SOCALGAS 2016 GRC – A.14-11-004 SOCALGAS AMENDED RESPONSE DATE RECEIVED: JANUARY 14, 2015

DATE RESPONDED: JANUARY 29, 2015 DATE AMENDED: APRIL 2, 2015

These questions are associated with the testimony in SCG-4 (Gas Distribution) and the supporting workpapers.

- 1. In its forecast of Gas Distribution Capital Expenditures, SoCalGas proposes replacement of Leak Detection Equipment in Exhibit 4 CWP, pp. 224-227. The Business Justification statement on p. 224 states the lifespan of electrical and optical components in existing leak detection technology is 7 to 8 years.
 - a. Regarding handheld leak detection equipment, discussed on p. 224 of Exh. 4 CWP,
 - i. Please provide the age, or distribution of ages of the handheld leak detection equipment, or other existing leak detection equipment, which the handheld equipment would replace. Please identify and describe the number of units and the capabilities of the leak detection equipment being replaced.
 - ii. Please provide all analysis conducted by SoCalGas in determining the reduction in costs or increase in leak detection efficacy or efficiency due to purchase of the new handheld equipment.
 - iii. When would SoCalGas have the technology available to utilize the Bluetooth capability of the proposed new equipment? Please provide all analysis of the cost savings resulting from that capability and identify each location in this application of any additional costs related to implementing it.
 - b. Regarding multi-gas detectors and support equipment discussed on p. 225 of Exh. 04 CWP.
 - i. Please provide the number and age or distribution of ages of the leak detection equipment which the handheld equipment would replace.
 - ii. Please identify and explain the material differences in capabilities between the existing equipment being replaced and the proposed multi-gas replacement units.
 - iii. Please provide all analysis conducted by SoCalGas regarding cost savings resulting from replacing existing equipment with the multi-gas detectors.
 - iv. Please provide all analysis conducted by SoCalGas regarding the increase in leak detection efficacy or efficiency from replacement of the existing leak detectors with the multi-gas detectors.

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Question 1 (Continued)

- c. Regarding the GIS-Based Leak Survey Tracker, discussed on p. 227 of Exh. 04 CWP
 - i. Please provide the results of all analysis conducted by SoCalGas regarding cost savings and safety improvement resulting from application of this equipment.
 - ii. Are there any other costs or forecasted expenditures related to implementation of this technology? If so, please indicate where each such expenditure is addressed or identified in this application, and the forecast cost of each such expenditure.
- d. Please describe and explain the conditions under which field personnel use a multi-gas detector, and the conditions under which those personnel use a leak detector.

SoCalGas Response:

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- 2. Please provide two confidential documents provided to DRA in response to their DR 30:
 - a. ORA-SCG-DR-030-DAO_Q1_CONFIDENTIAL.pdf
 - b. ORA-SCG-DR-030-DAO_Q4_CONFIDENTIAL.pdf

SoCalGas Response:

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- 3. Regarding Gas Distribution O&M expenses and the Field O&M Leak Survey forecast on Exh. 04 WP, p. 15:
 - a. Please provide the end-of-year leak survey footage on SoCalGas' system for each year from 2008 through 2013.
 - b. For the leak survey footage provided for each year in a. above, please provide the number of feet subject to a five-year survey cycle and the number of feet subject to a three-year survey cycle.

SoCalGas Response:

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- 4. Regarding the Field O&M Main Maintenance forecast on Exh. 04 WP p. 43:
 - a. Please explain the "gas leak backlog" noted on p. 42 under "Forecast Explanations", including
 - i. The number of located, unrepaired main leaks at the end of each year from 2009 through 2013.
 - ii. The number of located, unrepaired main leaks, by grade (1, 2 and 3) at the end of each year from 2009 through 2013.
 - iii. The forecast backlog of located, unrepaired main leaks at the end of each year from 2014 through 2018, assumed in SoCalGas funding proposal.
 - iv. The forecast number of new leaks found in each year from 2014 through 2018, by grade (1, 2 and 3).

SoCalGas Amended Response:

For Questions 4a.i. and 4a.ii., please refer to the information provided in the table below. Values in the table for 2009 'Main' and 'Service' leaks (and resulting totals) have changed from the January 29th response to reflect leak backlogs data in lieu of leaks scheduled for repair. Please see revised 2009 counts by code although not by location. Please see the revised Footnotes 2 and 3 which describes these changes.

