**QUESTION 1:**

This question is similar to ORA-15 Q1 except that it asks to verify the historical investment for ACT 378 as shown in Table 4 of Mr.Chaudhury’s workpapers. At pages 15-16 of the above subject regarding distribution-related marginal unit cost and marginal cost revenue, SoCalGas/SDG&E witness Mr. Chaudhury states : “The period for the regression analysis is 15 years: nine years of historical data (2005-2013) and six years of forecast data (2014-2019).” In the SCG 2017 TCAP LRMC Distribution Costs excel spreadsheet workpapers, specifically at Tab “Out Investment History” at Table 4: Load-Growth-Related Total, High & Medium Pressure Distribution Mains Historical Investments, the historical investment information on distribution mains presented under excel columns BJ through BM and at excel rows 13 through 21 are designated with the captions “New Business,” “Pressure Betterment,” “Contrib New Constr,” “ACT 378 Mtr Reg Stn,” and “Annual Total.” The information in Table 4 are stated in 2017$. The workpapers of Mr.Chaudhury also provides the factor to escalate prices from 2013-2017 applicable to capital, which is 1.0876. ORA notes that in the recent A.14-11-004 2016 GRC for SoCalGas, SoCalGas witness on Gas Distribution capital expenditures (CAPEX) Frank Ayala presented information on the 2009-2014 SoCalGas recorded capital expenditures for gas distribution.[[1]](#footnote-1) The information in the SoCalGas GRC gas distribution CAPEX workpapers are stated in 2013$.

1. Please explain whether the information on historical investment for “ACT 378 Mtr Reg Stn” shown in excel column BM represent the SoCalGas actual recorded historical investment for the period 2005-2013 shown in Table 4. If not, please so confirm and state what the costs shown represent.
2. ORA observed a material difference when it compared a portion of the historical investment for the period 2009-2013 for “ACT 378 Mtr Reg Stn” shown at Table 4 of Mr. Chaudhury’s workpapers against those shown in the 2016 GRC workpapers for Exhibit SCG-04-CWP-R shown below:

|  |  |
| --- | --- |
| **Table 4** | **Total Distribution Mains** |
| Year | New | Pressure | Contrib. | ACT 378 | Annual | **Cumulative** |
| Business | Betterment | New Constr | Mtr, Reg Stn | Total | **Total** |
| 2005 | 130,600,833 | 68,569,217 | (3,755,464) | 4,468,683 | 199,883,269 | 199,883,269 |
| 2006 | 140,308,251 | 75,974,323 | (16,001,924) | 9,609,107 | 209,889,757 | 409,773,026 |
| 2007 | 97,059,456 | 47,815,313 | (170,565) | 5,959,329 | 150,663,533 | 560,436,559 |
| 2008 | 29,741,732 | 47,542,052 | (391,549) | 6,948,113 | 83,840,348 | 644,276,907 |
| 2009 | 15,311,812 | 36,443,478 | (313,498) | 4,350,817 | 55,792,608 | 700,069,515 |
| 2010 | 9,949,237 | 34,403,550 | (734,630) | 5,742,870 | 49,361,027 | 749,430,542 |
| 2011 | 12,421,550 | 5,698,970 | 0 | 7,429,092 | 25,549,612 | 774,980,154 |
| 2012 | 13,165,722 | 13,972,011 | 0 | 8,139,388 | 35,277,122 | 810,257,275 |
| 2013 | 17,147,077 | 1,008,112 | 3,112 | 7,950,652 | 26,108,954 | 836,366,229 |
| 2014 | 0 | 0 | 0 |  |  |  |
| Total | 465,705,671 | 331,427,026 | (21,364,518) | 60,598,050 | 836,366,229 |

Portion of Table 4 above for “ACT378 Mtr Reg Stn” are reformatted to be comparable to SCG-04-CWP-R Table on gas distribution CAPEX:

(in Thousands of 2017 Dollars)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description | 2009 | 2010 | 2011 | 2012 | 2013 |
| (a) | (b) | (c) | (d) | (e) | (f) |
| ACT 378 MtrReg Stn | $4,351 | $5,742 | $7,429 | $8,139 | $7,951 |

