SDGE™

# 2025 Gas Safety Plan

March 14, 2025

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March 14, 2025

Mr. James Zhang, Utilities Engineer
Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue, 2nd Floor
San Francisco, CA 94102

**RE**: **San Diego Gas & Electric Company 2025 Gas Safety Plan**

Dear Mr. Zhang:

San Diego Gas & Electric Company (SDG&E) is pleased to submit its annual Gas Safety Plan. This document outlines our comprehensive strategy and approach to safety, reaffirming SDG&E's commitment to the protection of our system, customers, employees, contractors, and the communities we serve.

Safety is a fundamental core value and underpins all our actions. This commitment to safety is ingrained in our culture and exemplified by our dedicated workers – from senior leadership to front-line workers who safely manage and operate the gas system and serve our customers daily.

SDG&E's safety culture encourages an environment where employees at all levels, across all work locations and departments, are empowered to offer safety suggestions, report near misses, identify hazards, raise safety concerns, and "stop the job" if they ever feel unsure about a situation. In essence, our employees take pride in their work and responsibility for safety.

Although a strong culture of safety exists today, SDG&E remains committed to evolving as a learning organization. As part of this commitment, SDG&E adopts a safety management system (SMS) designed to manage safety risks by adapting, expanding, and integrating the SMS framework outlined in American Petroleum Institute Recommended Practice 1173 (API RP 1173). SDG&E's ongoing efforts to continuously enhance its safety performance and safety culture are detailed in this Gas Safety Plan.

Significant revisions to SDG&E's 2024 Gas Safety Plan are summarized in the table attached to this letter and are also highlighted in yellow within the Plan. Please contact Alex Hughes at (213) 671-1344 or AHughes@SoCalGas.com if you have any questions regarding our submission.

Sincerely,

# Summary of New or Significantly Changed Elements

The table below summarizes the portions of SDG&E's 2025 Gas Safety Plan that are new or have significantly changed, and are included with this submission:

| Chapter | New or Significantly Changed Element |
|---|---|
| Chapter I: Introduction | • Updated language<br>• Updated Figure 2; added footnote 7 |
| Chapter II: Leadership Commitment to Safety | • Updated language |
| Chapter III: Plan Development & Implementation | • Updated language, added footnotes 9-11 |
| Chapter IV: Safety Systems | • Section 1 – added footnote 13<br>• Section 2 – added footnotes 14 -15<br>• Section 4 – updated language<br>• Section 7 – added footnote 16<br>• Section 8 – added new section on Control Room Management Plan<br>• Section 9 – updated language; updated damage prevention data |
| Chapter V: Emergency Response | • Section 2 – updated language, expanded narrative on levels of emergency management support |
| Chapter VI: State and Federal Regulations | • Section 3 – updated language, updated Figures 4 and 5 |
| Chapter VII: Continuing Operations | • Section 3 – added section on Leak Detection and Repair<br>• Section 4 – updated language<br>• Section 5 – updated language<br>• Section 6 – removed section on Addressing the Covid-19 Pandemic<br>• (Renumbered) Sections 6 & 7 – updated language; added footnote 21 |
| Chapter VIII: Emerging Issues | • Section 3 – updated language, updated proceeding/regulation status, added footnotes 22, 24-25, expanded narrative on SDG&E's Enterprise Risk Management organization, updated SDG&E's Climate Adaptation Planning efforts, updated PHMSA regulations |
| Appendix: Safety Policy Documents | • Updated Policy Document Matrix |

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# I. INTRODUCTION

San Diego Gas & Electric Company (SDG&E or Company) defines safety as the presence of controls for known hazards, actions to anticipate and guard against unknown hazards, and the commitment to continuously improve our ability to recognize and mitigate hazards. Safety is integral to who we are and embedded in everything we do, requiring constant leadership commitment and active employee engagement. SDG&E's safety commitment applies to public safety,[1] system safety,[2] employee safety,[3] and contractor safety.[4]

This Gas Safety Plan reflects SDG&E's commitment to safety and outlines the overarching plans, programs, policies, standards, and procedures designed to support this pledge. This document describes the Company's comprehensive Safety Management System (SMS) framework. As detailed below, the SDG&E SMS framework bolsters SDG&E's enduring commitment to safety by promoting the deliberate and intentional integration of our safety systems and processes. SDG&E's SMS applies this model of safety with an enhanced focus on proactive and predictive risk identification and an increased emphasis on psychological safety and safety culture for continuous public, employee, contractor, asset, system, and cyber safety. This comprehensive view of safety necessitates strong, ongoing, and visible leadership commitment and employee engagement. SDG&E's safety philosophy is rooted in our values and commitment to continuous improvement, fostering an environment where we are constantly searching for ways to listen, learn, and enhance our practices. Consequently, both the Gas Safety Plan and the SMS Governance Plan are dynamic documents, subject to continual review and update.

## 1. PUBLIC UTILITIES CODE SECTIONS 961, 963, 956.7 AND CPUC DECISION 12-04-010

California Senate Bill 705 became law on October 7, 2011, and codified in Public Utilities Code sections 961 and 963. Section 961 requires each gas corporation in California to create a plan for the safe and reliable operation of its gas pipeline facilities and the California Public Utilities Commission (Commission or CPUC) to accept, modify, or reject the plan by year-end 2012.

On April 19, 2012, the Commission approved Decision (D.)12-04-010, expanding its Pipeline Safety Rulemaking (R.) 11-02-019 to comply with sections 961 and 963 and requiring gas corporations to submit a proposed natural gas system operator safety plan (Gas Safety Plan).

