

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



November 25, 2020

GI-2020-06-SCG-40-09
GI-2020-06-SDG-53-09

Mr. Rodger Schwecke, Senior Vice President
Gas Transmission, Storage & Engineering
Southern California Gas Company
555 West 5th Street, GT21C3
Los Angeles, CA 90013

SUBJECT: Closure Letter for General Order (GO) 112-F Gas Inspection of Southern California Gas Company, and San Diego Gas and Electric Company Distribution Integrity Management Program (DIMP)

Dear Mr. Schwecke,

The Safety and Enforcement Division (SED) of the California Public Utilities Commission has reviewed response of SEMPRA (Southern California Gas (SCG) Company's, and San Diego Gas and Electric Company's (SDG&E)) for the findings identified during the General Order 112-F inspection of its Distribution Integrity Management Program (DIMP). The Inspection was conducted between June 15-19 and 22-26, 2020.

Included is SED's evaluation of SEMPRA's response for identified Areas of Concern/ Recommendations.

This letter serves as the official closure of the 2020 GO 112-F Inspection of SEMPRA's Distribution Integrity Management Program (DIMP).

Thank you for your cooperation in this inspection. If you have any questions, please contact Sikandar Khatri at (415) 703-2565 or by email at Sikandar.Khatri@cpuc.ca.gov

Sincerely,

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

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

Enclosure: Summary of Inspection Findings

cc:

Troy Bauer, Manager, Southern California Gas Company
Terence Eng, SED
Claudia Almengor, SED
Kelly Dolcini, SED

Summary of Inspection Findings

Dates of Inspection: June 15-19 and 22-26, 2020

Operator: Southern California Gas Company and San Diego Gas and Electric Company (SEMPRA)

Operator IDs: 18484 (primary) 18112

Inspection Systems: Distribution Integrity Management Program (DIMP)

Assets (Unit IDs): SEMPRA (88390 88391)

System Type: GD

Inspection Name: SEMPRA DIMP Inspection

Lead Inspector: Sikandar Khatri

Operator Representative: Khoa Le

Unsatisfactory Results

No Preliminary Findings.

Concerns

Gas Distribution Integrity Management : Knowledge of the System (GDIM.KN)

**(1) Question Does the plan contain procedures to identify additional information that is needed
Text to fill gaps due to missing, inaccurate, or incomplete records?**

References 192.1007(a)(3)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(a)(3) States:

"Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities)."

SEMPRA has established a process to collect missing information (manufacturer) for plastic pipe for SDG&E. However, no systematic list of missing information was available. DIMP team should document all missing information (which they come across while working through different DIMP cycles, for example specific fittings, pipeline parameters and others) and keep it updated.

SED recommends that this process be formalized in an appropriate DIMP document i.e. include in DIMP procedure that a list of missing information will be developed and identify the processes that will be used to collect the information. Please follow the same and keep records of compliance.

SoCalGas and SDG&E Response:

SoCalGas/SDG&E have developed a formalized tracking system to document identified missing, inaccurate, or incomplete information needed for DIMP. This list includes the assignment of priority, based on its need and business justification. The processes required to acquire the information will be developed as part of the project plan. DIMP program will be initiated to collect the required data in accordance with the priority.

SoCalGas/SDG&E agree with SED's recommendation and will update the DIMP plan to formalize these requirements.

SED's Conclusion:

SED has reviewed PG&E's response and have accepted the same.

(2) Question Do the procedures specify the means to collect the additional information needed Text to fill gaps due to missing, inaccurate, or incomplete records (e.g., O&M activities, field surveys, One-Call System, etc.)?

References 192.1007(a)(3)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(a)(3) States:

"Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities)."

SEMPRA Document, DIMP.2 states that the information collected through normal activities will be used. If needed, new procedure will be developed for undetermined data.

SED recommends that DIMP procedures should specifically identify means to collect additional information needed to fill gaps due to missing, inaccurate or incomplete records, such as working with operation and maintenance personnel to collect this information through normal activities, continue to do field survey/interviews, One-Call systems, looking at purchase records and use other means as necessary.

