

PUBLIC UTILITIES COMMISSION  
505 Van Ness Avenue  
San Francisco CA 94102-3298



**Southwest Gas Corporation**  
**GAS (Corp ID 905)**  
**Status of Advice Letter 1318G**  
**As of January 21, 2025**

Subject: Joint Advice Letter Documenting Research on Mercury Impacts of Southern California Gas Company, San Diego Gas & Electric Company, Pacific Gas and Electric Company, and Southwest Gas Corporation

Division Assigned: Energy

Date Filed: 12-18-2024

Date to Calendar: 12-27-2024

Authorizing Documents: D2012031

<b>Disposition:</b>	<b>Accepted</b>
<b>Effective Date:</b>	<b>12-18-2024</b>

Resolution Required: No

Resolution Number: None

Commission Meeting Date: None

CPUC Contact Information:

[edtariffunit@cpuc.ca.gov](mailto:edtariffunit@cpuc.ca.gov)

AL Certificate Contact Information:

Gary Lenart

(213) 244-2424

[Tariffs@socalgas.com](mailto:Tariffs@socalgas.com)

**PUBLIC UTILITIES COMMISSION**  
505 Van Ness Avenue  
San Francisco CA 94102-3298



To: Energy Company Filing Advice Letter

From: Energy Division PAL Coordinator

Subject: Your Advice Letter Filing

The Energy Division of the California Public Utilities Commission has processed your recent Advice Letter (AL) filing and is returning an AL status certificate for your records.

The AL status certificate indicates:

- Advice Letter Number
- Name of Filer
- CPUC Corporate ID number of Filer
- Subject of Filing
- Date Filed
- Disposition of Filing (Accepted, Rejected, Withdrawn, etc.)
- Effective Date of Filing
- Other Miscellaneous Information (e.g., Resolution, if applicable, etc.)

The Energy Division has made no changes to your copy of the Advice Letter Filing; please review your Advice Letter Filing with the information contained in the AL status certificate, and update your Advice Letter and tariff records accordingly.

All inquiries to the California Public Utilities Commission on the status of your Advice Letter Filing will be answered by Energy Division staff based on the information contained in the Energy Division's PAL database from which the AL status certificate is generated. If you have any questions on this matter please contact the:

Energy Division's Tariff Unit by e-mail to  
**[edtariffunit@cpuc.ca.gov](mailto:edtariffunit@cpuc.ca.gov)**



**Joseph Mock**  
Director  
Regulatory Affairs

555 W. Fifth Street, GT14D6  
Los Angeles, CA 90013-1011  
Tel: 213.244.3718  
Fax: 213.244.4957  
[JMock@socalgas.com](mailto:JMock@socalgas.com)

December 18, 2024

**Advice 6415-G**

(Southern California Gas Company ID U 904-G)

**Advice 3379-G**

(San Diego Gas and Electric Company ID U 902-G)

**Advice 5016-G**

(Pacific Gas and Electric Company ID U 39-G)

**Advice 1318-G**

(Southwest Gas Corporation ID U 905-G)

Public Utilities Commission of the State of California

**Subject: Joint Advice Letter Documenting Research on Mercury Impacts of Southern California Gas Company, San Diego Gas & Electric Company, Pacific Gas and Electric Company, and Southwest Gas Corporation**

**Purpose**

Southern California Gas Company (SoCalGas), San Diego Gas & Electric Company (SDG&E), Pacific Gas and Electric Company (PG&E), and Southwest Gas Corporation (Southwest Gas) (collectively, the Joint Utilities), hereby submit this Advice Letter in compliance with direction provided by the Executive Director of the California Public Utilities Commission (CPUC or Commission) in a Letter Granting the Joint Utilities time to comply with Commission Decision (D.) 20-12-031 to update the mercury constituent of concern Lower and Upper Action Limits (UAL/LAL) by January 1, 2022.

**Background**

Ordering Paragraph (OP) 11 of D.20-12-031 states that the Joint Utilities shall provide UAL/LAL specifications in a joint filing to be submitted to the Commission no later than April 1, 2021 for biologicals and January 1, 2022 for ammonia, mercury, and siloxanes. UAL/LAL of hydrogen will be established pursuant to Phase 4 of Rulemaking (R.) 13-02-008.

On December 21, 2021, pursuant to Rule 16.6 of the Commission's Rules of Practice and Procedure, the Joint Utilities filed a letter of extension to comply with OP 11 of D.20-12-031. Specifically, the Joint Utilities requested this extension of time to update the mercury

constituent of concern UAL/LAL until adequate research and/or operation data is available to support such limits.

