.e.ii. See response to question 2.e.i. on the number of curb meters replaced as part of the GRC funding.
- 2.e.iii. There are 22,162 curb meters remaining at the end of 2016 that need to be upgraded with the AMI technology.
- 2.g. SoCalGas discovered a discrepancy in the count of remaining curb meters to be upgraded with AMI technology used in the testimony and forecast. A revision will be submitted by SoCalGas at a later date to reflect this change which will revise the forecast for 2017 and 2018. See response to Q.8 for further information.

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- 3. Referring to SCG's SCG-04-R workpapers, page 231, please provide the following:
 - a. Provide the number of total rented vehicles recorded to Remote Meter Reading each year from 2013-2017;
 - b. A copy of all calculations and workpapers used to determine the number of total rental vehicles needed for 2017 (8 vehicles) and 2018 (32 vehicles);
 - c. A statement explaining why SCG rented instead of purchased vehicles for use;
 - d. Provide the number of FTEs recorded under Remote Meter Reading for each year from 2013-2017;
 - e. A copy of all calculations and workpapers used to determine the number of FTEs for 2017 (7.8 FTEs) and 2018 (21.7 FTEs);
 - f. A copy of all calculations and workpapers used to determine the number of orders worked by FSAs for 2017 (5,138 orders) and 2018 (19,552 orders);
 - g. Provide the number of orders worked on by FSAs each year from 2012-2017;
 - h. Provide a working Excel spreadsheet of page 239 of the workpapers.

SoCalGas Response 3:

3.a. The average number of rented vehicles recorded each year from 2013 to 2017 is shown below:

Year	2013	2014	2015	2016	2017
No. of Rented Vehicles	0	10	104	91	43

- 3.b. The total rental vehicles needed for 2017 (8 vehicles) and 2018 (32 vehicles) is based on the number of FSA FTEs. Please refer to item FTE [R] of SCG-04-GOM-CAP-SUP-015, Exhibit SCG-04-CWP, which shows 8.4 FTEs in 2017 for the 8 vehicles and 31.8 FTEs in 2018 for the 32 vehicles. The calculation to derive the FTEs are shown on this workpaper.
- 3.c. SoCalGas rented vehicles instead of purchased vehicles for use since the vehicles were needed on a temporary basis until the curb meter replacement work is completed in 2018.

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SoCalGas Response 3:

3.d. The number of FTEs recorded under Workpaper Group 001820 - Remote Meter Reading for each year from 2013 to 2017 is provided in the table below.

	Adjusted Recorded					
Year	2013	2014	2015	2016	2017	
FTE	11.3	19.3	70.1	52.5	*	

^{*}The 2017 financial information will not be available until after SoCalGas makes its 10-K filing with the SEC in early 2018. It is currently expected that SoCalGas will provide the adjusted recorded 2017 financial information to ORA in March 2018.

- 3.e. The calculations to determine the number of FTEs for 2017 (7.8 FTEs) and 2018 (21.7 FTEs) are shown in the workpaper, SCG-04-GOM-CAP-SUP-015, Exhibit SCG-04-CWP, page 239 of 239.
- 3.f. Response to be submitted at a later date.
- 3.g. Response to be submitted at later date.
- 3.h. Please refer to the accompanying file labeled "ORA-SCG-075-DAO-Q3h Attachment.xlxs" for a working Excel spreadsheet of page 239 of the workpapers.

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- 3. Referring to SCG's SCG-04-R workpapers, page 231, please provide the following:
 - b. A copy of all calculations and workpapers used to determine the number of total rental vehicles needed for 2017 (8 vehicles) and 2018 (32 vehicles);
 - e. A copy of all calculations and workpapers used to determine the number of FTEs for 2017 (7.8 FTEs) and 2018 (21.7 FTEs); Put a note for this.
 - f. A copy of all calculations and workpapers used to determine the number of orders worked by FSAs for 2017 (5,138 orders) and 2018 (19,552 orders);
 - g. Provide the number of orders worked on by FSAs each year from 2012-2017;
 - h. Provide a working Excel spreadsheet of page 239 of the workpapers.

SoCalGas Response 3:

3.b. SoCalGas discovered a discrepancy in the count of remaining curb meters to be upgraded with AMI technology used in the testimony and forecast. A revision will be submitted by SoCalGas at a later date to reflect this change which will revise the forecast for 2017 and 2018. See response to Q.8 for further information.

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SoCalGas Response 3 Continued:

- 3.e. SoCalGas discovered a discrepancy in the count of remaining curb meters to be upgraded with AMI technology used in the testimony and forecast. A revision will be submitted by SoCalGas at a later date to reflect this change which will revise the forecast for 2017 and 2018. See response to Q.8 for further information
- 3.f. SoCalGas discovered a discrepancy in the count of remaining curb meters to be upgraded with AMI technology used in the testimony and forecast. A revision will be submitted by SoCalGas at a later date to reflect this change which will revise the forecast for 2017 and 2018. See response to Q.8 for further information.
- 3.g. CS-F does not track order volume worked by job classification. Refer to the response to Q.2.e.ii on the number of curb meter replacements completed each year.
- 3.h. SoCalGas discovered a discrepancy in the count of remaining curb meters to be upgraded with AMI technology used in the testimony and forecast. A revision will be submitted by SoCalGas at a later date to reflect this change which will revise the forecast for 2017 and 2018. See response to Q.8 for further information.

