SAFETY OMBUDSMAN

Virtual Townhall Meeting October 15, 2025 Annual Report Review

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Overview

- 1. Experience/Background
- 2. Safety Ombudsman Role
- 3. Work of the Safety Ombudsman
- 4. Work of the Well and Storage Operations Safety Committee (WSOC)
- 5. Recommendations for Improvement

Safety Ombudsman Role

Experience/Background of Steve Nowaczewski

- Education, Experience, Professional Associations
- Risk Management and Safety
- Industry Service including API 1171 Development
- Consulting and Integrity Management Maturity Advocacy
- RCP history with SoCalGas

Safety Ombudsman Role

Key Elements of Role

- Safety/Transparency Advocate
- Totally Independent of SoCalGas
- Investigate and Respond to Safety/Integrity Concerns
- Public/Regulatory Interface
- Interface with SoCalGas Aliso Canyon Well and Storage Operations Safety Committee

Work of the Safety Ombudsman

Participate in Quarterly WSOC Meetings

Prepare 2024-2025 Safety Ombudsman Reports (find reports through link below):

https://safetyombudsman.com/home/annual-reports/

October 15, 2024 Virtual Public Meeting (presentation found at link below)

Underground Storage

There were no new public concerns, but interest remained with respect to the application of subsurface safety valves in Aliso Canyon facility wells to mitigate potential damage due to fault displacement, specifically the SoCalGas progress on planning for the installation of several deeper-set subsurface safety valves

Work of the Safety Ombudsman

CPUC and CalGEM Safety Inspections/Audits

- The May 2025 CalGEM audit of the Aliso Canyon Facility addressed 228
 questions regarding the storage integrity management program and related
 construction, maintenance, inspection, testing, and documentation
- No findings against SoCalGas' storage integrity management program

Fence Line Methane Monitoring System

- Website: SoCalGas Aliso Canyon Infrared Fence-Line Methane Monitoring System
- Reporting criteria: 25 ppm averaged over 30 minutes; no known events this reporting period

Safety-related Concerns/Complaints Submitted by the Public

No inquiries received the past year

Developed Data Request 22 as a follow-up on the public interest in risk mitigation potential of subsurface safety valves in Aliso Canyon Facility wells, particularly those wells deemed more susceptible to damage from fault displacement at depth due to seismic events

Data Request 23 asked SoCalGas to explain actions that occurred on the six (6) requests for integrity inspection time extensions that had been denied by CalGEM.

- What subsequent work was done on the five (5) wells that were initially denied and later approved?
- How many wells at the Aliso Canyon Facility are still on a two-year assessment cycle?

The substance of each data request and summaries and/or links to the SoCalGas responses are included in the report

Data Request #22 (12/2/24)

- Asked questions relating to SoCalGas' risk-based decision criteria for deep-set SSSV installation, including the estimated pre-installation and post-installation net risk, for any well in which SoCalGas decided to install modern deep-set subsurface safety valves.
- Asked SoCalGas to identify which wells were potential candidates for SSSV installation and which were not, based on SoCalGas' most recent risk assessment; and for those wells that have been selected for installation, the proposed subsurface safety valve design, installation, operation, monitoring, and testing specifications and procedures.
- SoCalGas presented information on risk assessment and decision making during the June 2025 WSOC meeting and formally responded to DR#22 on July 25, 2025.

SoCalGas' responses to Data Request #22, combined with a detailed risk assessment discussion at the June 2025 WSOC meeting, were sufficient to address the Ombudsman's questions

- SoCalGas uses quantitative risk analysis to estimate risks and benefits of valve installation. Significant contributors to the likelihood of well failure and fluid release include:
 - Well drilling, intervention (workover)
 - Earth movements landslides in relatively shallow intervals up to ~500 feet of depth and fault displacements at depths of several thousand feet
- SoCalGas work since 2016 to add new or dual tubular barriers and increase pressure monitoring, casing inspection, and other repairs leads to lower likelihood of fluid release.

