



Annual Report Number 7
Recommendations for Improvements Related to
Safety and Leak Prevention
July 2025 – June 2026

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Overview

SoCalGas (Defendant) and the State Attorney General, City Attorney for the City of Los Angeles, County Counsel for the County of Los Angeles, and the County of Los Angeles (collectively referred to as Government Plaintiffs) entered into a Consent Decree to resolve claims raised by the Government Plaintiffs associated with the natural gas leak that occurred at the Aliso Canyon natural gas storage Facility (Facility) in October 2015. The terms and conditions of the Consent Decree required SoCalGas to, among other things, form an internal safety committee and select and retain a third-party subsurface gas storage industry expert (Safety Ombudsman) who shall act as a safety advocate for the Facility. A copy of the Consent Decree may be accessed via this link: [Click Here](#)

Section 4.2 of the Consent Decree outlines the requirements for SoCalGas to establish a Well and Storage Operations Safety Committee (WSOC). The duties of the WSOC include but are not limited to the following:

- Meet quarterly to review safety issues at the Facility.
- Review operational safety issues and promote safe operations at the Facility consistent with applicable laws, rules, regulations, and orders.
- Review Facility-related information, materials, or work product to assess safety at the Facility.
- Make recommendations to SoCalGas for repairs, improvements, policies, and/or upgrades to the Facility or infrastructure therein.
- Facilitate the role of, and work in cooperation with, the Safety Ombudsman.
- In coordination with the Safety Ombudsman, conduct periodic safety audits or safety-related Strengths, Weaknesses, Opportunities, Threats (SWOT) analyses of the Facility.
- Review California Public Utilities Commission (CPUC) and California Department of Conservation Geologic Energy Management Division (CalGEM) audit reports of the Facility.

Section 4.3 of the Consent Decree outlines the requirements for SoCalGas to select and retain a Safety Ombudsman and the duties associated with that role. The duties of the Safety Ombudsman include the following:

- Participate in all WSOC meetings.
- Have access to all non-privileged materials, information, records, and work product in SoCalGas' possession, custody, and control necessary to accomplish the tasks required of the Safety Ombudsman.
- Review CPUC and CalGEM audit reports of the Facility.
- Review and evaluate all incidents reported to the public and State and local agencies pursuant to Section 4.1 of the Consent Decree.
- Review and advise on the WSOC's efforts, findings, and recommendations for improvements.
- Serve as a non-exclusive repository for safety-related concerns reported by the public with respect to the Facility.
- Serve as a point of contact to receive safety complaints or concerns relating to the Facility from anyone who wishes to remain anonymous, and to provide any anonymous reports of safety concerns to SoCalGas.

This unredacted report is not for release to the public and may contain information which is confidential, security sensitive, or trade secrets of a party.



- Maintain the privacy of the person or member of the public confidentially making safety complaints or concerns relating to the Facility.
- Generate annual reports (Annual Reports) that detail the following:
 - o The work of the Safety Ombudsman.
 - o The work of the WSOC.
 - o Recommendations, if any, for improvements related to safety and prevention of leaks at the Facility.
- Provide the Annual Reports to the State Attorney General, the City Attorney, County Counsel, the CPUC and CalGEM. The Annual Reports shall also be made public via the Aliso Canyon Website and the local community shall be provided with an opportunity to comment on the Annual Reports. The Safety Ombudsman shall schedule at least one (1) public meeting each year to explain the Annual Reports and respond to questions.

This report has been prepared in accordance with the requirements outlined in Section 4.3, (b), (ix), (2) of the Consent Decree, and summarizes the recommendations for improvement made by the WSOC and/or the Safety Ombudsman during the period of July 2025 – June 2026. It is the seventh such annual report. [Section I](#) of this report summarizes recommendations developed by the WSOC. [Section II](#) includes recommendations from the Safety Ombudsman.

The Safety Ombudsman maintains a compendium of all recommendation topics by the WSOC and/or the Ombudsman over the past seven (7) years during which the Consent Decree has been active. This report provides a summary of the new recommendations as well as the status of prior recommendations. The summary of past and current recommendations and the progress of SoCalGas in response to the recommendations is contained in a Microsoft Excel file which can be found at the following link: [Click Here](#)



I. Recommendations of the WSOC for Safety Improvements at the Facility

The WSOC did not make any new recommendations during the July 2025 – June 2026 period; however, SoCalGas informed the Ombudsman at the June 2026 WSOC meeting that they had identified a safety improvement involving changing the wellhead design for deeper-set subsurface safety valve systems to increase the wellhead equipment rating to 10,000 psi and have tubing hanger flanges made to permit the safety valve control line full passage to the surface. Refer to Annual Report Number 7 – Work of the Aliso Canyon Well and Storage Operations Safety Committee, at this link: [Click Here](#)

The WSOC recommendations regarding improvements to the Management of Change (MOC) standard and process made in 2026 are provisionally closed, pending completion of action items through the end of 2026.

To summarize, an analysis of SoCalGas' Storage Integrity Management Plan (SIMP) Chapter 6, Management of Change was conducted by the WSOC in 2024 and concluded in early 2025. The SWOTs were summarized and presented to the WSOC for both the SIMP.6 standard process and the eMOC tool.

The subcommittee developed an Action Plan to address improvement opportunities identified through the MOC SWOT analysis, including reinforcement and learning by sharing examples of operational MOCs, development of an MOC Dashboard, and shared initial examples charts. Additionally, SoCalGas created an enterprise gas standard on Management of Change with publication in the first half of 2025.

WSOC recommendations for improvements to the MOC process include:

1. Continue annual awareness training, upgrade the training module, and establish a feedback loop survey after the training.
2. Continue technical review meetings; leverage the new cross-functional Technical Committee to support MOC technical reviews.
3. Create a specific MOC email address for support and communication; promote eMOC usage; generate metrics for eMOC usage and present to Management annually to emphasize importance.
4. Address the eMOC Stakeholder role, as defined in SIMP.6, Section 1.3.1, in training updates.
5. Include a process for Stakeholders to provide feedback in eMOC form.
6. Address the groups recommended to participate in technical review, as noted in SIMP.6, Section 3.2.1, in training updates.
7. Review the enterprise MOC procedure and incorporate best practices into the SIMP MOC process where applicable.

SoCalGas progress: enterprise MOC has been published in 2025, and enterprise training has been completed. Additionally, a video to promote awareness is planned for 2025. The published enterprise MOC will be reviewed, and best practices will be incorporated into SIMP 6 as applicable, by 2026.



8. Create and deploy an MOC Dashboard for accessibility/visualization of program metrics and real-time data; add a metric for the time difference between initiation date and approval date; include language addressing changes impacting safety, reliability, or environment in SIMP.6, Section 3.1.2; update training.

SoCalGas progress: Online MOC Dashboards have been created.

9. Add an example list of scenarios requiring MOC to the SIMP.6 appendix and to the MOC section of gas standards; annually review documented MOCs with underground and aboveground storage departments to promote understanding of scenarios requiring MOC; circulate a quarterly bulletin of completed MOCs and solicit feedback on changes that may have missed documentation or are pending documentation.

SoCalGas progress: Examples of MOC will be included in SIMP 6 during the annual review planned for 2025. Example MOCs are being added to applicable gas standards as annual reviews are completed, and this task will be fully completed in 2026. The MOC bulletin was created and circulated periodically.

SoCalGas 2026 Update:

- Examples of MOC have been included in SIMP 6; this action was completed in December 2025 and published in February 2026 during the annual review. The enterprise MOC was reviewed and best practices incorporated into SIMP 6 for alignment.
- Example MOCs continue to be added to applicable gas standards as annual reviews are completed through 2026.
- Online MOC Dashboards were created in 2025. Metrics for the time difference between initiation date and approval date have been added to the MOC Dashboard.
- The MOC bulletin is created and circulated periodically, as needed, relative to current needs.
- Development of MOC Training module in MyLearning System to be finalized in 2026 with a feedback survey loop. Department-wide training was scheduled in May 2026.
- Established a Cross Functional Technical Committee for technical input, as needed.
- Modified the eMOC form to include the ability for Stakeholders to provide feedback in the form.

Ombudsman Note: The recommendation is provisionally closed, pending SoCalGas completion of action items through the end of 2026.

II. Recommendations of the Safety Ombudsman for Safety Improvements at the Facility

Part A: Recommendations Made During the July 2025 – June 2026 Period

There were no new recommendations from the Safety Ombudsman during the during the July 2025 – June 2026 period.



Part B: SoCalGas Progress Responding to Prior Recommendations

Part B-1

Please refer to Annual Report Number 6 – Recommendations for Improvements Related to Safety and Leak Prevention at this link: [Click Here](#), for a listing and discussion as applicable for prior recommendations considered to be addressed and closed.

Part B-2

Please refer to Annual Report Number 6 – Recommendations for Improvement Related to Safety and Leak Prevention at the link in Part B-1 above for a listing and discussion, as applicable, for prior recommendations considered to be addressed and closed.

One recommendation made by the Safety Ombudsman concerning Gas Inventory Analysis was noted as provisionally closed in the previous report and the status remains the same this year.

1. In July 2021, the Safety Ombudsman made recommendations, listed below, to increase the adequacy and effectiveness of Gas Inventory Analysis and resolve year-to-year discrepancies and/or inconsistencies:
 - a. Apply consistent methodology for calculating average reservoir pressure in the inventory verification process and consistent with Gas Standard GS 224.070 Reservoir Integrity and Inventory Assessment.
 - b. The report format should be consistent from year to year, and the report should discuss elements influencing average reservoir pressure calculations, such as any operational changes, changes to the estimate of gas dissolved in the oil phase, influence from the aquifer, and any other aspects that affect the analysis.
 - c. Changes to the average reservoir pressure evaluation method should be updated in the relevant Gas Standard, GS 224.070 Reservoir Integrity and Inventory Assessment, assuming that has not been completed.
 - d. The change in the July 5, 2018, weighted average reservoir pressure (P/Z) and Z factor reported in the 2018 report versus what is reported in the 2020 version needs to be explained, including all assumptions made in arriving at the revised figure in the 2020 report.
 - e. SoCalGas should retain a third-party independent reservoir engineering expert with expertise in gas storage operations to perform an annual independent review of the results of its inventory verification analysis of the Aliso Canyon Facility.
 - f. Include in the inventory assessment an address of fuel, use, and fugitive loss and how these are accounted for in the inventory verification process.
- *SoCalGas Response:* SoCalGas is in the process of retaining the services of a third party to review the gas inventory analysis and provide further recommendations. SoCalGas reviewed recommendations a. through f. above and responded as follows, in order:
 - o The methodology for calculating reservoir pressure is consistent across the storage fields, and, where differences exist, they are pointed at in GS 224.070 (Section 4.3.4.1.1). SoCalGas plans to develop field-specific appendices, providing greater granularity on the changes in the well population used for the calculation over time.
 - o SoCalGas plans to develop a more comprehensive annual report on inventory verification addressing the items identified in the recommendations.



- o See SoCalGas' response to a. above.
- o This recommendation refers to an inadvertent typo in the 2020 report, which has been fixed.
- o This recommendation is already implemented and detailed in GS 224.070 as the "Validation" step of the Inventory Assessment Process Workflow. As discussed with the Safety Ombudsman, a 3-to-5-year independent review may be more appropriate.
- o SoCalGas plans to include a section in the proposed comprehensive annual report that reviews the data obtained from the Measurement Group regarding fuel usage and fugitive losses.
- *SoCalGas 2024 Update:* The third-party consultant is anticipated to begin towards the end of Q4 2024. This effort will include:
 - o Review the methodology for calculating average reservoir pressure in the inventory verification process.
 - o Evaluate changes to the average reservoir pressure evaluation method and provide feedback.
 - o Perform a review of the results of the inventory verification analysis of the Aliso Canyon Facility.
- *SoCalGas 2025 Update:* SoCalGas retained Ryder Scott as a third-party expert consultant and started work on the inventory validation process. Ryder Scott will evaluate our current methodology and make recommendations for improvement if necessary.
- *SoCalGas 2026 Update:* SoCalGas indicated they would be willing to share and discuss methodology and results of the gas inventory analysis with the Ombudsman during WSOC meetings in the July 2026 – June 2027 period.

Ombudsman Note: This recommendation remains provisionally closed, pending the review of the assessment performed by the third-party consultant. The Ombudsman requested to the WSOC that SoCalGas presentations for discussion at future WSOC meetings include:

- How the gas inventory assessment meets at a minimum the requirements in API 1171, 2nd Edition, clauses 9.5 and 9.6.1 – 9.6.2, as well as per recommendations of the Ombudsman (from July 2021, listed above)
- Explain the methodology used for estimating/calculating average reservoir pressure during shut-ins and any revisions to methodology recommended by Ryder-Scott
- What are the recent results of the inventory verification analysis for Aliso Canyon?
- What are the trends in the average pressure/z vs volume (P/Z vs V) (inventory) relationship in terms of volume per psi and verifiability of gas volumes on the company accounting record (including native gas)?
- What are the methods used for operational monitoring of pressure-volume, such as the use of a shut-in key observation well or wells?
- Are there observation wells observing overlying or underlying or offset potential collector zones for storage fluids?
- What uncertainties affect the inventory verification effort and how are the uncertainties addressed – in gas/fluid composition variation, pressure stability, pressure average, meter accuracy, conversion of wellhead to reservoir level pressure, and/or other uncertainties?



