APPLICATION OF SOUTHERN CALIFORNIA GAS COMPANY AND SAN DIEGO GAS & ELECTRIC COMPANY FOR AUTHORITY TO REVISE THEIR NATURAL GAS RATES EFFECTIVE JANUARY 1, 2017 IN THEIR TRIENNIAL COST ALLOCATION PROCEEDING - PHASE 2

(A.15-07-014)

(DATA REQUEST ORA-TCAP2-SCG-17)

QUESTION 1:

This question is similar to Question 1 in ORA-15 Q1 except that the comparison of Table 4 is to the previous Table 4 in the 2013 TCAP in A.11-11-002 for the period 2005-2010. 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$. The workpapers of Mr.Chaudhury also provides the factor to escalate prices from 2013-2017 applicable to capital, which is 1.0876. ORA notes that in the previous 2013 TCAP in A.11-11-002 for gas distribution, SoCalGas/SDG&E witness Mr. Lenart provided a similar Table 4: Load-Growth-Related Total, High & Medium Pressure Distribution Mains Historical Investments.[1] The historical investment information in the workpapers of Mr. Lenart are for the period 2001-2010 and stated in 2013$.

a) ORA observed a material difference when it compared a portion of the historical investment for the period 2005-2010 for "New Business", "Pressure Betterment" "Contrib New Constr" and "ACT 378 Mtr Reg Stn" shown at Table 4 of Mr. Chaudhury's 2017 TCAP workpapers against those shown in Table 4 of the 2013 TCAP workpapers for Mr. Lenart for the same period 2005-2010 as shown below: (in 2017 Dollars)

[1] Exhibit SCG-04-R, Frank B. Ayala and workpapers in Exhibit SCG-04-CWP-R.

APPLICATION OF SOUTHERN CALIFORNIA GAS COMPANY AND SAN DIEGO GAS & ELECTRIC COMPANY FOR AUTHORITY TO REVISE THEIR NATURAL GAS RATES EFFECTIVE JANUARY 1, 2017 IN THEIR TRIENNIAL COST ALLOCATION PROCEEDING - PHASE 2

(A.15-07-014)

(DATA REQUEST ORA-TCAP2-SCG-17)

Table 4 Chaudhury WP	**Total Distribution Mains**					
Year	New Business	Pressure Betterment	Contrib. New Constr	ACT 378 Mtr, Reg Stn	Annual Total	**Cumulative 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	

From Mr. Lenart's Table 4 2013 TCAP Workpapers on Gas Distribution LRMC in A.11-11-002 (in 2013 Dollars)

Table 4 Lenart WP	**Total Distribution Mains**					
Year	New Business	Pressure Betterment	Contrib. New Constr	ACT 378 Mtr, Reg Stn	Annual Total	**Cumulative Total**
2001	49,887,294	21,698,124	0	4,852,820	76,438,238	76,438,238
2002	64,961,874	7,801,005	0	3,193,676	75,956,554	152,394,792
2003	67,745,281	46,133,766	(5,391,692)	3,659,313	112,146,667	264,541,459
2004	69,828,268	26,892,199	(12,685,850)	3,976,249	88,010,866	352,552,325
2005	83,838,747	42,457,805	(2,788,612)	2,494,780	126,002,720	478,555,045
2006	90,305,749	48,661,716	(10,054,316)	5,984,627	134,897,776	613,452,821
2007	59,578,164	30,987,943	(119,805)	4,036,697	94,482,999	707,935,819
2008	17,891,891	28,791,965	(310,707)	4,617,456	50,990,605	758,926,425
2009	9,915,537	25,876,777	(256,129)	3,195,217	38,731,402	797,657,827
2010	6,111,018	20,937,219	(610,643)	4,152,942	30,590,535	828,248,362
Total	520,063,823	300,238,518	(32,217,755)	40,163,776	828,248,362	

ORA compared the above Table 4 Workpapers for Mr. Chaudhury and Mr. Lenart, in particular, the total amount for the 2005-2010 period and restated the amounts in 2017$ using SoCalGas factor for capital of 1.0876 as shown below:
(in 2017 Dollars)

Table 4 Chaudhury		Total Distribution Mains					
Line No.	Year	New Business	Pressure Betterment	Contrib. New Constr	ACT 378 Mtr, Reg Stn	Annual Total	Cumulative Total
1	2005	130,600,833	68,569,217	(3,755,464)	4,468,683	199,883,269	199,883,269
2	2006	140,308,251	75,974,323	(16,001,924)	9,609,107	209,889,757	409,773,026
3	2007	97,059,456	47,815,313	(170,565)	5,959,329	150,663,533	560,436,559
4	2008	29,741,732	47,542,052	(391,549)	6,948,113	83,840,348	644,276,907
5	2009	15,311,812	36,443,478	(313,498)	4,350,817	55,792,608	700,069,515
6	2010	9,949,237	34,403,550	(734,630)	5,742,870	49,361,027	749,430,542
7	Total 2005-2010	422,971,321	310,747,933	(21,367,630)	37,078,918	749,430,542	

