SOUTHWEST GAS CORPORATION

Jerome T. Schmitz, P.E., Vice President/Engineering

July 14, 2013

Sunil Shori, Utilities Engineer
California Public Utilities Commission
Utilities Safety & Reliability Branch
Safety and Enforcement Division
505 Van Ness Avenue, 2nd Floor
San Francisco, CA 94102-3298

Re: Gas System Metrics

Dear Mr. Shori:

On behalf of Southwest Gas Corporation (Southwest Gas or the Company), I would like to thank you for the opportunity to provide written feedback on the California Public Utilities Commission (CPUC or the Commission) gas system metrics workshop hosted on June 27, 2012 in San Francisco. Southwest Gas is a natural gas local distribution company that serves over 185,000 customers in California. The Company owns and operates 15 miles of intrastate transmission pipelines and 3,108 miles of distribution mains and facilities in California.

Southwest Gas believes that development and utilization of effective, meaningful metrics are important to maintain the focus of our management, employees and contractors on providing safe and reliable gas service.

Southwest Gas has broken out our respective comments into two categories for the Commission's consideration: General Comments and Comments on Proposed Metrics provided in "Gas System Metrics for Consideration" presentation provided by the Commission at the June 27 workshop.

General Comments

The Commission's stated objective of the June 27 workshop "is to create a set of reporting metrics that convey consistent and comparable information regarding the gas system safety parameters". Southwest Gas commends the Commission's efforts to establish consistent and comparable gas system safety metrics and supports this objective. Southwest Gas also notes that data quality and integrity are essential in demonstrating the safety and reliability of pipeline facilities.

PHMSA discussed the challenge of metrics at the Pipeline Data Collection workshop hosted by the agency in January 2013. Stakeholders present at this workshop discussed the importance of accurate data collection and use of metrics but also cautioned that metrics must remain meaningful and that data analysis is critical, but often difficult due to data quality issues.

Performance measurement systems must provide intelligence for decision-makers, not just compile data, and they should be positive, not punitive[1].

Southwest Gas considers enhancing public and employee safety, improving emergency response, increasing the effectiveness of asset management efforts and programs, and capitalizing on new and existing technologies as key factors in developing a system of meaningful metrics. Effective gas system safety metrics must be driven by efficient data collection activities and data quality must be a key priority. Furthermore, metrics must be clearly defined and relevant to gas safety. For example, terms such as "near miss" are ambiguous and carry multiple meanings to multiple stakeholders.

Southwest Gas urges the Commission to consider industry guidance when developing new gas system safety metrics. Southwest Gas cautions against the creation of too many metrics. The Gas Piping and Technology Committee (GPTC) incorporated the concept of selecting a critical few measurements in its guidance (GM Appendix G-192-8-7) material for the Subpart "P" distribution integrity management. There are decreasing returns as measurements are added, and too many measurements is likely to overwhelm the measurement system.

On the path to develop new meaningful gas system safety metrics, it is important to recognize that gas system operators in California already provide useful data through many different data sources. Although Southwest Gas understands that new metrics may be required, the Commission should consider all of the existing data sources in its proposal to create additional metrics. Southwest Gas provides data through a variety of existing reports and programs that meet the above objective which include: the PHMSA annual transmission, distribution and mechanical fitting failure reports, the Commission's Quarterly Incident Report (QIR), and the Common Ground Alliance (CGA) Damage Information Reporting Tool (DIRT).

Development of new reporting metrics often results in extensive modifications to legacy data collection systems and databases, re-training of existing field employees, as well as the unintended consequences of data integrity issues due to the mix of old and new data. Great care should be taken to ensure that metrics and their intended benefits promote public safety and system integrity.

Southwest Gas respectfully submits the following comments to assist the Commission in developing meaningful gas system safety metrics.

Comments on presentation "Gas System Metrics for Consideration" presentation

CPUC PPT Presentation Slide 4 - 1) Add construction defects and material failures as a cause on the annual report

[1] SERVING THE AMERICAN PUBLIC; Best Practices in Performance Measurements, Benchmarking Study Report, National Performance Review, Vice President Al Gore, June 1997; Page 3 of 35 (http://govinfo.library.unt.edu/npr/library/papers/benchmrk/nprbook.html)

Southwest Gas Response: The existing PHMSA Form 7100.1-1 (Annual Report for Gas Distribution Systems) and Form 7100.2-1 (Annual Report for Gas Transmission and Gathering Systems) address the items requested. Construction defects are captured on the distribution annual report under Part C as "Incorrect Operations" and Part M1 on the transmission annual report as "Construction". Material failures are reported on the distribution annual report under the Part C "Material or Welds" or "Equipment" depending on the nature of the leak, and Part M1 as "Manufacturing" or "Equipment" depending on the nature of the leak. This information is already provided to the Commission on an annual basis.