This Gas Safety Plan meets the requirements of Assembly Bill 56, which codified Public Utilities Code section 956.5 on October 7, 2011, mandating an annual review of emergency contingency plans with local fire departments having jurisdiction over the area where intrastate transmission and

[1] Safety systems and processes focused on protection of our customers' and the public (i.e., Emergency Management, Environmental Safety, Customer Data Privacy, Accessibility, and protection of the public from harm caused by our operations or our assets).
[2] Safety systems and processes associated with the design, construction, operation, inspection and maintenance of SDG&E's assets, facilities, or infrastructure.
[3] Safety systems and processes focused on the health and safety of our employees. This includes safety policies, programs, and training.
[4] Safety systems and processes focused on the safety and protection of our contractors and subcontractors who provide services to support SDG&E assets and operations.

distribution lines are located.

## 2. PURPOSE

According to the Commission, "the rationale for developing a gas safety plan is to motivate a gas utility to reflect upon its existing methods and for it to change, to optimize, or to enhance the existing methods… and the lessons learned from the San Bruno incident, as appropriate, to ensure that the gas utility has a prudent plan in place to protect public safety and worker safety."[5] The gas system operator safety plans are to convey the "Executive Officer's" safety performance expectations, policy principles, and goals/objectives for a gas utility's safety performance.

SDG&E has designed this Gas Safety Plan to satisfy each of these directives, and to implement "the policy of the state that the commission and each gas corporation place safety of the public and gas corporation employees as the top priority."[6]

## 3. GAS SAFETY PLAN STRUCTURE

Public Utilities Code Sections 961 and 963 require that the gas system operator safety plans establish how the utility will achieve certain specified goals, and the Commission has organized these goals into five overall categories: (1) safety systems, (2) emergency response, (3) state and federal regulations, (4) continuing operations, and (5) emerging issues. This Gas Safety Plan follows this organizational structure as outlined by the Commission and is divided into sections corresponding to these five categories, with each section representing a required Gas Safety Plan element or other significant element or aspect of the Gas Safety Plan. The requirements of section 956.5 are addressed within the category of emergency response.

Within its Safety Management System, SDG&E has numerous safety programs, plans, and procedures in place that address specified infrastructure or areas of company activity. The intent of the Gas Safety Plan is to provide an overview that encompasses all the plans, programs, and policies, as well as affirm SDG&E's commitment to safety and to advancing a comprehensive SMS framework.

Appendix-SD provides a listing of the safety program components discussed in the Gas Safety Plan.

## 4. SAFETY MANAGEMENT SYSTEM

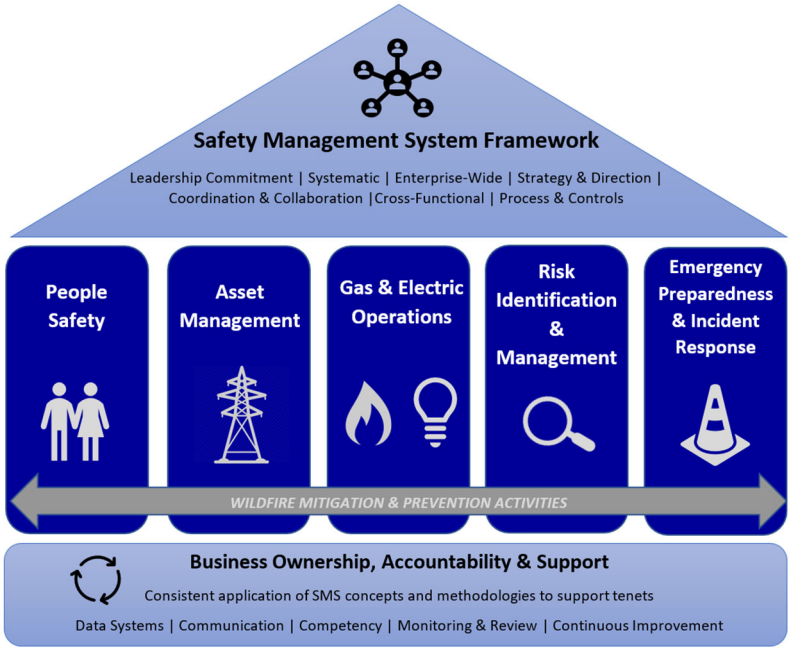
SDG&E began operating within an enterprise-wide Safety Management System (SMS) in 2020. SDG&E's SMS is a systematic framework to collectively manage safety risk and promote continuous improvement. The SMS integrates asset, risk, emergency, and safety management into everything we do and is foundational to who we are – from initial engineering and design to employee training, to the installation, operation, and maintenance of our utility infrastructure, to the safe and reliable delivery of service to our customers – following the Plan-Do-Check-Act Cycle of continuous improvement.

[5] D.12-04-010 at p. 19.
[6] Pub. Util. Code section 963.

The SMS encompasses systematic, company-wide procedures for effective risk-based decision-making in daily operations. It aligns operational safety for gas and electric services with API 1173 standards, incorporating elements from ISO 31000 for risk management, ISO 55000 for asset management, and the Incident Command System for emergency management, along with OSHA's occupational safety principles. This comprehensive approach fosters a proactive safety program to continually enhance safety for employees, contractors, and the public.

SDG&E's decentralized SMS organizational structure features a cross-functional team including leaders from gas operations, electric operations, employee safety, contractor safety, customer safety, public safety, asset management, risk management, and emergency management. These leaders form a centralized governance body representing the Five Pillars of Safety within the SMS Framework (Figure 1 below).

