ORA DATA REQUEST
ORA-SCG-062-DAO
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: DECEMBER 27, 2017
DATE RESPONDED: JANUARY 19, 2018

Exhibit Reference: SCG-04 Testimony and Workpapers
SCG Witness: G. Orozco-Mejia
Subject: Gas Distribution Capital Expenditures, Regulator Stations

Please provide the following:

1. Referring to Ex. SCG-04 testimony, page GOM-108, line 26, and GOM-109, line 1, please provide a breakdown of the 1,975 regulator stations currently operated and maintained by SCG by age group:

a. 0-10 years,

b. 11-20 years,

c. 21-30 years,

d. 31-35 years, and

e. 36 years and older.

SoCalGas Response 1:

Please see the table below with the breakdown for the number of regulator stations in the system by age group.

AGE	COUNT
0 – 10 Years	288
11 – 20 Years	302
21 – 30 years	454
31 – 35 Years	147
36 Years and Older	784
Grand Total	**1,975**

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2. Referring to Ex. SCG-04-CWP workpapers, page 76, Project Justification, please provide the following:

a. An explanation of how SCG prioritizes the replacement of regulator stations;

b. An explanation of how SCG assesses the risk of regulator stations and how the risks are assigned to each of the factors identified on page 76:

i. design obsolescence,

ii. active corrosion,

iii. deteriorating vaults or equipment,

iv. exposure to flooding,

v. hazardous traffic conditions, and

vi. considered ergonomically unsafe.

c. Referring to the statement, "SoCalGas proactively targets these stations for replacement before operation and safety issues arise," please state if this is a past, current, or proposed company practice?

d. Please provide the risk assessments performed, if any, from 2012-2017YTD to prioritize regulator station replacement;

e. Provide the number of regulator stations replaced each year from 2012-2017YTD, by risk factor; and

f. Provide the annual costs to replace regulator stations from 2012-2017YTD by risk factor.

SoCalGas Response 2:

a. SoCalGas prioritizes the replacement of regulator stations with emphasis on the safe and reliable delivery of natural gas and several factors contribute to the replacement decisions, including:

Safety – The safety of our customers and employees is our top priority. A safety-related condition that cannot be addressed in a satisfactory manner through maintenance will be targeted for replacement.

Condition – Certain conditions, when encountered, such as material or component failure, severe corrosion and other unanticipated factors require that action be taken. If system configuration prevents the facility from being taken off-line, replacement is the preferred option.

System Reliability – SoCalGas' gas distribution system is analyzed and evaluated to determine ability to meet winter and summer peak load demand conditions. If it is determined that a larger regulator station is needed for reliability purposes, the existing facility will be scheduled for replacement.

New Business – As communities across our service territory expand, it may become necessary to replace an existing regulator station to increase system capacity to meet demand.

Franchise Obligations – When SoCalGas regulator station facilities conflict with municipalities, railways, or state and federal improvement projects, SoCalGas is required by franchise agreement to accommodate these projects, which could entail relocation via replacement.

b. Please see below the explanation on how SoCalGas assesses the risk of regulator stations:

i. design obsolescence

Dual run regulator stations that include particle filtration and modern "top entry" regulators in ergonomically designed vaults with an inlet and outlet "fire control" valve, are the preferred design due to enhanced safety, increased system capacity, and reliability as well as ease of maintenance and improved industrial ergonomics. All regulator stations are compared against this preferred standard design. Regulator stations that do not meet the design criteria stated above are considered obsolete.

An aspect of obsolescence is the availability of replacement parts for routine maintenance for certain components. While these assets are well maintained and remain in service for extended periods, they are no longer considered "industry standard."

ii. active corrosion

Corrosion is assessed and documented on each visit. Employees are trained to identify and address atmospheric corrosion.

iii. deteriorating vaults or equipment

SoCalGas' vaults are assessed on each visit. The material of the lids varies. Locations that have lids are in constant contact with the environment and are subject to the effects of age, moisture, earth movement, static load forces, and pedestrian and vehicular traffic. These facilities are monitored

for component integrity, including: lid assembly corrosion (hinges, springs/torsion bars, safety bars/ latches, and locks), concrete integrity, and water intrusion.

iv. exposure to flooding

Regulator stations are routinely exposed to nuisance water, which can cause corrosion and leaking.

v. hazardous traffic conditions

Street improvement projects often change the physical environment affecting vehicular dynamics around some of SoCalGas' facilities, exposing our employees and equipment to increased danger while completing routine inspections. Mitigating these risks results in increased inspection costs.

vi. considered ergonomically unsafe

Vaults that were installed in past decades did not consistently consider the issues associated with industrial ergonomics. As a result, these locations require our employees to perform inspections in cramped conditions, often in awkward positions for extended periods that can potentially expose employees to workplace injuries.

c. SoCalGas targets stations for replacement before operation and safety issues arise that can impact the safety of the public and employees and the integrity of the pipe system. This is a past and current practice.

d. The assessments are conducted on a continuous basis by the regional measurement and regulation teams. As the local technician's report findings from the ongoing inspections and maintenance activities, a list of regulator station replacements is developed for the subsequent year. For reference, the current list of regulator stations identified for replacement is attached to this response. SoCalGas does not retain other records of risk assessments previously performed. See attachment ORA-SCG-062-DAO-Q2.d.

e. Please see below the number of regulator stations replaced from 2012 – 2017 YTD (November 30, 2017). Once a station is replaced, SoCalGas does not keep documentation of the reason for the replacement.