SoCalGas and SDG&E Response:

Please see response to Concern #1

SED's Conclusion:

SED has reviewed PG&E's response and have accepted the same.

(3) Question Does the plan list the additional information needed to fill gaps due to missing, Text inaccurate, or incomplete records?

References 192.1007(a)(3)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(a)(3) States:

"Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities)."

The comprehensive list of information needed to fill gaps due to missing, inaccurate, or incomplete records was not available. SEMPRA should prepare this list as such information is identified and update records as the required information becomes available. Please document and keep records.

SoCalGas and SDG&E Response:

Please see response to Concern #1

SED's Conclusion:

SED has reviewed PG&E's response and have accepted the same.

Gas Distribution Integrity Management : Identify Threats (GDIM.TH)

(4) Question In identifying threats did the information considered include all of the required Text data and information sources?

References 192.1007(b)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulations, §192.1007(b) states:

"An operator must consider reasonably available information to identify existing and potential threats. Sources of data may include, but are not limited to, incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, and excavation damage experience."

DIMP.3 "Threat Identification" page 6 states, in part:

"Potential threats may be identified during field investigations, from near misses, NTSB Reports, PHMSA Advisory Bulletins, Industry Incidents, and/or M&I activities."

A review of threat identification records provided in response to DR#19 demonstrate a review of leak history, PHMSA advisories, and NTSB reports for threat and potential threat identification. However, records do not indicate a review of other reasonably available information in the identification of potential threats, such as field investigations, near misses, industry incidents, M&I activities not related to leak repair, excavation damage that did not result in a leak, etc.

SED recommends that SEMPRA incorporate a review of these sources and other O&M records for the identification of potential threats to the distribution system. An example of these O&M records is the patrolling records which in addition to others has useful information on environmental threats such as landslides, flooding, earthquake damage etc.

SoCalGas and SDG&E Response:

SoCalGas/SDG&E's risk assessment methodology is leak-based. Therefore, they have relied primarily on leak data to identify environmental factors leading to failures for each threat. Additionally, non-leak data (such as overpressure events and hard to locate pipelines,) is reviewed to determine the drivers of the threat during the threat specific investigation. SoCalGas/SDG&E will continue to explore and evaluate if additional non-leak data is available and establish the mechanisms to document the review when new potential threats are being evaluated within the DIMP processes. If a new potential threat is identified, the supporting data will be integrated into the threat identification process.

SED's Conclusion:

SED has reviewed the response and emphasizes that in addition to other sources for threat identification, "patrolling" should also be considered.

(5) Question Do the procedures consider, in addition to the operator's own information, data Text from external sources (e.g. trade associations, government agencies, or other system operators, etc.) to assist in identifying potential threats?

References 192.1007(b)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulations, §192.1007(b) states:

"An operator must consider reasonably available information to identify existing and potential threats. Sources of data may include, but are not limited to, incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, and excavation damage experience."

A review of records demonstrates the operator is reviewing NTSB reports and PHMSA advisories to identify potential threats. Trade associations and other operators are additional available sources of knowledge, and SED recommends the operator include these other sources in the identification of potential threats. Examples include GPTC, AGA, GTI, Midwest Energy Association (MEA), Southern Gas Association (SGA), Northeast Gas Association (NGA), Western Energy Institute (WEI), other operators' best practices, etc. SEMPRA should outline in an appropriate DIMP document that what external resources will be reviewed in identifying the potential threats.

The process of attending conference/workshops should be documented and notes kept for the knowledge/information gained, and its implementation, if any.

SoCalGas and SDG&E Response:

SoCalGas/SDG&E are active in various industry organizations, including many of the examples listed in SED's recommendation. The knowledge gained from involvement in these organizations, NTSB reports, and PHMSA advisories have been used to identify potential threats. The DIMP potential threat identification process requires documentation of any potential threats, including those identified through industry organizations. SoCalGas/SDG&E will document knowledge gained through these organizations that may result in the identification of additional potential threats or drive other DIMP program changes or updates.

