

**ORA DATA REQUEST
ORA-SCG-DR-009-DAO
SOCALGAS 2016 GRC – A.14-11-004
SOCALGAS RESPONSE
DATE RECEIVED: NOVEMBER 18, 2014
DATE RESPONDED: DECEMBER 4, 2014**

Exhibit Reference: SCG-4, Category B, Shared Services

Subject: Gas Distribution Operations and Maintenance Expenses, Shared Services

Please provide the following:

1. A citation to the workpapers wherein ORA can locate Supplemental Workpaper SCG-FBA-USS-SUP-006 referenced on page 131 of the workpapers of exhibit SCG-4, or a copy of this document.

SoCalGas Response:

Supplemental Workpaper SCG-FBA-USS-SUP-006 can be found on page 138 of Gas Distribution's O&M workpapers (Exhibit SCG-04-WP).

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2. A copy of all documents and calculations relied on to develop SoCalGas' 2016 forecast of \$4.069 million in non-labor expenses and \$0.4 million in labor expenses for Gas Distribution Monitoring and Control Program Assessment and Blueprint Development as shown on page 131 of the workpapers for exhibit SCG-4.

SoCalGas Response:

On page 131 of Exhibit SCG-04-WP, \$4,096,000 corresponds to SoCalGas' portion of the total activity forecast and \$404,000 corresponds to SDG&E's portion. It does not represent the labor and non-labor breakdown for the activity.

The total non-labor for the activity is forecasted to be \$4,050,000 (\$3,686,000 for SoCalGas and \$364,000 for SDG&E). The total labor for the activity is forecasted to be \$450,000 (\$410,000 for SoCalGas and \$40,000 for SDG&E).

Supplemental Workpaper SCG-FBA-USS-SUP-006 (page 138 of Exhibit SCG-04-WP) shows the calculations for the labor and non-labor breakdown as well as the calculations for the SoCalGas and SDG&E portions of the project.

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3. A breakdown of the 2016 forecast for each of the activities identified on pages FBA-84 through FBA-86.

SoCalGas Response:

By way of clarification, in the testimony on page FBA-84 line 15 we state “To this end, SoCalGas and SDG&E will establish a team of internal and external resources to conduct an assessment and develop a program blueprint to determine the extent to which SoCalGas and SDG&E should implement remote monitoring and control of their gas distribution infrastructure. The program’s blueprint will also recommend projects and work processes as well as the priority and timing of the work. Furthermore, the assessment will include an analysis of industry best practices, including field and control room technologies.” This effort is to complete the work described that will lead to a go forward plan referred to as the “blueprint” or Monitoring and Control (project) Plan. Supplemental Workpaper SCG-FBA-USS-SUP-006 (page 138 of Exhibit SCG-04-WP) shows the forecast calculations for the following activities:

- Benchmarking
- Remote Monitoring and Control Plan
- Enhancement of Current Business Processes Plan
- Implementation and Ongoing Support Team

A breakdown was not calculated for the Gas Distribution Control Center Plan. It is a part of the analysis that will go into developing the Monitoring and Control Plan.

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4. A definition of “program blueprint” as used on page FBA-83.

SoCalGas Response:

There is no formal definition of “program blueprint” as used in Gas Distribution testimony and workpapers. That term refers to the project’s overall plan. A description of the program blueprint, or the project plan, can be found on pages FBA-80 – FBA-81 of Exhibit SCG-04:

The forecast described in this section is to conduct an assessment and develop a program blueprint to determine the extent to which SoCalGas and SDG&E should implement remote monitoring and control of gas distribution infrastructure. The program’s blueprint will also recommend projects and work processes as well as the priority and timing of the work.