**Figure 1**
**SDG&E's Safety Management System Framework**

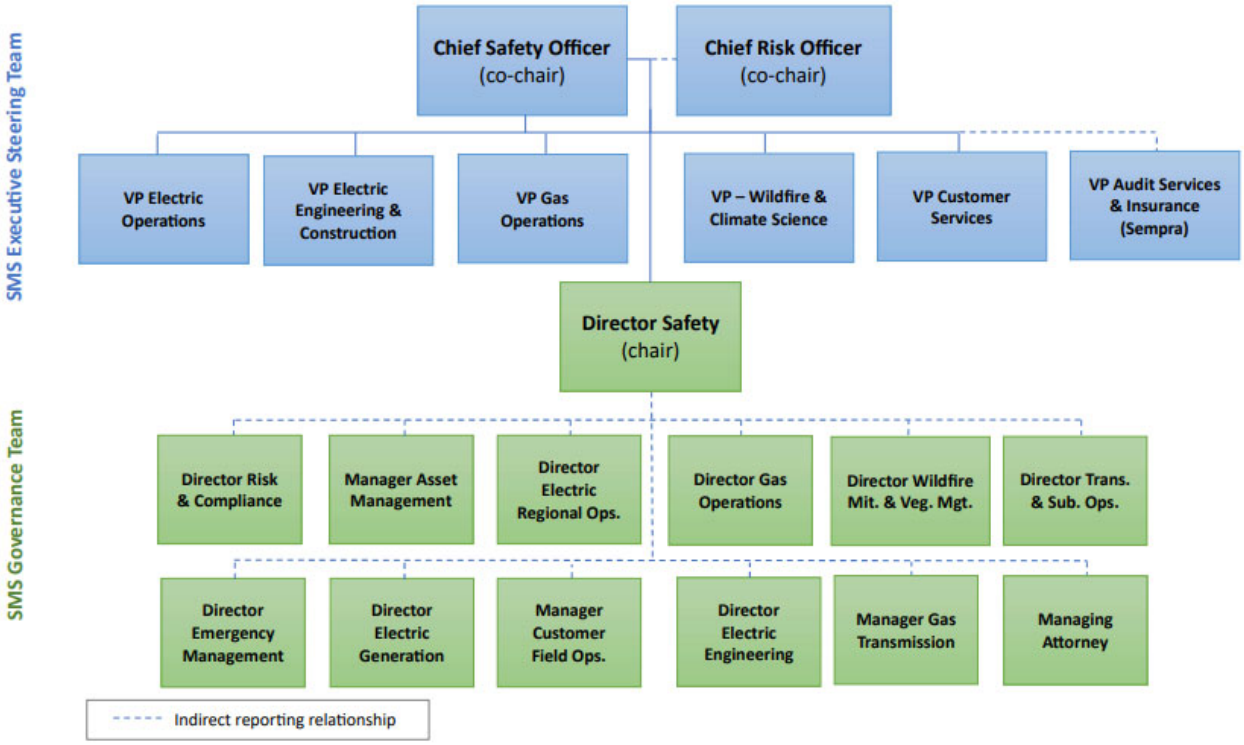



Central to this integrated and risk-informed methodology are the core pillars, built on fundamental safety and process safety management principles. The SMS integrates actions to identify and address risks throughout its framework effectively.

The SMS governance structure includes a SMS Executive Steering Team and a SMS Governance Team, as depicted in Figure 2, below. This decentralized organizational structure allows for cross-functional governance of risk and safety across SDG&E, while maintaining risk accountability at operational levels. Operational employees provide input and feedback on safety matters, which the SMS Governance Team addresses within their scope and authority as a unified entity.

SDG&E's Chief Safety Officer bears ultimate accountability for safety, co-chairing the SMS Executive Steering Team alongside the Chief Compliance & Risk Officer. The SMS Governance Team is led by the Director of Safety, reporting directly to the Chief Safety Officer.

**Figure 2**
**SDG&E's SMS Governance Structure**[7]




SDG&E's SMS Executive Steering Team directs the development, implementation, ongoing maintenance, and continuous improvement of the SMS. This team also sets high-level performance metrics and conducts annual management reviews. Centralized authority for executing the SMS lies with the Governance Team, which oversees and refines the system according to the ten essential elements of API 1173:

1. Leadership and Management Commitment
2. Stakeholder Engagement
3. Risk Management
4. Operational Controls
5. Incident Investigation, Evaluation, and Lessons Learned

[7] Updated SMS Governance Structure based on 2025 organizational changes; revised SMS Governance Plan reflecting these changes pending adoption.

6. Safety Assurance
7. Management Review and Continuous Improvement
8. Emergency Preparedness and Response
9. Competence, Awareness, and Training
10. Documentation and Record Keeping

These elements are executed through the Plan-Do-Check-Act model illustrated in Figure 3, below. An objective of the SMS is to integrate safety systems and processes more deliberately and intentionally, strengthening the company's safety culture.

**Figure 3**
**SDG&E's Integrated Plan-Do-Check-Act Model**


SDG&E's journey towards an enterprise-wide SMS began over a decade ago with its Environmental & Safety Compliance Management Program (ESCMP), based conceptually on ISO 14001 standards and tailored with unique safety components. The Company has built upon these foundations to create its SMS, aiming to enhance safe operations, strengthen safety culture, and improve overall safety performance, always striving for zero safety incidents.

## 5. PROGRAM REVIEW AND MODIFICATIONS

Public Utilities Code section 961 establishes that gas corporations shall periodically review and update their gas system operator safety plans. This Gas Safety Plan shall be reviewed at an annual frequency period not to exceed 15 months. The program owners must provide justification for any deviation from this review schedule.