SED's Conclusion:

SED has reviewed the response and accepted the same.

Gas Distribution Integrity Management : Evaluate and Rank Risk (GDIM.RR)

(6) Question Do the procedures contain the method(s) and/or a model used to determine the Text relative importance of each threat and estimate and rank the risks posed?

References 192.1007(c)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulations, §192.1007(c) states:

"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. An operator may subdivide its pipeline into regions with similar characteristics (e.g., contiguous areas within a distribution pipeline consisting of mains, services and other appurtenances; areas with common materials or environmental factors), and for which similar actions likely would be effective in reducing risk."

SEMPRA's document DIMP.4 "Evaluate and Rank Risk" pages 4-6 describe the risk model and weighting factors that go into the model. The table on page 6 lists a weight of 5 for undetermined pressure, which is the same as the weight for medium pressure. SEMPRA

response to DR#32 indicated that there have been only 1 leak with an undetermined pressure used in the risk model within the last three years.

SED recommends that for the risk model to be conservative, the weight for undetermined pressure should match the weight factor for high pressure (worst case scenario), i.e. 10.

SoCalGas and SDG&E Response:

The undetermined pressure score of 5, the same score as medium pressure, was selected because all high-pressure systems are known to be high pressure and would not be recorded as undetermined pressure on the leak repair form. Consequently, it is reasonable and appropriate to assign the leaks with undetermined pressures the same score as medium pressure and not the high pressure.

SoCalGas/SDG&E will review the undetermined pressure leak records to investigate if there are any process improvements that could be implemented to minimize the leaks being reported as undetermined pressure.

SED's Conclusion:

SED has reviewed the response and have accepted the same.

(7) Question Are the results of the risk ranking supported by the risk evaluation Text model/method?

References 192.1007(c)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulations, §192.1007(c) states:

"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. An operator may subdivide its pipeline into regions with similar characteristics (e.g., contiguous areas within a distribution pipeline consisting of mains, services and other appurtenances; areas with common materials or environmental factors), and for which similar actions likely would be effective in reducing risk."

SEMPRA's document DIMP.4 "Evaluate and Rank Risk" page 6 lists the Cause Significance Factors for eight causes/threats. The Cause Significance Factor for "Other Cause" is 3.89%. This cause/threat is not listed in the risk ranking records provided to SED (S4Q5,6,7,8), although this appears in "Leak Repair Form" and other documents.

SED recommends that "Others" threat category be revisited in "Leak Repair Form" to minimize events that go to this category; additionally, this should be included in "threat results", when applicable.

SoCalGas and SDG&E Response:

The data entry options on the Leak Repair Form were created to obtain the most accurate data possible from the field technician. The DIMP team aggregates all the leak records and performs a detailed review of the data to appropriately categorize the leaks for DOT reporting. The appropriately categorized DOT leak data set is then used to perform the risk analysis for every leak including those in the "Others" threat category. SoCalGas/SDG&E recognizes that, although the risk calculations were being performed and scored using "Others" threat leaks, the "Others" threat risk results were not visually included in the risk charts. The "Others" threat risk results will be included in the risk charts for future results.

SED's Conclusion:

SED has reviewed the response and accepts that SEMPRA will include "Others" threat risk results in the risk charts for future results. However, it is emphasized that every time DIMP risk calculations are performed, the leaks going to "others" category be scrutinized for the reported cause which will provide information that whether either of those leaks could have been reported under the other seven well-defined categories. It will be useful, if necessary, for providing instructions/training to field staff and possibly a change in the "leak repair

form” or other document(s). The process should be documented. SED will revisit this in the next DIMP Inspection.

