# SUPPLEMENTAL QUESTIONNAIRE R.15-01-008, 2023 Annual Report

[San Diego Gas & Electric]

Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In partial fulfillment of Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In Response to Data Request R15-01-008, 2023 Annual Report
Date: [6/15/23]

The following data have been prepared to comply with Senate Bill 1371 (Leno, 2014), Section 2, Article 3, Order Instituting Rulemaking (OIR) 15-01-008, and to provide responses to Data Request R. 15-01-008, 2023 Annual Report.

- 1. Please provide the following for the period from January 1, 2022 to December 31, 2022:
  - a. Describe any current projects or studies related to SB 1371.

### Response:

Listed below are the major initiatives and studies from SDG&E's 2022 Compliance Plan. For additional details on projects and studies related to SB 1371, please refer to the 2022 Compliance Plan (Natural Gas Leakage Abatement Rulemaking | San Diego Gas & Electric (sdge.com)).

- Chapter 1 Increased Leak Survey
- Chapter 2 Blowdown Reduction Activities
- Chapter 3 Damage Prevention Algorithm and Proactive Intervention
- Chapter 4 Recordkeeping IT Project
- Chapter 5 Geographic Tracking
- Chapter 6 Electronic Leak Survey
- Chapter 7 Damage Prevention Public Awareness
- Chapter 8 Pipe Fitting Specifications
- Chapter 9 Repeat Offenders IT Systems
- Chapter 10 Gas Speciation
- Chapter 11 Public Leak Maps
- Chapter 13 Distribution Above Ground Leak Surveys
- RD&D Summary #16 Sub-Surface Migration Model and Plastic Piping Slow Crack Leak-Rate Growth
- RD&D Summary #17-1 Evaluation of New Technologies for Leak Detection, Localization, and Specialization
- RD&D Summary #17-2 Aerial Leak Detection and Quantification Technologies
- RD&D Summary #18 Evaluation of Stationary Methane Detectors
- RD&D Summary #20a-1 Develop Company-Specific Emission Factors
- RD&D Summary #20a-2 Evaluation of New Technologies for Leak Quantification
- RD&D Summary #20a-3 Quantification of Through-Valve Leakage on Large Compressor Valves
- RD&D Summary #22 Investigate Designs, Specifications, Tolerances and Sealing Compounds for Threaded Fittings and Joints
- RD&D Summary #23-1 Evaluation of Technologies to Mitigate Gas Blowdowns & Equipment Vented Emissions
- RD&D Summary #23-2 Evaluate Component Emission Reductions Opportunities
- b. Describe the activity changes between the previous year's reporting and the current year's reporting that affected the change in the total emissions. For

example, changes in maintenance activities may have changed blowdown emissions from previous years and resulted in changes to total emissions.

# Response:

- <u>Transmission Pipeline Blowdowns</u>: The volume of Transmission Pipeline blowdowns increased from 75 Mscf to 181 Mscf, which is a year-over-year increase of 141.3%. The increase can be attributed to increased project activity.
- <u>Transmission M&R Station Blowdowns</u>: The number of Transmission M&R Station blowdowns increased year-over-year by 23.8%. The number of blowdown events increased from 130 to 161 between 2021 and 2022. The volume remained at approximately 2 Mscf during 2021 and 2022.
- Transmission Compressor Station Blowdowns: The volume of Transmission Compressor Station blowdowns decreased year-over-year by 69.9%. The decrease in emissions can be attributed to increased project activity at the stations. Due to the increased project activity, equipment was out of service for extended periods of time, and the number of blowdowns from large equipment was reduced.
- <u>Transmission Compressor Station Component Fugitive Leaks</u>: Emissions decreased by 5.6% year-over-year. The number of leaks ≥10,000 ppm decreased from 20 to 17 between 2021 and 2022. The decrease in emissions and leak counts can be attributed to the continued efforts to detect and repair leaks ≥1,000 ppm during quarterly CARB Oil and Gas Rule surveys.
- Transmission Compressor Station Storage Tank Leaks and Emissions:
   Emissions decreased by 97.3% year-over-year (from 5 Mscf to approximately 0.1 Mscf). The decrease can be attributed to operating fewer LNG (liquified natural gas) tanks during 2022 than 2021. During 2022, one tank was in service, whereas two tanks were in service during 2021.
- <u>Distribution Main and Service Pipeline Leaks</u>: Total emissions increased by 8.2% and the leak count increased from 705 to 822 between 2021 and 2022. Emissions from known leaks were approximately equal year-over-year; however, because more leaks were found during 2022 surveys than 2021 surveys, the estimated volume of emissions from unknown leaks during 2022 is higher than 2021. The increase in the number of leaks found during survey can be attributed to covering more mileage during 2022 than 2021. Approximately 400 additional miles were surveyed in 2022.
- **Distribution Main and Service Pipeline Blowdowns**: Emissions increased by 57.7% (from 26 Mscf to 41 Mscf). The number of blowdown events increased from 290 to 296 between 2021 and 2022. The increase can be attributed to increased project activity.
- <u>Distribution Main and Service Pipeline Damages</u>: Emissions decreased by 11.1% and the number of damage events decreased by 9.9% (from 385 to 347) year-over-year. The number of 811 tickets increased by more than 25,000 during 2022 relative to 2021, which helped contribute to the decrease in damage events and emissions.
- <u>Distribution M&R Blowdowns</u>: Emissions increased by 6.3% during 2022 relative to 2021 (from 16 Mscf to 17 Mscf). Distribution M&R Blowdowns are a function of inspection activity level and can vary year-to-year. There were more inspections and more blowdowns in 2022 than 2021.

