**Exhibit Reference:** SCG-04 **SCG Witness:** Gina Orozco-Mejia **Subject:** Field Operations and Maintenance, Main Maintenance

#### Please provide the following:

1. Please provide the definition of "leak evaluation" as shown on line 23 of page GOM-49 and "Main leak evaluation" as shown on line 1 of page GOM-50.

#### SoCalGas Response 1:

Leak Evaluation as it relates to line 23 includes the activities performed during the investigation of above ground and below ground leak indications, which include:

- Leakage survey performed to identify the source of above ground and below ground leak indications.
- The taking of below ground methane samples to determine the extent of leak indications.
- Classifications of leaks or leak indications according to location, spread, concentration of gas, possibility for accumulation of gas, potential source of ignition, potential migration, and imminence of hazard to people or property.

Leak evaluation activities apply to all Company above ground and below ground piping systems, which include Mains and Services.

2. Please provide the work procedures for the leak evaluations as discussed on pages GOM-49 and GOM-50 and leak surveys as discussed on pages GOM-36 to GOM-39.

## SoCalGas Response 2:

Attached are copies of the Company Gas Standards listed below.

- 223.0125 Leakage Classification and Mitigation Schedules
- 223.0100 Leakage Surveys
- 184.0245 Leak Investigation Distribution

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

3. Referring to SCG's testimony on pages GOM-52 to GOM-53, please provide the following information:

- a. The number of main leak repairs performed and costs incurred each year from 2012-2016;
- b. The number of pending non-hazardous leaks considered as "backlog" at the end of each year from 2012-2016;
- c. The number of pending non-hazardous leaks in SCG's backlog as of November 30, 2017;
- d. The number of main leaks out of compliance with state and federal leak repair requirements as of November 30, 2017;
- e. The 2017YTD recorded number of main leaks repaired and expenses incurred;
- f. Provide the number of leak repairs and annual expenses authorized for SCG to repair in 2016, 2017, and 2018, as part of its 2016 GRC request;
- g. Provide a copy of the calculations and supporting documents used to determine the increase of 2,800 and 4,870 in leak repairs for 2017 and 2018 respectively;
- h. Provide a copy of the calculations and supporting documents used to determine the expenses for the 2017 and 2018 annual leak repair estimates;
- i. Of the total number of increased leak repairs for 2017 and 2018, how many will be out of compliance with state and federal requirements in 2019?

# SoCalGas Response 3:

a. Please see below the number of main leaks repaired and the O&M cost incurred each year from 2012 – 2016 below:

Main Leak Repairs											
		2012	2013			2014		2015		2016	
Leaks Repaired		3,698		3,808		4,147		2,939		3,111	
Total Cost	\$	7,386,805	\$	7,178,631	\$	8,421,188	\$	7,439,882	\$	8,194,221	

b. SoCalGas defines "backlog" as its non-hazardous leak inventory, as mentioned in page GOM-53, lines 2-3. Please see below the number of pending non-hazardous leaks considered as "backlog" at the end of each year from 2012-2016:

	Non Hazardous Pending Leaks by Year								
	2012	2013	2014	2015	2016				
Leaks	7,770	8,496	8,282	9,462	10,435				

c. The 2017 pending leak backlog or inventory as defined in Question 3.b above as of November 30, 2017 is 10,559.

- d. As of November 30, 2017, there are zero main leaks out of compliance with state and federal leak repair requirements.
- e. The 2017 YTD total number of main leaks repaired through November 30, 2017 is 4,477. The expense incurred for those repairs is \$12,101,862.
- f. SoCalGas did not request funding in its TY 2016 GRC of a total specific number of leak repairs. Leak repairs were part of the Main Maintenance workpaper (2GD000.003), which requested authorization in the amount of \$18,899,000 for the TY 2016. The leak repairs cost is embedded in this amount.
- g. SoCalGas had a Code 3 leak indications inventory of approximately 9,572 as of December 31, 2016. SoCalGas estimated that approximately 80% of leaks in its inventory are main leaks. Based on this assumption, SoCalGas targeted the resolution of 7,670 leak indications in its inventory by the end of 2018.

Please see workpaper SCG-04-WP-GDIST, pages 58 and 59; and supplemental workpaper SCG-04-GOM-O&M-SUP-001 located on page 67 of workpapers SCG-04-WP-GDIST.

- h. Please see workpaper SCG-04-WP-GDIST- 2GD000.003 Main Maintenance for information on the assumptions made for the base costs associated with leak repairs; and supplemental workpaper SCG-04-GOM-O&M-SUP-001 located on page 67 of workpapers SCG-04-WP-GDIST for the calculations associated with the number of incremental leak repairs SoCalGas forecasted it will perform to reduce its leak indications inventory.
- i. SoCalGas does not expect to be out of compliance with state or federal requirements in 2019.

4. Referring to page GOM-53, lines 15-16, please provide the number of leaks SCG expects to find per the accelerated leak survey SCG plans to implement during this GRC cycle. Please identify the number of expected leaks by leak survey plan.