Gas Distribution Integrity Management : Measure Performance and Evaluate Effectiveness (GDIM.EV)

(8) Question Does the plan establish a baseline for each performance measure? Text

References 192.1007(e)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulations, §192.1007(e) states:

“Measure performance, monitor results, and evaluate effectiveness. (1) Develop and monitor performance measures from an established baseline to evaluate the effectiveness of its IM program. An operator must consider the results of its performance monitoring in periodically re-evaluating the threats and risks. These performance measures must include the following:

(i) Number of hazardous leaks either eliminated or repaired as required by §192.703(c) of this subchapter (or total number of leaks if all leaks are repaired when found), categorized by cause;

(ii) Number of excavation damages;

(iii) Number of excavation tickets (receipt of information by the underground facility operator from the notification center);

(iv) Total number of leaks either eliminated or repaired, categorized by cause;

(v) Number of hazardous leaks either eliminated or repaired as required by §192.703(c) (or total number of leaks if all leaks are repaired when found), categorized by material; and

(vi) Any additional measures the operator determines are needed to evaluate the effectiveness of the operator's IM program in controlling each identified threat.”

SEMPRA has established baseline for each performance measure as outlined in CFR 192.1007(e). The other programs such as DREAMS, GIPP, DRIP, and others are monitored through the measure of progress of these projects.

SED recommends exploring to establish performance measures baseline for these projects to get an insight into the success/effectiveness of the programs and document the same. The performance measures thus developed must be documented in an appropriate DIMP document.

SoCalGas and SDG&E Response:

SoCalGas/SDG&E agree with SED’s recommendation and will explore approaches to establish performance measures and control groups based on program scope which provide insight on program effectiveness. These effectiveness metrics will be reviewed regularly as part of the continual management oversight of each DIMP program and adjustments to the program will be made as necessary (e.g., scope adjustments, program closeouts).

SED’s Conclusion:

SED has reviewed the response and accepted the same.

(9) Question When measures are required to reduce risk, does the plan provide/describe what Text type and/or what specific performance measures will be used to measure effectiveness?

References 192.1007(e)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulations, §192.1007(e) states:

"Measure performance, monitor results, and evaluate effectiveness. (1) Develop and monitor performance measures from an established baseline to evaluate the effectiveness of its IM program. An operator must consider the results of its performance monitoring in periodically re-evaluating the threats and risks. These performance measures must include the following:

(i) Number of hazardous leaks either eliminated or repaired as required by §192.703(c) of this subchapter (or total number of leaks if all leaks are repaired when found), categorized by cause;

(ii) Number of excavation damages;

(iii) Number of excavation tickets (receipt of information by the underground facility operator from the notification center);

(iv) Total number of leaks either eliminated or repaired, categorized by cause;

(v) Number of hazardous leaks either eliminated or repaired as required by §192.703(c) (or total number of leaks if all leaks are repaired when found), categorized by material; and

(vi) Any additional measures the operator determines are needed to evaluate the effectiveness of the operator's IM program in controlling each identified threat."

SEMPRA provided document S6Q6 which shows that projects are assessed based on the amount of work done, rather than effectiveness of the work. For example, page 14 of S6Q6 shows the Sewer Lateral Inspection Program (SLIP) dashboard, which tracks annually the O&M budget spent, records researched, field inspections, and intrusions repaired.

SED recommends that other performance measures may be explored which can provide information on the effectiveness of these special projects, such as SLIP, DREAMS, GIPP, DRIP, and others. This should be documented.

SoCalGas and SDG&E Response:

Please see response to Concern #8.

SED's Conclusion:

SED has reviewed the response and accepted the same.

Gas Distribution Integrity Management : GDIM Implementation (GDIM.IMPL)

**(10) Question Is missing or incomplete system information and data needed to fill
Text knowledge gaps to assess existing and potential threats being collected?**

References 192.1007(a)(3)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(a)(3) States:

"Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities)."

SED emphasizes that a list of missing or incomplete system information and data (for assessing existing and potential threats) be developed, and the same be collected as this becomes available. The records must be maintained.