CPUC PPT Presentation Slide 4 - 2) Report Metrics collected per 192.1007(e)(1)(v) for hazardous leaks and include the same information for non-hazardous leaks

Southwest Gas Response: Currently, Southwest Gas reports both total leaks and hazardous leaks eliminated/repaired during the year categorized by cause on PHMSA Form 7100.1-1 (Annual Report for Gas Distribution Systems) Part C, in accordance with 192.1007(e)(1)(i) and provides copies to the Commission on an annual basis. The proposed metric is inconsistent with the stated objectives of the Commission because it is not comparable amongst operators, and, with respect to non-hazardous leaks, the metric is not relevant to gas system safety. As PHMSA has noted:

> *PHMSA has concluded it would be most useful for operators to report **four** performance measures. PHMSA recognizes that there will be some variability in the criteria for these performance measures among operators. The performance measures are intended to measure individual operator, state, and national trends.*
>
> *The total number of leaks eliminated or repaired by cause and the number of hazardous leaks eliminated or repaired by cause are two of the reportable performance measures. Leaks can lead to incidents and hazardous leaks represent the highest risk leaks. PHMSA and State partners expect effective integrity management programs to produce a reduction in the number of leaks. The total number of leaks scheduled for repair has historically been part of the Annual Report submitted by operators of distribution pipelines.*

CPUC PPT Presentation Slide 4 - 3) Report Metrics for the number of compression type mechanical fitting failures that resulted in hazardous (192.1009 using Form 7100.1-2) as well as those for non-hazardous leaks.

Southwest Gas Response: Southwest Gas tracks data on the number of compression type mechanical fitting failures that result in hazardous leaks on PHMSA Form 7100.1-2 (Mechanical Fitting Failure Report Form for Distribution Operators) and provides copies to the Commission on an annual basis. Southwest Gas has concerns reporting mechanical

fitting failures that result in a non-hazardous leak since, by definition, this category of leak does not present a hazard to people or property and its repair may not be required.

CPUC PPT Presentation Slide 4 - 4) For leaks repaired in the CY, show time between finding the leak and its repair in intervals of 0-3 months; 3-6 months; 6-9 months; 9-12 months; 12-15 months; and greater than 15 months

Southwest Gas Response: Southwest Gas has concerns with a proposed metric to show the time between finding and repairing a leak. Southwest Gas utilizes the GPTC guidance (GM Appendix G-192-11-7) to define the severity or grade of a leak. This classification then determines the required timeframe for the leak to be repaired. A hazardous leak, by definition, requires prompt and continuous action to repair or eliminate the hazard to people or property. A non-hazardous leak by definition does not present a hazard to people or property and its repair may not be required. The proposed metric is not consistent with the Commission's objective "to create a set of reporting metrics that convey consistent and comparable information regarding the gas system safety parameters".

CPUC PPT Presentation Slide 5 - 5) Add a new Part G which requires number of overpressure events which exceed 50% allowance to be reported annually

Southwest Gas Response: Under GO 112-E operators are required to report events which exceed MAOP plus the buildup allowed for operation of pressure limiting or control device which, is also consistent with 49 CFR 191.23. Under the existing reporting requirements, both the CPUC and PHMSA have given consideration to the fact that the secondary pressure limiting or control device requires a set pressure greater than that of the primary pressure limiting or control devise in order to function properly. This pressure differential is the buildup allowed under current regulations. To require the reporting of overpressure events which exceed anything less than 100% of the buildup allowed is essentially the same as requiring the operator to report any event in which the MAOP is exceeded. This metric appears to be arbitrary and the value is unclear.

CPUC PPT Presentation Slide 5 - 6) Annual Public Awareness Monitoring and/or calls received by the operator on each phone number provided in the public awareness message

Southwest Gas Response: Southwest Gas conducts annual public awareness monitoring and evaluates the effectiveness of it Public Awareness Program as required by state and federal regulations. However, Southwest Gas has concerns with a proposed metric for reporting calls received by the operator on each phone number provided in the public awareness message and does not believe this would be a meaningful metric to measure effectiveness of a Public Awareness Program.

