SOUTHERN CALIFORNIA GAS COMPANY (SOCALGAS)
SIERRA CLUB DATA REQUEST 6 (SIERRA CLUB DR-06)
HYDROGEN BLENDING DEMONSTRATION APPLICATION (A.22-09-006)
DATE REQUESTED: June 16, 2025
RESPONSE DUE: June 26, 2025

I. GENERAL OBJECTIONS

1. SoCalGas objects generally to each request to the extent that it seeks information protected by the attorney-client privilege, the attorney work product doctrine, or any other applicable privilege or evidentiary doctrine. No information protected by such privileges will be knowingly disclosed.
2. SoCalGas objects generally to each request that is overly broad and unduly burdensome. As part of this objection, SoCalGas objects to discovery requests that seek "all documents," "all emails," or "all information" and similarly worded requests on the grounds that such requests are unreasonably cumulative and duplicative, fail to identify with specificity the information or material sought, and create an unreasonable burden compared to the likelihood of such requests leading to the discovery of admissible evidence. Notwithstanding this objection, SoCalGas will produce all relevant, non-privileged information not otherwise objected to that it is able to locate after reasonable inquiry.
3. SoCalGas objects generally to each request to the extent that the request is vague, unintelligible, or fails to identify with sufficient particularity the information or documents requested and, thus, is not susceptible to response at this time.
4. SoCalGas objects generally to each request that: (1) asks for a legal conclusion to be drawn or legal research to be conducted on the grounds that such requests are not designed to elicit facts and, thus, violate the principles underlying discovery; (2) requires SoCalGas to do legal research or perform additional analyses to respond to the request; or (3) seeks access to counsel's legal research, analyses or theories.
5. SoCalGas objects generally to each request to the extent it seeks information or documents that are not reasonably calculated to lead to the discovery of admissible evidence.
6. SoCalGas objects generally to each request to the extent that it is unreasonably duplicative or cumulative of other requests.
7. SoCalGas objects generally to each request to the extent that it would require SoCalGas to search its files for matters of public record such as filings, testimony, transcripts, decisions, orders, reports or other information, whether available in the public domain or through FERC or CPUC sources.
8. SoCalGas objects generally to each request to the extent that it seeks information or documents that are not in the possession, custody or control of SoCalGas.
9. SoCalGas objects generally to each request to the extent that the request would impose an undue burden on SoCalGas by requiring it to perform studies, analyses or calculations or to create documents that do not currently exist.
10. SoCalGas objects generally to each request that calls for information that contains trade secrets, is privileged or otherwise entitled to confidential protection by reference to statutory protection. SoCalGas objects to providing such information to the extent it is not covered by the parties' Non-Disclosure Agreement.

II. EXPRESS RESERVATIONS

1. No response, objection, limitation or lack thereof, set forth in these responses and objections shall be deemed an admission or representation by SoCalGas as to the existence or nonexistence of the requested information or that any such information is relevant or admissible.
2. SoCalGas reserves the right to modify or supplement its responses and objections to each request, and the provision of any information pursuant to any request is not a waiver of that right.
3. SoCalGas reserves the right to rely, at any time, upon subsequently discovered information.
4. These responses are made solely for the purpose of this proceeding and for no other purpose.

III. RESPONSES

QUESTION 1:

Page 4, Table 1 of Chapter 1R of the Joint Utilities' Prepared Testimony states that SoCalGas intends to include "18 months live blending" for the demonstration and data collection period of its Closed System Project. Please explain:
a. The basis for choosing an 18-month testing period;
b. How 18 months of live blending can address long-term reliability and integrity of customer equipment and gas system equipment with lifespans of 10+ years.

RESPONSE 1:

a. Pursuant to OP 7(e) of D.22-12-057, Chapter 1 of the Joint Utilities' prepared testimony, page 22, lines 7-14 state that "SoCalGas's Closed System Project is in line with other notable hydrogen blending studies and would allow sufficient time to show changes in seasonal gas flows. Testing duration is in line with previous successful demonstrations, such as the HyDeploy Trial Phase I[1] and Phase 2[2] demonstrations, that were performed for 18 months and 10 months, respectively. The Closed System Project will test at a minimum of three (3) months for lower levels and six (6) months for greater hydrogen concentrations."