SoCalGas has had four (4) shallow SSSV installations in operation for several years at Standard Sesnon (SS) 9 (457', installed 2018), SS 10 (372', installed 2020), SS 29 (374', installed 2019), and Fernando Fee 33 (367', installed 2018)

- New shallow installations were made to mitigate landslide damage risk in wells Porter 69C (462'), Porter 69F (468'), Porter 69J (479'), and Fernando Fee 35D (489').
- New SSSV installations were made at depths approximately 200' below the Younger Santa Susana Fault to mitigate fault displacement risk in wells Fernando Fee 35C (1707'), Porter 50C (3175'), and Fernando Fee 32F (3517')
- Some of the recent installations are waiting on control panels for full functionality
- Moderate-depth installations are planned at Fernando Fee 32G, Porter 68A, Porter 69D, Porter 69K, and Porter 72B

Summary opinion of the Ombudsman following DR#22 responses:

- SoCalGas risk assessment, data collection, and well flow characterization have reached a state of maturity, enabling identification of wells with greater susceptibility to fault displacement and/or to shallower-seated landslide mass movement
- The risk analysis identifies those wells with higher environmental risk that would or could result from a well flowing uncontrollably to the surface or near surface, and the risk analysis identifies the net risk benefit to the SSSV installation, given potential decreases to environmental risk but potential increases to life safety risk due to an increased number of well workovers related to treating SSSV reliability issues
- It is the Ombudsman's opinion that the current state of SoCalGas' well risk analysis methodology brings a credible clarity to the decision making regarding SSSV installation. The ability to make risk-informed, values-based decisions regarding installation and placement depth of SSSV, using enhanced knowledge of well-specific conditions, is a satisfactory safety improvement outcome

Summary opinion of the Ombudsman following DR#22 responses:

The efficacy of the new SSSV installations depends on reasonably good reliability of the SSSV. SoCalGas' prior history with subsurface safety valve installations in the Aliso Canyon Facility and the reliability issues experienced were covered in Annual Report Number Five – Work of the Ombudsman

- DR#22 asked how SoCalGas plans to operate and maintain the new SSSV installations and track reliability. In response, SoCalGas noted that SoCal's Gas Standard 224.0000 outlines the steps to test SSSVs every six (6) months.
- Results of SSSV tests are maintained in SoCalGas' maintenance management systems and any unresolved sub- or non-standard conditions are noted, with a requirement to repair or replace a failed or incompletely functioning SSSV within ninety (90) days or else temporarily plug the well.
- The tracking SoCalGas will do in their maintenance and records management systems will allow SoCalGas to compare the reliability of the new and recent installations to the reliability of the old systems used in the 1970s and 1980s.

The Ombudsman made a request to the WSOC at the June 2025 meeting to explain actions that occurred on the six (6) requests for integrity inspection time extensions that had been denied by CalGEM. SoCalGas responded on July 25, 2025.

SoCalGas noted that of the six (6) original denials:

- Five (5) wells have been approved in subsequent requests for extensions to eighty-four (84) months (seven (7) years) for integrity inspection re-assessment intervals.
- Fernando Fee 34A and Porter 24B had new inner casing strings installed, and baseline logged showing no anomalies; thereafter, CalGEM approved extensions to the timing of integrity reassessment logging.
- Porter 26B showed less degradation when comparing a six-year inspection span than the potential degradation rate previously identified, and CalGEM granted an extension request based on the new information.
- Porter 32C and Standard-Sesnon 44B were given extensions after CalGEM re-assessed integrity inspection information with CalGEM's learnings-revised model.
- Three (3) Aliso Canyon wells remain on the original CalGEM-mandated two-year integrity reassessment basis; SoCalGas plans to install new inner casing strings on two (2) of the wells.

Work of the WSOC

Key Elements

- Eight-Year Commitment
- Role: Safety Monitoring and Improvement Activities:
 - Quarterly Meetings
 - Focus on Well Integrity and Leak Prevention
 - Make Recommendations for Repairs/Improvements and Policies
 - Facilitate Role of and Work Cooperatively With Ombudsman
- WSOC Charter and Meetings

Work of the WSOC July 2024-June 2025

- WSOC members participated in responding to Ombudsman Data Requests #22 and #23 and discussing well integrity and reservoir integrity risk assessments
- WSOC meetings include reviews of safety culture initiatives:
 - At the December 2024 WSOC meeting SoCalGas showed how they conduct Storage Integrity Management Program (SIMP) audits of downhole well work contractor activities. Audit elements include:
 - Conformance to the SoCalGas Contractor Safety Handbook and California OSHA requirements;
 - Contractor-led safety audits aligned to the contractors' specific work tasks;
 and
 - SoCalGas engineer-led, on-site audits.
 - At each level of audit, leading indicators showing the progressive positive safety behaviors are determined, tracked, and shared.