Year	Regulator Stations Replaced
2012	29
2013	27
2014	19

2015	20
2016	20
2017	17

f. Please see the expenses below related to regulator stations as shown in page 76 of workpapers SCG-04-CWP-GDIST. SoCalGas Gas Distribution does not track regulator station replacement costs by risk factor; rather, costs are captured in one budget category for regulator replacements. The 2017 YTD (November 30, 2017) expenses are approximately $6,300,000.

	Adjusted Recorded				
Years	2012	2013	2014	2015	2016
Labor	370	236	329	428	447
Non-Labor	4,294	6,936	6,069	6,993	8,189
NSE	0	0	0	0	0
Total	**4,665**	**7,172**	**6,398**	**7,422**	**8,635**
FTE	4.7	2.7	3.5	4.7	4.6

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3. From 2012-2017YTD, has SCG (a) received in rates or (b) used and/or moved funds, from any other sources or programs in addition to the funding authorized for the Regulator Replacement Program, to replace regulator stations? If yes, please identify all funding sources/accounts/programs and the annual costs recorded.

SoCalGas Response 3:

SoCalGas has not had a regulator replacement program as referenced in page GOM-110, lines 15-25 from 2012-2017 YTD (November 30, 2017). The Regulator Replacement Program identified in the testimony of Gina Orozco-Mejia is a new program, not previously funded. Funding for routine regulator replacement efforts (including limiting stations) have been authorized through previous GRC decisions, such as for transmission-related regulator stations and other Major Projects regulator station work.

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4. SCG requests funding for the Regulator Station Replacement Program for 2017-2019 as shown in Ex. SCG-04, testimony pages GOM-108 to GOM-111 and in the workpapers pages 76 to 89. Does SCG request O&M or capital funding relating to the replacement of regulator stations elsewhere in other SCG witnesses' testimony and/or workpapers? If yes, please identify the amount of SCG's request and provide a citation to other SCG witnesses' testimony and/or workpapers.

SoCalGas Response 4:

SoCalGas Gas Distribution does not request O&M or capital funding relating to the replacement of regulator stations elsewhere in other SoCalGas witnesses' testimony or workpapers. However, SoCalGas does request capital funding related to replacement of regulator stations in Exhibits SCG-07, for transmission-related regulator stations; and SCG-15 for PSEP-related regulator station work. In Ex. SCG-07, please see pages MAB 26-28 and pages 136 – 140 of workpapers SCG-07-CWP-GTRAN. Included in the overall cost estimate of PSEP pipeline replacement project Line 85 is the replacement of two regulator stations. Please see page 191 of Supplemental Workpapers SCG-15-WP-Redacted.

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5. Please provide the CPUC authorized funding amount for the Regulator Station Replacement Program each year from 2012-2016.

SoCalGas Response 5:

See the response to Question 3 above.

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6. Please provide the number of FTEs allocated to the Regulator Replacement Program for each year from 2012-2017 YTD.

SoCalGas Response 6:

As indicated in the testimony of Gina Orozco-Mejia, the Regulator Replacement Program, referenced on page GOM-110, lines 15-26, is new and scheduled to start in 2018 to allow SoCalGas to finalize a plan and implement it; therefore, there are no FTEs for this Regulator Replacement Program for the years 2012-2017.

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7. For each year from 2012 to 2017YTD, please provide the recorded unit completed and expenditures incurred to:

a. inspect regulators and gauges,

b. construct new installations,

c. relocate, and

d. replace distribution regulator stations.

SoCalGas Response 7:

a. The inspection of regulator and gauges is an O&M expenditure. Below is the number of inspection orders completed in the regulator station work category and associated Labor cost by year.

	2012	2013	2014	2015	2016	2017YTD
Order count	5,086	5,345	5,458	5,671	5,696	5,872
Costs	$860,362	$974,037	$1,079,119	$1,286,278	$1,453,768	$1,593,197

b. c. d. The table below provides new installations, relocations and replacements of regulator stations for the years 2012-2017 YTD (November 30, 2017). See the response to Question 1.f above for expenditures incurred.

	2012	2013	2014	2015	2016	2017YTD
New Installations	9	8	7	3	5	8
Relocations	13	7	3	11	2	5
Replacements	7	12	9	6	13	4

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8. For each of the forecast years, 2017-2019, please provide the SCG forecast for the number of units to be completed and expenditures to:

a. inspect regulators and gauges,

b. construct new installations,

c. relocate, and

d. replace distribution regulator stations.

SoCalGas Response 8:

a. The inspection of regulator and gauges is an O&M activity captured in the workgroup Field Operations and Maintenance – Measurement and Regulation. SoCalGas chose a five-year (2012 through 2016) linear trend to forecast the base funding requirement for TY 2019 for this work category. Therefore, a specific number of work units was not forecasted.

b. SoCalGas used the 2016 base plus incremental forecast to capture the expenditures for the regulator stations work category. Although the replacement or installation of regulator stations can vary due to municipality, pressure betterments, or unforeseen corrosion-related activities, SCG can estimate the number of units to be completed from 2017-2019 based on the forecast methodology used. The number for the year 2017 was calculated using the Base Year 2016 completed units. This number was increased by the number of regulator stations replacements in the Regulator Station Replacement Program to calculate the number of replacements for the years 2018 and 2019. Please see the estimated forecast shown below addressing questions 8.b, 8.c, and 8.d:

	2017	2018	2019
New Installations	5	5	5
Relocations	2	2	2
Replacements	13	23	31