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PUBLIC UTILITIES COMMISSION

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JULY 19, 2017

JOINT DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES AND CALIFORNIA PUBLIC UTILITIES COMMISSION OPEN LETTER

To: Southern California Gas Company and Interested Members of the Public

SB 380 FINDINGS AND CONCURRENCE REGARDING THE SAFETY OF THE ALISO CANYON GAS STORAGE FACILITY

The Division of Oil, Gas, and Geothermal Resources (DOGGR) and California Public Utilities Commission (CPUC) jointly issue this statement regarding the status of the Aliso Canyon gas storage facility (Facility). In response to the leak discovered in October 2015 at the Facility, DOGGR ordered Southern California Gas Company (SoCalGas) to suspend all injection of natural gas at the Facility. The leak was sealed in February 2016, but DOGGR's order to suspend injection has remained in effect while work has occurred to improve and ensure the safety of the Facility.

Senate Bill 380 (SB 380)², through its enactment of Public Resources Code section 3217, specifies requirements that must be satisfied before the State Oil and Gas Supervisor (Supervisor) may lift the prohibition on injection at the Facility. This statement describes Public Resources Code section 3217's requirements in more detail below and includes the Supervisor's determination and the concurrence of the Executive Director of the CPUC (Executive Director) that injection operations may resume at the Facility. Enclosure 1 and Enclosure 2 set forth the findings that support the Supervisor's determination. Enclosure 3 contains the findings that support the Executive Director's concurrence determination.

Neither this statement nor the enclosed findings lift the prohibition on injection at the Facility. The Supervisor will be issuing an Order wherein he lifts the injection prohibition subject to

¹ DOGGR Order No. 1106 issued on December 10, 2015, prohibited SoCalGas from any further gas injections until reauthorized by the Division. On January 6, 2016, Governor Brown issued an emergency proclamation that, among other things, required the Division to continue to prohibit SoCalGas from injecting into the storage facility until a safety review of all gas storage wells at the facility is completed. On March 4, 2016, the Division issued Order No. 1109, which directed SoCalGas to undertake a specified safety review and testing regime.

² SB 380 (Pavley, Chapter 14, Statutes of 2016) codified Public Resources Code section 3217 and California Public Utilities Code sections 714 and 715. Public Utilities Code section 714 requires that the CPUC, "no later than July 1, 2017, shall open a proceeding to determine the feasibility of minimizing or eliminating use of the Aliso Canyon natural gas storage facility." The CPUC opened the proceeding on February 2, 2017. Public Utilities Code section 715 requires the CPUC to issue a report, in consultation with energy resource agencies and affected public utilities, determining the range of working gas necessary and the amount of natural gas production at the facility needed to meet safety and reliability requirements. The report was first published in summer 2016, updated in winter 2017, and recently updated on July 19, 2017.

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additional temporary requirements. These temporary requirements are meant to further demonstrate the integrity and safety of the Facility as the injection operations resume.

SB 380 Requirements

Public Resources Code section 3217 requires that before SoCalGas can be allowed to resume injection at the Facility, the wells at the Facility must undergo a comprehensive safety review consistent with criteria developed with input from independent experts. The purpose of the criteria is to ensure a comprehensive review of the external and internal well integrity as specified in Public Resources Code section 3217. DOGGR closely coordinated with the Lawrence Berkeley, Lawrence Livermore, and Sandia National Laboratories (collectively, "National Labs") to develop criteria satisfying those specifications. To complete this comprehensive review, all 114 active wells at the Facility must either: (1) pass a first and second battery of tests, or (2) pass the first battery of tests and be taken out of service and isolated from the underground gas storage reservoir, or (3) be properly plugged and abandoned. DOGGR posts all test results of the comprehensive safety review at: http://www.conservation.ca.gov/dog/AlisoCanyon/Pages/Well-Detail.aspx.

Public Resources Code section 3217 also directs SoCalGas to propose a maximum reservoir pressure limit for the Facility and provide supporting data and calculations. The limit must account for the pressure needed to inject gas volumes at all proposed inventory levels and may not exceed the design pressure limits of the reservoir, wells, well heads, piping, or associated facilities with an appropriate margin for safety. Public Resources Code section 3217 directs DOGGR to consult independent experts regarding the appropriate maximum and minimum reservoir pressure limits for the Facility before approving them. In keeping with these requirements, the Supervisor consulted with the National Labs regarding the pressure limits. and following further coordination with the CPUC, revised the reservoir pressure limits initially proposed for the Facility. The approved reservoir limits significantly reduce the amount of natural gas that SoCalGas can store at the Facility.