RP1162 incorporated by reference into 49 CFR 192.616 already requires operators to measure program effectiveness to assess whether the actions undertaken in implementation of the RP are achieving the intended goals and objectives including the following:

- whether the information is reaching the intended stakeholder audiences;
- if the recipient audiences are understanding the messages delivered;
- whether the recipients are motivated to respond appropriately in alignment with the information provided;
- if the implementation of the Public Awareness Program is impacting bottom-line results

The proposed metric must measure the program effectiveness. However, tracking calls does not achieve this objective. For example, an increase in the number of calls year over year could be interpreted as an indication of an effective Public Awareness Program or interpreted that the message is ineffective prompting customer calls.

CPUC PPT Presentation Slide 5 - 7) Annually Report the 32 metrics required to be tracked per 192.945(a) and ASME B31.8S, Chapter 9, Table 9

Southwest Gas Response: Southwest Gas supports the annual reporting of the 32 metrics required to be tracked per 192.945(a) and ASME B31.8S, Chapter 9, Table 9.

CPUC Gas System Metrics Presentation Slide 6 - 1) Number of excavation damage events involving homeowners

Southwest Gas Response: Southwest Gas supports a metric for the number of excavation damage events involving homeowners and already provides this information to the Commission Safety & Enforcement Division in the Quarterly Incident Reports (QIR) as required by GO 112-E, Section 122(d).

CPUC Gas System Metrics Presentation Slide 6 - 2) Number of excavation damage events involving agencies (i.e., Caltrans, non-pressurized sewer) excluded per GC 4216 (given exemptions)

Southwest Gas Response: Southwest Gas supports a metric for the number of excavation damage events involving agencies and already provides this information to the Commission Safety & Enforcement Division in the Quarterly Incident Reports (QIR) as required by GO 112-E, Section 122(d). To ensure the completeness of this metric, Southwest Gas supports the elimination of state one call exemptions from this requirement.

CPUC Gas System Metrics Presentation Slide 6 - 3) Number of person-days, along with total costs, devoted to excavation field meetings (per GC 4216) and stand-by activities.

Southwest Gas Response: Southwest Gas has concerns with a proposed metric for the number of person-days, along with total costs, devoted to excavation field meetings (per GC 4216) and stand-by activities. This requested information does not reflect the effectiveness of an Operator's Damage Prevention Program and therefore is not a meaningful metric. For example, if an operator experiences a decrease in the number of person-days and/or associated total costs year over year for the above activities, this could be interpreted as an indication of an ineffective damage prevention program, a shrinking economy, a change in wage scale, or all of the above. It is unclear what the proposed metric will measure.

Southwest Gas urges the Commission to involve the CGA and use the CGA DIRT for damage prevention data collection. Southwest Gas believes that One Call enforcement is a more effective approach to damage prevention than additional data collection beyond the best practices established by CGA.

CPUC Gas System Metrics Presentation Slide 6 - 4) Number of person-days, along with total costs, devoted to mark and locate activities

Southwest Gas Response: Southwest Gas has concerns with a proposed metric for the number of person-days, along with total costs, devoted to mark and locate activities. This information does not reflect the effectiveness of an Operator's Damage Prevention Program and therefore is not a meaningful metric. As stated in the above referenced response to Slide 6 - 3, it is unclear what the proposed metric will measure.

Southwest Gas urges the Commission to involve the CGA and use the CGA DIRT for damage prevention data collection. Southwest Gas believes that One Call enforcement is a more effective approach to damage prevention than additional data collection.

CPUC Gas System Metrics Presentation Slide 6 - 5) Confirm that Part D, the Number of Excavation tickets should include all original and renewals (overall, there exists a need to confirm state-wide uniformity in this reporting)

Southwest Gas Response: Southwest Gas confirms that our data reported under Part D "Number of Excavation Tickets" includes all original and renewal tickets. Southwest Gas uses this data and the total number of excavation damages, to calculate damages per 1000 tickets. The Company and industry uses this metric as a measure of the effectiveness of damage prevention.

CPUC Gas System Metrics Presentation Slide 7 - 1) Number of near-miss events by operating Division, District and/or Region

Southwest Gas Response: Southwest Gas is not aware of an industry recognized definition for the term "near miss" and therefore cannot support a metric for reporting the number of near-miss events by operating Division, District and/or Region. Terms like "near miss" are ambiguous and carry multiple meanings to multiple stakeholders. Southwest Gas could support this proposed metric should the Commission provide a clear and concise definition of the term as it applies to gas system safety.

