Exhibit Reference: SCG-04-R Testimony **SCG Witness:** Gina Orozco-Mejia **Subject:** Gas Distribution Capital, Capital Tools and Equipment

Please provide the following:

1. Referring to Ex. SCG-04-R revised testimony, page GOM-135, lines 21-24, please provide a copy of all calculations and supporting documents used to determine SCG's expectation, that:

a. "...routine tool purchases to continue on an increasing trend...",

b. "...existing tools and equipment reach their useful life expectancies...", and c. "...adding to the number of new employees that must be equipped with tools and equipment..."

SoCalGas Response 1:

- a. As referenced in Ex. SCG-04-R, page GOM 135-136, the increase in activities discussed throughout Gina Orozco-Mejia's testimony, including M&R, Cathodic Protection, Main Maintenance, Service Maintenance, Main Replacement, and Service Replacements, will drive the need for additional employees, which drives the need for tools required for these employees to perform their job. The historical spending under Capital Tools & Equipment as referenced on page GOM-136, lines 6-8 shows an increase in spending, which generally trends with the increase in the field activities mentioned above.
- b. Tools and equipment are mechanical devices that with time and use reach the end of their useful lives and must be replaced before they fail to prevent injury to employees or loss of production due to lack of appropriate, useful tools.
- c. See answer to Question 1.a above.

2. Referring to Ex. SCG-04-R revised testimony, page GOM-136, lines 20-26, please provide the following:

a. A listing of locating equipment currently is used to find the location of buried facilities prior to excavating;

b. Identify the type of training SCG has provided to its employees and required of contractors prior to using locating equipment for Locate and Mark purposes during the time frame of 2012-2016;

c. Did SCG determine that any of its employees and/or contractors was not qualified to use locating equipment for Locate and Mark purposes at any point during the time frame of 2012-2016? If yes, please explain the steps taken to resolve the issue(s) and provide a copy of all documents related to this issue and its resolution.

d. A copy of all calculations and analyses performed to determine SCG's assertion, "...Having different locating units presents the potential risk that an employee may not fully understand the function of each unit and can potentially mis-mark a gas facility in the field..."

e. Provide the number of times an SCG employee or its contractors mis-marked a gas facility each year from 2012-2017YTD;

f. For the period 2012-2017YTD, identify and provide the SCG procedures to prevent employees and/or contractor's use of a locating equipment for Locate and Mark purposes without the pre-requisite trainings?

g. Did SCG or its contractors follow the standards of best practices in its use of various locating equipment for Locate and Mark purposes from 2012-2017YTD?

h. Please provide a copy of the SCG current standards of best practices for the use of various locating equipment for Locate and Mark purposes.

SoCalGas Response 2:

a. Please see below the current list of locating equipment currently used to find location of buried facilities:

SoCalGas Response 2 continued:

- Radiodetection RD8100
- Metrotech 480
- Metrotech 480B
- Metrotech 9800
- Metrotech 9890
- Metrotech 810
- Metrotech 850
- b. SCG employees receive formal training at the central training facility via classroom and field instruction. The employees learn how to locate and mark facilities utilizing the applicable equipment. SCG does not use contractors to mark its facilities for thirdparty locate and mark request tickets. However, contractor companies working for SCG are sometimes required to locate and mark SCG's facilities in the project area. SCG does not provide contractors with training to locate and mark facilities; however, it requires contractors to provide training to their employees per SCG's standards.
- c. During the time frame 2012-2016, SoCalGas did not have any employees and/or contractors not qualified to use the locating equipment for Locate and Mark.
- d. The statement "Having different locating units presents the potential risk that an employee may not fully understand the function of each unit and can potentially mismark a gas facility in the field" was an observation from SoCalGas' operations and training subject matter experts regarding the identification of an activity that could be modified to reduce a potential risk. Standardizing the locate and mark equipment will allow employees to focus on utilizing one tool instead of having to remember how to utilize various pieces of equipment and reduce the risk of making a mistake in the field.
- e. Response will be provided in a subsequent production.
- f. Please see the attached SCG procedure used to prevent employees use of locating equipment for Locate and Mark purposes without the pre-requisite training (184.0200 Underground Service Alert and Temporary Marking). Furthermore, employees performing Locate and Mark activities must be Operator Qualified for this task.