By letter dated October 21, 2016, DOGGR and the CPUC jointly provided SoCalGas a mandatory checklist of safety evaluations for the Facility based in part on the requirements of SB 380. The checklist items relate to the comprehensive safety review, reservoir pressure limits, and other evaluations DOGGR and the CPUC identified as necessary to demonstrate the Facility is safe. Upon receiving data from SoCalGas as required by the checklist, DOGGR, the CPUC, and the California Air Resources Board inspected the Facility on November 8, 9, and 10, 2016, to determine whether the Facility complied with the checklist items. After evaluating the data and inspection results, DOGGR and the CPUC found that SoCalGas fully satisfied or was on track to satisfy all checklist items. DOGGR and the CPUC's related findings are in a January 17, 2017 letter (including its enclosure) to SoCalGas available at: http://www.conservation.ca.gov/dog/Pages/AlisoCanyon.aspx.

Public Resources Code section 3217 requires DOGGR to notice and hold one public meeting in the affected community - after completion of the safety review but before lifting the prohibition on injection at the Facility - to provide the public an opportunity to comment on the safety review findings and on the proposed maximum and minimum reservoir pressure limits. In compliance with this requirement, DOGGR held two public meetings on February 1 and 2, 2017, in Woodland Hills, California. DOGGR also invited the public to comment in writing between January 17, 2017, and February 6, 2017. The findings subject to the public review reflected more stringent safety measures than existed before the leak, such as the requirement that all

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wells be equipped with real-time pressure monitors and the requirement that injection occur only through tubing. The new proposed reservoir pressure limits would significantly cap the amount of natural gas that SoCalGas can store at the Facility. DOGGR's public comment summary and response is available at:

http://www.conservation.ca.gov/dog/Documents/Aliso/public comment summaries and responses.pdf.

Public Resources Code section 3217 also provides that the Supervisor may not lift the prohibition on injection until the Executive Director of the CPUC concurs with the Supervisor's findings regarding the safety of the Facility. This concurrence is to be based upon a review of the comprehensive safety review and the CPUC's independent verification that the substantive mandates of SB 380 have been fulfilled.

SB 380 also requires that the Executive Director consult with the Supervisor and direct the operator to maintain a specified range of working gas at the Facility necessary "to ensure reliability and just and reasonable rates in California." The Executive Director's reliability directive may not be issued until after the Supervisor has allowed injections to resume at the Facility. The Supervisor hereby acknowledges that the Executive Director has consulted with the Supervisor about the CPUC's findings regarding the range of working gas necessary to be maintained at the Facility to ensure reliability and just and reasonable rates.

The Supervisor's Safety Findings and the CPUC's Concurrence

After fully considering all qualitative and quantitative data derived during the comprehensive safety review, the November site inspections, public meetings, written public comment period, and other analysis undertaken in fulfillment of SB 380 mandates, the Supervisor has determined that the risks of failures identified during the review have been addressed, that well integrity has been verified, and injection at the Facility may safely resume. These findings are included as Enclosure 1 and Enclosure 2. The Supervisor will rely on these findings when issuing the order wherein he lifts the prohibition on injection at the Facility as part of DOGGR's ongoing regulatory response to the October 2015 gas leak.

The Executive Director of the CPUC and his staff, having reviewed the same data, participated in the November site inspections, and been engaged in all phases of review of the Facility, including development of the stringent safety review criteria in consultation with the National Labs, hereby concurs with the Supervisor's determination. Those findings are included as Enclosure 3.

Sincerely,

Kenneth A. Harris Jr.

State Oil and Gas Supervisor

Division of Oil, Gas, and Geothermal Resources

Timothy J. Sullivan, Executive Director

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California Public Utilities Commission

Enclosures:

(1) Updated Comprehensive Safety Review Findings

(2) January 17, 2017 Comprehensive Safety Review Findings

(3) CPUC Findings and Concurrence