b. SoCalGas objects to this request on the grounds that it is vague, ambiguous, and unintelligible with respect to the meaning of "can address." Subject to and without waiving this objection, SoCalGas responds as follows:
There are several ways to assess and predict the long-term behavior of mechanical systems. These methods typically involve a combination of analytical, computational, experimental, and empirical approaches. Live blending demonstrations will provide real-world data to complement findings from existing literature and research studies. For example, UCR's Hydrogen Blending Impacts study and the Hydrogen Blending Compendium Report provide a comprehensive review of literature on topics related to blending hydrogen gas into natural gas infrastructure. Additionally, accelerated testing in lab settings can be specifically designed to simulate long-term effects in a shorter period of time.
A comprehensive prediction of long-term behavior often requires integrating these methods, including pilot projects that combine real-world data with theoretical modeling.
Two key approaches for predicting long-term behavior include:

- Extrapolating results from the 18-month live blending project using various analytical and statistical models.

[1] HyDeploy. Project Phases. Available at https://hydeploy.co.uk/project-phases/
[2] Id

- Applying physics-based models that use principles from mechanics of materials, thermodynamics, and material science to derive equations describing system behavior.

The data collected during the 18-month blending project can be used to model the long-term performance, reliability, and integrity of the mechanical systems involved.

Existing literature and studies captured in both reports published by UCR supports hydrogen blending in distribution systems up to 20% with ordinary end use equipment. The Compendium Report includes an extensive discussion on the impacts of end use equipment with blended fuels; common natural gas appliances have shown compatibility with hydrogen blends up to 20% and in some cases, beyond 20%, including that "The US Department of Energy National Energy Technology Laboratory (NETL) recently completed a US based hydrogen appliance assessment report determining 20%-30% acceptability for residential natural gas appliances."[3] Notably, Hawaii has been operating on a blend of 10-15% hydrogen for over fifty years with ordinary end-use appliances designed for natural gas systems.

QUESTION 2:

Please provide the most recently updated schematic of the Closed System Project, representative of the project as described in the May 28, 2025 revised testimony.

RESPONSE 2:

Chapter 1 (Revised) of the Joint Utilities' prepared testimony, page 5-7, illustrate Figure 1: *Potential SoCalGas Hydrogen Blending Demonstration Site Layout on UCI Campus,* Figure 2: *Preliminary Solar Siting Proposal* and Figure 3: *Potential Location of Pipelines Performing the Demonstration.*

[3] UCR Compendium Report, p. 66 (p. 122 of PDF)

Figure 1: Potential SoCalGas Hydrogen Blending Demonstration Site Layout on UCI campus

Equipment Type	Color
Electrolyzer	Green
SCADA Building	Orange
Storage Shed	Yellow
Bulk Hydrogen Storage (~150 kg)	Red
Chiller Unit	Purple
Gas Composition Analyzer	Brown
Blending Skid	Black
Hydrogen Compressor	Pink

