

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



June 5, 2018

GI-2017-08-SEM-40-09

Jimmie Cho, Senior Vice President
Gas Operations and System Integrity
Sempra Energy Utilities
555 W 5th Street, GT21C3
Los Angeles, CA 90013

SUBJECT: Closure letter for General Order (G.O.) 112-F Gas Distribution Integrity Management program (DIMP) of Southern California Gas Company and San Diego Gas and Electric Company

Dear Mr. Cho:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission reviewed Southern California Gas Company and San Diego Gas and Electric Company gas response letter dated April 22, 2018 that addressed one recommendation identified during the GO 112-F inspection of Sempra Energy Utilities' Distribution Integrity Management Program, procedures and records on August 7 through 10, 2017. Herewith, the two companies are collectively referred to as Sempra Energy Utilities (SEU).

Attached is a summary of SED's inspection findings, SEU's response to SED's findings, and SED's evaluation of SEU's response to the recommendation.

This letter serves as an official closure of the 2017 Distribution Integrity Management Program, procedures and records.

If you have any questions, please contact Mahmoud (Steve) Intably, at (213) 576-7016.

Sincerely,

A handwritten signature in blue ink that reads "Dennis Lee".

Dennis Lee, P.E.
Program and Project Supervisor - GSRB
Safety and Enforcement Division

CC: Mahmoud (Steve) Intably, SED/GSRB, Matthewson Epuna, SED/GSRB, Kan Wai Tong, SED/GSRB, Kenneth Bruno, SED/GSRB, Kelly Dolcini, SED/GSRB, and Troy Bauer, Sempra Energy Utilities

Sempra Energy Utilities DIMP inspection

Summary of Inspection Findings August 7 through August 10, 2017

I. SED Identified Probable Violations

None

II. Concern and Recommendation

Title 49 CFR, Part 192, §192.1007 What are the required elements of the integrity management plan?

§192.1007 What are the required elements of the integrity management plan states in part:

(a)(1) *“Identify the characteristics of the pipeline’s design and operations and the environmental factors that are necessary to assess the applicable threats and risks to its gas distribution pipeline”.*

(a)(7) *“The evaluation must consider each applicable current and potential threat, the likelihood of failure associated with each threat, and the potential of consequences of such a failure”*

(c) Evaluate and rank risk states in part:

“Evaluate and rank risk. An operator must evaluate the risks associated with its distribution pipeline. In this evaluation, the operator must determine the relative importance of each threat and estimate and rank the risks posed to its pipeline. This evaluation must consider each applicable current and potential threat, the likelihood of failure associated with each threat, and the potential consequences of such a failure.

PHMSA-Introduction to Risk Assessment Methods defines Consequence

“The consequence is the impact on the population, property, and environment in the vicinity of the leak. Consequences can even involve financial impacts on the operator and distribution of services to customers”

SEU’s DIMP A Terms, Definitions, and Acronyms define:

Consequences of failure: *The impact that a pipeline failure could have on the public, employees, property, and the environment*

Risk: *the product of the likelihood of a failure associated with a threat and the potential consequences of such a failure*

SEU’s DIMP 4 Evaluation and Rank Risk, page 5 of 12 Weighting Factors for Consequence states in part:

“Consequence weight factors have been determined by a team of field/internal personnel. Each component of consequence is assigned a weight factor. The attribute data is the consequence of the environment and the PHMSA numbers are the consequence of the cause. The sum of these consequence scores represents the total consequence associated to each threat”.

The components to be considered in the determination of the consequence are leak code, pipe diameter, operating pressure, proximity to structures, and incident fatality Percentage (Derived on a per-threat basis using the national PHMSA data from the last 20 years for all distribution serious incidents).

SED reviewed SEU’s DIMP.4 and found that SEU failed to include population density (schools, fire houses, hospitals, people with special mobility, commercial centers, location where other subsurface conduits may enlarge gas migration patterns, etc.) in the determination of the consequence. Therefore, SED recommends that SEU to review and revise DIMP.4 “Evaluation and Rank Risk” to include all applicable components for the consequence including population density (in determining the consequences) when calculating the risk score for a pipeline segment to ensure effective implementation of DIMP.

SEU’s Response:

SoCalGas/SDG&E perform Risk Assessment of pipeline segments as part of DIMP Distribution Risk Evaluation and Monitoring System (DREAMS) and population density, which includes churches, schools, health and day care facilities, hospitals, and other significant commercial gathering points is considered. However, SoCalGas/SDG&E recognize that DIMP 4 verbiage focuses on Risk Assessment on a program level using leak based performance analysis and is lacking the explanation of how population density is considered at pipeline segment level. SoCalGas/SDG&E will update DIMP 4 to describe Risk Assessment of pipeline segments.

SED’s Conclusion:

SED has reviewed SEU’s response and accepts the corrective actions that it has articulated and implemented. However, SED may review the records of the corrective action during future inspections.