SoCalGas and SDG&E Response:

Please see response to Concern #1.

SED's Conclusion:

SED has reviewed PG&E's response and have accepted the same.

(11) Question Has the operator identified information or data from external sources (e.g. Text trade associations, operator's consultants, government agencies, other operators, manufacturers, etc.) that may require re-evaluation of threats and risks?

References 192.1007(b)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulations, §192.1007(b) states:

"An operator must consider reasonably available information to identify existing and potential threats. Sources of data may include, but are not limited to, incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, and excavation damage experience."

SEMPRA does not have records that show the information and data was reviewed/identified from external sources that may require re-evaluation of threats and risks. Suggested external resources to explore this information include but are not limited to: GPTC Guide, PHMSA Bulletins and American Gas Association (AGA) resources; and where possible other industry best practices such as, Gas Technology Institute (GTI) Publications, American Gas Foundation (AGF) Study - Safety Performance and Integrity of the Natural Gas Distribution Infrastructure January 2005, American Society of Mechanical Engineers (ASME) Standard B31.8S - Managing System Integrity of Gas Pipelines, Regional Industry Organizations (Midwest Energy Association (MEA), Southern Gas Association (SGA), Northeast Gas Association (NGA), Western Energy Institute (WEI)). SEMPRA should investigate the use of these resources and make decisions as applicable to their program, but the process should be documented.

SoCalGas and SDG&E Response:

Please see response to Concern #5.

SED's Conclusion:

SED has reviewed the response and accepted the same.

(12) Question Is missing or incomplete system information and data using the procedures Text prescribed in the DIMP plan being collected?

References 192.1007(a)(3)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(a)(3) States:

"Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities)."

SED recommends including in DIMP procedures the means to collect missing or incomplete system information. These procedures should be followed to collect the information, and records maintained.

SoCalGas and SDG&E Response:

Please see response to Concern #1.

SED's Conclusion:

SED has reviewed the response and accepted the same.

(13) Question Are data collection forms used in conjunction with the operator's DIMP plan Text being fully and accurately completed?

References 192.1007(a)

Assets Covered SEMPR (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(a) States:

"Knowledge. An operator must demonstrate an understanding of its gas distribution system developed from reasonably available information.

(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.

(2) Consider the information gained from past design, operations, and maintenance.

(3) Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities).

(4) Develop and implement a process by which the IM program will be reviewed periodically and refined and improved as needed.

(5) Provide for the capture and retention of data on any new pipeline installed. The data must include, at a minimum, the location where the new pipeline is installed and the material of which it is constructed."

SED reviewed sample "Leak Repair Forms" as well observed its demonstration during the WebEx session. Following observations were made for threat categories:

(1) There was no "Equipment Failure" category

(2) The "Outside Force Damage Category" listed the options which should be under "Excavation Damage" such as 1st Party, 2nd Party and 3rd Party Damages. SEMPR should create separate category for "Excavation Damages".

(3) The "Outside Force Damage" category should have options like Vehicular Damage, Vandalism, and others as appropriate

(4) The "Others" threat category has an option "Valve Stem Leak" which is better suited to be listed under "Equipment Failure". The threats coming from "Risk Model" under "Others" category should be closely scrutinized manually, and if they are better suited to other primary threat categories, then those be listed under appropriate category and changes should be made accordingly to the Leak Repair Form. The "Others" threat category should have least possible options possible.

SED recommends to:

(1) Thoroughly review "Leak Repair Form" and make necessary changes to align with PHMSA threat categories

(2) Minimize leaks being assigned to "Others" threat category

GPTC guide and ASME 31.8S among others are excellent sources for this information. SEMPR should make and implement changes including training (if any) in the "Leak

Repair Form" within 90 days of the receipt of this letter and send confirmation to SED of the same.