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4. On page 231 of the SCG-04-R workpapers, SCG presented the Adjusted Recorded expenditures in 2016 dollars for Remote Meter Reading for Budget Code 00182.0. On page 235 of the workpapers, SCG presented the 2012-2016 recorded adjusted costs in nominal dollars for Remote Meter Reading for the same budget code, 00182.0. Please explain the differences for the recorded costs during this time frame. For example, the 2016 adjusted recorded costs in constant dollars was \$4,665,000 and the 2016 adjusted costs in nominal dollars was -\$4,341,000. Why is one set of costs recorded as negative and the other positive?

SoCalGas Response 4:

Page 235 of the workpapers reflected the "Summary of Adjustments to Recorded" amounts, so the amount of -\$4,341,000 was adjusted out of Remote Meter Reading, Budget Code 00182.0, costs. Please refer to the table below.

	Budget Code 00182.0 – Remote Meter Reading	2016	
	(From Exhibit SCG-04-CWP, page 234 of 239)	(\$000)	
a)	Recorded Total (Nominal \$).	8,590	
b)	Adjustments Total (Nominal \$)	-4,341	
c)	Recorded Adjusted Total (Nominal \$)	4,249	Item a + b
d)	Vacation & Sick Total (Nominal \$)	415	
e)	Recorded Adjusted Total (Constant 2016 \$)	4,665	Item d + e

- Item a) refers to the cost originally recorded in Budget Code 00182.
- Item b) are charges that were erroneously charged to Budget Code 00182.0 so an adjustment was made to remove these costs from this Budget Code.
- Item e) is the recorded adjusted cost for Budget Code 00182.0 after the adjustment was made and vacation and sick cost was added.

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5. Referring to page 231 of the SCG-04-R workpapers, please state if the 50/50 costs split between O&M and capital was authorized for the AMI deployment phase from 2013-2017.

SoCalGas Response 5:

On April 8, 2010, the Commission issued D.10-04-027 approving SoCalGas' AMI Application A.08-09-023, with modifications, which authorized \$1.05 billion of capital and O&M expenditures for SoCalGas' AMI Project over the deployment period 2010 through 2017. In SoCalGas' Chapter III of A.08-09-023, SoCalGas provided the labor cost description for curb vault meters as 50% capital and 50% O&M.

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- 6. Referring to SCG's revised testimony, Ex. SCG-04-R, page GOM-142, lines18-21, please provide the following:
 - a. A clarification of "costs" as used in describing AMI modules and meters for the curb meter installations; (Are these costs O&M costs?) and
 - b. Please provide a citation to the testimony of SCG witness Garcia (Ex.SCG-17) as referenced on lines 20-21.

SoCalGas Response 6:

- 6.a. AMI modules and meters for the curb meter installations are capital costs and funded by the AMI project implementation.
- 6.b. Below is the citation to the testimony of SCG witness Garcia (Ex. SCG-17) as referenced on lines 20-21.

As stated in the testimony of Rene Garcia, Exhibit SCG-17-R, section III.C, "AMI costs and benefits have been recorded in the AMIBA since the beginning of the project in 2010 and will continue to do so through 2018. TY 2019 is SoCalGas' first opportunity to integrate the impacts of the AMI implementation into SoCalGas' continuing operations and associated GRC forecasts."

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7. Referring to SCG's revised testimony, Ex. SCG-04-R, page GOM-142, lines 24-25, please define "advanced" as used in the statement that 26,600 meters have not been advanced as part of AMI.

SoCalGas Response 7:

The word "advanced" as used in the statement "26,600 meters have not been advanced as part of AMI" means that SoCalGas has not completed the AMI deployment of the curb meters and the meters have not been upgraded with the AMI technology.

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8. Referring to SCG's revised testimony, Ex. SCG-04-R, page GOM-142, line 25, please provide a copy of all calculations and supporting documents used to determine the remaining curb meters totaling 26,600.

SoCalGas Response 8:

SoCalGas discovered a discrepancy in both the testimony and the workpaper. The table below shows the corrected data. There are 22,162 curb meters remaining to be upgraded with the AMI technology as of the end of 2016, and this equates to an estimated order volume of 24,311 as shown in line # 4 below.

The count provided in the original workpaper and testimony inadvertently included curb vaults with no meter. Since there is no meter in the curb vault, it does not need to be upgraded with the AMI technology, and therefore, should have been excluded in the count.

A revision will be submitted by SoCalGas at a later date to reflect this change and revise the capital forecast for Budget Code 00182.0 and associated O&M forecast for 2017 and 2018.

Line #	Description	Revised (Correction)
1	No. of curb meter remaining to be upgraded with AMI technology as of end of 2016	22,162
2	Customer Services – Field 2016 average incomplete rate	9.7%
3	No. of incompletes so additional visits required (Item 1 x Item 2)	2,150
4	Total estimated order volume (Item 1 + Item 3)	24,311

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9. Referring to SCG's revised testimony, Ex. SCG-04-R, pages 142-143, please explain why the costs of replacing curb meter are not charged to the AMI project?

SoCalGas Response 9:

Customer Services – Field (CS-F) performs planned meter changes (PMCs) as part of the SoCalGas' Meter Performance Control Program. It was originally planned for the AMI project team to handle the labor cost to deploy curb meter AMI replacements since existing curb meters are incompatible with the AMI technology, while CS-F would continue with the PMCs of aboveground meters as planned for each year which would be GRC funded. With CS-F's PMC work, the gas meter would have been "advanced," i.e., old meter would be replaced and upgraded with a new meter that has an AMI module.

Beginning in 2013, in order to adhere to the AMI implementation schedule, the AMI project team assumed responsibility for above-ground PMCs, including both planned and accelerated meter changes, and CS-F 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, all GRC and AMI-funded PMCs would be completed.