

**ORA DATA REQUEST  
ORA-SCG-DR-041-DAO  
SOCALGAS 2019 GRC – A.17-10-008  
SOCALGAS FINAL RESPONSE  
DATE RECEIVED: DECEMBER 08, 2017  
DATE RESPONDED: DECEMBER 26, 2017**

**Exhibit Reference:** SCG-04 Testimony and Workpapers

**Subject:** Gas Distribution O&M, Locate & Mark

**Please provide the following:**

1. Referring to SCG's testimony, Ex. SCG-04, p. GOM-35, lines 1-11; please provide the annual expenses and number of USA tickets received for 2017 YTD.

**SoCalGas Response 1:**

SoCalGas has received 611,571 USA tickets and incurred annual expenses of approximately \$602,662 as of November 30, 2017.

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2. Referring to SCG’s workpapers for Ex. SCG-04, page 19, please provide the following:
  - a. Explain and provide support, include all calculations and documents relied on, for the forecast of 10% increase in USA ticket volume for each year from 2017- 2019 as shown under Assumption “B”;
  - b. Explain and provide support, include all calculations and documents relied on, for the forecast of \$0.15 incremental cost per ticket for each year from 2017- 2019 as shown under Assumption “B”;
  - c. Please state whether the 2016 fees of \$78,582 as shown under Assumption F, was the recorded or forecast amount?
  - d. Please show and provide a copy of all calculations SCG relied on to develop the total projected incremental cost for USA South and USA North.

**SoCalGas Response 2:**

- a. The 10% assumption is based on the forecasted number of additional USA tickets that will result from a change in the Dig Safe Act of 2016<sup>1</sup>, requiring that any Underground Service Alert (USA) ticket that needs to be renewed must be resubmitted, thus creating a new ticket and adding to the overall number of tickets. SoCalGas pays a per ticket membership fee to USA South (DigAlert). As the number of tickets increases so does the membership fee SoCalGas must pay.
- b. Please see the attached supporting document, ORA-SCG-041-DAO-2.b.1, from USA South stating the increase in ticket prices. The previous contract, ORA-SCG-041-2.b.2, is also attached in which the previous ticket fee is shown. Please see supplemental workpaper SCG-04-GOM-O&M-SUP-009 located on page 19 of workpapers SCG-04-WP\_GDIST for supporting details on the forecast of the increased fees for each year from 2017 – 2019.
- c. The 2016 fees of \$78,582 were forecasted based on the previous year (2015) data. Since then, SoCalGas has received the recorded fees for 2016, in the amount of \$72,452.
- d. Please refer to the supplemental workpaper, GOM-O&M-SUP-009 located on page 19 of workpapers SCG-04-WP\_GDIST, for the calculation showing the total projected incremental cost for USA South and USA North.

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<sup>1</sup> See Cal. Gov’t Code §4216.2(e).

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3. Referring to SCG’s testimony, Ex. SCG-04, p. GOM-35, lines 13-21, please provide the following:

- a. Identify the current method(s)/technology SCG uses to excavate to find hard-to-locate underground pipelines; and
- b. State whether or not SCG has used keyhole technology for the purposes of locating hard-to-find pipelines. If yes, please state the year SCG started and the annual expenses associated with the excavations using this technology.

**SoCalGas Response 3:**

- a. SoCalGas currently uses a two-person crew to excavate and find hard-to-locate underground facilities. The crew will use a jackhammer to break the concrete where the facility has been located. Once the concrete has been broken through, the crew will use a hand shovel and manually dig a 3-foot by 2-foot excavation until the pipe is found. To avoid damage, crews hand-excavate the facility once they determine the pipeline is near.
- b. Keyhole technology has been used at SoCalGas since 2013. It has not been previously used by Gas Distribution. The approximate annual expenses associated with this technology (incurred outside of Gas Distribution) are approximately as follows:

Keyhole Technology (2012 -2017 YTD)						
	2012	2013	2014	2015	2016	2017 (YTD -Nov)
Annual Expense	\$ -	\$ 170,000	\$ 2,160,000	\$ 800,000	\$ 820,000	\$ 490,000

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4. Referring to SCG’s Ex. SCG-04 workpapers page 10, please provide the following:
- a. A copy of all calculations and studies/analyses used to develop the number of units (10, 100, and 500 units) that SCG expects to excavate for each year from 2017-2019;
  - b. The definition of a “unit” as used;
  - c. A copy of all calculations and analyses used to derive the unit cost of \$1,000;
  - d. The number of units completed and expenses incurred each year from 2012-2017 YTD to excavate and find hard-to-locate underground pipelines; and
  - e. Provide a brief explanation of how SCG uses Vacuum Technology or Keyhole Technology to excavate; and
  - f. State whether SCG uses the Vacuum Technology or Keyhole Technology for other excavation purposes in addition to hard-to-locate underground pipelines. If so, please explain and provide the annual expenses incurred for that work activity.

**SoCalGas Response 4:**

- a. SoCalGas’ Gas Distribution plans to increase the overall use of keyhole technology to pothole more facilities when locating with the purpose of more accurately marking lines and providing a better depth range to excavators. This would support SoCalGas’ effort to prevent the number of damages to pipe facilities from increasing. SoCalGas’ Gas Distribution plans to pilot the technology in its operations group and methodically introduce it into its routine mode of locating hard-to-locate underground facilities by increasing the usage in 2017, 2018, and 2019. The 10, 100 and 500 units forecast is based on Subject Matter Expert input on the ramp up level to be used for Gas Distribution work.
- b. The term “unit” represents an individual excavation using the Vacuum Technology.
- c. The unit cost was estimated based on feedback SoCalGas received from a vendor.
- d. The number of units completed and expenses incurred each year from 2012- 2017 (YTD-Nov) to excavate and find hard-to-locate underground pipelines are shown below. The table below provides the number of orders completed.

Depth Check Orders (2012 - 2017 YTD)						
	2012	2013	2014	2015	2016	2017 (YTD - Nov)
Orders Completed	734	768	441	398	425	506
Annual Expense	\$ 558,076	\$ 441,396	\$ 314,879	\$ 339,487	\$ 472,648	\$ 470,147

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**SoCalGas Response 4:-Continued**

- e. As discussed in the response to Questions 3.b above, keyhole technology has been used at SoCalGas since 2013. It has not been previously used by Gas Distribution. This technology is used to excavate hard-to-locate underground facilities. The technology is used to drill an 8-inch diameter access hole in concrete or asphalt at marked utility locations. It then hydro excavates to identify and determine the top and depth of the facility.
- f. SoCalGas does not utilize Vacuum Technology or Keyhole Technology for other excavation purposes in addition to hard-to-locate underground pipelines.