**Exhibit Reference:** SCG-36 and SCG-36-WP **SCG Witness:** Flora Ngai **Subject:** Depreciation

Please provide the following. "Workpapers" refers to SCG-36-WP.

1. Referring to page FN-9, Section C, and page FN-23, lines 1-6, please explain how SoCalGas determines whether or not there is a need to update the average service lives (square curves) for those accounts for which SoCalGas follows vintage accounting under FERC Account Release 15.

#### SoCalGas Response 1:

SoCalGas generally determines whether the average lives (square curves) for accounts which follow FERC Accounting Release 15 needs to be updated based upon information obtained from operations and accounting personnel regarding the assets in the accounts.

- 2. Referring to all workpapers in the section, "Service Life and Survivor Curve Selections," on page 145 of the workpapers et seq., please explain:
  - a. What is the unit used for the "Error Sum" columns?
  - b. What is the calculation methodology for the "Residual Measure" columns?

#### SoCalGas Response 2:

- a. There is no unit associated with the "Error Sum" column. The value is a statistic used to determine the goodness of fit between the actual data and projected data (IOWA curves) based on the minimum sum of squared deviations. "The difference between the observed and projected data is calculated for each data point in the observed data. This difference is squared, and the resulting amounts are summed to provide a single statistic that represents the quality of fit between the observed and projected curves."<sup>1</sup>
- b. The "Residual Measure" column is an alternate method to identify the best fitting curve based on the least absolute difference. This statistic is calculated by summing the absolute errors between the actual data and projected data (IOWA curves).

<sup>&</sup>lt;sup>1</sup> Public Utility Depreciation Practices, National Association of Regulatory Utility Commissioners (NARUC), 1996, p. 124.

- 3. Referring to page FN-13, lines 15-26, please explain:
  - a. Given the wide range of average service lives (referenced as 40 to 80 years), why does SoCalGas not depreciate wells by sub-account?
  - b. What are the characteristics of wells with longer service lives (e.g., 80 years), as compared to wells with shorter service lives (e.g., 40 years)?
  - c. What is the dispersion of service lives for "wells kept open and used for observation"?
  - d. What is the dispersion of service lives for "wells used for injection and withdrawal of gas" other than those discussed above, in part (c)?
  - e. How does SoCalGas account for the interim retirements referenced in lines 20-21?

## SoCalGas Response 3:

- a. SoCalGas' accounting data at sub-account levels were used to track plant additions associated with regulatory programs, and by themselves do not contain the complete and historical data required for life analysis without combining them with the primary account 352.00. For example, subaccount 325.25 was created to record only plant additions associated with the Honor Rancho Expansion Program during 2011-2013.
- b. In preparing the response to this question, SoCalGas discovered an error in Exhibit SCG-36 at FN-13, lines 17-19 regarding what the identified years represent. The years provided refers to the age of the four major storage locations based on when operations began for SoCalGas, not the average service life. The testimony in Exhibit SCG-36 at FN-13, lines 17-19 will be corrected in errata as follows:

"This account is comprised of over 300 wells at four major locations ranging in age from 45 to 85 years, relative to when SoCalGas began storage operations."

Generally, the service life of a well will vary depending on operating conditions, including operating and maintenance practices, age, capacity needs, technological changes, and environmental and compliance factors.

# SoCalGas Response 3:-Continued

- c. Accounting data does not provide the information needed to perform life studies only on wells kept open and used for observation.
- d. Accounting data does not provide the information needed to perform life studies only on wells used for injection and withdrawal of gas.
- e. When an asset is retired, the entry is a credit to plant at original cost of the asset (reduction to plant) and a debit to accumulated depreciation reserve (reduction to reserve).