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5. On page FBA-83 SoCalGas states, “To this end, SoCalGas and SDG&E will establish a team of internal and external resources to conduct an assessment and develop a program blueprint to determine the extent to which SoCalGas and SDG&E should implement remote monitoring and control of their gas distribution infrastructure.”
- a. Identify SoCalGas and SDG&E’s gas distribution infrastructures that are currently monitored remotely.
 - b. The number of miles of distribution pipelines, including supply lines, currently remotely monitored by (i) SoCalGas, and (ii) by SDG&E.
 - c. The percentage of SoCalGas’ distribution system currently monitored remotely.

SoCalGas Response:

- a. The table below shows the number of medium and high pressure networks that are monitored by Electronic Pressure Monitors (EPM)

	SoCalGas	SDG&E
Total Distribution Networks	929	145
Networks Remotely Monitored by EPMs	520	61

As stated on page FBA-131 of Exhibit SCG-04, “Electronic pressure monitors are used by SoCalGas to remotely monitor distribution pipeline pressures in support of gas system capacity analysis, and for alarming of over or under-pressure events.”

The Gas Distribution Monitoring and Control Program Assessment and Blueprint Development will look at enhancing Gas Distribution’s current monitoring activities. We will explore the industry practices and determine the next generation of pressure monitoring enhancements to enable us to detect and resolve pressure anomalies quickly before they create operating and or safety difficulties. Again, this is an exploratory study to determine best practices and to develop go forward plans. One example of activities that will be contemplated is described on page FBA-84:

Development of a plan for the installation of electronic pressure monitors as the replacement of mechanical charts reaches completion. An example of this decision process is to determine if electronic pressure monitors should be installed at all regulator stations.

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SoCalGas Response to Question 5, Continued:

b. The table below shows the miles of Distribution Main currently monitored by EPMs

	SoCalGas Miles	SDG&E Miles
Total Distribution Main ¹	50,450 ²	8,076
Remotely Monitored by EPMs	49,185	7,988

c. The table below shows the percent of Distribution Main currently monitored by EPMs

	SoCalGas	SDG&E
Percent Monitored by EPMs	97.5 %	98.9 %

¹ Includes distribution supply lines operating at or above 20% SMYS.

² SoCalGas mileage is based on the pipe installed as of the end of the 2013 base year.

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6. On page FBA-83 SoCalGas states, “The program’s blueprint will also recommend projects and work processes as well as the priority and timing of the work.”
 - a. Please describe the current processes used to identify projects, the priority, and timing of the work activities for Gas Distribution.
 - b. Please identify the work activities and processes that may be affected by the proposed assessment.

SoCalGas Response:

- a. The projects referred to in this section are the follow-up steps that are required to implement the blueprint. Those steps will not be known until the blueprint is completed. The activities and processes that may be affected are those related to enhancing pipeline systems and business processes related to the monitoring and controlling of Distribution gas systems. As discussed, the assessment is intended to define what is required in the future to enhance pipeline systems and safety and business processes related to advanced Remote Monitoring and Controlling of Gas Distribution in ways similar to those processes currently followed by Transmission.
- b. Below is a list of work activities and processes that may be affected by the proposed assessment:
 - Installation, Maintenance, and Monitoring of Electronic Pressure Monitors
 - Integration or Coordination with Current Dispatch Activities
 - Planning, Construction, Maintenance, and Operation of Regulator Stations and Valves
 - Coordination and Monitoring of Gas Handling and Valving Procedures
 - Coordination of Emergency Response
 - Integration with Gas Emergency Centers
 - Integration of Data into Engineering Analyses and Processes
 - Revisions and Additions to Training Procedures and Materials
 - Revisions to Gas Standards

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7. On page FBA-82 SoCalGas discusses its multi-year program to replace all mechanical pressure recorders with electronic recorders. Please provide the following information regarding this discussion:
- a. How long has this program been in existence?
 - b. The number of mechanical pressure recorders currently in SoCalGas and SDG&E's systems.
 - c. The number of electronic recorders currently in SoCalGas and SDG&E's systems.
 - d. The annual number of replacements of mechanical recorders with electronic recorders since the program's inception.
 - e. A description of the functions of (i) "mechanical charts" , (ii) "mechanical recorders", and "electronic recorders".