All components of this Gas Safety Plan are reviewed and updated per the schedule below:

| Document Type | Review Cycle |
|---|---|
| Gas Safety Plan | Annually (not to exceed 15 months) |
| Gas Standards | At least every 5 years |
| Transmission Integrity Management Program | At least annually |
| Operation & Maintenance | At least annually |
| Control Room Management | At least annually |
| Distribution Integrity Management Program | At least every 5 years |
| Facilities Integrity Management Program | At least every 5 years |
| Form Instructions | Every 5 years |
| Environmental | Every 5 years |
| Information Bulletins | At least annually |

If changes are needed, they shall be made as soon as practicable through the Request to Publish[8] process and not deferred until the next scheduled review.

[8] PP01.040 - Submitting a Revised Company Operations Standard for Publication.

# II. LEADERSHIP COMMITMENT TO SAFETY

At SDG&E, safety is a core value, covering our employees, customers, infrastructure, and both physical and cyber systems. This commitment has been a cornerstone for over 130 years, guiding our programs and practices.

Leadership at SDG&E leads by example, promoting a culture of safety throughout the Company. They are dedicated to operational excellence and have established a Board Safety Committee for greater oversight. SDG&E executives assigned as an Officer in Charge of the Emergency Operations Center (EOC) receive foundational Incident Command System (ICS) training including FEMA ICS 100, 200, and 700, as well as the State of California's Standardized Emergency Management Systems Overview training. Supervisors also engage in three-hour safety leadership training as part of Essentials of Supervision.

SDG&E's safety expectations can best be described by the following Commitment to Safety statement that every member of our leadership wholeheartedly endorses:

> ***SDG&E's longstanding commitment to safety focuses on three primary areas – employee/contractor safety, customer/public safety and the safety of our gas and electric delivery systems. This safety focus is embedded in what we do and is the foundation for who we are – from initial employee training, to the installation, operation and maintenance of our utility infrastructure, and to our commitment to provide safe and reliable service to our customers.***
>
> ***-- SDG&E's Commitment to Safety***

SDG&E's dedication to operating a safe utility is reflected in its voluntary adoption of a company-wide Safety Management System, based on the safety guidelines outlined in American Petroleum Institute Recommended Practice 1173 (API 1173). SDG&E takes a comprehensive approach to asset management, risk assessment, and safety protocols, and will integrate additional SMS principles as they are relevant.

## 1. POLICY PRINCIPLES AND PERFORMANCE EXPECTATIONS

SDG&E's commitment to safety and its supportive organizational framework enable the Company to proactively manage the safe and reliable delivery of natural gas and related services. The Company aims to create an environment where employees at all levels, along with contractors, can voice concerns about pipeline infrastructure, risks, hazards, customer safety, contractor safety, and employee safety. They can also suggest improvements through different platforms such as local Safety Committees, the Executive Safety Committee, and a web-based and mobile application for reporting near misses and close calls. All employees are empowered and encouraged to "Stop the Job" whenever unsafe conditions are perceived.

SDG&E regularly monitors and evaluates its safety performance in compliance with state and federal regulations, alongside additional metrics to maintain a culture of continuous safety

improvement. These metrics are reviewed and reported according to schedules outlined in policies, programs, plans, or other documents that are part of the Gas Safety Plan.

Additionally, SDG&E keeps track of updates on the U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) website for new regulations and advisories, ensuring timely action and integration of these changes into policies, standards, procedures, and employee training.

The Company frequently assesses its safety culture, fostering open communication between employees and management to identify and manage safety risks. Management has implemented various methods for employees to report and share incidents and close calls/near misses, promoting ongoing learning and improvement.

SDG&E equips all employees with necessary training, awareness, and competence to perform their duties safely, as further detailed in Section VII.4. This commitment extends to contractors through SDG&E's Contractor Safety Management activities. Contractor safety performance is continually monitored to promote alignment with our safety focus and the integrity of the gas and electric delivery systems. SDG&E's Contractor Safety Services team oversees contractor safety performance and continually engages with contractors to promote safe work practices. Contractors are kept informed about operational, regulatory, and procedural changes affecting their work, and feedback from contractor-identified safety issues and near miss incidents is encouraged. SDG&E's Contractor Safety Services team hosts quarterly safety meetings, shares monthly newsletters, and issues incident debriefs and lessons learned following internal and external safety incidents to promote a shared culture of safety with our contractor workforce.

## 2. GOALS AND OBJECTIVES

SDG&E leadership and management are responsible for supporting, implementing, and overseeing safety across the organization, including employee, contractor, customer, public, and gas and electric system safety. They show commitment to safety by communicating its importance and modeling SDG&E's safety values.

This Gas Safety Plan is a Company policy that SDG&E leadership fully supports as part of their safety commitment.

# III. PLAN DEVELOPMENT AND IMPLEMENTATION

## 1. STATE DIRECTIVES TO SUPPORT WORKFORCE PARTICIPATION

In D.12-04-010, the Commission identified the topic of workforce participation in plan development to meet the requirements of California Public Utilities Code section 961(e). This section requires that the gas safety plan achieve the following:

> The commission and gas corporation shall provide opportunities for meaningful, substantial, and ongoing participation by the gas corporation workforce in the development and implementation of the plan, with the objective of developing an industry wide culture of safety that will minimize accidents, explosions, fires, and dangerous conditions for the protection of the public and the gas corporation workforce.