Work of the WSOC July 2024-June 2025

- At the June 2025 WSOC meeting, SoCalGas shared an update on their corporate safety culture improvement initiative "Safer Together."
- The update discussed SoCalGas' Safety Management System (SMS) and its elements, aligning to the elements of API 1173, Pipeline Safety Management Systems.
- The 2025 goals include strengthening leadership commitment, establishing the governance model, building processes and procedures, and launching an employee awareness and engagement campaign.
- The corporate initiative, along with the Storage Integrity Management Program, should support progressive safety culture improvement at the SoCalGas Aliso Canyon Facility.

Work of the WSOC – Audits and/or SWOT

A SWOT analysis of SoCalGas' SIMP Chapter 6 Management of Change was conducted by a WSOC subcommittee starting in mid-late 2024 and concluding in early 2025.

- Conducted two (2) workshops with stakeholders and subject matter experts to gather feedback and summarize the Strengths, Weaknesses, Opportunities and Threats.
- Developed a Plan to address improvement opportunities identified, 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-wide gas standard on Management of Change with publication in the first half of 2025.
- The recommendations from the WSOC are detailed in the Annual Reports (Work of the WSOC and Recommendations for Improvements Related to Safety and Leak Prevention) regarding process, procedure, tools, guidance, and training.

Work of the WSOC July 2024-June 2025

WSOC meetings include review and discussion of the well work and well integrity assessments completed or in progress. As of June 2025:

- Active well count is fifty-nine (59) injection/withdrawal (I/W) wells, forty-two
 (42) with complete new inner casing/tubing strings since 2016.
- Fifty-five (55) wells plugged and abandoned since late 2016.

As of June 2025, the Company had been granted seventy-five (75) reassessment extensions on fifty-three (53) unique wells, with the reassessment interval reset by CalGEM from twenty-four (24) months to as much as eight-four (84) months. For six (6) wells where reassessment extension requests had previously been denied, SoCalGas reworked two (2) wells, reinspected three (3) wells, and subsequently received reassessment extension permission from CalGEM.

Work of the WSOC – Public Agency Interaction

CalGEM audited the Aliso Canyon Facility in May 2025

- Comprehensive address of the SoCalGas storage integrity management program and construction, maintenance, inspection, testing, and documentation.
- The audit included ninety-five (95) questions regarding Integrity in Well Design and Construction, eighty-six (86) questions regarding Integrity Monitoring, Site Security and Safety, Procedures and Training, and forty-seven (47) questions regarding Reporting, Risk Management, and PHMSA Rules and Frequently Asked Questions.
- There were no findings against SoCalGas' storage integrity management program at the Aliso Canyon Facility in this audit.

Recommendations for Improvements

Recommendations made by the WSOC were covered in a previous slide Recommendations by the Ombudsman

- Part A: No New Recommendations During the July 2024 June 2025 Period
- Part B: Report on SoCalGas Progress in Responding to Recommendations Made in Prior Periods
 - B-1: Recommendations made by the WSOC, closed
 - B-2: Recommendations made by the Safety Ombudsman, closed
 - B-3: Recommendations made by the Safety Ombudsman, open

Recommendations for Improvements

Safety Ombudsman Compendium of All Recommendations, Status and Progress Tracker

- Part B: Report on SoCalGas Progress in Responding to Recommendations Made in Prior Periods
 - B-1: Recommendations made by the WSOC that have been closed: response to the recommendations coming out of the SWOT on Management of Change are in progress, and four (4) previous recommendations are closed.
 - B-2: Recommendations made by the Safety Ombudsman that have been closed:
 10 recommendations were closed in the past year, adding to the fourteen (14) recommendations previously closed
 - B-3: Recommendations made by the Safety Ombudsman that remain open: Five
 (5) recommendations open

Recommendations for Improvements

Part B-3: Five recommendations remain open

- Review and continual improvement of human and organizational capacity and effectiveness with respect to the SoCalGas SIMP
- Adaptation of an ISO 16530-based well integrity management system (WIMS) incorporating well barrier element status and documentation
- Ongoing monitoring, logging, sampling, and characterization of well casing annulus conditions and fluids in the SS-25 area
- Reservoir integrity risk assessment, threat interactions involving geologic uncertainty and pressure-volume-gas inventory trends
- Storage well flow potential data collection, and characterization and incorporation into emergency planning

SoCalGas continues to progress in responding to the recommendations

Next Steps

- Review feedback from virtual public meeting
 - Incorporate recommendations for improving utility of future reports
- Ongoing attendance at WSOC Meetings
- Responding to issues/concerns posted to Safety Ombudsman Website – the link is on the next slide...



Questions?

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