On December 30, 2021, the Joint Utilities submitted their individual Advice Letters with rule modifications per OP 11 of D.20-12-031. The Advice Letters provided UAL/LAL specifications for ammonia and siloxanes but did not provide specifications for mercury due to inadequate research available. Instead, the Joint Utilities proposed to continue to monitor available literature and gather operational data to support a recommendation in the future.

On January 13, 2022, Executive Director Rachel Peterson granted the Joint Utilities' request to maintain the existing Trigger Level for mercury of 0.08 mg/m<sup>3</sup> while continuing to monitor available literature and gather operational data to support a recommendation to update the UAL/LAL specifications for mercury once sufficient information is available. The letter also ordered that until such time as sufficient information is available to update the UAL/LAL specifications for mercury, the Joint Utilities shall submit a Tier 1 Advice Letter on or before December 31 of each calendar year documenting research on mercury impacts on pipeline integrity. For calendar year 2021, the Advice Letter may be submitted on or before January 31, 2022.

The Joint Utilities described the latest research for calendar year 2022 and 2023 in their respective Advice Letters submitted on December 29, 2022<sup>1</sup> and December 29, 2023.<sup>2</sup> Pursuant to Executive Director Rachel Peterson's order, the Joint Utilities have included a description of their research as part of this Advice Letter.

Herein, the Joint Utilities describe their latest research on mercury impacts on pipeline integrity for calendar year 2024.

### **Research on Mercury Impacts on Pipeline Integrity for 2024**

Industry research continues to be largely limited to the impact of mercury on infrastructure used for cryogenic operations, where liquefied natural gas equipment shows corrosion, such as brazed aluminum heat exchangers, and as a result a cryogenic limit for mercury was established at 10 ng/m<sup>3</sup> (or 0.00001 mg/m<sup>3</sup> for reference). It is important to note that cryogenic operations are not applicable to the Joint Utilities' service territories in California. Additionally, it is common practice by cryogenic operators to use mercury guard beds to protect equipment integrity from the risks that mercury poses.

The focus of the Joint Utilities is on the effects of mercury on the natural gas pipeline infrastructure and end-user equipment, rather than cryogenic operations. The following is a summary of the continuous efforts by the Joint Utilities to gain sufficient information to establish UAL/LAL specifications for mercury:

---

<sup>1</sup> SoCalGas Advice 6073-G, SDG&E Advice 3148-G, PG&E Advice 4694-G, and Southwest Gas Advice 1245-G.

<sup>2</sup> SoCalGas Advice 6238-G, SDG&E Advice 3265-G, PG&E Advice 4848-G, and Southwest Gas Advice 1282

SoCalGas has interconnected numerous renewable natural gas (RNG) projects and reported operational data, as required, from a diverse mix of RNG supplies including dairy, wastewater, and other organic sources. Gas quality in these projects has not shown mercury at a concentration exceeding the current Trigger Level. Southwest Gas has interconnected with a wastewater RNG supplier which has not shown mercury at a concentration exceeding the current trigger level. These results suggests that mercury concentration at a level that would present an integrity concern is not a likely occurrence for these RNG sources. In 2024, there were no mercury exceedances of the current trigger level. Landfill RNG projects, a likely source of mercury, are not currently interconnected with SoCalGas and Southwest Gas systems to facilitate gaining operational experience or performing any field tests. Landfill projects are expected to interconnect within the next year or two years for SoCalGas. Currently, no landfill projects are planned for Southwest Gas.

PG&E has interconnected three RNG projects and reported operational data as required for dairy interconnect facilities since 2022. In 2024, PG&E interconnected three additional RNG projects— dairy (1), landfill (1) and food waste (1). To date, PG&E has a total of six (6) RNG facilities interconnected to its gas system and where operational data has been collected.

Test results from the Pre-injection tests performed by the project developers and ongoing periodic testing performed by PG&E have shown undetected/below trigger levels for Mercury at PG&E 's RNG interconnect facilities.

SoCalGas specified coupons from various materials used in SoCalGas pipeline and operations. These coupons will be strategically installed at several RNG sites. The purpose is to monitor the impact of different trace amounts of mercury, if detected, in the gas stream on these materials. In 2024, there were still no mercury exceedances.

