



W. Jeff Koskie
Pipeline Safety and Compliance
Manager
55 W. Fifth Street, M.L. GT-11A6
Los Angeles, CA 90013
Phone: 213 305-8660
Fax: 213-244-8223

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Mr. Kenneth Bruno
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
320 W. Fourth Street, Suite 500
Los Angeles, CA 90013

Dear Mr. Bruno:

The staff of Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order (G.O) 112, Part 2 inspection of the Southern California Gas Company's and San Diego Gas and Electric Company's Gas Transmission Pipeline Integrity Management Program (TIMP) on March 2-6, March 9-13, and July 6-10, 2015. These two companies are collectively referred to as the Sempra Energy Utilities.

In 2013, SED separated the Sempra TIMP Inspection into two parts: Part 1 inspection was completed in November 2013, and it consisted of in-depth review of the Sempra Energy Utilities' TIMP plan, procedures and certain parts of its implementation records. Part 2 of the inspection was scheduled for 2015. This Part 2 inspection consisted of validation review of the Sempra Energy Utilities' TIMP implementation records and field verifications of various integrity assessment processes.

During the Part 2 inspection, SED used the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety's "Gas Integrity Management Field Verification Inspection Form" for the field verification portion of the inspection. SED's single inspection finding and single inspection recommendation are noted on the attached "Sempra 2015 TIMP Inspection Findings Summary" (Summary) along with responses.

Please feel free to contact me at (213) 305-8660 if you have any questions or need additional information.

Sincerely,

W. Jeff Koskie

**Sempra 2015 TIMP Inspection Summary
March 2-6, March 9-13, and July 6-10, 2015**

CPUC Identified Probable Violation:

I. Protocol Area A. Identify HCAs:

A.02 Potential Impact Radius

“Verify that the definition and use of potential impact radius for establishment of high consequence areas meets the requirements of §192.903. [§192.905(a)] ”

Protocol A.02.b. states:

In cases where potential impact circles are used to identify high consequence areas, verify that the program requires that high consequence areas include the area extending axially along the length of the pipeline from the outermost edge of the first potential impact circle to the outermost edge of the last contiguous potential impact circle for those potential impact circles that contain either an identified site or 20 or more buildings intended for human occupancy. [§192.903 High Consequence Area (3)]”

Protocol A.05.b. states:

“Verify the program includes piping locations as high consequence areas if the area within the potential impact circle contains an identified site. [§192.903 High Consequence Area (2)(ii)] ”

Title 49 CFR Part192, §192.903(3) states in part:

“Where a potential impact circle is calculated under either method (1) or (2) to establish a high consequence area, the length of the high consequence area extends axially along the length of the pipeline from the outermost edge of the first potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy to the outermost edge of the last contiguous potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy. (See figure E.I.A. in appendix E.)”

Sempra identified covered segments on Line 7000. One of the HCA segments (HCA # 1121816) on the Line 7000 was within an identified site and had a 90 degrees elbow turn and continued for a mile. However, this pipeline segment within the HCA # 1121816 did not extend completely to the outer edge of the potential impact circle that contains the identified site that contacts the outermost edge of the last contiguous potential impact circle. Piping locations were not appropriately identified as covered segments when the potential impact circle contained an identified site (using Method 2). Sempra did not provide a justification why it was not necessary to include the entire length of the pipeline

within the impact circle. Therefore, Sempra is in violation of 49 CFR, Part 192, §192.903(3).

Sempra Response:

The Sempra Energy Utilities employ an HCA identification method that meets the requirements of 49 CFR 192 regulations including §192.903 (3), this section of code references Figure E.1.A in Appendix E of Part 192 for determining extents of a HCA and is shown below in Figure A. As shown in the illustration, the length of the HCA extends axially outward from the centers of the first and last contiguous potential impact circle to the outermost edges of the impact circles; at a distance equal to the PIR. The Sempra Energy Utilities meet this requirement and measures the axial distance represented by PIR using pipeline length in feet.

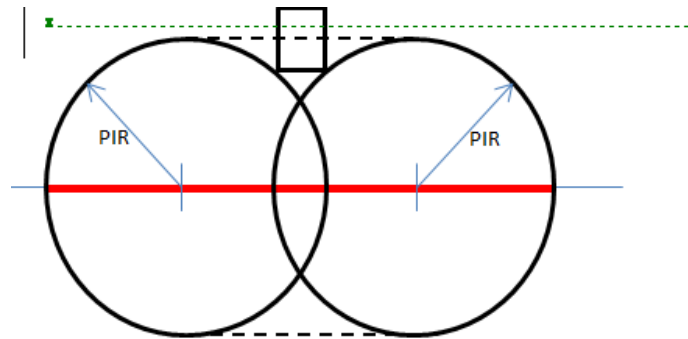


Figure A: Illustration from Appendix E to Part 192

Attached below is the aerial imagery of HCA 1121816 on Line 7000, which demonstrates the Sempra Energy Utilities' compliance. As the image shows, the corners of the identified site are touched by the outer edges of two potential impact circles with a radius of PIR. The PIR is calculated by the following equation as described in code:

$$PIR = r = 0.69 * \sqrt{(p*d^2)} = 295.82$$

Where pressure (p)= 718 , diameter (d)=16 , PIR= 295.82



Figure 1: HCA 1121816 on Line 7000

The HCA was extended past the edge of the potential impact circle and the 90 degree angle by adding an addendum or safety factor to the PIR length. This is represented in Figure 1 as the end of the green highlight. The end of the green highlight is beyond the requirements of regulation and is based upon SoCal's use of an addendum.

As such, it is the Sempra Energy Utilities' belief that they have met the requirements of the 192.903 since the extent of the HCA is farther than the minimum requirement established by regulation. The Sempra Energy Utilities will look at enhancing its procedure to clarify its use of addendum when performing HCA identification. The Sempra Energy Utilities would also like to note that, as of June 3, 2013, the method in which HCA segments are determined for Line 7000 was changed from Method 2 to Method 1. Furthermore, Line 7000 was last assessed by in-line inspection on 10/4/2012, which is prior to the audit and in this area both HCA and non-HCA segments were assessed.

CPUC Concerns/ Recommendations:

I. Protocol Area C. Identify Threats, Data Integration, and Risk Assessment:

SED is concerned that the format Sempra uses in presenting its TIMP data is confusing and requires frequent clarification. SED recommends that Sempra organize, summarize and present its TIMP data in a simplified and less confusing manner. This can be accomplished through use of simplified formats, for example organize the data, summarize the pertinent facts and present the data in tabular format, spreadsheet or any other format while capturing the pertinent pipeline features, inspection tool results, actual dig results and remedial action data.

Sempra Response:

The Sempra Energy Utilities acknowledge this recommendation and will continue to look for opportunities to simplify its TIMP data presentation. Additionally, the Sempra Energy Utilities are open to further recommendations as provided through SED TIMP audits and reviews. As an example, the Sempra Energy Utilities recently updated the TIMP Risk & Threat Report format in 2015. The new report includes summary and details of data being used. These details include, but are not limited to: pipeline features, operational data, and land-based data.