Exhibit Reference: SCG-04 Testimony and Workpapers SCG Witness: Gina Orozco-Mejia Subject: Gas Distribution Capital, Other Distribution Capital Projects and Meter Guards Please provide the following:

1. Referring to Ex. SCG-04 testimony, page GOM-123, lines 18-20, please provide the following:

a. A copy of all calculations and studies/analyses performed to support SCG's claim that demand for meter guards are increasing; and

b. Clarification of the type of meter guards referenced as "less-amenable".

SoCalGas Response 1:

a. As stated previously in ORA-SCG-049-DAO-Q2, The MSA Inspection Program is discussed in the testimony of Gwen Marelli, Exhibit SCG-18, Section III.B.5. Section III.B.5, page GRM-38, lines 7 – 15 states:

Pursuant to CFR § 192.481, the DOT generally requires that each MSA be inspected every three years for atmospheric corrosion. Meter readers have historically performed this function, but with the implementation of AMI and the elimination of the traditional Meter Reading function, a new group, the CS-F MSA Inspection Organization, was formed in BY 2016. The CS-F MSA Inspection Organization performs physical, onsite inspections of each MSA to comply with DOT required MSA inspections for atmospheric corrosion, to identify conditions which require remediation by CS-F and Distribution field employees.

During 2016 and 2017, the MSA inspection team identified approximately 125,000 locations where a meter guard, or other means of meter protection, may be required. SoCalGas Gas Distribution is implementing a project given the information available to address these installations over a period of approximately 10 years to meet federal regulation requirements under PHMSA Title 49, Subpart H, 192.353 (a) and mitigate any potential risk.

b. The space reduction around some MSAs as described on page GOM-123, lines 18-20 has increased the risk of vehicular damage for these facilities, increasing the need for the installation of meter guards to provide protection.

2. Referring to page GOM-123, lines 22-23, wherein SCG states that this capital category covers meter guards installed at a facility for the first time, please provide:

a. the number of (i) light-duty, (ii) medium-duty, and (iii) heavy-duty meter guards installed,

b. costs incurred by type of meter guards, and

c. the number of MSA locations installed each year from 2012-2017YTD.

SoCalGas Response 2:

- a. SoCalGas Gas Distribution does not track this data by the level of detail requested. However, during the Base Year 2016, SCG installed 835 meter guards under the Meter Guards budget category.
- b. SoCalGas does not track costs incurred by type of meter guards. Please see page 130 of workpapers SCG-04-CWP-GDIST for the cost incurred under capital meter guard installations.
- c. Please see below the number of new meter set assemblies (MSAs) installed below from 2012-2017:

New Meter		
Sets		
21,898		
26,787		
33,249		
33,594		
37,708		
39,842		

3. Referring to page GOM-124, lines 2-3, please provide a citation to SCG's witness Ms. Marelli's testimony and workpapers as referenced.

SoCalGas Response 3:

The MSA Inspection Program is discussed in the testimony of Gwen Marelli, Exhibit SCG-18, Section III.B.5. Section III.B.5, page GRM-38, lines 7 - 15. This section further describes the activities of this group and incremental funding requested by CS-F to perform the various activities.

Additionally, please refer to the file labeled "SCG-18-WP_Supplemental_2FC005.000_1-6.xlsx" which was included as native Supplemental Workpaper 1 for Workpaper 2FC005.000 in Exhibit SCG-18-WP and sent to ORA on October 30, 2017. This native Supplemental Workpaper shows the order volume forecast and cost calculations for the MSA Inspection Program activities.

4. Referring to page GOM-124, lines 3-4, please provide support for the SCG claim that "As Customer Services increases the number of MSA inspections, the amount of work orders generated for follow up will continue to increase." Please include a copy of all calculations and/or studies/analyses performed to support this claim.

SoCalGas Response 4:

Please see the response to Questions 1.a and 3 above for the background on the reason the amount of work orders generated by the MSA Inspection Team for follow up will continue to increase. As the MSA Inspection Team continues to inspect more MSAs, the number of items they identify for follow up will also continue to increase, adding to the current amount of work already identified.