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SoCalGas Response to Question 4.a.i. and 4.a.ii., Continued:

Year	2009	2010	2011	2012	2013
Main Leaks					
Code 1	Unavailable	13	35	23	39
Code 2	Unavailable	24	419	206	206
Code 3	Unavailable	1,867	4,472	4,988	5,357
Subtotal	Unavailable	1,904	4,926	5,217	5,602
Service Leaks					
Code 1	Unavailable	61	116	133	247
Code 2	Unavailable	161	531	307	185
Code 3	Unavailable	1,298	1,619	1,951	1,749
Subtotal	Unavailable	1,520	2,266	2,391	2,181
Service to Main Connection Leaks					
Code 1	-	-	-	-	6
Code 2	-	-	77	19	156
Code 3	-	-	540	690	1,465
Subtotal	-	-	617	709	1,627
Unknown Location					
Code 1	461	-	-	-	-
Code 2	222	-	-	-	-
Code 3	6,482	3,332	963	264	17
Subtotal	7,165	3,332	963	264	17
Total					
Code 1 ¹	461	74	151	156	292
Code 2	222	185	1,027	532	547
Code 3	6,482	6,497	7,594	7,893	8,588
Total	$7,165^2$	$6,756^3$	$8,772^4$	8,581	9,427

¹ Code 1 leaks may be temporarily repaired to eliminate the immediate hazard. During the interim between temporary and permanent repairs the situation is monitored and documented to insure no further hazard exists or develops. For this reason, there may be some pending Code 1 leaks at the end of the year.

² In the DOT Gas Distribution system annual report for 2009, the number of known system leaks at the end of the year scheduled for repair was shown to be 3,247 leaks. This number was estimated to include 888 main leaks and 2,359 service leaks. There is no data available on the leak codes for these leaks due to differences in how the DOT report leaks were calculated in the legacy system. The total leaks shown in the table above comes from a different legacy report, which has a breakdown by leak code, but not leak location (main or service).

³ In the DOT Gas Distribution system annual report for 2010, the number of known system leaks at the end of the year scheduled for repair was shown to be 3,424 leaks. This number included 100% of the Code 1 and Code 2 leaks, and only the portion of Code 3 leaks that were estimated to be repaired in the following year. The 2010 leak numbers corresponding to the DOT report are shown under the headings Main Leaks and Service Leaks in the table above. There were additional Code 3 leaks that were not included in the DOT report, as they were not estimated to be repaired in the following year. Those leaks are shown under the heading Unknown Location, as the documentation available does not show whether the leaks were on mains or services.

⁴ In the DOT Gas Distribution system annual report for 2011, the number of known system leaks at the end of the year scheduled for repair was shown to be 1,178. This number excluded the Code 3 leaks. Including Code 3 leaks, the total is 8,772, as shown in the table above.

TURN DATA REQUEST TURN-SCG-DR-02 SOCALGAS 2016 GRC – A.14-11-004 SOCALGAS AMENDED RESPONSE

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SoCalGas Response to Question 4, Continued:

Responses to Questions 4a.iii. and 4a.iv. submitted January 29, 2015 remain unchanged.

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- 5. Regarding the Field O&M Service Maintenance forecast on Exh. 04 WP p. 53:
 - a. Please explain the "gas leak backlog" noted on p. 53 under "Forecast Explanations", including
 - i. The number of located, unrepaired service leaks at the end of each year from 2009 through 2013.
 - ii. The distribution of located, unrepaired service leaks, by grade (1, 2 and 3) at the end of each year from 2009 through 2013.
 - iii. The forecast backlog of located, unrepaired service leaks at the end of each year from 2014 through 2018, assumed in SoCalGas funding proposal.
 - iv. The forecast number of new service leaks found in each year from 2014 through 2018, by grade (1, 2 and 3).

SoCalGas Response:

Please refer to the responses provided in Question 4 above.

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- 6. Regarding the Field O&M Field Support forecast on Exh. 04 WP p. 63: SoCalGas' forecast of Field Support FTE in the 2012 GRC, Exh. 2 WP, p. 115 included 198 FTE in 2012, a figure that was 8 to 18 FTE over the FTE recorded figures for 2012 and 2013 as presented in the 2016 GRC. SoCalGas' workpapers refer to "increased regulatory pressures" (2016 GRC Exh. 04 WP p. 62) occurring since the 2012 forecast was made.
 - a. Please explain how SoCalGas completed the additional work outlined in its 2012 GRC workpapers (2012 GRC Exh. 02 WP p. 115) and absorbed the "increased regulatory pressures" noted in this filing with the lower staffing levels as compared to the 2012 GRC forecast.
 - b. Please explain how SoCalGas incorporated these efficiencies into its current forecast of FTE required for these functions.

SoCalGas Response: