#### PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



March 23, 2018 GI-2017-08-SEM-40-09

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

SUBJECT: 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 conducted a General Order (G.O.) 112-F, Reference Title 49, Code of Federal Regulations (49CFR), Parts 191 and 192, Gas Distribution Pipeline Integrity Management Program inspection of Southern California Gas Company and San Diego Gas and Electric Company gas distribution system from August 7 through August 10, 2017. Herewith, the two companies are collectively referred to as Sempra Energy Utilities (SEU).

The inspection included a review of the gas Distribution Integrity Management Program (DIMP), procedures and records pursuant to G.O. 112-F, reference Title 49, Code of Federal Regulation (CFR), Parts 191 and 192. SED used the Federal Pipeline and Hazardous Material Safety Administration Gas Distribution Integrity Management Inspection Form (Form 22) as a reference guideline to conduct the inspection. SED staff made one recommendation. The recommendation is noted in the attached "Summary of Inspection Findings".

Please provide a written response within 30 days of your receipt of this letter indicating the measures taken by Sempra Energy Utilities to address the recommendation noted in the "Summary of Inspection Findings".

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

Sincerely,

Kenneth Bruno,

Program Manager - GSRB

Safety and Enforcement Division

Kuuth A. B.

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

<sup>&</sup>lt;sup>1</sup> General Order 112-F was adopted by the Commission on June 25, 2015 via 15-06-044

### **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?

 $\S 192.1007$  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 defines:

**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.