5. Referring to page GOM-124, lines 4-5, please state whether or not the costs to inspect/identify MSAs (Meter Set Assembly) are part of SCG's capital expenditures request for Meter Guards. If yes, please provide the expense forecasts for inspection/identification for 2018 and 2019. If not, please provide a citation to SCG's testimony and workpapers where the inspection/identification expense forecasts are presented.

SoCalGas Response 5:

The costs to inspect/identify MSAs as referenced on page GOM-124, lines 4-5 are not part of SoCalGas' capital expenditure request for Meter Guards. Please see the testimony of Gwen Marelli, Exhibit SCG-18, Section III.B.5, page GRM-38, lines 7 – 15 and the file labeled "SCG-18-WP_Supplemental_2FC005.000_1-6.xlsx," which was included as native Supplemental Workpaper 1 for Workpaper 2FC005.000 in Exhibit SCG-18-WP.

6. Referring to page GOM-124, lines 5-8, please provide the:

a. forecasted number of (i) light-duty, (ii) medium-duty, and (iii) heavy-duty meter guards to be installed,

b. costs to be incurred by type of meter guards, and

c. the number of MSA locations to be installed each year from 2017-2019.

SoCalGas Response 6:

a. SoCalGas Gas Distribution did not forecast the number of meter guards to be installed by light, medium, or heavy duty. SoCalGas used a 2016 base year methodology plus incremental installations to forecast the needs in 2017-2019. SoCalGas did not specifically forecast the amount of meter guards for 2017. However, there were approximately 835 meter guards installed in 2016. SoCalGas can approximate the number of meter guards installed from 2017-2019 using its 2016 base forecast methodology plus incremental installations, as shown on page 139 of workpaper SCG-04-CWP-GDIST. Please see the approximate number of meter guards to be installed under BC 264 from 2017-2019 below:

Meter Guard Installations					
Year 2017 2018 2019					
Units	835	13,683	13,683		

- b. Please see pages 129-139 of workpaper SCG-04-CWP-GDIST for the forecasted cost to be incurred by meter guards from 2017-2019.
- c. Pease see the approximate number of new meter set installations each year from 2017-2019 below. This number is based on the new meter set forecast methodology of witness Rose Marie-Payan, listed on page 9 of Exhibit SCG-39-WP.

Year	New Meter Sets		
2017	37,404		
2018	47,080		
2019	50,981		

7. Referring to page GOM-124, lines 11-12, please explain and provide a copy of all calculations and supporting analyses/studies SCG performed to forecast the installation of 13,000 MSA locations each year in 2018 and 2019.

SoCalGas Response 7:

In 2016, SoCalGas implemented a focused MSA Inspection Program, as mentioned above in response to Question 3. As Customer Services increases the number of MSA inspections, the amount of work orders generated for follow up will continue to increase. This includes identifying MSAs that require the installation of a new meter guard. During 2016 and 2017, the MSA Inspection Team identified approximately 125,000 locations where a meter guard, or other means of meter protection, may be required. In order to address these work orders, SoCalGas will increase the installation of meter guards with a target goal of 10 years to reduce its current inventory starting with 13,000 orders in 2018. SoCalGas plans to continue at this rate until it reduces its inventory.

8. Referring to page GOM-124, lines 9-10, please provide the following:

a. A copy of the plan to address the installation of the incremental meter guards as referenced;

b. The rationale for developing this plan;

c. The rationale for the implementation of the plan specifically in 2018;

d. Is this plan designed to comply with regulations affecting the work activities of meter guards in the 2019 GRC cycle? If yes, please identify the regulations.

e. The status of SCG's plan development.

SoCalGas Response 8:

- a. SoCalGas has not yet completed the formal project plan for the meter guard installation project. See the response to Question 7 above.
- b. See the responses to Questions 1.a and 7 above.
- c. The creation of the MSA Inspection Team in 2016 as referenced in Question 3 above created a significant inventory of MSA locations requiring follow up work by Gas Distribution. SoCalGas Gas Distribution recognized the growing number of MSA locations needing follow up relating to meter guards and began to develop a plan in 2017 with the goal of implementing its plan in 2018.
- d. The plan is designed to comply with PHMSA Title 49, Subpart H, 192.353 (a). In general, state and federal regulations require gas piping to be protected from physical damage, including impact from vehicles. In addition, Title 49, Subpart H, 192.917 (a) (3) (DIMP) refers to the protection of gas systems from damage by outside forces.
- e. SCG is still in development of its capital meter guard installation plan.

9. Referring to Ex. SCG-04-CWP workpapers, page 138, please provide the following:

a. Explain and provide support for the cost per order amount of \$646 for completing an order;

b. What is an order, or the unit of work?

c. The number of orders completed each year from 2012-2017YTD;

d. The costs incurred each year from 2012-2017YTD;

e. The number of FTEs allocated to this work category each year from 2012-2017YTD; and

f. What is the "Yearly Factor" and how is it calculated?

SoCalGas Response 9:

- a. SCG determined the cost per order of \$646 by dividing the total cost by the number of total orders.
- b. An order or unit represents a meter guard installation at an MSA location.
- c. Please see below the number of new meter guard orders completed from 2012-2017 YTD (November 30, 2017):

New Meter Guard Units Installed (2012 - 2017YTD)						
Year	2012	2013	2014	2015	2016	2017
Count	2,041	1,092	785	710	835	834

d. Please refer to Ex. No. SCG-04-CWP, page 130, for the cost incurred for new meter guard installations each year from 2012-2016. A copy of this information is found in the table below. The expenses for 2017 YTD (November 30, 2017) are approximately \$282,244.

•	Adjusted Recorded					
Years	2012	2013	2014	2015	2016	
Labor	473	277	209	192	279	
Non-Labor	206	105	175	64	80	
NSE	0	0	0	0	0	
Total	678	381	384	256	358	
FTE	6.6	3.6	2.8	2.4	3.4	

- e. Please see the response to Question 9.d for the FTEs recorded to this category from 2012-2016. The FTEs for 2017 YTD (November 30, 2017) are approximately 3.4.
- f. Yearly factor is the total number of straight time hours SoCalGas employees are able to work in a calendar year.

10. Is SCG requesting related funding for the installation of new meter guards in any other work category or account, in addition to the Meter Guards account, in its 2019 GRC Application? If yes, please identify the amount(s) and provide a citation to the testimony and workpapers where the request is presented.

SoCalGas Response 10:

SoCalGas Distribution is requesting capital funding related to the installation of new meter guards as discussed in Ex-SCG-04, pages GOM 123 and 124. Please see pages 130-138 of workpaper SCG-04-CWP-GDIST for reference. In addition, in the testimony of Witness Maria Martinez, Ex. SCG-14, a request was made under Distribution Integrity Management Program (DIMP) as referenced on page MTM 22-23, for a project (Gas Infrastructure Protection Project) that addresses potential third-party vehicular damage associated with above-ground distribution facilities that may include meter guards as a remediation option.

11.Has SCG received funding in rates in past GRC applications for the installation of new meter guards in any other work category or account, in addition to funding authorized specifically for Other Distribution Capital Projects, Meter Guards, or a similar account? If yes, please identify the amount received and GRC decision number.

SoCalGas Response 11:

SCG Distribution has received funding in rates in past GRC applications for routine installation of meter guards under the Other Distribution Capital Projects, Meter Guards as part of the overall capital funding authorization. See D.16-06-054 at page 233.

SoCalGas has also received funding under the Distribution Integrity Management Program (DIMP) to assess the gas distribution system and implement mitigation measures to address identified risks. Funds authorized under this program were used to create a project known as Gas Infrastructure Protection Project (GIPP) that addresses potential third-party vehicular damage associated with above-ground distribution facilities that may include meter guards as a remediation option. See D.16-06-054 at pages 236-238.