To comply with Section 961(e) directives and General Order 112-F Subpart G Section 301, the Commission has explained that natural gas system operators need to take the following actions:

1. The operator must make its safety plan available to its workforce, and provide for comments and suggestions from the workforce;

2. Gas system operators shall retain a log of the comments and suggestions, including the disposition of the comment or suggestion, with a summary of the rationale for the disposition;

3. Gas system operators shall also inform their employees that any employee who perceives a breach of safety requirements may inform the Commission of the breach, and that the Commission will keep the identity of the employee confidential; and

4. Each gas operator shall provide its workforce with the address of the Director of the Commission's Consumer Protection and Enforcement Division and the designation "Safety Breach Notification from Gas System Operator Employee–Confidentiality Requested" to seek confidential treatment.

## 2. INTERNAL STAKEHOLDER GAS SAFETY PLAN CONTRIBUTION PROCESS

When it comes to safety, we all have a role to play. Safety is a shared responsibility at SDG&E, with employees playing a vital role in proactive risk identification. All employees are empowered to halt operations if they perceive any unsafe conditions or deviations from the planned procedures. Additionally, employees can report near misses when they encounter risks, hazards, close calls, or good catches. Effective communication is a cornerstone of SDG&E's Safety Management System, with safety values and leadership commitment cascading from top executives to all employees.

The five pillars and ten essential elements that form the foundation of our SMS underscore the importance of employee and stakeholder engagement, ensuring clarity in policies, goals, and

procedures. Employees significantly contribute to this Gas Safety Plan by raising concerns and making safety recommendations, which is essential for continual improvement through gathering input from those closest to the work.

To foster a culture of trust and encourage reporting of known safety risks, the Company supports employee involvement in enhancing the Gas Safety Plan. This plan is accessible on the company intranet and is updated annually. The intranet also facilitates the submission of pipeline and occupational safety risks and improvement ideas, allowing for anonymous reporting as well. Company communication strategies highlight the availability and importance of SDG&E's Gas Safety Plan and the necessity of reporting safety risks, integrated into training materials.

Starting in January 2023, SDG&E hosts an annual "Start Strong" safety event for its operational workforce, demonstrating partnership with its Union (IBEW Local 465) and reaffirming a commitment to safety while setting goals for the year. This event aims to reinforce psychological safety, empowering employees to voice concerns, submit near misses, and stop unsafe tasks. Also starting in 2023, SDG&E began holding regular Gas Working Foremen Summits to gather feedback from its operational workforce. These summits, led by Gas Operations leadership, provide updates, offer training, and solicit input to improve department goals and pipeline operations. Regular Gas Safety Subcommittee (GSS) meetings also feature cross-functional workforce representation to discuss and address safety concerns.

SDG&E's near miss reporting program provides employees the means to report hazards, risks, close calls, and near misses via an online portal or mobile app, with all submissions reviewed for safety improvement opportunities. Meetings with employees promote the ongoing attention to safety issues, supported by regular safety council meetings, supervisor field visits, Gas Safety Center Field Safety Engagements,[9] and Behavior Based Safety (BBS) peer observations.[10]

Quarterly Risk Council meetings, operational safety standdowns, an Annual Safety Congress, and a Safety Leadership Award Ceremony further promote safety initiatives and recognize leaders who exemplify the company's safety vision. To maintain continual process improvement, a post-incident After-Action Review program solicits input from internal stakeholders, with action plans reviewed quarterly by executive leadership.

[9] SDG&E's Field Safety Engagements are documented reviews of activities where high-energy hazards are present to ensure the appropriate direct controls are in place to reduce or eliminate exposure and mitigate the risk of serious injuries and fatalities. This new leading metric introduced in 2024, aligns with industry best practices utilizing a standard methodology to conduct High-Energy Control Assessments (HECA), and the Edison Electric Institute (EEI) Safety Classification and Learning (SCL) Model. Field Safety Engagements are measured as a sum of each documented high-energy exposure assessment completed. SDG&E's Safety department and Gas Safety Center collaborate with field operations groups to identify, plan, and conduct these high-energy exposure reviews.

[10] SDG&E's Behavioral Accident Prevention Process (BAPP®), also referred to BBS, is a proactive approach to safety and health management, which recognizes at-risk behaviors as a frequent cause of both minor and serious injuries. BAPP is an employee driven safety process with partnership between management and employees that continually focuses people's attentions and actions on their, and others, daily safety behavior to identify safe and at-risk behaviors. The peer observation program utilizes a behavior inventory checklist to track safety behaviors and have a dialog on safe and at-risk behaviors, with recommended behavioral safety changes to promote safe work practices.

SDG&E's Gas Safety Plan is reviewed and updated annually and available to all employees online.

## 3. EXTERNAL STAKEHOLDER SAFETY PLAN CONTRIBUTION PROCESS

To foster a culture of trust and enhance the likelihood of reporting known pipeline or occupational safety risks, SDG&E actively involves its contractors and the general public in the ongoing improvement of the Gas Safety Plan.

Communication with external stakeholders (e.g., the public, first responders, public officials) is coordinated through SDG&E's Public Awareness Plan[11] and public liaison program.[12] For significant projects and programs, a dedicated outreach and communication plan is established to gather input, including safety-related feedback, from the community and other stakeholders.