- How has the varying allowable pressure-volumes in storage since the SS-25 incident affected the reservoir, if at all, and how quickly does the reservoir adjust to changes in top content?

Additionally, and related to reservoir integrity and gas inventory analysis, the Ombudsman requested to the WSOC that SoCalGas discussions at future WSOC meetings include the following topics:

Reservoir integrity – plugged and third-party well monitoring:

- How many plugged wells and third-party wells exist inside the Aliso Canyon storage field boundary and SoCalGas' defined "area of review"?
- How many of those wells are owned/controlled by SoCalGas?
- What is the year of the most recent final plugging of each well owned or not owned by SoCalGas?
- What is SoCalGas doing/planning with respect to plugged well integrity risk assessment?
- What is SoCalGas doing/planning with respect to third-party well integrity risk assessment?
- Does SoCalGas perform any patrols or other monitoring (include remote sensing) of plugged well and third-party well sites?
- Has SoCalGas seen any need to increase monitoring or apply increased preventive and mitigative (P&M) measures, including re-entry and replugging of plugged wells, in the last ten years?

Reservoir integrity – risk assessment:

- How does SoCalGas characterize threats, threat susceptibility, and threat interactions regarding Aliso Canyon reservoir integrity?
- How does SoCalGas characterize consequence potentials as outcomes of potential threat paths leading to reservoir leakage (however "failure" is defined)?
- How does SoCalGas incorporate well integrity (active, plugged, third party) holistically into the reservoir integrity risk assessment, specifically potential evidence of leakage such as annulus leaks, gas seeps, or other indications of abnormal pressure or fluid?
- What does SoCalGas apply as reservoir integrity P&M measures for Aliso Canyon and how is the effectiveness of those P&M measures assessed?
- What performance metrics are established or planned for Aliso Canyon reservoir integrity management?

One recommendation made by the Safety Ombudsman was closed during the July 2025 – June 2026 period, as discussed below:

1. From the 2023 Annual Report Number 4, released to the public in September 2023, the Ombudsman recommended that SoCalGas could improve its storage well emergency action plans to identify flow capability of each well and implement improvements in emergency action plans for gas storage well incidents using heat flow, noise, pollutant flow, and precautionary distancing measures.

Based on the Ombudsman's review of SoCalGas' responses to DR#16 and DR#16A, recommendations for improvement in the well emergency action plans could include:

- Identification of max flow capability (absolute open flow, tubing flow constrained, at maximum operating pressure) at surface for each well.



- Identification of downhole rupture flow potential through casing (tubing-casing annulus constrained; variable with depth?).
- Determination of the relationship of max flow at surface to heat flux and to noise flux.
- Determination of the relationship of heat and noise flux to emergency planning initial isolation zones, emergency action zones, and emergency planning zones.
- Characterization of the nature of well flow and other fluid/pollutant/toxin transport (fluids other than natural gas) – is there information to differentiate the potential fluid composition from wells?
- Identification of potential collector and transport zones above (shallower than) the storage intervals – identification of rock properties, native pressures, native fluid contents – prioritize by shallowest/best/etc. Are any of these zones observed directly or by comparison of neutron or other logs over time?
- Characterization of how downhole leaks might spread in the subsurface and/or modeling of potential pathways, including identification and characterization of how downhole uncontrolled hydrocarbon and other fluid releases could be detected and controlled, how such releases might spread, and what receptors could be affected.
- *SoCalGas 2024 Response:* SoCalGas is performing a study of precautionary distances in the event of a potential well failure based on storage inventory and inflow performance relationship (IPR). SoCalGas anticipates updating the Blowout Contingency Plan, as appropriate, in Q1 2025, after the completion of the study.
- *SoCalGas 2025 Update:* SoCalGas is developing the IPR curve information for all wells and anticipates completion by Q3 2026. Based on information generated, SoCalGas will adjust, as needed, emergency action plans for gas storage well incidents. SoCalGas anticipates updating the Blowout Contingency Plan, with initial well safe zones by Q2 2026.
- *SoCalGas 2026 Update:* In response to new regulations pursuant to California SB 463, SoCalGas is developing well-specific well control plans based on well-specific Inflow Performance Relationships (IPR) developed from individual well flow-testing data and analysis. Testing began in Q1 2025 and the anticipated completion date is Q4 2027. To date, twenty-eight (28) Aliso Canyon storage wells have been flow-tested, resulting in twenty-eight (28) IPRs generated. The IPRs will be used to generate well-specific heat maps to assess safe emergency response distances related to heat flow in the event of a well incident. Another effort linked to SoCalGas' response to SB 463 establishes well-specific inventories of potential chemical released in the case of a well incident.
- *Ombudsman Note:* The recommendation is provisionally closed, although SoCalGas needs to complete the testing of all Aliso Canyon wells, which it will do because the testing requirement is now part of regulations.

Part B-3

Four (4) recommendations made by the Safety Ombudsman remain open, although SoCalGas has made progress in each of the subject matter areas.

One recommendation that is provisionally complete as presented in [Section II, Part A](#) of this Report and is not repeated here. SoCalGas progress on the remaining open recommendations is summarized below.



1. Through mid-late 2019 and 2020, the Ombudsman made an ongoing recommendation that SoCalGas periodically review its human and organizational capacity and effectiveness with respect to the SIMP, identify potential gaps in technical expertise, include supervisory protocols to ensure adequate oversight for both company and contractor personnel, assess the adequacy and competence of resources to meet the needs of the organization, and verify that those engaged in SIMP activities are trained in, and aware of, the associated regulatory compliance requirements. The study of human and organizational factors and reliability remains an open recommendation, subject to periodic evaluation of the Company's continual improvement.
 - *SoCalGas Response:* Thus far SoCalGas has added detail to Section 7.2.1 of SIMP.8 Quality Assurance Plan to describe the status of the Human Factors Assessment. The description in SIMP.8 is supplemented in the updated April 1, 2023 Aliso Canyon Risk Management Plan (RMP) with Appendix D: Human Factors Assessment Overview. During the Q1 WSOC meeting, held on March 23, 2023, SoCalGas provided an overview of the Safety Forward program to WSOC. Safety Forward is a company-wide commitment to enhance SoCalGas' safety culture while living its safety values. Under the SIMP, the Internal Audit and Human Factors Assessment programs provide structures for detailed procedural reviews, including observations of field execution, to understand the appropriateness and effectiveness of SIMP processes. They also allow for an understanding of how the systems in place support personnel in their comprehension of procedural requirements and execution of tasks. The employee training program in place includes awareness training of procedures pertinent to an individual's job responsibilities. The contractor onboarding process supports the effort to bring trained and qualified individuals to job sites.
 - *SoCalGas 2024 Update:* SoCalGas' Human Factors Assessment program, as part of SIMP, is executed on individual operations and maintenance processes to evaluate the interactions between humans and the systems in place to support their execution of tasks and procedures. Three (3) human factors assessments have been completed. SoCalGas plans to complete at least two (2) additional human factors assessments in 2024.
 - *SoCalGas 2025 Update:* SoCalGas has completed eleven (11) Human Factors Assessments (HFAs) as of July 2025. SoCalGas plans to complete seven (7) additional HFAs by the end of 2025, for a total of eighteen (18) HFAs by the end of 2025. In 2026, SoCalGas plans to complete nine (9) HFAs.
 - *SoCalGas 2026 Update:* SoCalGas has completed fifteen (15) Human Factors Assessments (HFAs) as of June 2026. SoCalGas plans to complete five (5) additional HFAs by the end of 2026, bringing the total number completed to twenty (20).
 - *Ombudsman Note:* Open while SoCalGas continues work in this area. The Ombudsman requested SoCalGas to present and discuss on this topic in the next year of WSOC meetings. The Ombudsman's primary interest is in how the assessments, findings, and recommendations will be or have been implemented in the gas storage integrity management environment.
2. In 2019-2020, the Ombudsman recommended that SoCalGas review and evaluate adaptation of relevant practices contained in ISO Standard 16530 (Petroleum and Natural Gas Industries – Well Integrity) such as Well Barriers, Well Monitoring and Surveillance, Annulus Pressure Management, and Well Intervention.

SoCalGas initiated a review of ISO 16530 in 2021 and since that time has implemented some changes, but one (1) open item remains, related to documentation and display of well barriers in WellView. SoCalGas reported in July 2024 that it was engaged in an evaluation of third parties for



a Well Integrity Management System (WIMS) solution to provide integration of well operations data, well barrier schematics, monitoring and status of well barriers, and other potential functions to support management of well integrity. SoCalGas anticipated implementation of a solution in the 2025-2026 timeframe, but in the 2025 update stated that resource limitations will delay implementation until 2028 and that remains the estimated timeline in the 2026 update. However, SoCalGas continues to implement data and process improvements associated with well integrity.

- *Ombudsman Note:* Open while SoCalGas continues process improvements to well safety information communication.
- 3. The Ombudsman recommended in 2020 that SoCalGas investigate possible subsurface accumulation(s) of gas behind well casing in the area surrounding the SS-25 well, including baseline and subsequent gas detection logs.

By mid-2022, SoCalGas had collected field screening data at various monitoring locations on and around the SS-25 well pad. A leak survey report that analyzed data from nested soil vapor probes from April to December 2016 found that significant reductions in methane concentrations had been observed in the subsurface. Data also indicated that natural degradation processes had assisted in bulk methane reduction, and at some locations had allowed complete attenuation prior to reaching the surface. Additional monitoring performed through August 2018 using nested soil vapor probes found no detectable methane.

Separately, per the requirements of CalGEM regulation 14 CCR § 1726.7(e), SoCalGas developed a program to “conduct baseline and subsequent gas detection logs on each storage well to detect gas indications behind casing.” Gas detection logs have been run on all gas storage wells. Given that there are no open hole neutron logs to provide a true baseline, SoCalGas identified logging program elements that include:

- Compensated neutron logs (CNL) with combination of ultrasonic imaging tool/cement bond log (USIT/CBL) run on wells post inner-string installations.
- Comparison of original cased hole logs with subsequent logs to provide qualitative indications of gas (void) behind casing, depending on specific well configurations.
- Logging frequency dependent on CalGEM-approved assessment interval.
- *SoCalGas 2026 Update:* SoCalGas reviewed the annular pressures of surrounding wells within a 1/4-mile radius of SS-25 over the past two (2) years and did not identify any anomalously high pressures indicative of subsurface gas accumulation behind well casing.
- *Ombudsman Note:* SoCalGas has completed past observations, but the Ombudsman considers this to be a standing open recommendation, as annulus pressure and fluid monitoring and identification of hydrocarbon sources are critical features of well and reservoir integrity assessment. Additionally, the original release from SS-25 in 2015-2106 could have longer-term residual effects in the subsurface, though diminishing through time. So far, SoCalGas reports that nothing of concern has been identified in the monitoring.
- The Ombudsman will continue emphasis on this subject and review of information related to it, including further discussions at WSOC meetings over the next year directed at annulus pressure monitoring and management and plugged well monitoring and assessment.



4. With respect to reservoir risk assessment and its qualitative treatment of threats affecting the reservoir – geologic uncertainty, third-party activity, incorrect operations, and outside forces – the Ombudsman recommends: a) clarify the definition of a reservoir risk event; b) add pressure-volume-inventory as a threat and, specific to the Aliso Canyon Facility, identify the sensitivity of gas volume per psi as a tool to monitor for reservoir events; and c) evaluate interaction of the pressure-volume-inventory threat with the geologic uncertainty threat.

The SoCalGas reservoir risk assessment model is recent and likely will undergo further development and improvement. The Ombudsman offered these recommendations for SoCalGas' consideration in the ongoing development and improvement of its reservoir risk assessment model.

- *SoCalGas 2025 Update:* In the context of the reservoir risk assessment, a reservoir failure is defined as the loss of containment of gas from the part of the reservoir intended for gas storage. Over- or under-pressuring of the reservoir is included as a threat within the Incorrect Operations and Maintenance threat category, with monitoring of the P/Z vs V “hysteresis curve” identified as an established measure to monitor for evidence of a loss of containment event. Geological Uncertainty, including uncertainties of reservoir extent, caprock capacity, and reservoir expansion/contraction, is covered in the risk assessment. As the assessment framework matures, SoCalGas will further explore potential threat interactions and methodology improvements.
- *SoCalGas 2026 Update:* No further action.
- *Ombudsman Note:* Recommendation remains open. SoCalGas is still exploring threat interactions and should look at the inventory in a volume per pressure unit trend analysis as well as the stated P/Z vs. V “hysteresis curve.” This recommendation is linked to the gas inventory assessment needs recommendation discussed in [Section II, Part B-2](#) (Recommendation #1) of this report, which is provisionally closed. The Ombudsman will have discussions with SoCalGas on these gas inventory assessment and reservoir risk assessment topics during the next year of WSOC meetings.