Figure 2: Preliminary Solar Siting Proposal

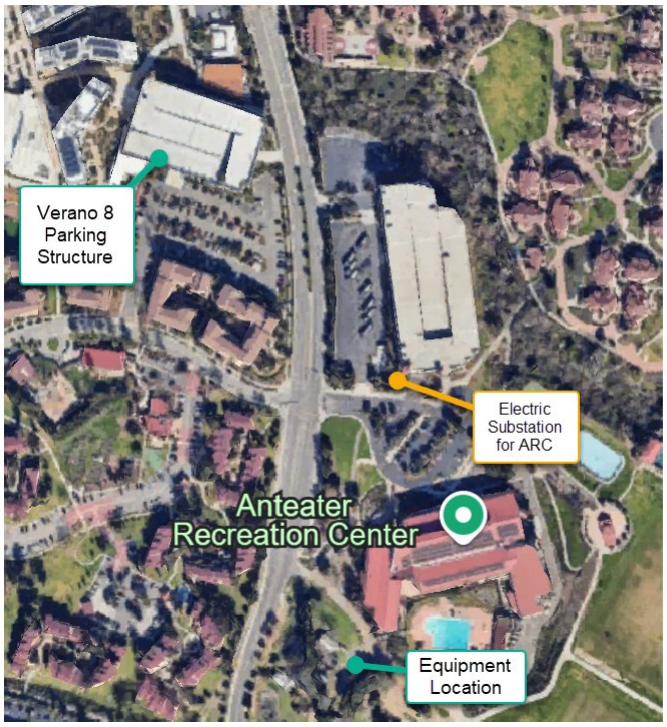
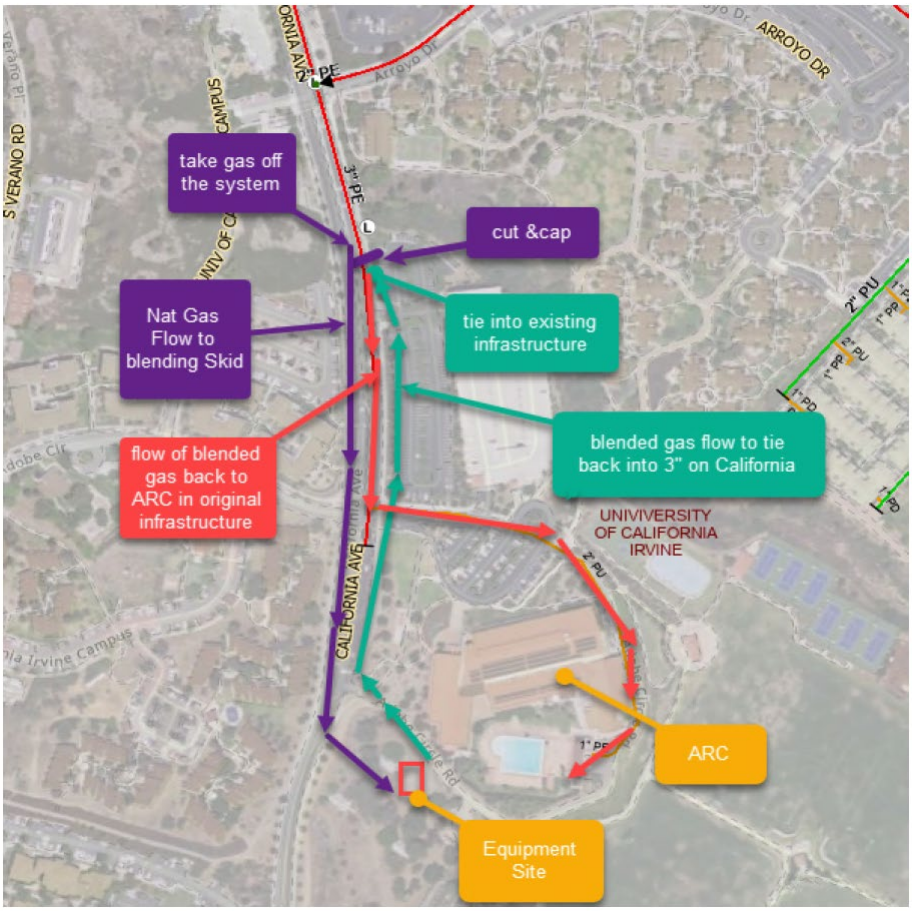


Figure 3: Potential Location of Pipelines Performing the Demonstration



QUESTION 3:

Page 11:9–10 of Chapter 1R of the Joint Utilities' Prepared Testimony states that "[l]eak surveys will also be performed prior to the demonstration to confirm the system is leak tight." Please explain:
a. Please define "leak tight" as used in the above-reference sentence. Does "leak tight" in this context mean there will be zero leaks?
b. If any leaks are allowed, please explain parameters around what leaks would be allowed.
c. Is SoCalGas aware of any portion of its current distribution system that is currently "leak tight"? If so, please explain what portion of its distribution system SoCalGas would currently characterize as "leak tight" under the definition used for the proposed pilot project.
d. What will SoCalGas do if its surveys reveal that the system for the Closed System Project is not "leak tight"?

RESPONSE 3:

a. "Leak tight" or "leak tightness" is an industry term that refers to the in-service leakage requirements of an assembled system or component and in this scenario is defined as no leaks are observed or detected during leak detection surveys.

b. SoCalGas performs leak detection surveys of its natural gas pipeline system in accordance with and responds as required by 49 CFR Part 192 to leaks found in the system. For this demonstration, if a leak indication is identified during initial survey of the pipeline system, the source of the indication will be identified and repaired as appropriate; survey will be completed upon repair to confirm there are no longer leak indications present prior to proceeding with hydrogen injection. If a leak indication is identified during the demonstration period, SoCalGas will halt hydrogen blending until the source of the leak can be identified and repaired appropriately or safely isolated.

c. SoCalGas objects to this request pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding nor is likely reasonably calculated to lead to the discovery of admissible evidence. SoCalGas generally objects to this request on the grounds that it is vague and ambiguous, and overly broad, particularly with respect to the phrase "any portion of its current distribution system".

d. See response to question 3(b).