Table 4 Lenart		Total Distribution Mains					
Line No.	Year	New Business	Pressure Betterment	Contrib. New Constr	ACT 378 Mtr, Reg Stn	Annual Total	Cumulative Total
1	2005	91,183,021	46,177,108	(3,032,895)	2,713,323	137,040,558	137,040,558
2	2006	98,216,532	52,924,482	(10,935,074)	6,508,881	146,714,821	283,755,379
3	2007	64,797,212	33,702,487	(130,300)	4,390,311	102,759,710	386,515,088
4	2008	19,459,221	31,314,141	(337,925)	5,021,945	55,457,382	441,972,471
5	2009	10,784,138	28,143,583	(278,566)	3,475,118	42,124,273	484,096,743
6	2010	6,646,343	22,771,319	(664,136)	4,516,740	33,270,266	517,367,009
7	Total 2005-2010	291,086,467	215,033,121	(15,378,896)	26,626,318	517,367,009	

There is a material difference between the two sets of data on historical distribution investment for the 2005-2010 period observed as shown below:
(in 2017 Dollars)

Line No.	Year	New Business	Pressure Betterment	Contrib. New Constr	ACT 378 Mtr, Reg Stn	Annual Total	Cumulative Total
(a) Line 7 Chaudhury	Total 2005-2010	422,971,321	310,747,933	(21,367,630)	37,078,918	749,430,542	749,430,542
(b) Line 7 Lenart	Total 2005-2010	291,086,467	215,033,121	(15,378,896)	26,626,318	517,367,009	517,367,009
(c)Difference (a) less (b)	Total 2005-2010	131,884,854	95,714,812	(5,988,734)	10,452,600	232,063,533	232,063,533

Please provide an explanation on why there could be a material difference between the two sets of data on historical gas distribution investment for the period 2005-2010 between the two successive TCAPs as described above. Please provide the necessary information to support the basis of your explanation.

RESPONSE 1:

The distribution investment costs, with the exception of Account 378 - Meter, Regulator Station costs, are the historical footage by pipe size multiplied by the updated pipeline unit costs that are escalated. The historical footage did not change between the two TCAPs. For this TCAP, distribution main unit costs increased considerably. It is difficult to specifically explain the change in the cost basis without extensive time required to review each of the underlying data points and complete a comparative review. However, as background, the cost information was directly extracted from the Construction Management System (CMS) and SAP with details for each of the construction jobs including the direct cost, overhead expense, and associated footage. It is this data that formed the basis of the cost/foot calculations by pipe size. For the development of this TCAP, SoCalGas used data for the period 2009 to 2013; and, for the 2013 TCAP, data for the period of 2005 to 2010. In general, the direct cost of replacement work can be influenced by the mix of work that is being completed (including general main replacements, supply lines, freeway and franchise construction projects, and abandonments), contractor utilization and associated rates, materials expenses, construction restrictions, paving and permitting fees, other general construction requirements (e.g. installation of valves, fitting, design), and field operating conditions (e.g. soil types). Similarly, the direct cost of new business installations can be influenced by contractor utilization and associated rates, materials expenses, paving and

permitting fees, general construction requirements, and field operating conditions. In each instance, the cost/foot will also be influenced by the footage installed wherein there can be economies of scale with larger system installations. In addition to direct expenses, there is the inclusion of overhead costs that will impact the total cost/foot shown. These overhead costs can also vary depending on the overall level of expenditures and the mix of capital work completed. The plastic distribution main costs were derived as described above.

The steel distribution main costs in this TCAP were derived by escalating unit costs from the last TCAP as the 2009 - 2013 unit cost data generally appeared very high and did not seem reasonable compared to prior TCAP filings. For the steel distribution main costs, both Mr. Lenart and Mr. Chaudhury's workpapers started with the same 2010 costs. To derive Mr. Lenart's 2013 costs, the 2010 costs were escalated by approximately 9%, based on forecasted escalation factor contained in the Global Insight First Quarter 2011 Power Planner Utility Cost Forecast (released on April 13, 2011). To derive Mr. Chaudhury's 2013 costs, the same 2010 costs were escalated by approximately 14%,[2] a significantly higher number, based on historical escalation factor contained in the Global Insight Fourth Quarter 2014 Power Planner Utility Cost Forecast (released February 17, 2015). The two Global Insight reports indicate that the actual steel distribution main cost increase between 2010 and 2013 was much higher indeed (as captured in Mr. Chaudhury's workpapers) than the cost forecasted in the 2013 TCAP (as captured in Mr. Lenart's workpapers).

[2] In fact, the recorded Handy-Whitman Index implied a 20% escalation but SoCalGas used the lower 14% number based on both steel and plastic distribution mains.