SoCalGas and SDG&E Response:

As stated in response to Concern #7, the data entry options on the Leak Repair Form were created to obtain the most accurate data possible from the field technician. The DIMP team aggregates all the leak records and performs a detailed review of the data to appropriately categorize the leaks for DOT reporting. The PHMSA threat categorization used for reporting is not solely dependent upon the way the causes are organized within the form. For instance, the "Valve Stem Leak" cause is categorized as "Equipment Failure" despite how it is represented on the form.

SoCalGas/SDGE will review available guide materials such as GPTC and ASME B31.8S for improvements on appropriate threat categorization and how to minimize the reporting of the "Other" threat category. The incorporation of additional causes will be explored and implemented as necessary. However, any system update and related training will likely require more than 90 days to achieve.

SED's Conclusion:

SED has reviewed the response and emphasizes that the observations (1) to (4) made by SED as outlined above should be considered in revising the 'leak repair form', in addition to other analysis. Since, DIMP analysis depends upon reported and repaired leaks, the accuracy of the 'leak repair form' is vital and therefore the leak causes recorded by field personnel are important. SEMPRA should carry out this exercise at the earliest and report on it by June 30, 2021.

(14) Question If Subject Matter Experts (SMEs), is their documented knowledge and Text experience being appropriately used in the DIMP Program?

References 192.1007(a)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(a) States:

"Knowledge. An operator must demonstrate an understanding of its gas distribution system developed from reasonably available information.

(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.

(2) Consider the information gained from past design, operations, and maintenance.

(3) Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (for example, design, construction, operations or maintenance activities).

(4) Develop and implement a process by which the IM program will be reviewed periodically and refined and improved as needed.

(5) Provide for the capture and retention of data on any new pipeline installed. The data must include, at a minimum, the location where the new pipeline is installed and the material of which it is constructed."

In response to data requests and discussion with SEMPRA personnel during the Inspection, it was mentioned that no specific list of SMEs exist, however, the interaction with SMEs is done at departmental and work responsibility level.

SED recommends that SMEs in different fields of specialization, such as Corrosion, Damage Prevention, Geoscience, Engineering and Construction and others be included in Steering Committee for their input to the DIMP Program. This will be helpful, for example for determining weight factors, interpreting the Risk model results and others. The process of establishing "Steering Committee", the required knowledge and

experience of its members, list of its members be formalized and documented. The minutes of steering committee meetings continue to be recorded and maintained for review.

SoCalGas and SDG&E Response:

DIMP. 4 states,

"DIMP Risk & Threat Steering Committee is composed of the Pipeline Integrity Director, Risk, Threat, and P&M Manager, Risk & Threat Team Lead, DIMP Analysis Team Lead and Risk & Threat team members. The Committee is responsible for annually providing guidance to the development and modification of the overall risk and threat strategy by providing guidance on company experiences and improvements. This includes, but is not limited to, the weight factors for Consequence of Failure."

In addition to Steering Committee members, SoCalGas/SDG&E engage various SMEs for their input to modifications to the overall risk and threat strategy depending on content of the update. The SME input can include threat specific experience, regional and program specific experience. SoCalGas/ SDG&E agree that DIMP.4 should be updated to reference the input of SMEs to overall risk and threat strategy. The following will be added to the above section in DIMP.4:

"When appropriate, Subject Matter Experts will be consulted and participate in Steering Committee meetings."

The steering committee documentation requirements will be utilized to document the involvements of SMEs.

SED's Conclusion:

SED has reviewed the response and accepted the same.

(15) Question Does each implemented risk reduction measure identified in the DIMP plan Text address a specific risk or group of risks?

References 192.1007(d)

Assets Covered SEMBRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(d) States:

"Identify and implement measures to address risks. Determine and implement measures designed to reduce the risks from failure of its gas distribution pipeline. These measures must include an effective leak management program (unless all leaks are repaired when found)."