From SCG-04-CWP-R on Gas Distribution

2009-2013 SoCalGas’ Recorded Capital Expenditures

(in Thousands of 2013 Dollars)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description | 2009 | 2010 | 2011 | 2012 | 2013 |
| (a) | (b) | (c) | (d) | (e) | (f) |
| 1.Meters | $20,116 | $19,024 | $17,572 | $16,474 | $18,987 |
| 2.Regulators | $4,282 | $4,454 | $4,756 | $4,321 | $6,826 |
| 3.Total Mtr & Regulators | $24,398 | $23,478 | $22,328 | $20,795 | $25,813 |

ORA restated the above in 2017$ using SoCalGas factor for capital of 1.0876 shown below:

(in Thousands of 2017 Dollars)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description | 2009 | 2010 | 2011 | 2012 | 2013 |
| (a) | (b) | (c) | (d) | (e) | (f) |
| 1.Meters | $21,878 | $20,691 | $19,111 | $17,917 | $20,650 |
| 2. Regulators | $4,657 | $4,844 | $5,173 | $4,700 | $7,424 |
| 3.Total Mtr & Regulators | $26,535 | $25,535 | $24,284 | $22,617 | $28,074 |

There is a material difference between the two sets of data on historical distribution investment on “ACT 378 Mtr Reg Stn” and “Total Meters & Regulators” observed as shown below:

(in Thousands of 2017 Dollars)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description | 2009 | 2010 | 2011 | 2012 | 2013 |
| (a) | (b) | (c) | (d) | (e) | (f) |
| 1. ACT 378 Mtr Reg Stn | $4,351 | $5,742 | $7,429 | $8,139 | $7,951 |
| 2. Total Mtr & Regulators | $26,535 | $25,535 | $24,284 | $22,617 | $28,074 |
| 3. Difference | $22,184 | $19,792 | $16,855 | $14,477 | $20,124 |

However, compared against only “Regulators, “the difference observed between “ACT 378 Mtr Reg Stn” and just “Regulators appear to be less such that “ACT 378 Mtr Reg Stn” could represent only the historical investment in regulators, as shown below:

(in Thousands of 2017 Dollars)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description | 2009 | 2010 | 2011 | 2012 | 2013 |
| (a) | (b) | (c) | (d) | (e) | (f) |
| 1. ACT 378 Mtr Reg Stn | $4,351 | $5,742 | $7,429 | $8,139 | $7,951 |
| 2. Regulators | $4,657 | $4,844 | $5,173 | $4,700 | $7,424 |
| 3. Difference | $306 | ($899) | ($2,256) | ($3,440) | ($527) |

Please provide an explanation on why there could be a material difference between the two sets of data on historical distribution investment on “ACT 378 Mtr Reg Stn” as described above. Please provide the necessary information to support the basis of your explanation.

**RESPONSE 1:**

1. The information on historical investment for “ACT 378 Mtr Reg Stn” shown in Excel column BM in Table 4 for the period 2005-2013 represents SoCalGas’ actual recorded historical investment costs escalated to 2017$ by IHS Global Insight’s forecast of the Handy-Whitman Index. (The Handy-Whitman index calculates historical cost trends for different types of utility construction.)
2. The two sets of historical data are not comparable. The ORA table showing a larger difference in historical costs can be explained by the fact that Mr. Ayala includes historical meter costs (see page FBA-124 and 125, Exhibit SCG-04-R) in his definition of “Gas Distribution Measurement and Devices” cost category, whereas in Mr. Chaudhury’s testimony, meter costs are captured in the customer-related cost function. In the broader-focused GRCs, it is not necessary to distinguish between customer-related and distribution-related costs; however, in a TCAP proceeding, it is important to make this distinction as the cost driver for customer-related functions is different from the cost driver for distribution functions.

Even the ORA table showing the small difference (excluding historical meter costs) is not comparable. Mr. Ayala includes the cost of regulators installed with customer meters; such regulator costs are part of customer-related costs in Mr. Chaudhury’s testimony.

**QUESTION 2:**

At page 16 of the above subject regarding marginal direct O&M costs, SoCalGas/SDG&E witness Mr. Chaudhury states at lines 9-12: “The 2013 recorded distribution-related direct O&M costs are allocated between medium pressure and high pressure distribution systems based on the split in total distribution investment between the medium and high pressure distribution systems. Distribution-related direct O&M costs are booked to FERC Accounts 874, 875, 887, and 889.” The workpapers show marginal MP distribution cost for direct O&M of $9.98/MCFD (from Table 4 Tab “Testimony Tables” of the SCG 2017 TCAP LRMC Distribution Costs excel spreadsheet workpapers). These workpapers indicate that $9.98 was derived from total distribution O&M costs of $47,052 (in 2013 $) and escalated to 2017$. The SCG 2017 TCAP LRMC O&M Loader excel file at Tab “Net O&M” shows the 2013 recorded costs for SoCalGas Accounts 874, 875, 887, and 889. The recorded costs of these four accounts are in the total amount of $60,129,365.