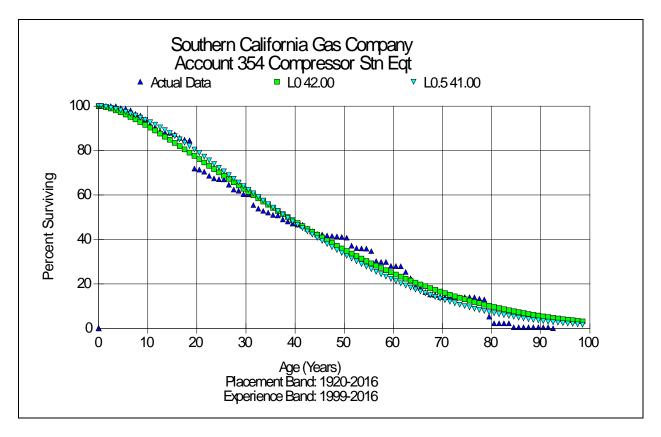
- 4. Referring to page FN-14, lines 10-20, and pages 152-153 of the workpapers, please explain:
  - a. How much of the proposed change in the depreciation rate for FERC Account 354 is due to the change in curves, independent of the change in net salvage?
  - b. Page 153 of the workpapers shows the uncommon result that ranked survivor curves options 3 through 27 all take an average service life of 41.44 years.
    - i. Please confirm whether or not this is correct.
    - ii. If this is incorrect, please provide all necessary corrections, including a corrected table for page 153 of the workpapers, updated recommendations, and a corrected narrative explanation of recommendations for this account.
  - c. Please provide a new copy of the graph on page 152 of the workpapers that includes the stub (actual data) curve, SoCalGas's recommended curve (if the recommended curve changes per part (b) above, include the new recommended curve), and the current L0.5 curve.
  - d. The graph on page 152 of the workpapers suggests a sudden decrease in survivorship at age 19, approximately.
    - i. What is the cause of this decrease in survivorship?
    - ii. What is the magnitude, in percentage surviving, of this decrease in survivorship?
    - iii. What survivor curve has the best fit to the stub curve for actual data from ages 19.5 and higher, independent of the stub curve from ages 0.5 through 18.5?
    - iv. Please provide an additional copy of the graph on page 152 that includes the stub curve, the curve selected above in (iii), and the current L0.5 curve.

#### SoCalGas Response 4:

- a. Independent of the change in net salvage, the proposed change in depreciation rate for FERC Account 354 due to change in curves is an increase of 0.02%. Please refer to the attached document "ORA-SCG-007-CL8\_A4a\_Attachment.xlsx" for the supporting calculation.
- b. Page 153 of the workpapers (Exhibit SCG-36-WP) is correct.
- c. Please see the response to Question 4(b) above. Page 153 of the workpapers (Exhibit SCG-36-WP) is correct.
- d.
- i. The decrease in survivorship at approximately age 19 is attributed to large retirement transactions relevant to other age intervals. Please refer to the attached document "ORA-SCG-007-CL8\_Q4d\_Attachment.pdf" which shows the observed life table for FERC account 354.
- ii. The magnitude of the decrease in percentage surviving from age 18.5 to age 19.5 is 12.66% (84.55% 71.89%). Please refer to the attached document "ORA-SCG-007-CL8\_Q4d\_Attachment.pdf" which shows the observed life table for FERC account 354.
- iii. The survivor curve that has a best fit to the actual data from age 19.5 and higher, independent of ages 0.5 to 18.5 is 42 L0.

#### SoCalGas Response 4: (cont.)

iv. The graph below shows the actual data, selected curve identified in response to Question 4(d)(iii) above of 42 L0, and the current 41 L0.5 life/curve.



5. Referring to page FN-16, lines 26-28, SoCalGas states that "replacement of engines, gas turbines, and compressors may occur after 15 years." Please explain why the graph of the actual data for FERC Account 368 on page 164 of the workpapers does not reveal any such sudden or marked decrease in survivorship at approximately age 15 – or any other age - as might accrue to such a managerial retirement decision.

#### SoCalGas Response 5:

Although the graph of actual data for FERC Account 368 on page 164 of workpapers (Exhibit SCG-36-WP), which is based on accounting data, does not show a sharp decrease in survivorship at age 15, information from SoCalGas operations management (*i.e.*, replacement of engines, gas turbines, and compressors may occur after 15 years) is taken into consideration in selecting the forecasted average service life.

- 6. Referring to page FN-17, lines 15-23, please explain:
  - a. Please reference all testimonial sources from SoCalGas detailing the capital expenditure requests for plant that is now classified as SCADA.
  - b. What was the original forecasted service life for SCADA plant?
  - c. How was the original forecasted service life for SCADA plant determined?
  - d. What were the previous depreciation parameters for the referenced "assets capitalized to the general plant communication account 397" that were transferred to FERC Account 370?
  - e. What is the dollar amount of plant, depreciation reserve, and weighted age of the transferred plant?