#### SoCalGas Response 4:

SoCalGas forecasts finding the following number of incremental leak indications associated with the change in leak survey cycles for vintage plastic pipe and high-pressure pipe:

Enhanced Vintage Plastic Pipe Leak Survey

Year	Leak Indications
2017	120
2018	3,500
2019	1,480

Bi-Annual HP Pipe	e Leak Survey
Year	Leak Indications

2019 55

- 5. Referring to page GOM-53, lines 22-23, please provide the following:
  - a. The estimated number of main leaks SCG expects to repair in 2019 and include a copy of all calculations and supporting documents; and
  - b. The calculations and all supporting documents used to determine the \$6,000,000 in incremental main leak repair expenses for 2019.

# SoCalGas Response 5:

a. The \$6 million reference found on page GOM-53, line 23, is related to cost to address the incremental number of leaks forecasted for the TY 2019 above its base forecast. SoCalGas estimates it will repair 2,8400 incremental leaks in the TY 2019. This incremental number is driven by the additional number of leaks forecasted from the change in leak survey cycles, as discussed in the response to Question 4 above.; and to continue to address the post-2016 leak inventory.

Please see workpaper SCG-04-WP-GDIST- 2GD000.003 - Main Maintenance for information on the assumptions made for the base costs associated with leak repairs; and supplemental workpaper SCG-04-GOM-O&M-SUP-001 located on page 67 of workpapers SCG-04-WP-GDIST for the calculations associated with the number of incremental leak repairs SoCalGas forecasted it will perform to reduce its leak indications inventory.

b. Please see response to Question 5.a above and supplemental workpaper SCG-04-GOM-O&M-SUP-001 located on page 67 of workpapers SCG-04-WP-GDIST.

- 6. Referring to page GOM-53, lines 24 to 28, please provide the following:
  - a. a copy of the scope of the leak abatement program, and a reference to SCG's authorization to establish the program's cost recovery mechanism; and
  - b. SCG states on line 28, "...previous GRC commitments to reduce the inventory," please identify the commitments.

## SoCalGas Response 6:

a. SoCalGas is developing a Compliance Plan for SB 1371 leak abatement, which will be filed in March 2018. The scope of the leak abatement efforts will be consistent with the best practices identified in in the attached SB 1371 Phase 1 Final Decision (Decision 17-06-015). SoCalGas' authorization to establish the program's cost recovery mechanism can be found in both the Final SB 1371 Phase 1 Decision (D.) 17-06-015 and the approved Tier 1 Advice Letter (AL) 5166. Please see the link below for AL 5166:

https://www.socalgas.com/regulatory/tariffs/tm2/pdf/5166.pdf

See also attached document "ORA-SCG-046-DAO-6.a.pdf" for the Final SB 1371 Phase 1 Decision.

b. SoCalGas requested funding to reduce the leak inventory that existed at the end of 2013. SoCalGas planned to reduce its pending main leaks inventory by 800 in 2015 and 1,600 in 2016 as mentioned in Ex-SCG-04, page GOM-52, lines 27-28.

7. Referring to SCG's main leak repair forecast as shown on pages GOM-49 to GOM-56, please provide the number of main leak repairs and expenses incurred each year from 2012-2017YTD.

### SoCalGas Response 7:

Please see response to Question 3.a above for 2012-2016 data. The 2017 YTD data is provided in the response to Question 3.e above.

- 8. Referring to page GOM-56, lines 15-16, please provide the following:
  - a. Please identify the incremental RAMP costs as referenced on line 15;
  - b. Please identify the costs in the statement, "Other costs associated with this RAMP activity...included in the Main Maintenance base forecast for TY 2019" and provide a copy of all calculations and supporting documents to show how SCG determined the RAMP costs.

#### SoCalGas Response 8:

a. The RAMP-related costs associated with Main Maintenance are included within the base forecast; therefore, no additional incremental RAMP costs were identified for this cost category, as mentioned in pages 58-61 of workpapers SCG-04-WP\_GDIST. Please see below for the cost referenced on GOM-56, line 15:

2019 RAMP In	cremental	0	920	0	920	0.0	1-Sided Adj	MMCLARK20170901104401963	
Explanation:								Ch 02 Employee Contractor reference RAMP Item #1	
2019 Other		0	-920	0	-920	0.0	1-Sided Adj	MMCLARK20170901104421520	
Explanation:	Adjustment to identify RAMP incremental costs within the base forecast methodology - RAMP - Ch 02 Employee Contractor Customer & Public - Contracting for Traffic Control Delineation materials - reference RAMP Item #1								

b. Please see pages 58-61 of workpapers SCG-04-WP\_GDIST for the other cost associated with this RAMP activity, as referenced in GOM-56, lines 15-16. As mentioned above, the RAMP-related costs associated with Main Maintenance are included within the base forecast; therefore, no additional incremental RAMP costs were identified for this cost category.