PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION **RESOLUTION G-3558**
December 19, 2019

R E S O L U T I O N

Resolution G-3558, Southern California Gas Company authorization to apply a meter calibration adjustment factor on customer bills to reduce methane emissions during meter replacement.

PROPOSED OUTCOME:

- Approves Southern California Gas Company's (SoCalGas) requested modifications to Condition 1 of Resolution G-2928 regarding a meter calibration adjustment factor.

SAFETY CONSIDERATIONS:

- There are no safety considerations.

ESTIMATED COST:

- The cost of the meter calibration adjustment factor should be minimal and will be included in SoCalGas' Natural Gas Leak Abatement Program.

By Southern California Gas Company (SoCalGas) Advice Letter (AL) 5403, Filed on December 27, 2018.

SUMMARY

This resolution approves SoCalGas' Advice Letter 5403, which proposes to modify Condition 1 in Resolution (Res.) G-2928 and related revisions to SoCalGas' tariff schedules. Condition 1 in Res. G-2928 establishes requirements for meter replacement by the utility. This change would allow a two percent meter calibration adjustment factor to be applied to customers' bills as a pilot program to reduce methane emissions and would be applicable throughout SoCalGas' service territory. This resolution also approves messages on customers' bills to explain the meter calibration adjustment factor and related tariff changes. The meter calibration adjustment factor will be applicable until a new factor is derived or the meter is

changed. SoCalGas will recommend whether to extend or terminate this pilot in its future Leak Abatement Compliance Plan.

BACKGROUND

The California Public Utilities Commission (CPUC) opened the Order Instituting Rulemaking (R.) 15-01-008 on January 22, 2015, to implement the provisions of Senate Bill (SB) 1371[1], which required the adoption of rules and procedures to minimize natural gas leakage from Commission-regulated natural gas pipeline facilities. Phase I of R.15-01-008 was established to specifically address the overall policies and guidelines for a natural gas leak abatement program consistent with SB 1371 and included the following program development activities: 1) information gathering, measurement, and best practices; 2) targets, compliance, and reporting; and 3) training and enforcement.

On June 15, 2017, the Commission adopted Decision (D.) 17-06-015,[2] which identified and adopted 26 best practices for the Natural Gas Leak Abatement Program. In compliance with Ordering Paragraph 10 of D.17-06-015, Pacific Gas & Electric (PG&E), SoCalGas, San Diego Gas & Electric (SDG&E), and Southwest Gas submitted compliance Advice Letters containing the projects and costs of their leak abatement programs. The incremental costs of best practices are recorded in a two-way balancing account, and costs related to pilot projects and R&D are recorded in one-way balancing accounts.

D.17-06-015 also ordered SED and Energy Division to convene a Technical Working Group and conduct a workshop to refine the scope and detail of the Compliance Plans and Tier 3 advice letters pertaining to forecasts, cost tracking, and recovery. SED held a workshop on August 1, 2017, to develop a standardized template for the Compliance Plans and to review the Commission requirements for R&D and pilot projects. On March 15, 2018, PG&E, SDG&E, SoCalGas, and Southwest Gas submitted a Methane

[1] SB 1371, Natural Gas: Leakage Abatement, was approved by the Governor on September 1, 2014.

[2] D.17-06-015 was issued June 15, 2017: http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M190/K740/190740714.PDF.

Leak Compliance Plan as directed by D.17-06-015. SED held a second workshop on April 19, 2018 to review the Compliance Plans submitted on March 15, 2018.

There are two prior resolutions with relevance to this Resolution:

- Resolution G-2928, which contains the Condition 1 that this resolution modifies, in order to to achieve reduced methane emissions from changeouts of meters with very small variances in their measurements via billing adjustments as described below; and
- Resolution G-3528, which approved the utilities 2018 Leak Abatement Compliance Plans.

ADVICE LETTER 5403

The Advice Letter proposes to minimize methane emissions during meter replacement by using a meter calibration adjustment factor on customers' bills, modifying Condition 1 in Res. G-2928. Condition 1 in Res. G-2928 establishes requirements for meter replacement by the utility. The modification is designed to reduce emissions by reducing the number of meters that must be pulled and replaced for small, less than two percent meter registration inaccuracies, as a small amount of methane escapes during the replacement process. The advice letter proposes to revise the relevant tariffs, and include a bill message on customers' periodic statements to explain the calibration adjustment factor. The meter calibration factor corrects small meter registration inaccuracies of participating meter groups by reducing the recorded meter registration by two percent and applying it to the billing factor. This meter calibration adjustment factor would only apply to participating meter groups of more than 500 meters, whose gas meters have been statistically registering between more than two percent fast and no greater than three percent fast. The proposed meter calibration adjustment factor would be applicable until a new factor is derived or the meter is changed. In future Leak Abatement Compliance Plans pursuant to SB 1371, SoCalGas will make recommendations to the Commission regarding the extension or termination of the program.