The accompanying attachment has been redacted to remove non-responsive, non-relevant employee information.

SoCalGas Response 2 Continued:

- g. Yes, SCG followed the standards of best practices for the use of various locating equipment for Locate and Mark purposes from 2012-2017.
- h. Please see the attached SCG current standards for the use of various locating equipment for Locate and Mark purposes.
 - Radiodetection RD8100 Gas Standard 107.0331
 - Metrotech 480 Gas Standard 107.0326
 - Metrotech 480B Gas Standard 107.0324
 - Metrotech 9800 Gas Standard 107.0332
 - Metrotech 9890 Gas Standard 107.0336
 - Metrotech 810 Gas Standard 107.0339
 - Metrotech 850 Gas Standard 107.0339
 - The accompanying attachments have been redacted to remove non-responsive, non-relevant employee information.

Exhibit Reference: SCG-04-R Testimony **SCG Witness:** Gina Orozco-Mejia **Subject:** Gas Distribution Capital, Capital Tools and Equipment

Please provide the following:

2. Referring to Ex. SCG-04-R revised testimony, page GOM-136, lines 20-26, please provide the following:

e. Provide the number of times an SCG employee or its contractors mis-marked a gas facility each year from 2012-2017YTD;

SoCalGas Response 2e:

1. Please see the table below showing SoCalGas' reported information to PHMSA for each year from 2012-2016 when responding to Underground Service Alert (USA) tickets. The third column incorporates the number of tickets where the damages resulting from the facility could not be found or located, the facility marking was not sufficient, the facility was not located or marked, or incorrect facility records/maps. These parameters are from the PHMSA instructions for the completion of the annual DOT Report. The 2017 DOT Report will not be available until March 2018.

Year	No. of USA Tickets	No. of Tickets Related to Mis- Marks
2012	534,174	228
2013	577,524	279
2014	640,677	272
2015	650,858	249
2016	627,116	254

3. Referring to Ex. SCG-04-R revised testimony, page GOM-136, lines 23-24, please state whether or not SCG provide refresher training to improve locator knowledge and experience with locating equipment for 2012-2017YTD? If yes, provide the number of refresher training opportunities provided and training frequency.

SoCalGas Response 3:

SCG provides refresher annual training on Locating and Mark procedures at the local district facilities to which gas distribution field crew personnel report. However, SCG conducts refresher training on the Locate and Mark equipment as needed; however, it does not track or document this training. SCG has provided training on all the new locating equipment that rolled out in 2017. In addition, SCG re-qualifies employees who perform the Locate and Mark task every five years per the Operator Qualification requirements. Furthermore, SoCalGas' supervisors perform field rides and job site inspections to review the work employees perform in the field and coach them as necessary.

4. Referring to Ex. SCG-04-R revised testimony, page GOM-136, lines 25-26, please provide a copy of all calculations and supporting documents used to develop the forecasts of \$3.8 million in 2017 and \$2.5 million in 2018.

SoCalGas Response 4:

The estimate was based on 450 units at \$14,000 per unit. SCG forecasted to replace these units in two phases by replacing 60% of these units in 2017 and the remaining 40% in 2018. The 450 units were based on the number needed for all employees that perform Locate and Mark activities. The \$14,000 per unit cost was based on feedback from a vendor at the time the forecast was developed.

5. Referring to Ex. SCG-04-R revised testimony, page GOM-137, lines 2-3, please provide supporting documents used to develop the non-labor expenses of \$1.1 million in 2018.

SoCalGas Response 5:

This response contains Confidential and Protected Materials Pursuant to PUC Section 583, GO 66-D, and D.17-09-023. Confidential information has been shaded in gray.

Please see the table below used for the development of the non-labor expenses related to Confined Space Air Monitoring System for Field Personnel. The forecast was based on previous unit costs from a SoCalGas approved vendor.

