ORA DATA REQUEST ORA-SCG-054-DAO SOCALGAS 2019 GRC – A.17-10-008 SOCALGAS RESPONSE **DATE RECEIVED: DECEMBER 15, 2017 DATE RESPONDED: DECEMBER 10, 2017**

Exhibit Reference: SCG-04 SCG Witness: Gina Orozco-Mejia Subject: Gas Distribution, Costs and Activities

Please provide the following:

1. Referring to Ex. SCG-04 testimony, page GOM-5, lines 7-20, please provide a copy of all calculations, analyses, and/or documents SCG used to support its claims that: (a) SCG's pipeline infrastructure continues to age, and (b) its system requires higher levels of maintenance resulting in higher costs.

SoCalGas Response 1:

Gas distribution system components have a finite useful life that must be observed and repairs or replacements must be anticipated. As these components approach their finite life, it is SoCalGas observation that additional maintenance is required to prevent service interruptions, noncompliance situations, or adverse safety conditions. The bullets below provide data on some of these aging components.

As shown in the excerpt below from the 2016 DOT gas distribution system annual report, • approximately 41% of SoCalGas' mains and approximately 32% of SoCalGas' services within its system are over 50 years old. As discussed in the Gas Distribution Testimony, Ex. SCG-04-R, page GOM-102, lines 13-14 and page GOM-104, lines 25-26, as mains and services age, they are more prone to corrosion and leakage.

4.MILES OF MAIN AND NUMBER OF SERVICES BY DECADE OF INSTALLATION											
	UNKNOWN	PRE- 1940	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	2010-2019	TOTAL
MILES OF MAIN	0	2354	2942	8263	7065	7102	9576	5513	6327	1214	50356
NUMBER OF SERVICES	0	58168	124734	599536	587800	700235	1066470	525030	595200	174129	4431302

- As discussed in the Gas Distribution Testimony, Ex. SCG-04-R, page GOM-110, lines 20-26, approximately 33% of regulator stations in SoCalGas' system are 35 years and older.
- As shown in page 46 of workpapers SCG-04-WP_GDIST, cathodic protection expenses • continued to increase as SoCalGas increases the maintenance on its steel mains under cathodic protection to keep this infrastructure under compliance.

	In 2016\$ (000) Incurred Costs									
		Adju	isted-Recor	Adjusted-Forecast						
Years	2012	2013	2014	2015	2016	2017	2018	2019		
Labor	6,625	6,865	7,442	7,805	8,623	8,940	9,678	10,542		
Non-Labor	3,033	3,577	4,789	4,835	5,780	6,429	7,104	7,779		
NSE	0	0	0	0	0	0	0	0		
Total	9,659	10,442	12,232	12,640	14,403	15,369	16,782	18,321		
FTE	75.6	79.0	85.3	89.3	99.1	102.7	111.2	121.4		

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2. Referring to SCG's testimony page GOM-6, lines 9-16, please provide a copy of all calculations, analyses, and/or documents SCG used to support its claim that state and municipal agency will be imposing new and more stringent administrative, planning and field construction operating requirements that will result in increased costs during the TY 2019 cycle.

SoCalGas Response 2:

SoCalGas' maintains a working relationship with 223 municipalities as well as state agencies such as Caltrans. Each of these municipalities and agencies have their own set of requirements that SoCalGas must adhere to. Below are some examples of requirements that have increased costs.

- Since 2015, the new requirement of removal of abandoned pipe in a Caltrans right-of-way has been enforced for both SoCalGas' mains and services. This has caused an increase in cost for capital projects. SoCalGas understands that this requirement will continue during the TY 2019 cycle and onward. See the attached document ORA-SCG-054-DAO_Q2.a and ORA-SCG-054-DAO-Q2.b, a Caltrans application checklist and a Caltrans permit application guide, respectively, for further details on Caltrans requirements.
- Additionally, there is an increase in a requirement of engineer-stamped plans from the cities, which strains planning with the need for additional communication. All cut and bore projects will now require plan view and stamped engineering drawings, resulting in an increase of \$500 to \$1,000 dollars per project.
- There are new requirements for paving to require a slurry purpose backfill to be used on all excavations that will increase the costs to complete planned and field construction projects. See the attached document ORA-SCG-054-DAO_Q2.c, a City of Los Angeles pavement restoration standard, for further details. Currently, the average cost of a single gas service is \$2,500. Based on the new requirements, slurry purpose backfill for isolated excavations will now cost approximately \$3,700. Please see the estimate below.

Slurry Backfill for Isolated Excavations							
Installation of service and material	\$	2,400					
Removal of Native including disposal	\$	350					
Slurry, Labor and plate rentals	\$	950					
Total	\$	3,700					

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3. Referring to SCG's testimony pages GOM-5and GOM-6, please provide a copy of all calculations, analyses, and/or documents SCG used to support the statements on: (a) on lines 4-5, page GOM-6, "Field experience indicates that more favorable economic conditions lead to increases in various work requirements" and, (b) line 7, page GOM-6, "...this will impact activities related to customer and load demands."

SoCalGas Response 3:

This statement is based on SoCalGas' subject matter experts' observations during slow and expanding economic periods. For example, during the last economic recession, December 2007 through June 2009, several field activities related to economic conditions were lower than the previous years as the economy slowed down. New business construction was down, which led to lower meter set installations. The number of new meter sets installed reached a low in 2011 of 18,764 and rose back to 37,708 in 2016 as economic conditions improved. In SoCalGas' observation, the growth in meter set installations is related to the recovery in the economy and growth in housing starts.

Another example is the impact on Locate and Mark activities, which grew as shown in page 7 of workpapers SCG-04-WP_GDIST. Page 18 of workpapers SCG-04-WP_GDIST also shows the growth in Underground Service Alert (USA) tickets and costs each year, during a period of positive economic growth. The decrease in tickets in 2016 is due to a process change in accounting for duplicate ticket requests.

Total SoCalGas Distribution USA Tickets									
	2012	2013	2014	2015	2016				
Number of USA Tickets ¹	534,174	577,524	640,677	650,858	627,116				
Annual Expense (shown in Thousands) ²	\$ 11,355	\$ 11,818	\$ 12,371	\$ 13,194	\$ 13,788				

Furthermore, SoCalGas distribution main mileage increased by 641 miles between 2012 and 2016, which led to an increase in leak survey. Additionally, the increase in meter sets and new business construction is one of drivers for pressure betterment activities. The historical spending, on page 27 of workpapers SCG-04-CWP_GDIST, shows an increase in the past three years correlating to the continued increase in new business activities.

		Adjus	Adjusted Forecast					
Years	2012	2013	2014	2015	2016	2017	2018	2019
Labor	262	177	382	649	1,158	526	526	526
Non-Labor	12,466	12,076	37,530	22,526	28,212	22,562	22,562	22,562
NSE	0	0	0	0	0	0	0	0
Total	12,728	12,253	37,912	23,175	29,371	23,088	23,088	23,088
FTE	3.3	2.0	4.1	6.8	11.7	5.6	5.6	5.6