CPUC Gas System Metrics Presentation Slide 7 - 2) A metric which tracks the amount of time it takes for changes, repairs, or new facilities to get finalized to the operating maps

Southwest Gas Response: Due to the varied nature of facility installations which range from small projects such as service lines, to very large projects that span many miles in length and may take many months to complete, the time to finalize the as-built package varies considerably from project to project. Southwest Gas is concerned that due to these factors, this metric may not be meaningful as a comparison between operators.

CPUC Gas System Metrics Presentation Slide 7 - 3) Number of employees, by operating Division, District and/or Region, evaluated, and those disqualified after evaluations, performed per 192.805 (d) or (e)

Southwest Gas Response: Southwest Gas supports a metric for the number of employees evaluated, and those disqualified after evaluations, performed per 192.805 (d) or (e). Southwest Gas can provide both evaluations and disqualifications as outlined in Southwest Gas' Operator Qualification Plan on an annual basis; however, Southwest Gas disagrees that this data should be broken down by division, district and/or region. In certain operating areas, employees or contractors may cover multiple districts and/or regions in a single day, therefore providing breakdowns by district and/or region may not be practical. Southwest Gas also notes that not all operators utilize the same covered tasks in their Operation Qualification Plan providing further ambiguity and possible inconsistency to this proposed metric.

CPUC Gas System Metrics Presentation Slide 7 - 4 Provide lost and unaccounted for gas values by operating Division, District and/or Region

Southwest Gas Response: Southwest Gas does not support a metric to provide lost and unaccounted for gas values by operating Division, District and/or Region. Lost and unaccounted for gas is not a relevant measure of safety or gas system integrity for gas distribution systems that are predominantly plastic. This accounts for a very small percentage of the total volume reported under lost and unaccounted for gas which is predominantly attributed to meter tolerances and other factors.

CPUC Gas System Metrics Presentation Slide 8
Annually report response times, by Division, District, and/or Region, to reports of leaks or damages in periods of five minute intervals

The intervals would start with 0-5 minutes, all the way to 40-45 minutes, and with all responses greater than 45 minutes.

The clock would start when the utility first receives the report and end when the first representative qualified to assess the situation and make it safe first arrives on scene at the reported location.

Southwest Gas Response: Southwest Gas supports the annual reporting of emergency response times. Southwest Gas urges the Commission to clearly define the parameters for this proposed metric, specifically, the definition of "make safe". Southwest Gas considers "make safe" the arrival of a qualified individual to take necessary actions to protect life and property. This may include performing an initial on-scene report, establishing a safety perimeter, evacuation, requesting additional resources, eliminating sources of ignition, performing a leak investigation, and/or establishing a gas control plan. Each emergency is different and the actions to "make safe" will likely vary depending on the situation.

Southwest Gas respectfully requests that the Commission consider the reporting of response times as an average reporting time in lieu of reporting in 5 minute increments. The proposed reporting of this metric in 5 minute increment adds unnecessary complexity.

CPUC Gas System Metrics Presentation Slide 9
Operators should report the total number of routine liaison activities planned and scheduled in the year and the number of the scheduled activities actually held (discussion)

Description of liaison activities and information on annual planned first responder liaison sessions would be provided on operators' respective websites:

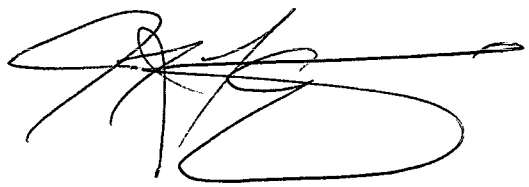
- Agencies invited to sessions would be listed by county and name of agency
- The number of agency representatives that attended the sessions would be listed;
- A link to the operators' websites would reside on the CPUC website.

Southwest Gas Response: Southwest Gas supports reporting of the total number of routine liaison activities planned and scheduled in the year and the number of the scheduled activities actually held. Southwest Gas also supports posting liaison activities and information on annual planned first responder liaison sessions on operators' websites. Additionally, Southwest Gas supports listing the agencies invited to these sessions by county and agency name.

However, Southwest Gas does not support publishing agency names for those agencies not in attendance. This action may be misconstrued as punitive and conflicts with establishing and maintaining good relations with each of these agencies.

Thank you again for your time and the opportunity to provide comments on the June 27 gas system safety metrics workshop. Southwest Gas looks forward to working with the Commission and other stakeholders to further refine and develop key gas system safety metrics to ensure the safe and reliable service to our customers. Please do not hesitate to contact me if there are any questions or if additional information can be provided.

Sincerely



/rm

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