NOTICE

Notice of SoCalGas AL 5403 was made by publication in the Commission's Daily Calendar. SoCalGas states that copies of its Advice Letter were mailed and distributed

in accordance with Section IV of General Order 96-B. The AL was suspended on January 17, 2019 and again on June 7, 2019.

PROTESTS

No protests were filed on SoCalGas AL 5403.

DISCUSSION

Energy Division has reviewed AL 5403 and finds it consistent with D.17-06-015 and Res. G-3538. SoCalGas proposes a pilot program designed to minimize methane emissions during meter replacements by:

1) Using a meter calibration adjustment factor on customers' bills, modifying Condition 1 in Res. G-2928;
2) Revising its tariffs; and
3) Including a bill message on customers' periodic bill statements, as follows.

1. Calibration Factor

The pilot program would apply a two percent meter calibration adjustment factor on the conversion of metered natural gas volumes to billable volumes on customers' bills whose gas meters in a "meter family" have been statistically registering between more than two percent fast and no greater than three percent fast. SoCalGas employs different meter families within groups of gas meters to measure customer gas consumption. A meter group is formed when a family of new, like-kind meters are installed in the field in a given year.

After a meter group has been in the field measuring gas consumption for 10 years, the meter group is subject to annual sample proof testing to verify that the meter group is still accurately measuring gas consumption. The number of samples tested annually provides a statistically significant indication of the performance of the entire installed meter group. Results from these proof tests are reported in terms of percentage error (percent slow, which reports less gas than is actually consumed or percent fast, which reports more gas than is actually consumed). A value of zero percent indicates that the meter is perfectly accurate. Negative values indicate percent slow and positive values indicate percent fast. The proposed two percent meter calibration adjustment factor corrects small meter registration inaccuracies of participating meter groups by reducing

the amount recorded by the meter by two percent and applying it to the billing factor. This reduces emissions by reducing the number of meters that must be pulled and replaced for small, less than two percent meter registration inaccuracies, as a small amount of methane escapes during the replacement process.

The meter participation groups in the meter calibration adjustment pilot program all consist of at least 500 meters that are at least 10 years old. The company proposes to include 312,000 meters in the pilot, out of a total meter population of 5.996 million meters. The initial proposed meter families' participation in the meter calibration adjustment factor pilot program will conclude at the end of the life cycles of the meter families. This is when the Advanced Meter Infrastructure (AMI) Meter Transmission Unit (MTU) requires a battery change, at which time a new meter and MTU would be installed together as a combination meter. Additionally, dependent upon the evaluation of the ongoing results, meter families meeting the participation requirements may be added or removed from the pilot program. In future Senate Bill (SB) 1371[3] Leak Abatement Compliance Plans, SoCalGas will make recommendations to the Commission regarding either the extension or termination of the pilot program.

The proposed revision to Condition 1 in Res. G-2928 adds the following language:

> *For participating meter groups more than 10 years old with more than 10% of the meters in the group registering more than two percent fast and no greater than 3% fast, the participating meter families within meter groups may be subject to a two percent meter calibration adjustment factor to correct meter registration inaccuracies. Any participating meter groups more than 10 years old will be scheduled for removal as soon as more than 25% of the meters in the group are indicated to be registering outside the range of two percent fast to two percent slow, on the basis of annual tests of sample meters from the group.*

The two percent meter calibration adjustment factor for participating meter families extends the useful lives of the meters and eliminates the need for removing meters

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from the field until the time new meters and MTUs are installed together as combination meters. By using the meter calibration factor, SoCalGas estimates that it will reduce methane emissions by 462,000 standard cubic feet from 2019 to 2021. The calibration factor and the revision to Condition 1 of Res. G-2928 should be approved.

2. Tariff Revisions

Rule No. 02, Description of Service, is revised to add two new sections describing the meter calibration adjustment factor and how the metered volume is adjusted by a billing factor, as follows:

> K. *Meter Calibration Adjustment Factor*
>
> *In the cases where meters have failed the Meter Performance Control Program as fast meters, a Meter Calibration Factor of two percent will be applied in lieu of removal. This factor shall be applied to all impacted meters and remain in place as long as the meter is left in service without removal.*
>
> *L. Conversion of Metered Volumes to Billable Volumes for Billing*
>
> *The metered volume shall be adjusted by a billing factor equal to the product of the applicable adjustment factors listed in I, J, K to calculate the billable volume in Ccf [hundred cubic feet].*

In addition, Rule No. 02, Section L, Conversion of Metered Volumes for Billing of Utility Electric Generation and Wholesale Customers, is deleted due to the fact that all utility customers, including Utility Electric Generation and Wholesale Customers, are billed in therms, not thousand cubic feet (Mcf). This section is replaced by Section L above.