QUESTION 4:

Page 14:6 of Chapter 1R of the Joint Utilities' Prepared Testimony sets forth the estimated blending intervals by increments for the Closed System Project, showing that the blend percentage would change every 3 to 5 months. Has SoCalGas analyzed the potential impact of variations in seasonal gas demand on the its pilot outcomes given that no blend will be tested continuously over the range of seasonal demand variations?

RESPONSE 4:

SoCalGas understands the variations in seasonal gas demand for the Anteater Recreation Center (ARC). The ARC was selected for this demonstration, in part, due to the facility's year-round gas usage, allowing blended gas to be continuously served to the ARC for the entirety of the project lifecycle. The 18-month demonstration period will allow for seasonal demand variations across different hydrogen blend scenarios and is consistent with previous successful demonstrations, such as the HyDeploy Trial Phase I. Additionally, blending skids are initially proposed to have real-time monitoring, which will allow SoCalGas to analyze various flow scenarios that can be used to model various seasonal conditions.
As noted in response 1, an 18-month demonstration period was selected in alignment with other notable demonstrations. For the purposes of this demonstration, SoCalGas proposed increasing blend percentages gradually overtime to validate safe operations through the course of the demonstration. This led to incremental time frames at different blend percentages, as outlined in Chapter 1, Table 4:

% Blending Level	Timeframe
Baselining at 0%	3 months prior to demo
Up to 5%	Months 1 to 3
Up to 10%	Months 4 to 6
Up to 15%	Months 7 to 12
Up to 20%	Months 13 to 18

QUESTION 5:

How will SoCalGas ensure that the intended percentage of hydrogen is present within the pilot project systems at any given time?

RESPONSE 5:

Each demonstration project contains a blending skid that controls the intended percentage of hydrogen in the gas system. Multiple points at the blending skid will be under continuous monitoring and evaluate gas composition. Real time notification will be sent to system operators if consequential variation is detected, and the system will automatically shut down hydrogen injection until SoCalGas evaluates the system on-site. The pipeline systems for these projects are isolated in nature with a single point of gas injection.

SOUTHERN CALIFORNIA GAS COMPANY (SOCALGAS)
SIERRA CLUB DATA REQUEST 6 (SIERRA CLUB DR-06)
HYDROGEN BLENDING DEMONSTRATION APPLICATION (A.22-09-006)
DATE REQUESTED: June 16, 2025
RESPONSE DUE: June 26, 2025

QUESTION 6:

Please provide all discovery responses provided by SoCalGas to other parties in this proceeding. This is a continuing request.

RESPONSE 6:

SoCalGas Data Requests (public version) are being posted at https://www.socalgas.com/regulatory/amended-hydrogen-blending-demonstration-application.

QUESTION 7:

Page 1:22–24 of Chapter 2 of the Joint Utilities' Prepared Testimony states that the Open System Project will test between 0.1% and 5% hydrogen blending by volume. Why is SoCalGas testing only up to 5% hydrogen by volume in the Open System Project compared to the 20% blend in the Closed System Project?

RESPONSE 7:

Decision (D) D.22-12-057 provides the "pilot projects should be used to evaluate hydrogen injection at blends between 0.1 and five percent, and between five and twenty percent… [and] …should be performed in either a closed system or a mock-up of a real-world system."[4] SoCalGas understands the scoping of their open system project to be aligned with this guidance and clarified with the CPUC's Energy Division that there was a clerical error and 0.1% was inadvertently omitted from Ordering Paragraph 7 and was intended to be representative of blending to an "open system".

[4] D.22-12-057 at 27.

QUESTION 8:

Page 2:6–7 of Chapter 2 of the Joint Utilities' Prepared Testimony states that "the City of Orange Cove hosts various mixed material gas pipeline and vintages with steel, polyethylene (PE), and Aldyl-A pipeline materials." For the portion of the system that would be used for the Open System Project, please provide:
a. Total length of steel pipe, broken down by year installed;
b. Total length of PE plastic pipe, broken down by year installed;
c. Total length of Aldyl-A pipe, broken down by year installed.