SDG&E's Contractor Safety Management program incorporates feedback from contractors on occupational and pipeline safety risks at SDG&E. Contractors receive training on the reporting policy and procedures. This program centralizes the focus on contractors, aligning all Business Units and Class 1 Contractors under the same requirements via the Contractor Safety Program Standard G8308 for SDG&E and the Class 1 Contractor Safety Manual for contractors. Internal construction-focused Business Units and Contractor Safety Services oversee field safety for all construction work performed by contracted groups. This oversight ensures that all contracted work complies with SDG&E standards, state and federal regulations, applicable laws, and Commission Orders.

Contractor feedback is highly valued and essential for continuous improvement. SDG&E promotes two-way communication with its contractors to exchange safety information such as near misses, incident reporting, incident debriefs, and quarterly newsletters. Moreover, SDG&E leadership conducts safety connection touchpoints with contractor leadership to identify proactive and preventive solutions, lessons learned, and opportunities for safety enhancement. The following outlines SDG&E's process management for collecting and analyzing contractor and external stakeholder input regarding pipeline safety:

- Public Awareness Plan
- Public Liaison Program
- Damage Prevention Program
- Contractor Safety Program
- ISNetworld (ISN) for Class 1 Contractor safety vetting
- Contractor field safety observations and inspections
- Quarterly Contractor Safety Meetings and Annual Contractor Safety Summit

[11] SDG&E's Public Awareness Plan includes SDG&E's natural gas safety marketing campaign that provides outreach to various stakeholders regarding general safety and specific infrastructure projects that impact a particular area or group.
[12] Additional detail on SDG&E's public liaison program can be found at www.sdge.com/safety/sdge-first-responder-liason-activities.

- To ensure continuous procedural improvements, SDG&E has developed a scorecard that consists of SDG&E specific safety metrics to support identification of any safety related gaps identified. This scorecard is updated monthly and communicated out for situational awareness.
- Reporting and sharing near misses and incident debriefs with contractors.

SDG&E's Gas Safety Plan is publicly available on its external website for viewing by all members of the public and third-party Contractors.

# IV. SAFETY SYSTEMS

## 1. SAFETY SYSTEMS AND CALIFORNIA PUBLIC UTILITIES CODE § 961 - (d)(1) and (d)(2)

In D.12-04-010, the Commission identified the topic of safety systems to meet the requirements in California Public Utilities Code sections 961(d)(1) and (d)(2). These sections require that the gas safety plan achieve the following:

- Identify and minimize hazards and systemic risks to minimize accidents, explosions, fires, and dangerous conditions, and protect the public and gas corporation workforce. Section 961(d)(1).

- Identify the safety-related systems that will be deployed to minimize hazards, including adequate documentation of the commission-regulated gas pipeline facility history and capability. Section 961(d)(2).

SDG&E has plans and programs that identify and minimize hazards and systemic risks in pipeline infrastructure and promote personnel, system, environmental, and public safety. These plans and programs are an integral part of our approach to safety and include the following:

| | |
|---|---|
| Transmission Integrity Management Program (TIMP) | The TIMP was established in accordance with 49 Code of Federal Regulations (CFR) Part 192, Subpart O, to address safety-related risks on SDG&E's natural gas transmission system. |
| Distribution Integrity Management Program (DIMP) | The DIMP was established in accordance with 49 CFR Part 192, Subpart P to address safety-related risks on SDG&E's natural gas distribution system. |
| Facilities Integrity Management Program (FIMP) | A FIMP framework was established to mitigate safety-related risks associated with transmission and distribution facilities not included in the preceding integrity management programs. |
| Operation and Maintenance Plan | The Operation and Maintenance (O&M) plan is a compendium of policies designed to comprehensively address the safe operation and maintenance of SDG&E facilities. |
| Pipeline Safety Enhancement Plan (PSEP) | The PSEP was established in response to a Commission rulemaking (later codified as Public Utilities Code §§ 957 and 958), that mandated operators to address: transmission pipelines that have not been adequately tested or for which reliable records are not available; pre-1946 pipe that cannot be assess using in-line inspection tools; and valve infrastructure enhancements.[13] |
| Gas Safety Enhancement Programs (GSEP) | The GSEP are safety-related programs developed and established in response to various safety-related regulations effectuated by PHMSA (e.g., Gas Transmission Safety Rule [GTSR], Valve Rule). |

[13] As of 2025, all known segments have been completed and will be continuing forward under the GSEP federal PHMSA program under GTSR to address segments that might be identified that have not been adequately tested or have reliable records.

| | |
|---|---|
| Control Room Management Plan (CRMP) | The CRMP is established in accordance with 49 CFR §192.631 to address safety requirements for controllers, control rooms, and SCADA systems used to remotely monitor and control pipeline operations. |
| Gas Damage Prevention Program | SDG&E's Damage Prevention Program protects our underground gas, electric, and fiber optic infrastructure from damage caused during excavation activities. This helps ensure the safety of our system, employees, the public, and ultimately supports the reduction of emissions since we are preventing natural gas from being released into the atmosphere. |
| Safety Management System (SMS) | SDG&E's SMS is a process-based, integrated, continuous improvement framework, adapted from API 1173, that applies a proactive and preventative approach to safety to mitigate risk, further enhance the Company's safety culture, and prevent employee, contractor, public, cyber and/or infrastructure-related safety incidents. |

## 2. TRANSMISSION INTEGRITY MANAGEMENT PROGRAM

The Transmission Integrity Management Program (TIMP) was developed to enhance pipeline safety through regular assessments and risk mitigation on transmission pipelines, particularly those in high consequence areas (HCAs). Initially developed in 2004 to comply with Subpart O of Part 192 of Title 49 of the CFR and more recently updated to comply with 49 CFR § 192.710, which was newly incorporated through Part 1 of the Gas Transmission Safety Rule,[14] the TIMP is designed to assess and enhance the integrity of transmission pipelines in HCAs and other applicable areas[15] through the identification and evaluation of threats, assessment of material integrity, and determination and implementation of preventive and mitigative actions and is continuously reviewed and improved.