SoCalGas Response:

- a. The program began in year 2010, so it has been in existence for approximately 5 years.
- b. As of November 1, 2014, there were 380 mechanical pressure recorders remaining in the SCG distribution system. SDG&E does not have any mechanical pressure recorders.
- c. As of November 1, 2014, there were 1,700 EPMs in SCG's distribution system and 325 EPMs in SDG&E's distribution system.
- d. The table below shows the annual EPMs installed replacing mechanical recorders

Year	2010	2011	2012	2013	2014 (Through October)
EPMs	106	237	225	247	159

- e.i. The terms "mechanical chart" and "mechanical recorder" are used interchangeably. Each is an analog pressure recorder that records pressure using a flexible element that shifts the position of an ink pen across a rotating circular paper chart. Pressure histories recorded on the paper charts are manually collected on prescribed schedules.
 - e.ii. An "electronic recorder", which we call an Electronic Pressure Monitor or EPM, records pressure electronically via a pressure transducer and stores the pressure information in the unit's memory. The pressure histories are remotely downloaded daily via telephone landlines or cellular networks.

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8. On page FBA-82 SoCalGas states, “The post-PSEP installation maintenance costs for these facilities are included in the O&M Section II. B. 3 of this testimony...” Is SoCalGas referring to the O&M expense amount of \$165,000 for the work activity identified as “Incremental Valve Maintenance” discussed on pages FBA-25 to FBA-26? If not, please provide a citation to the SoCalGas testimony and/or workpapers referred to in this statement.

SoCalGas Response:

For SoCalGas Gas Distribution, this activity is labeled “Incremental Valve Maintenance.” It can be found in Section II.B.3.b.i. on pages FBA-25 – FBA-26 of Exhibit SCG-04. The corresponding workpaper pages are 21 – 22 and 28 – 29 of Exhibit SCG-04-WP. The TY2016 forecast for this incremental work is \$165,000.

For SDG&E Gas Distribution, the activity is labeled “Enhanced Valve Maintenance.” It can be found in Section II.B.9.b.v. on pages FBA-34 – FBA-35 of Exhibit SDG&E-04. The corresponding workpaper pages are 61 and 67 of Exhibit SDG&E-04-WP. The TY2016 forecast for this incremental work is \$149,000.

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9. Referring to SoCalGas' discussion of benchmarking on page FBA-84, please provide a listing and electronic copies of any and all benchmark studies performed by SoCalGas, SDG&E, or external entities on behalf of SoCalGas and/or SDG&E, between 2009-2014 to determine best practices for (1) remote monitoring and/or control of gas distribution systems, (2) associated business processes, (3) use of monitoring and control technology in the field and control room, and (4) data collection processes.

SoCalGas Response:

The benchmarking described in testimony is prospective in nature. SoCalGas, SDG&E, or external entities on behalf of SoCalGas and/or SDG&E have not yet performed benchmark studies. Acquiring this data would be part of the purpose of the data gathering and analysis that would become the Monitoring and Control Plan.

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10. Provide an electronic copy of all studies, reviews, and/or analyses performed by SoCalGas, SDG&E, and/or external entities on behalf of SoCalGas and/or SDG&E in developing the utilities Safety Plan pursuant to Rulemaking 11-02-019.

SoCalGas Response:

There were no studies, reviews, or analyses performed in developing the utilities' Safety Plans. The Safety Plans were established to be consistent with the intent of SB 705. The Safety Plans are a consolidation and expansion of existing safety policies and procedures. SoCalGas' and SDG&E's Pipeline Safety Plans were reviewed by the Commission's Safety Enforcement Division (SED) (see Decision 12-12-009). In response to SED's review, SoCalGas and SDG&E revised the Safety Plans to remedy any identified deficiencies. Subsequently, on June 28, 2013, SED issued a letter acknowledging that the revisions adequately addressed the deficiencies.