SoCalGas proposes to revise Rule No. 02, Section M (formerly Section K) by deleting obsolete language (in redlined format) that implies that Utility Electric Generation and Wholesale Customers are not billed in therms. The utility also proposes to add language to the beginning of the section describing the conversion of metered volumes to therms for billing and to modify the billing factor description in the second paragraph, as follows:

M. Conversion of Metered Volumes to Therms for Billing ~~OtherThanUtility ElectricGenerationandWholesaleCustomers~~

The number of therms to be billed shall be the product of the billable volume in Ccf times the BTU factor.[4]

The number of therms to be billed shall be the product of the metered volume in Ccf times the billing factor. The billing factor is equal to the product of the applicable ~~BtufactorfortheBtudistricttimesthe~~ adjustment factors for altitude, ~~and~~ metering pressure, and meter calibration, as appropriate.

The proposed tariff revisions, as shown in Attachment A of Advice Letter 5403, should be approved.

3. **Bill Message**

For participating meter families within meter groups subject to a two percent meter calibration adjustment factor, the following bill message will appear on the customers' periodic bill statements:

A meter calibration adjustment factor has been incorporated in the Billing Factor for this bill period. The calibration factor corrects small meter registration inaccuracies, effectively reducing the recorded registration by two percent.

Due to the limited space for bill messages on customers' periodic bill statements, the bill message may need to be superseded by another bill message of greater relevance. Samples of the revised periodic bill statements with the proposed bill message for the meter calibration adjustment factor, as shown in Attachment B of Advice Letter 5403, should be approved.

[4] BTU is the acronym for British thermal units, which is the quantity of heat required to raise the temperature of one pound of liquid water by one degree Fahrenheit. The BTU factor is the number that is multiplied by the volume of gas measured in order to arrive at the heating value of gas.

4. **Bill Presentation**

Currently, the conversion of metered volumes to therms for billing are the product of the metered volume in Ccf and the billing factor. The billing factor is equal to the product of the applicable Btu factor for the Btu district and the factors for altitude and metering pressure, as appropriate.

Therms = Ccf x (Applicable Btu Factor for the Btu District x Adjustment for Altitude x Adjustment for Metering Pressure)

Below are the columns that are included on the current periodic bill statement for the above calculation:

Current Reading	-	Previous Reading	=	Difference	x	Billing Factor	=	Total Therms

The use of the meter calibration adjustment factor revises the conversion of metered volumes to therms for billing as the products of the metered volume in Ccf, the revised billing factor, and the applicable Btu factor for the Btu district. The revised billing factor is equal to the product of the meter calibration adjustment factor and factors for altitude and metering pressure, as appropriate.

Therms = Ccf x (Meter Calibration Adjustment Factor x Adjustment for Altitude x Adjustment for Metering Pressure) x Applicable Btu Factor for the Btu District

An additional column, BTU Factor, will be included on the proposed periodic bill statement, as shown below:

Current Reading	-	Previous Reading	=	Difference	x	Billing Factor	x	BTU Factor	=	Total Therms

The revised periodic bill statements with the proposed bill calculation, as shown in Attachment B of Advice Letter 5403, should be approved.

5. Conclusion

This proposed pilot, including tariff changes, bill message, and bill presentation, does not increase or decrease any rate or charge, conflict with any schedules or rules, or cause the withdrawal of service.

We find that these proposed changes are reasonable and in the public interest and further the goals of SB 1371 to reduce emissions from natural gas infrastructure. A description of the pilot, the emissions reductions it achieved, and whether it should be expanded, adjusted, or terminated should be included as part of SoCalGas' 2022 Leak Abatement Compliance Plan pursuant to Senate Bill (SB) 1371.

COMMENTS

This is an uncontested matter in which the resolution grants the relief requested. Accordingly, pursuant to PU Code 311(g)(2), the otherwise applicable 30-day period for public review and comment is being waived.

FINDINGS

1. D.17-06-015 adopted policies and guidelines for a natural gas leak abatement program consistent with SB 1371.
2. D.17-06-015 identified and adopted 26 best practices for the Natural Gas Leak Abatement Program.
3. Resolution G-3538 approved utility Natural Gas Leak Abatement Program Memorandum and Balancing Accounts. Resolution G-2928 contains Condition 1 which sets requirements for meter replacement.
4. Resolution G-2928 Condition 1 should be modified to allow SoCalGas to implement a pilot program to allow a two percent meter calibration adjustment factor rather than the group changeouts, which will be applicable until a new factor is derived or the meter is changed.
5. The tariff changes to implement the pilot regarding SoCalGas' meter calibrations are consistent with D.17-06-015 and with Res. G-3538 and should reduce unnecessary methane emissions.

THEREFORE IT IS ORDERED THAT:

1. Southern California Gas Company Advice Letter 5403 is approved.

2. SoCalGas shall include the results of the evaluation of the meter calibration adjustment factor pilot in its next Leak Abatement Compliance Plan pursuant to Senate Bill (SB) 1371.
3. This resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on December 19, 2019 the following Commissioners voting favorably thereon:

ALICE STEBBINS
ALICE STEBBINS
Executive Director

MARYBEL BATJER
President
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
Commissioners