The TIMP integrates information about the pipeline's physical, operating, environmental, and performance history into a comprehensive evaluation. This analysis is used to develop specific integrity-related assessments, applied at intervals no greater than seven years for pipelines in HCAs and no greater than ten years for pipelines subject to 49 CFR § 192.710.

Risk evaluations and subsequent integrity activities for DOT defined Transmission segments under the TIMP are designed to identify and address safety concerns and are conducted in accordance with federal requirements. SDG&E uses several methods to assess pipelines, including in-line inspections (ILI), pressure testing, and direct assessment, with ILI being the preferred method due to its generation of comprehensive data sets pertaining to the pipe segments. Of the total transmission pipelines in the SDG&E system, approximately 157 miles (~72%) are evaluated using ILI methods. TIMP assessments support the safe operation of the transmission system through recurring assessment and remediation of pipelines, as well as the incorporation of preventive and mitigative measures, including corrosion control and damage prevention. The

[14] 84 FR 52180 – "Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments."
[15] 49 CFR § 192.710(a).

TIMP is continuously reviewed and improved to maintain its effectiveness in managing pipeline safety.

SDG&E implements TIMP in accordance with our written plan: a collection of internal policy documents that detail how the safety and integrity of our transmission pipeline system is managed, enhanced, and improved. The written TIMP plan also outlines procedures and processes to address each required program element and referenced industry standards (e.g., API RP 1173, ASME B31.8S and NACE SP0502-2008).

## 3. DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM

The Distribution Integrity Management Program (DIMP), initially developed in 2010, complies with Subpart P of Part 192 of Title 49 of the CFR. The DIMP is designed to enhance distribution pipeline safety by identifying threats, evaluating and ranking risks, and developing measures to reduce risks on the system.

SDG&E integrates data from various sources for risk analysis and uses a data-driven approach to develop measures that reduce the likelihood and consequences of pipeline failures. SDG&E also measures the performance of the DIMP, continually evaluating its effectiveness, and implements improvements as appropriate. In 2022, the DIMP teams began improving existing vintage pipeline replacement activities that mitigate risks on steel and plastic mains, such as corrosion or manufacturing defects. Using internal and publicly available industry data sources, SDG&E is shifting from using relative risk analysis to segment-specific quantitative risk results to inform replacement activities.

## 4. FACILITIES INTEGRITY MANAGEMENT PROGRAM

The Facilities Integrity Management Program (FIMP) is based on industry recommended guidelines and practices to enhance the safety of SDG&E's various facilities and exceeds the CFR requirements that effectuated the TIMP and DIMP. The program includes electrical equipment inspections and mechanical integrity inspections on certain vessels at transmission compressor stations and pressure limiting stations, SB 1383 renewable natural gas facilities, and natural gas vehicle fueling stations.

Through the FIMP, the Company incorporates integrity management principles, continuous improvement, and industry best practices to reduce risks on facility equipment and promote safety, sustainability, and operational excellence.

## 5. OPERATION AND MAINTENANCE PLAN

SDG&E's Operation and Maintenance (O&M) plan consists of more than 175 policies designed to address the safe operation and maintenance of our facilities in accordance with 49 C.F.R. § 192.605 "Procedural manual for operations, maintenance, and emergencies." These policies include, but are not limited to, various processes, such as pipeline operation, corrosion control, record availability, pipeline startup and shutdown, compressor station maintenance, operator qualification, procedure review, excavation safety, and control room management.

The O&M plan is reviewed annually to validate compliance with federal regulations and is updated throughout the year based on new information, regulations, and technology. Individual documents undergo full reviews every five years, and training programs are aligned with gas standards to ensure employees perform tasks safely.

This O&M plan includes policies that address:

- Operating, maintaining, and repairing the pipeline and its components;
- Controlling corrosion;
- Availability of construction records, maps, and operating history;
- Start up and shut down of the pipeline;
- Maintenance and operation of compressor stations;
- Operator Qualification;
- Review of procedures to determine effectiveness and adequacy;
- Safety procedures for excavation; and
- Southern California Gas Company (SoCalGas) Control room management of the SDG&E system.

The O&M plan is reviewed annually to verify that the included policies and procedures remain in compliance with the requirements of the relevant sections of Title 49 of the Code of Federal Regulations. These policies and procedures are updated throughout the year in response to new information or regulations, technology, or other items that drive improvement.

Individual documents referenced by the O&M plan undergo full functional reviews at least every five years. Training programs are reviewed in the same timeframe as associated gas standards, so employees are aware of and perform tasks safely and according to the current requirements. To help employees remain safe and knowledgeable of critical policies and procedures, including those related to safety, SDG&E provides annual review training for all operations employees.

The documents referenced by the O&M plan comprehensively address the safe operations and maintenance of our facilities, identify and prescribe activities whose purpose is to minimize risks, and document its history through meeting and documenting code/regulation compliance, promoting safety and operational excellence, and minimizing the potential for and consequences associated with unplanned events such as equipment failure or operator error.

## 6. PIPELINE SAFETY ENHANCEMENT PLAN

In 2011, the CPUC issued D.11-06-017 (in rulemaking (R.)11-02-019), which ordered all California natural gas transmission pipeline operators to prepare and file implementation plans to replace or pressure test all transmission pipelines that have not been adequately tested or for which reliable records are not available. These requirements were later codified as Public

Utilities Code Sections 957 and 958.