SoCalGas and Southwest Gas initiated a Gas Technology Institute (GTI) Energy OTD (7.23.k) project for Mercury Action Limits for RNG Specifications. The Phase 1 objective was to develop a test plan for lab testing at Southwest Research Institute (SwRI) leveraging the literature review on the impact of trace amounts of mercury in a gas stream on common materials of construction, as well as impacts on equipment similar to that found in a natural gas distribution network and end use equipment. The Phase 2 objective is to conduct laboratory testing that could inform the selection of appropriate mercury trigger and action levels for natural gas distribution systems. The Phase 1 study began in the first quarter of 2023. A refresh of the literature review was performed to identify any new research completed in the area., . The literature study update concluded that while there is plenty of literature focusing on mercury corrosion of materials, very few are directly applicable for mercury corrosion in the natural gas network. The literature review was a useful resource for test plan development. The test setup has been designed to be able to complete tests on a variety of representative materials and equipment from the natural gas distribution network over a wide range of relevant mercury concentrations. The test plan for Phase 2 was proposed in the fourth quarter of 2023, and the project kicked-off in early 2024. PG&E provided input to the development of the test plan and joined as a funder of the project with Phase 2. In 2024, the test system was constructed and commissioned using 100% natural

gas. Final pre-test performance checks on the hardware were completed with Mercury testing scheduled to begin in the first quarter of 2025.

In calendar year 2024, the Joint Utilities continued to seek developments in research on mercury impacts on pipeline integrity for calendar year and focused on the test setup for the Phase 2 research project through GTI Energy to support a UAL/LAL recommendation. The Joint Utilities will continue to monitor available literature and gather operational data for the purpose of gaining sufficient information to update the UAL/LAL specifications for mercury.

### **Protests**

Anyone may protest this Advice Letter to the Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be submitted electronically and must be received within 20 days after the date of this Advice Letter, which is January 7, 2025. Protests should be submitted to the attention of the Energy Division Tariff Unit at:

E-mail: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

In addition, protests and all other correspondence regarding this Advice Letter should also be sent electronically to the attention of:

- |                       |  |
|-----------------------|--|
| <b>For SoCalGas:</b>  | Attn: Gary Lenart<br>Regulatory Tariff Manager<br>E-mail: <a href="mailto:GLenart@socalgas.com">GLenart@socalgas.com</a><br>E-mail: <a href="mailto:Tariffs@socalgas.com">Tariffs@socalgas.com</a>                     |
| <b>For SDG&amp;E:</b> | Attn: Greg Anderson<br>Regulatory Tariff Manager<br>E-mail: <a href="mailto:GAnderson@sdge.com">GAnderson@sdge.com</a><br>Email: <a href="mailto:SDGETariffs@sdge.com">SDGETariffs@sdge.com</a>                        |
| <b>For PG&amp;E:</b>  | Attn: Sidney Bob Dietz II Director, Regulatory Relations c/o<br>Megan Lawson<br>E-mail: <a href="mailto:PGETariffs@pge.com">PGETariffs@pge.com</a>   |
| <b>For SWG:</b>       | Attn: Valerie J. Ontiveroz Regulatory Manager/California<br>E-mail: <a href="mailto:Valerie.Ontiveroz@swgas.com">Valerie.Ontiveroz@swgas.com</a><br>E-mail: <a href="mailto:regserve@swgas.com">regserve@swgas.com</a> |

**Effective Date**

The Joint Utilities assert this Advice Letter is subject to Energy Division disposition and should be classified as Tier 1 (effective pending disposition) pursuant to General Order (GO) 96-B. The Joint Utilities respectfully request that it be made effective for service on December 18, 2024, which is the date this Advice Letter was submitted.

**Notice**

A copy of this Advice Letter is being sent to the Joint Utilities' respective GO 96-B service lists and the Commission's service list in R.13-02-008. Address change requests to SoCalGas' GO 96-B service list should be directed via e-mail to [Tariffs@socalgas.com](mailto:Tariffs@socalgas.com) or call 213-244-2837; all other utilities should be contacted directly at the email addresses noted above. For changes to the service list in R.13-02-008, please contact the Commission's Process Office at 415- 703-2021 or via e-mail at [Process\\_office@cpuc.ca.gov](mailto:Process_office@cpuc.ca.gov).

*/s/ Joseph Mock*

**Joseph Mock**

Director – Regulatory Affairs



# ADVICE LETTER SUMMARY

## ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.:

Utility type:

ELC       GAS       WATER  
 PLC       HEAT

Contact Person:

Phone #:  
E-mail:  
E-mail Disposition Notice to:

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas      WATER = Water  
PLC = Pipeline      HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #:

Tier Designation:

Subject of AL:

Keywords (choose from CPUC listing):

AL Type:  Monthly     Quarterly     Annual     One-Time     Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested?  Yes     No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required?  Yes     No

Requested effective date:

No. of tariff sheets:

Estimated system annual revenue effect (%):

Estimated system average rate effect (%):

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed<sup>1</sup>:

Pending advice letters that revise the same tariff sheets:

<sup>1</sup>Discuss in AL if more space is needed.



**Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:**

CPUC, Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102  
Email: [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Name:  
Title:  
Utility Name:  
Address:  
City:  
State: Zip:  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

Name:  
Title:  
Utility Name:  
Address:  
City:  
State: Zip:  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email: