ORA DATA REQUEST ORA-SCG-118-KCL SOCALGAS 2019 GRC – A.17-10-008 SOCALGAS RESPONSE DATE RECEIVED: FEBRUARY 2, 2018

DATE RESPONDED: FEBRUARY 13, 2018

Exhibit Reference: SCG-10-R, SCG-10-CWP-R

SCG Witness: Neil Navin

Subject: Compressor Capital Expenditures

Please provide the following:

1. Referring to Ex. SCG-10-R, page NPN-33, lines 15 to 29, and workpapers SCG-10-CWP-R, page 9, SCG proposes capital expenditures of \$1 million in 2017, \$3 million in 2018, and \$10 million in 2019 for an early study to replace five compressors in Honor Ranch. Please provide detailed schedule and detailed study components and the associated expenditures which were included to build up these capital expenditures. Please also provide plan operational dates of each of the new compressors.

SoCalGas Response 1:

This project consists of performing a feasibility study using preliminary front end engineering and design (pre-FEED) and front end engineering and design (FEED) methodology. Pre-FEED began in 2017 and will continue with FEED in 2018 and 2019. Upon completion of FEED, detailed design and engineering, permitting and procurement shall commence and are forecasted to be completed by the end of 2021. Estimated forecast for start of construction is in 2021 with completion and start up in 2024.

The cost estimate for this feasibility study was derived from two methods. The first was referencing the article "Oil & Gas Journal, Regressions allow development of compressor cost estimation models" dated 1/09/2012, in which a cost per horsepower was used to replace a 30,000 horsepower prime mover. The second was from a recent SoCalGas Aliso Canyon Turbine Replacement (ACTR) Project. Extrapolating the cost to perform preliminary front end engineering design (Pre-FEED) and front end engineering (FEED) was estimated at \$14MM. The estimated schedule to complete the Pre-FEED and FEED scope of work is planned for the next three years beginning in 2018.

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2. Referring to Ex. SCG-10-R, page NPN-34, lines 26 to 27, SCG proposes capital expenditures for Blanket Projects of \$5.0 million for 2017, \$12.17 million for 2018, and \$15.70 million for 2019. Please provide detailed schedule and detailed individual projects and the associated expenditures which were included to derive these annual capital expenditures.

SoCalGas Response 2:

Please reference Table 1 below. 'Blanket Projects' are generally a collection of many like-kind or associated component projects whose precise makeup and schedule may alter over time, as described in SCG-10-R at page NPN-35 beginning at line 2. The process for evaluating additional compressor station work is ongoing and plans are subject to change.

Table 1: Compressor Stations Blanket Projects									
Station	Asset Description	Anticipated Work	2017 Estimated Forecast	2018 Estimated Forecast	2019 Estimated Forecast				
Playa del Rey	Vapor Recovery Compressor	Replacement/Overhaul	20,000	100,000	200,000				
Playa del Rey	Main Units	Compressor/Engine Overhauls	120,000	150,000	150,000				
Playa del Rey	Main Units - Compressor Station Equipment	Inlet Separator Upgrade	0	0	200,000				
La Goleta	Main Units	Compressor/Engine Overhauls	0	900,000	2,000,000				
La Goleta	Main Units - Compressor Station Equipment	Cooling Fan Replacement	100000	500000	500000				
La Goleta	Main Units - Compressor Station Equipment	Valve/Actuator Replacements, Safety Upgrades, Equipment Foundation Upgrades, Safety and Compliance Upgrades, Automate Unloaders	900,000	705,000	1,150,000				
Honor Ranch	Main Units	Compressor/Engine Overhauls	100,000	1,600,000	1,700,000				
Honor Ranch	Main Units - Compressor Station Equipment	Venting Recovery	710,000	2,980,000	1,280,000				
Honor Ranch	Main Unit - Engine Equipment	Replace Engine Turbochargers, Upgrade Exhaust Manifolds, Refurbish Engine Heads, Catalyst Replacement	1,424,000	1,700,000	1,820,000				
Honor Ranch	Wet Gas Compressor	Installation	126,000	0	0				

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SoCalGas Response 2:-Continued

Aliso Canyon	Field Generators	Emission Controllers Installation	150,000	0	0
Aliso	KVS Units - Compressor				
Canyon	Equipment	Cooler Upgrade	150,000	1,700,000	3,000,000
Aliso Canyon	KVS Units	Compressor/Engine Overhauls	1,200,000	1,200,000	3,200,000
Aliso Canyon	Field Compressor	Compressor Upgrade	0	635,000	500,000