RESPONSE 8:

a. Approximate total length of steel pipe by year installed, to the 100th decimal of mileage.

Installation Year	Total Mileage
1946	7.68
1947	1.19
1948	0.73
1949	0.31
1950	0.13
1951	0.04
1952	0.17
1954	0.07
1955	0.03
1956	0.06
1958	0.03
1959	0.01
1960	0.04
1961	0.18
1962	0.11
1963	0.08
1964	0.52
1965	0.07
1966	0.04
1967	0.05
1969	0.16
1971	0.02
1972	0.08
1978	<0.00

1984	<0.00
1999	<0.00
2006	0.01
2014	<0.00
2017	0.38

b. Approximate total length of PE plastic pipe by year installed, to the 100th decimal of mileage; includes plastic pipe installed after 1992 not considered Aldyl-A.

Installation Year	Total Mileage
1993	0.75
1994	0.08
1995	0.51
1997	0.29
1999	0.08
2000	0.97
2002	0.29
2005	0.82
2006	0.70
2007	1.15
2008	0.65
2009	<0.00
2013	0.05
2014	0.08
2015	0.36
2017	0.01
2022	0.12

c. Approximate total length of Aldyl-A pipe by year installed, to the 100th decimal of mileage; includes plastic pipe installed from late 1960s to 1992.

Installation Year	Total Mileage
1973	0.19
1975	0.16
1976	0.04
1980	0.03
1981	0.05
1982	0.05

1983	0.24
1984	0.37
1986	0.09
1987	0.03
1990	0.04
1991	0.36

QUESTION 9:

SoCalGas's Response to Data Request SC-SCG-05, Question 4(c) stated that "if SoCalGas finds or is made aware of equipment that is not in safe working order when operating with natural gas, it takes steps to troubleshoot, and in some cases lockout, the equipment until it is returned to safe working order."

a. Please describe the troubleshooting steps that SoCalGas will take if an Orange Cove resident receives a courtesy inspection by SoCalGas prior to commencement of blending for the Open System Project and SoCalGas determines their gas-burning equipment (e.g., a stove, furnace, water heater, or other gas-burning appliance) is not in "safe working order."
b. Please define "lockout" as used in the quoted statement.
c. Under what circumstances would SoCalGas "lockout" a customer's equipment?
d. If a customer's equipment is "locked out" because it was not in safe working order upon inspection, does gas still flow to the appliance or is the gas cut off from the appliance?
e. Are there scenarios in which SoCalGas, upon performing an inspection of an appliance and determining it is not in "safe working order," would *not* troubleshoot and would instead advise the customer to seek appliance repair services from another source (e.g., from the store that the appliance came from, from an appliance repair contractor, etc.)? If so, please explain which circumstances would lead a SoCalGas technician to troubleshoot versus recommend the customer seek other services.

RESPONSE 9:

a. Troubleshooting steps performed by SoCalGas technicians abide by company policies and procedures. Customer Service Field (CSF) Employees inspect, adjust, repair, provide parts replacement, and communicate appropriate appliance and equipment referrals in accordance with CPUC Rules and Regulations. Inspection of appliances and equipment does not include making appliance repairs without charge, other than those commonly referred to as adjustments to enhance safe and efficient use of the gas service. Examples of no-charge adjustments and repairs utilizing expendable parts include, but are not limited to:
    - Safety checks
    - Clear and adjust orifices and pilots
    - Clear burner ports and venturis
    - Adjust air shutters, gas pressure, air pressure, etc.
    - Tightening or minor repairs of electrical terminals
    - Carbon Monoxide Tests
    - Flue Gas Analysis

   CSF Employees communicate with customers and provide advice on the safe, efficient, and environmentally responsible utilization of natural gas appliances. CSF Employees shall remain alert for hazardous or unsatisfactory appliance conditions and take appropriate corrective action for customer safety and the protection of property.

b. SoCalGas existing policies and procedures instruct field technicians in the response to hazardous or unsatisfactory conditions at a customer's facility. "Lockout" refers to the process of "leaving an appliance off"; when a hazardous condition exists, and cannot be corrected within the scope of Company service procedures, a method is identified to discontinue gas service to the appliance and eliminates the hazard, with the least inconvenience for the customer

Examples include:

- Closing appliance burner and pilot valve(s)
- Closing appliance/equipment line valve
- Disconnecting appliance and capping the outlet or line valve
- A customer's equipment would be "locked out" if the customer's equipment was determined to be unsafe, and SoCalGas personnel was unable to repair it onsite. The lockout would be in place until the equipment was either returned to safe working order or replaced

c. See Response 9(b).

d. See Response 9(b).

e. If hazardous conditions from the appliance exceed those allowable for a service technician per company policy, or repairs fall outside the scope of company standards, a technician may opt to recommend referral to other services after lockout has been completed.

QUESTION 10:

Page 11:6–8 of Chapter 2 of the Joint Utilities' Prepared Testimony states that "[l]eak surveys will also be performed throughout the community prior to the demonstration to confirm the system is leak tight."
a. Please define "leak tight" as it is used in the above-referenced statement.
b. If any leaks are allowed, please explain parameters around what leaks would be allowed.
c. What will SoCalGas do if its surveys reveal that the system for its Open System Project is not "leak tight"?

RESPONSE 10:

a. See Response 3(a).

b. See Response 3(b).

c. See Response 3(b).

SOUTHERN CALIFORNIA GAS COMPANY (SOCALGAS)
SIERRA CLUB DATA REQUEST 6 (SIERRA CLUB DR-06)
HYDROGEN BLENDING DEMONSTRATION APPLICATION (A.22-09-006)
DATE REQUESTED: June 16, 2025
RESPONSE DUE: June 26, 2025

QUESTION 11:

Page 11:8–9 of Chapter 2 of the Joint Utilities' Prepared Testimony states that "[a]ny material repair or replacement needed on SoCalGas's distribution system will be completed prior to injecting hydrogen."
a. Please define "material repair or replacement" as used in this sentence.
b. Please provide examples of types of repair or replacement that SoCalGas could find in a leak survey but categorize as anything other than "material."

RESPONSE 11:

a. "Material repair or replacement" refers to the act of repairing or replacing pipeline materials such as, but not limited to, pipelines, valves, meters, seals, and gaskets.

b. SoCalGas objects to this request on the grounds that it is vague, ambiguous, and unintelligible, as framed. Subject to and without waiving this objection, SoCalGas responds as follows:
SoCalGas does not find "repairs or replacements" during a leak survey. The leak survey is intended to survey the pipeline system, and its components, for leaks. If leak indications are identified, SoCalGas will determine the proper means of addressing the leak, whether that be repair of the pipeline or pipeline components, or replacement of pipeline or components.

QUESTION 12:

Page 13, Table 3 of Chapter 2 of the Joint Utilities' Prepared Testimony states that customer equipment evaluations for the Open System Project will be performed "[a]s needed for customer calls." Will SoCalGas be providing participating customers with educational materials regarding warning signs to look out for that might indicate they should call SoCalGas to have their equipment checked during the live blending period (e.g., difference in flame appearance, etc.)? If so, please provide all such educational materials or, if the materials are still in development, indicate what information SoCalGas intends to include in such materials.

RESPONSE 12:

As outlined in Chapter 2 testimony: "SoCalGas will continue performing stakeholder outreach with city staff, residents, businesses, and interested parties after filing of the Amended Application so that the community continues to stay engaged throughout the demonstration period. SoCalGas will keep community members abreast of project updates as additional details become available and project planning unfolds". To this end, SoCalGas has continued stakeholder engagement in Orange Cove and surrounding areas by performing direct community touch points via in-person home visits (door-to-door) and having a presence at events and meetings to provide information about the project and answer questions from residents and stakeholders. These engagement activities are conducted in English and Spanish.

SoCalGas plans to develop additional educational materials for stakeholders in the community once the project is closer to being operational. As indicated in Chapter 2 testimony: "Lastly, SoCalGas will develop a dedicated means of communicating with stakeholders that provides easy accessibility for stakeholders to get in touch about the project." This educational material will include a dedicated means for contacting SoCalGas regarding the project. This material will be developed after application approval.