Equipment	Units	Total Cost		
MSA Altair 5X	295			
Draeger PAC 7000	376			
Total	671			

6. Referring to Ex. SCG-04-R revised testimony, page GOM-136, lines 30-32, please identify the H2S monitoring equipment system currently in use system-wide and provide the installation date(s) and cost of equipment.

SoCalGas Response 6:

This response contains Confidential and Protected Materials Pursuant to PUC Section 583, GO 66-D, and D.17-09-023. Confidential information has been shaded in gray.

The approved H₂S Monitoring equipment currently in use are the MSA Altair and the Draeger PAC 7000 H₂S Personal Monitors. Both units are portable monitors which require the use of calibration stations and calibration gasses. The monitors are used system-wide by Transmission, Storage, Gas Distribution, M&R and Support Groups. Please see the table below for the installation dates and cost of equipment.

Installation Date	Equipment	Units	Total Cost
January 2014	MSA Altair 5X	279	
January 2014	Draeger PAC 7000	277	
December 2014	MSA Altair 5X	16	
December 2014	Draeger PAC 7000	99	

7. Referring to Ex. SCG-04-R revised testimony, pages 136 and 137, please provide a copy of any and all studies performed from 2012-2017YTD regarding SCG employees' health risks as a result of H_2S exposure, and provide the number of employees affected, if any.

SoCalGas Response 7:

Please see the attached three studies performed between 2012 - 2017 YTD (November 30, 2017) regarding SoCalGas employees' health risks as a result of H₂S exposure:

ORA-SCG-068-DAO-Q7.a ORA-SCG-068-DAO-Q7.b ORA-SCG-068-DAO-Q7.c

There have been no employees affected as a result of H₂S exposure.

The accompanying attachments have been redacted to remove non-responsive, non-relevant employee and critical infrastructure identification information.

8. Referring to Ex. SCG-04-R revised testimony, page GOM-137, lines 7-16, please provide the following:

- a. Supporting documents showing that the manufacturer of the currently used Supplied Air Respirator (SAR) kits no longer supports the equipment;
- b. The number of SAR kits in use each year from 2012-2017YTD;
- c. The number of new SAR kits purchased and costs incurred each year from 2012-2017YTD;
- d. The number of Self-Contained Breathing Apparatus (SBCA) kits currently in use each year from 2012-2017YTD;
- e. The number of new SBCA kits purchased and costs incurred each year from 2012-2017YTD;
- f. The annual budget allocated for the purchase of specific equipment for use by Field personnel working in Immediately Dangerous to Life or Health (IDLH) environments or in flammable atmospheres, and recorded expenses for 2012-2017;
- g. The number of field personnel working in IDLH environments or in flammable atmospheres for 2012-2017.

SoCalGas Response 8:

- a. SCG verified with the manufacturer that the SAR kits are discontinued and the replacement parts are no longer available.
- b. There were 119 SAR kits in use each year from 2012 2017 YTD (November 30, 2017).
- c. There were no SAR kits purchased from 2012 2017 YTD (November 30, 2017).
- d. There were 51 SBCA kits used between 2012- 2015. From 2015 2017 YTD (November 30, 2017), there were 25 SBCA kits in use.
- e. There were 25 SBCA kits purchased in 2015. The total cost was approximately \$32,000. There were no SBCA kits purchased in other years from 2012 2017 YTD (November 30, 2017).

SoCalGas Response 8 Continued:

- f. The Confined Space and Personal Space monitors were incorporated into the employee PPE inventory as industry best practices. The equipment is replaced before the current equipment becomes obsolete and it reaches its end of life cycle. IDLH or flammable atmosphere equipment is part of the overall tools and equipment cost categories; therefore, a budget number for this specific equipment is not available for the years between 2012-2017.
- g. Please see below the number of field personnel working in IDLH environments or in flammable atmospheres for 2012-2017 YTD (November 30, 2017).

	2012	2013	2014	2015	2016	2017
# of Field						
Personnel	1,196	1,192	1,240	1,230	1,270	1,301