- <u>Distribution M&R Component Leaks</u>: Emissions decreased by 21.5%, and the number of leaks decreased from 35 to 28 between 2021 and 2022. SDG&E's efforts to reduce emissions through increased greasing and exercising of valves during inspections may be contributing to the lower leak rate.
- <u>Customer Meter Leaks</u>: Emissions increased by 0.4% year-over-year. The number of customer meters in the SDG&E system increased from 906,136 to 909,907. The increase in reported emissions is due to the increased number of meters and the population-based emission estimation methodology.
- <u>Customer Meter Damages</u>: Emissions from Customer Meter damages increased from 795 to 1,661 Mscf, which is a year-over-year increase of 108.9%. Between 2021 and 2022, the number of damage events increased from 145 to 194. 191 of the 194 damages in 2022 were repaired within one day, and the remaining three damages were repaired within two days.
- <u>Customer Meter Vented Emissions</u>: Emissions increased by 40.0% year-over-year (from 45 Mscf to 63 Mscf). The number of blowdowns increased from 53,410 to 60,163. Customer Meter blowdowns are a function of activity level and can vary year-to-year. More O&M activities resulting in blowdowns took place in 2022 than 2021.
- c. Describe advances in abatement efforts, similar to the executive summary in the best practices reporting.

#### Response:

Title	Emission Source	Mandatory Best Practice(s)	Advances in Abatement Efforts During Emission Year 2022
Blowdown Reduction Activities	Transmission Pipeline	23, 3-7	The Digital Blowdown Planning and Reporting Tool was launched in 2022 and is expected to increase reporting accuracy as well as allow for better tracking and emission forecasting.
Aerial Monitoring /Aerial Methane Mapping	Distribution Mains and Services; Customer MSAs	16, 17, 20a	A limited R&D demonstration and pilot project of the AMM program was completed. 51 emission sources were detected, of which 4 were system leaks.

Damage Prevention Public Awareness	Distribution Mains and Services	24, 25, 26	Geofencing efforts were implemented by leveraging location-based and behavioral data which target relevant users in real time. In certain hardware and/or excavation & demolition businesses, shoppers indicating interest in excavation and/or demolition activities receive push notification on their mobile devices, and they are directed to the SoCalGas "Call 811 Before You Dig" website.
			mobile devices, and they are directed to the SoCalGas "Call 811 Before You Dig" website for more information.

d. Describe improvements in reporting that are not discernable by reviewing the reporting data. For example, report the installation of a new data management or leak tracking system.

## Response:

The Digital Blowdown Planning and Reporting Tool was launched in 2022 and is expected to increase reporting accuracy as well as allow for better tracking and emission forecasting.

e. For smaller utilities, confirm if there were no leaks in distribution mains and services pipelines.

## Response:

Not applicable.

f. Identify any additional tables to be included in the Joint Report. Staff will place these tables in an appendix.

## Response:

SDG&E appreciates the opportunity to suggest new tables for the Joint Report but is not recommending the addition of any tables at this time.