SOUTHERN CALIFORNIA GAS COMPANY (SOCALGAS)
SIERRA CLUB DATA REQUEST 6 (SIERRA CLUB DR-06)
HYDROGEN BLENDING DEMONSTRATION APPLICATION (A.22-09-006)
DATE REQUESTED: June 16, 2025
RESPONSE DUE: June 26, 2025

QUESTION 13:

Page 17:7–24 of Chapter 2 of the Joint Utilities' Prepared Testimony describes ATCO's Fort Saskatchewan Hydrogen Blending Project in Canada, and states that "there is still a need to conduct a California-specific hydrogen blending demonstration due to potential different designs in pipeline systems and end-use equipment."
a. Please identify all "different designs in pipeline systems" that SoCalGas is aware of between the Fort Saskatchewan project and California's gas distribution system.
b. Please identify all "different designs in . . . end-use equipment" that SoCalGas is aware of between the Fort Saskatchewan project and California.

RESPONSE 13:

a. SoCalGas objects to this request as overly broad, unduly burdensome and oppressive, particularly with respect to the application of the word "all" to apply to in the context of "all different designs in pipeline systems." SoCalGas further objects to this request on the grounds that it calls for speculation regarding the entire pipeline system evaluated in ATCO's Fort Saskatchewan Hydrogen Blending Project. Without waiving and subject to these objections, SoCalGas responds as follows:

SoCalGas intends to generate California- and SoCalGas-specific data through its proposed demonstration projects. SoCalGas is not aware of all of significant differences or similarities in the components that make up ATCO's distribution system. The only difference SoCalGas is aware of is that ATCO's distribution system that hosts the Fort Saskatchewan hydrogen blending demonstration does not have vintage Aldyl-A pipes.

b. SoCalGas objects to this request as overly broad, unduly burdensome and oppressive, particularly with respect to the application of the word "all" to apply to in the context of "all different designs in . . . end-use equipment." SoCalGas further objects to this request on the grounds that it calls for speculation regarding the confidential customer-related information evaluated in ATCO's Fort Saskatchewan Hydrogen Blending Project. Without waiving and subject to these objections, SoCalGas responds as follows:

SoCalGas intends to generate California- and SoCalGas-specific data through its proposed demonstration projects. SoCalGas has not conducted a full inventory of end-use equipment in Orange Cove.
SoCalGas does not have intimate knowledge on specifics of end use equipment in Canada. However, SoCalGas is aware of the standards pertinent to equipment installation in Canada. There is a wide range of manufacturers and product lines in the market, which makes it challenging to account for all variations in appliance design and performance. In terms of design and installation, appliances in Canada must generally be certified to ANSI Z21/CS standards and installed per CSA B149.1. In the USA, ANSI Z21 standards are often referenced in NFPA 54 (National Fuel Gas Code), which serves a similar role to CSA B149.1.

In addition, in Canada, appliances must meet CSA (Canadian Standards Association) certification, while in the USA, certification is typically provided by Underwriters Laboratories (UL) or Intertek's ETL mark. Many manufacturers pursue certification for both Canadian and U.S. standards to enable sales across North America.

SOUTHERN CALIFORNIA GAS COMPANY (SOCALGAS)
SIERRA CLUB DATA REQUEST 6 (SIERRA CLUB DR-06)
HYDROGEN BLENDING DEMONSTRATION APPLICATION (A.22-09-006)
DATE REQUESTED: June 16, 2025
RESPONSE DUE: June 26, 2025

QUESTION 14:

As of March 1, 2024, when Chapter 2 of the Joint Utilities' Prepared Testimony was submitted, Exhibit 2A, Table 2 stated that for the Open System Project, the "visual testing" methods and frequency for NOx, CO2, CO, and O2 end use emissions were still "to be determined." As of the date of this request, has SoCalGas determined plans for its proposed testing of these emissions in the Open System Project?

RESPONSE 14:

Specific test methods for monitoring emissions have not yet been determined and will be developed in collaboration with an independent third-party pursuant to OP 7.l of D.22-12-057. SoCalGas intends to align testing methodologies and associated results for the end-use equipment with rules from the respective air quality management jurisdiction where each project is located (i.e., SCAQMD for the Closed System Project and San Joaquin Valley APCD for the Open System Project). Further, as indicated in Chapter 2 testimony: "Upon application approval, the Applicants will contract an independent party as directed to finalize a research plan for assessment, measurements, monitoring, and reporting."