STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

GI-2019-10-SEM-40-08

January 22, 2020

Rodger Schwecke, Senior Vice President
Gas Operations and System Integrity
Southern California Gas Company
555 West 5th Street, GT21C3
Los Angeles, CA 90013

SUBJECT: General Order 112 Inspection of the Southern California Gas Company's and San Diego Gas and Electric Company's Gas Transmission Pipeline Integrity Management Program (TIMP).

Dear Mr. Schwecke:

On behalf of the Safety and Enforcement Division (SED) of the California Public Utilities Commission, Paul Penney, Kai Cheung and James Zhang conducted a General Order 112 inspection of Southern California Gas Company and San Diego Gas and Electric Company Transmission Integrity Management Programs (TIMP) the weeks of October 7-11, 2019, October 14-18, 2019 and November 12-15, 2019. The inspection included a review of procedures and records related to the TIMP ILI program.

SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those procedures and records that SED inspected during the inspection.

Please provide a written response within 30 days of your receipt of this letter indicating measures taken by Sempra to address the findings noted in the Summary.

If you have any questions, please call Paul Penney at (415) 703-1817.

Sincerely,

Dennis Lee

Dennis Lee, P.E.
Program and Project Supervisor
Gas Safety and Reliability Branch
Safety and Enforcement Division

cc: Terence Eng, GSRB
Kai Cheung, GSRB
James Zhang, GSRB
Khoa Le, SoCal Gas and SDG&E

Summary of Inspection Findings

Violation and Concerns Identified from IA

1. Integrity Management : Quality Assurance (IM.QA)

Question Title, ID: Measuring Program Effectiveness , IM.QA.IMPERFEFECTIVE.P

Question Text: Does the process for measuring IM program effectiveness include the elements necessary to conduct a meaningful evaluation?

References: 192.945(a) (192.913(b), 192.951)

Assets Covered: SoCalGas' Main Office Inspection - Transmission (88388 (40A))

Issue Summary: UNSAT

192.945(a) states *"General. An operator must include in its integrity management program methods to measure whether the program is effective in assessing and evaluating the integrity of each covered pipeline segment and in protecting the high consequence areas These measures must include the four overall performance measures specified in ASME/ANSI B31.8S (incorporated by reference, see §192.7 of this part), section 9.4, and the specific measures for each identified threat specified in ASME/ANSI B31.8S, Appendix A. An operator must submit the four overall performance measures as part of the annual report required by §191.17 of this subchapter."*

Southern California Gas Company and San Diego Gas and Electric Company meets the requirements for four overall performance metrics and nine threat specific performance metrics required under 192.945(a). However, as identified in the first sentence of 192.945(a), each operator must include measures to evaluate the integrity of each covered pipeline segment. Both the nine threat specific performance metrics and the four overall performance metrics are aggregate performance metrics and do not evaluate the integrity of each covered pipeline segment.

Southern California Gas Company and San Diego Gas and Electric Company has no performance metrics to evaluate the integrity of each covered pipeline segment in accordance with 192.945(a).

According to DR #37, Southern California Gas Company and San Diego Gas and Electric Company does not include any other performance metrics, which is required by code.

2. Assessment and Repair : In-Line Inspection (Smart Pigs) (AR.IL)

Question Title, ID: Qualification of Operator/Vendor Personnel (including Supervisors) Who Evaluate ILI Results , AR.IL.ILIREVIEWQUAL.P

Question Text: Does the process require that operator/vendor personnel (including supervisors) who review and evaluate ILI assessment results meet appropriate training, experience, and qualification criteria?

References: 192.915(a) (192.915(b))

Assets Covered: SoCalGas' Main Office Inspection - Transmission (88388 (40A))

Issue Summary: CONCERN

In the ILI standard 167.0210, Rev 2.4, page 7, Southern California Gas Company and San Diego Gas and Electric Company summarizes the training requirements for each job category in Table 1. But in standard 167.0210, Rev 3, Southern California Gas Company and San Diego Gas and Electric Company does not have a table summarizing the training requirements for each job category.

GSRB staff **recommends** Southern California Gas Company and San Diego Gas and Electric Company include a table to summarize the training requirements and if the training is periodic

including the TIMP101 training.

Question Title, ID Validation of ILI Results , AR.IL.ILIVALIDATE.P

Question Text Does the process for validating ILI results ensure that accurate integrity assessment results are obtained?

References 192.921(a)(1) (192.937(c))

Assets Covered SoCalGas' Main Office Inspection - Transmission (88388 (40A))

Issue Summary CONCERN

For a level 2 validation (as defined in API 1163, Section 8), 167.0210, Section 9.4.2 says you need at least two digs to get to this level.

For a level 3, Southern California Gas Company and San Diego Gas and Electric Company does not have a hard and fast rule that defines the difference between the two levels of validation. GSRB staff advocates for a hard and fast rule to define the difference.

3. Integrity Mangement : Quality Assurance (IM.QA)

Question Title, ID Invoking Non-Mandatory Statements in Standards , IM.QA.IMNONMANDT.P

Question Text Does the process include requirements that non-mandatory requirements (e.g., "should" statements) from industry standards or other documents invoked by Subpart O (e.g., ASME B31.8S-2004 and NACE SP0502-2010) be addressed by an appropriate approach?

References 192.7(a)

Assets Covered SoCalGas' Main Office Inspection - Transmission (88388 (40A))

Issue Summary CONCERN

RECOMMENDATION: Add language to define "should" statements, which are consistent with this IA question and address FAQ 244. The language can be put in TIMP.1 or any other standard Southern California Gas Company and San Diego Gas and Electric Company deems appropriate.

4. Time-Dependent Threats : Stress Corrosion Cracking (TD.SCC)

Question Title, ID SCC on HCA Sections , TD.SCC.SCCIM.P

Question Text Does the integrity management program have a process to identify and evaluate stress corrosion cracking threats to each covered pipeline segment?

References 192.911(c) (192.917(a)(1))

Assets Covered SoCalGas' Main Office Inspection - Transmission (88388 (40A))

Issue Summary CONCERN

The screening criteria identified in ASME B31.8S-2004, Appendix A3, for the High pH Stress Corrosion Cracking (SCC) threat is not absolute. These criteria do not account for approximately 25-35% of historical SCC failures. As noted in the National Association of Corrosion Engineers (NACE) RP0204-2004 (Stress Corrosion Cracking Direct Assessment Methodology), Section 1.2.1, ***"...It is recognized that these screening factors will identify a substantial portion of the susceptible locations, but not all of them."***

CONCERN: SEMPRA has two pipelines where the screening criteria in B31.8S-2004 are almost met. These pipelines are Line 225 and Line 2001 East. GSRB staff advocates two things:

1. Include a footnote in your threat identification procedure (167.0203) to alert engineers of the fact that the screening criteria do not account for approximately 25-35% of SCC failures.

2. Do an integrity assessment for SCC on the two pipelines identified above.