1. Please fully explain how the marginal MP distribution cost for direct O&M of $9.98/MCFD was calculated based on the recorded costs of the four accounts described above.

**RESPONSE 2:**

1. As ORA points out above, the 2013 total recorded costs of the four accounts combined (874,875,887 and 889) is $60,129,365. This amount reflects O&M costs for both distribution mains and service lines. As shown in the attached Excel file, the distribution main’s share of the $60,129,365 cost is $19,501,000 (tab “Summary,” cell C12). Adding overhead of $25,551,000 (tab “Summary,” cell E12), reflecting direct O&M costs associated with activities such as Operation Supervision and Engineering, Maintenance Supervision and Engineering expenses for distribution function, results in total distribution direct O&M cost of $47,052,000. The MP distribution cost for direct O&M of $9.98/MCFD was derived from total distribution O&M costs of $47,052,000 (in 2013 $) by escalating to 2017$, then multiplying by MPD share of total cumulative distribution investment in 2013, and dividing by the MPD peak day demand (see SCG 2017 TCAP LRMC Distribution Costs excel spreadsheet, tab “Out\_MP\_LRMC,” cell D19).



**QUESTION 3:**

The SCG 2017 TCAP LRMC Distribution Costs excel spreadsheet workpapers also show the percent share of investment for Medium Pressure Distribution (MPD) of 86% and 14% for High Pressure Distribution (HPD) at Tab “Out MP LRMC”. The percent share calculation depends on the historical distribution investment over the period 2005-2013. Assuming that the recorded information for the period 2009-2013 presented in the SoCalGas 2016 GRC testimony of witness F.Ayala and discussed in Question 1 above and the previous ORA data request ORA-15 more accurately represent the actual recorded for the period 2009-2013, does SoCalGas agree that the calculation of the percent share of investment for MPD and HPD, currently at 86% and 14%, respectively, could result in different percentage shares? If not, please explain your response.

**RESPONSE 3:**

See SoCalGas’ earlier responses (Question 1 above and the previous ORA data request ORA-15) with respect to the incomparability of GRC and TCAP historical investment data. Further, the recorded information for the period 2009-2013 presented in the SoCalGas 2016 GRC testimony of witness Ayala is not broken down between investment in MPD and HPD. Therefore, percentage shares between MPD and HPD cannot be calculated based on Mr. Ayala’s GRC testimony.

**QUESTION 4:**

The SCG 2017 TCAP LRMC Distribution Costs excel spreadsheet workpapers also show the historical HPD Peak Month Demand and the MPD Peak Day Demand for the period 2005-2013. Please explain whether the historical data on demand as described and shown for 2005-2013 represents actual recorded historical demand, and if not, please describe the nature of the information on the demand for the period 2005-2013,

**RESPONSE 4:**

SoCalGas’ residential and core G-10 commercial and industrial customers’ gas demand is HDD (heating degree days)-sensitive with higher demand in winter months due to space heating needs; the gas demand for other customer classes is HDD-insensitive. For the HDD-insensitive customer classes, the historical HPD Peak Month Demand for the Period 2005-2013 are recorded historical December gas consumption. For these HDD-insensitive customer classes (except for gas engine, gas air conditioning and NGV customers), the historical HPD Peak Day Demand for the Period 2005-2013 includes an adjustment to historical average daily December demand for the class that reflects the expected ratio of December peak demand relative to average daily December demand for the class.

For HDD-sensitive customer classes, neither the historical HPD Peak Month Demand nor the MPD Peak Day Demand for the period 2005-2013 represents actual recorded historical demand. The HPD Peak Month Demand is derived by adjusting historical demand to reflect Peak Month HDD design criteria (December Cold Year HDDs for this calculation were 357 HDDs). The HPD Peak Day Demand is derived by adjusting historical demand to reflect Peak Day HD design criteria (peak day temperature design was 40 ºF, which equates to 25 HD).

1. Exhbit SCG-04-R, Frank B. Ayala and workpapers in Exhibit SCG-04-CWP-R. [↑](#footnote-ref-1)