#### SoCalGas Response 6:

- a. Details regarding the capital expenditures for supervisory control and data acquisition (SCADA) may be found in Exhibit SCG-06, direct testimony of Beth Musich, and Exhibit SCG-07, joint direct testimony of Michael A. Bermel and Beth Musich.
- b. The current CPUC-authorized average service life for SCADA plant is 15 years.
- c. SCADA equipment was charged to FERC account 397, which follows vintage accounting under FERC Accounting Release 15. Generally, the average service life for vintage group accounting is based on information from operations and accounting personnel.
- d. The depreciation parameters for the assets capitalized to general plant account 397 that were transferred to FERC Account 370 is 15 SQ.
- e. The dollar amount of plant and depreciation reserve transferred from FERC account 397 to FERC account 370 is \$5.9 million and \$524 thousand, respectively. Since all transferred assets have a 2014-year vintage, the weighted age of the transferred plant is 2.5 years (2016-2014+.5).

7. Referring to page FN-17, lines 24-30, please provide a description of the items that are charged to FERC Account 371.

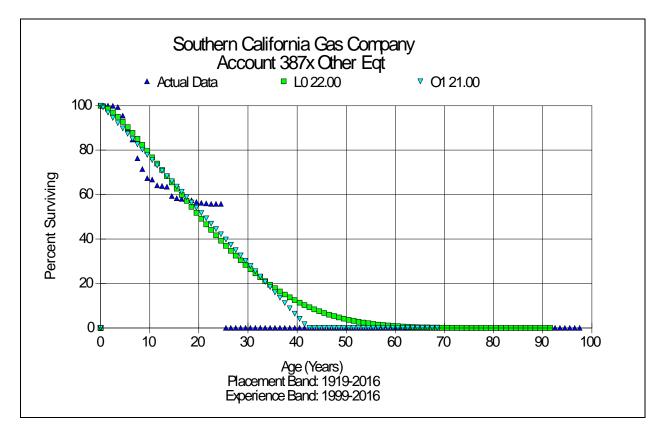
# SoCalGas Response 7:

Items charged to FERC account 371 can be found in the Sempra Energy Utilities Capitalization Policy under FERC account 371. Please refer to the attached document "ORA SCG CL8\_Q7\_Attachment.pdf."

- 8. Referring to page FN-21, lines 1-7, and page 184 of the workpapers, please provide:
  - a. Please provide a description of the items that are charged to FERC Account 387.
  - b. Please provide a copy of the graph on page 184 that includes the stub curve, the recommended curve, and the current O1 curve.

# SoCalGas Response 8:

- a. Items charged to FERC account 387 include remote readers, recording gauges, portable pumps, and other distribution system equipment not identified in other distribution FERC accounts.
- b. Below is a copy of the graph on page 184 that includes the stub curve, the recommended curve, and the current O1 curve.



9. Referring to page FN-22, lines 1-7, please provide a description of the items that are charged to sub-account 390.1.

# SoCalGas Response 9:

Items charged to FERC account 390.1 can be found in the Sempra Energy Utilities Capitalization Policy under Facilities. Please refer to the attached document "ORA SCG CL8\_Q9\_Attachment.pdf."

10. Referring to pages FN-13 et seq., SoCalGas specifically notes a large decrease (i.e., more negative) in net salvage, as given by the 15-year bands for the 2016 and 2019 GRCs, for FERC Accounts 351, 352, 368, and 369. For each account, please explain why the account is particularly susceptible to a trend of decreasing net salvage.

#### SoCalGas Response 10:

Generally, the cost of removal increases with age, inflation, and regulation. The trend toward decreasing net salvage is due to higher labor costs, equipment costs, and costs to properly dispose of hazardous materials. For example, above ground pipes and structures at storage facilities typically contain lead paint and asbestos, which require proper disposal. The cost of removal percent is a function of retirements at original costs. The later the asset retires, the more negative the net salvage becomes, due to inflation associated with the cost to remove the asset. Each of the FERC accounts 351, 352, 368 and 369 have experienced increasing cost of removal activity in recent years as shown in Exhibit SCG-36-WP, Section IV Salvage Studies.