

Neil P. Navin
Vice President
Gas Transmission and Storage
555 W. 5th Street
ML: GT17G4
Los Angeles, CA 90013

Tel: 213.244.2731 NNavin@semprautilities.com

October 9, 2018

Kenneth A. Harris Jr.
State Oil and Gas Supervisor
Division of Oil, Gas, and Geothermal Resources
801 K Street MS 18-05
Sacramento, CA 95814

Re: Aliso Canyon Geological, Seismological, and Geomechanical Studies

Dear Mr. Harris:

Pursuant to Division of Oil, Gas and Geothermal Resources (DOGGR) Order No. 1118, SoCalGas committed, by letter dated July 31, 2017, to provide DOGGR with a "workplan for completing the seismic risk study to the satisfaction of DOGGR using a third-party consultant approved by the Division and National Laboratories." The study would include a Probabilistic Seismic Hazard Analysis, a Probabilistic Fault Displacement Hazard Analysis, and the evaluation of potential mitigation measures. On August 9, 2017, SoCalGas provided DOGGR its initial workplan for completing the seismic risk study, and has provided monthly updates of the Aliso Canyon Geological, Seismological, and Geomechanical Team's (GSG Team) efforts to DOGGR.

Subsequently, DOGGR and the Lawrence Berkeley, Lawrence Livermore, and Sandia National Laboratories (collectively, the National Labs) recommended that the GSG Team undertake the following additional work: (i) additional petrophysical modeling to define the properties of fault zones that may influence displacement hazards and gas migration; (ii) laboratory testing of production casing and tubing to better understand their behavior under applied simulated fault displacement; and (iii) dynamic modeling of potential pathways for gas migration to surface, including flow within formations, along fault zones, and along the wellbore.

On May 18, 2018, SoCalGas provided DOGGR with its Amended Scope of Work, which included the additional work recommended by DOGGR and the National Labs. On July 30 through August 2, the laboratory testing of production casing and tubing was performed. The National Labs, on behalf of DOGGR, and the California Public Utilities Commission (CPUC) attended the testing.

The National Labs have recommended and DOGGR has concurred, that the GSG Team undertake additional laboratory testing to include surface casing with production casing, and tubing. Accordingly, SoCalGas hereby provides the enclosed *Aliso Canyon Gas Storage Field Geologic, Seismologic, and Geomechanical Studies: Second Amended Scope of Work* dated

October 9, 2018 (Second Amended Scope of Work), which includes this additional work and a revised schedule, with report submittal to DOGGR for review by January 18, 2019.

Please let me know if you have any questions.

Sincerely,

Neil P. Navin Vice President

Gas Transmission and Storage

Enclosure

cc: Alan Walker, Supervising Oil and Gas Engineer, DOGGR

Richard Boyd, Senior Oil and Gas Engineer, DOGGR