DIMP cycle results in Risk Ranking which is used for determining the mitigation activities. PHMSA DIMP FAQ C.4.d.1. states, "Operators must perform a risk analysis to understand the factors that are important to their risk and should compare the results of this analysis to the actions now being taken *to assure pipeline safety.*"

SED recommends that after each DIMP cycle, DIMP team communicate prioritized list of projects to planning and execution teams based on risk ranking to reduce the risk and follow up on these for proper and timely action. Documents must be maintained outlining the reasons of delays in implementation of projects, if any.

SoCalGas and SDG&E Response:

SoCalGas/SDG&E routinely communicate implementation plan and prioritization list of projects to the execution teams. Deviations from the plan will be formally documented.

SED's Conclusion:

SED has reviewed the response. Please keep the lists of projects that are recommended for execution which shows priority based on the risk ranking and keep the records of follow-up with the execution team on completion of these projects.

(16) Question Text **If the periodic evaluation indicates that implemented measures to reduce risks are NOT effective, were risk reduction measures modified, deleted or added?**

References 192.1007(f)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(f) States:

"Periodic Evaluation and Improvement. An operator must re-evaluate threats and risks on its entire pipeline and consider the relevance of threats in one location to other areas. Each operator must determine the appropriate period for conducting complete program evaluations based on the complexity of its system and changes in factors affecting the risk of failure. An operator must conduct a complete program re-evaluation at least every five years. The operator must consider the results of the performance monitoring in these evaluations."

SED discussed with SEMPRA regarding the criteria that would constitute implemented measures to be ineffective. For example, setting a criterion such as "drastic decrease in certain event" ignores the initial and continuous assessment of the effectiveness of the programs. DIMP programs are supposed to be proactive, and once mitigation measures are implemented, the trends should be monitored which can guide on effectiveness of the measures and consideration of alternate measures, if needed.

SED recommends that SEMPRA devise a set criterion for each program stating what conclusion would be drawn from the results of the continuous evaluation for the effectiveness and devise alternate strategy if the measures in place do not provide desired positive results.

SED also reviewed the response provided for DR#37. In 2017, the 5-year moving average performance metric triggered an investigation into the Equipment Failure threat. SEMPRA provided the investigation report on DR#45, which summarized the analysis and made three recommendations. However, based on WebEx discussions with SEMPRA, no actions were taken to implement these recommendations.

SED finds concern with this approach, as it appears SEMPRA identified a worsening performance metric, performed analysis into the threat, identified possible actions to mitigate the threat, and took no action.

SED recommends SEMPRA keep clear records of both:

- a) Any action taken in response to a threat investigation
- b) Justification for why no action was taken after the investigation.

SoCalGas and SDG&E Response:

SoCalGas/SDG&E will document the actions taken as a result of threat investigations and the effectiveness review process as described in response to Concern #8. This will include instances where no actions were taken and the associated justification.

SED's Conclusion:

SED has reviewed the response and accepted the same.

(17) Question Text **Did the periodic evaluation indicate that the selected performance measures are assessing the effectiveness of risk reduction measures, and, if not, were performance measures modified, deleted or added?**

References 192.1007(f)

Assets Covered SEMPRA (Multi Unit)

Issue Summary Title 49 Code of Federal Regulation, §192.1007(f) States:

"Periodic Evaluation and Improvement. An operator must re-evaluate threats and risks on its entire pipeline and consider the relevance of threats in one location to other areas. Each operator must determine the appropriate period for conducting complete program evaluations based on the complexity of its system and changes in factors affecting the risk of failure. An operator must conduct a complete program re-evaluation at least every five years. The operator must consider the results of the performance monitoring in these evaluations."

SED reviewed SEMPRA's records and observed the performance measures required by 192.1007(e) are tracked and monitored, however, some of threat categories show increasing trend over time. The accelerated programs are monitored through progress of the work completed.

SED recommends that SEMPRA devise a set of specific performance measures for each program which should be monitored and adjusted if needed for the programs to be effective.

SoCalGas and SDG&E Response:

Please see response to Concern #8.

SED's Conclusion:

SED has reviewed the response and accepted the same.