Exhibit Reference: SCG-4, Gas Distribution O&M and Capital Expenditures

Subject: Non-Routine Tool Purchases, GIS-Based Leak Survey Tracker and Mobile Data Terminal Replacements

Please provide the following:

- 1. Referring to page FBA-137, lines 2-12, please provide the following:
 - a. SoCalGas proposes to purchase 400 units of GIS-Based Leak Survey Tracker. Is this a new technology that SoCalGas has not previously purchased? If no, please provide the number of GIS-Based leak survey tracker SoCalGas purchased each year from 2009-2014 YTD and the annual amount incurred.
 - b. A detailed explanation showing how SoCalGas determined the number of units to purchase should be 400?
 - c. A detailed explanation showing why the 400 GIS-based leak survey trackers must be purchased in 2016.
 - d. Provide support for the unit cost of \$3,177 per unit shown on page 230 of the workpapers, and include a copy of all documents and calculations used to determine the unit cost.

SoCalGas Response:

- a. The GIS-Based Leak Survey Tracker is a new technology that SoCalGas has not previously purchased. The need for these leak survey trackers is discussed in the response to question 1.c. below.
- b. SoCalGas has 465 Construction Technicians and Energy Technicians Distribution who are leak survey trained. These employees operate out of 52 bases, and each base could have up to six employees walking leak survey at a given time, so 312 leak survey trackers are needed for the field. An additional 40 trackers are needed for centralized training so that they can be used when new employees are being trained. 48 trackers are being purchased as spare units. Please see the calculations below.

GIS-Based Leak Survey Trackers for the Bases

- = 52 Bases x 6 Employees Walking Leak Survey / Base
- = 312 Leak Survey Trackers for the Bases

Total GIS-Based Leak Survey Trackers

- = 312 Trackers for the Bases + 40 Trackers for Centralized Training + 48 Spares
- = 400 GIS-Based Leak Survey Trackers

SoCalGas Response to Question 1, Continued:

c. The need for these GIS-based leak survey trackers is discussed on page 227 of Exhibit SCG-04-CWP:

The GIS-based leak survey tracker is a hand-held device that will be used while performing leak surveys. This technology will enable surveyors to geo-tag the position of as-found leaks. Such geo-tag information can then be collected electronically to document the field survey findings. The ability to collect this information electronically with interface to SoCalGas' existing technologies such as, the GIS and Maintenance & Inspections database, can enhance the ability for abnormal field conditions to be reported, recorded, and followed up accordingly with minimal manual intervention involving data entry. This device will be blue-tooth linked to SoCalGas' leak detectors and will run on a mid-ware application that will integrate with the GIS and inspection systems.

It will take some time to set up our existing systems to integrate the new technology and test that integration, so 2016 is anticipated to be the earliest that this technology could be rolled out to the company.

d. The estimated unit cost was based on devices being used in production at other natural gas distribution utilities for electronic leak survey management. The separately provided CONFIDENTIAL document, ORA-SCG-DR-031-DAO_Q1.pdf shows the device and the base unit cost. This document should be treated as <u>CONFIDENTIAL PURSUANT TO P.U.</u> <u>CODE SECTION 583 & G.0.66-C</u>.

CALCULATIONS REMOVED DUE TO CONFIDENTIALITY

- 2. Referring to SoCalGas' discussion of mobile data terminal (MDT) replacements on pages FBA-137 to FBA-138, please provide the following information:
 - a. Provide the annual repair expense incurred from 2009-2014YTD for the 1,100 units of MDTs currently in SoCalGas' inventory.
 - b. Since SoCalGas plans to replace the existing MDTs from 2014-2016, has the associated expense to repair MDTs been removed from SoCalGas' 2016 forecast? If yes, please provide a citation to the testimony and/or workpapers wherein DRA can confirm the removal of such expenses.
 - c. Provide the number of MDTs SoCalGas purchased and the expenses incurred in 2014 YTD.
 - d. Provide the number of MDTs SoCalGas replaced in 2014 YTD.
 - e. Provide support for the claim MDTs fail at about 25% in the first 5-years of use.
 - f. Provide the age of the 1,100 MDTs SoCalGas plans to replace.
 - g. Provide support for the unit cost of \$5,800 per MDT as shown on page 233 of the workpapers.

SoCalGas Response:

- a. This information is not readily available. SoCalGas does not currently track the MDT repair costs separately. The repairs that are performed internally are part of the routine work and expenses of the Mobile Hardware and Applications Team, which is included in the Operations Management and Training workgroup. Costs associated with external repairs are charged to the department requesting the repair, which would be included in the Field Operations and Maintenance workgroup.
- b. Expenses associated with repairing the MDTs have not been removed from SoCalGas' historical base costs. It is expected that there will be some ongoing repair costs associated with the new units. Some repairs that have been needed for new units include the replacement of components such as LCD screens, keyboards, antennas, broadband cards, and protective covers.
- c. 283 MDTs and associated peripheral equipment were purchased in December 2014 at a cost of \$1,613,051 (stated in 2014 dollars). These MDTs will be deployed throughout 2015.
- d. 418 MDTs and associated peripheral equipment were replaced during 2014. These MDTs were purchased in December 2013.
- e. MDTs are relatively new to Gas Distribution, as shown by the ages in the table provided in response to Question 2f. below. Gas Distribution consulted with other departments who have been using similar devices in the field for a longer period of time. Based on their field experience and observations, they estimated that approximately 25% of their devices failed within the first five years of use.

Response to Question 2 (Continued)

f. Please see the table below for the ages of the MDTs that SoCalGas plans to replace.

MDT Age in 2013	Number of MDTs
2 Years	95
3 Years	139
4 Years	575
5 Years	268
6 Years	23
Total	1,100

g. The estimated unit cost was based on the base cost of the unit at the time when the estimate was being developed and the tax and shipping fees. The separately provided CONFIDENTIAL document, ORA-SCG-DR-031-DAO_Q1.pdf shows the device details and the base unit cost. This document should be treated as <u>CONFIDENTIAL PURSUANT TO</u> <u>P.U. CODE SECTION 583 & G.0.66-C</u>.

CALCULATIONS REMOVED DUE TO CONFIDENTIALITY

This base unit cost and the estimated taxes and shipping fees are also shown on page 237 of Exhibit SCG-04-CWP.