In response, SoCalGas and SDG&E submitted their Pipeline Safety Enhancement Plan (PSEP). The PSEP is a systematic effort to test or replace transmission pipelines that do not have sufficient documentation of a pressure test to at least 1.25 times the Maximum Allowable Operating Pressure (MAOP). PSEP employs a risk-based prioritization methodology and includes replacement of pre-1946 pipe that cannot be assessed using in-line inspection tools, and enhancement of valve infrastructure.

The primary objectives of the PSEP are to: (1) enhance public safety; (2) comply with Commission directives; (3) minimize customer impacts; and (4) maximize the cost effectiveness of safety investments.

PSEP's key elements include:

- Criteria (Decision Tree) to determine whether to test or replace transmission pipelines that do not have sufficient documentation of a pressure test to at least 1.25 times the MAOP
- A two-phased approach and prioritization of pipelines operated in more populated areas (Phase 1A) ahead of pipelines in less populated areas (Phase 2A)
- Replacement of pipelines installed prior to 1946 that cannot be assessed using in-line inspection tools, i.e., "non-piggable" pipelines (Phase 1B)
- Interim safety enhancement measures
- Enhancement of valve infrastructure through the retrofit of existing valves and installation of additional remote control and automated shutoff valves.

The PSEP also includes measures to enhance the pipeline system through retrofitting pipelines and valves with existing and emerging technologies to provide advance warning of potential pipeline failure and decrease the time to identify, investigate, prevent, remedy, or manage the effects of such an event.

## 7. GAS SAFETY ENHANCEMENT PROGRAMS

In SDG&E's Test Year (TY) 2024 General Rate Case (GRC), SDG&E proposed a portfolio of gas safety enhancement programs that are designed to comply with new PHMSA rulemakings resulting from the PIPES Act of 2011 and successive acts.[16] Current rules that have taken effect and have driven incremental safety enhancements including the "Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments," "Pipeline Safety: Safety of Gas Transmission Pipelines: Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Change, and Other Related Amendments," and "Pipeline Safety: Requirement of Valve Installation and Minimum Rupture Detection Standards" final rules.

- **"Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments" Rulemaking:** PHMSA published the final rule on October 1, 2019. With various parts

[16] D.24-12-074, pp. 279-280.

taking effect July 1, 2020, and July 1, 2021, the rule strengthened record-keeping requirements and added entirely new sections to the code, required operators to reconfirm pipeline maximum allowable operating pressure (MAOP) for pipeline segments without traceable, verifiable, and complete records; establishes an opportunistic material properties and attributes verification procedure; and expand integrity assessment requirements beyond segments in high consequence areas. Requirements associated with and/or impacting the TIMP are discussed in section IV.2. of this plan.

- **"Safety of Gas Transmission Pipelines: Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Change, and Other Related Amendments" Rulemaking**: PHMSA published a final rule on August 24, 2022, which took effect May 24, 2023, with a limited enforcement discretion order extending the effective date of changes associated with various sections to February 24, 2024. The rule added new requirements for pipeline segments that impact the TIMP (Section IV.2.) as well as requirements that enhance the safety of transmission pipelines through increased corrosion control and extreme weather event response measures and expanded management of change activities.

- **Pipeline Safety: Requirement of Valve Installation and Minimum Rupture Detection Standards Final Rule:** PHMSA published a final rule on April 8, 2022, which went into effect on October 5, 2022. The rule requires operators to install rupture mitigation valves (RMVs) on newly constructed or "entirely replaced" transmission pipeline segments with diameters of 6 inches or greater and perform risk analyses annually to identify RMV installation opportunities. Additionally, the rule requires operators to strengthen incident investigation requirements and establish procedures for rupture identification and response measures, which are discussed in more detail in Section V of this plan.

## 8. CONTROL ROOM MANAGEMENT PLAN

On December 3, 2009, PHMSA published the Control Room Management/Human Factors final rule in the Federal Register as 49 CFR §192.631, *Control Room Management*, which went into effect on February 1, 2010. These safety regulations prescribe safety requirements for controllers, control rooms, and SCADA systems used to remotely monitor and control pipeline operations.

In response, SDG&E submitted its Control Room Management Plan (CRMP) in 2010 to comply with 49 CFR §192.631. The CRMP aims to enhance the performance reliability of operator personnel that control pipeline operations by:

- Defining the roles and responsibilities of controllers and providing controllers with the necessary information, training, and processes to fulfill these responsibilities.
- Implementing methods to prevent and manage controller fatigue according to an established fatigue management plan.
- Managing SCADA alarms and controller workloads according to an established alarm management plan.

- Integrating human factors management into SCADA systems.
- Testing backup SCADA systems and internal communication plans periodically to verify the effectiveness of procedures and equipment if an emergency involving loss of SCADA system functions occur.
- Assuring control room considerations are taken into account when changing pipeline equipment or configurations.
- Reviewing reportable incidents or accidents to determine whether control room actions contributed to the event.
- Developing team training that provides controllers, and those who operationally collaborate with control room personnel, the skills necessary to address conditions that could occur in any operational mode (normal, abnormal, or emergency conditions).

The CRMP is reviewed annually and is updated throughout the year based on new regulations, revised company policies, internal and external audits, and other items that drive improvement. Training programs are also reviewed and updated in the same timeframe, so employees are aware of and perform tasks safely and according to the current requirements.

## 9. DAMAGE PREVENTION PROGRAM

SDG&E's Damage Prevention Program protects our underground gas, electric, and fiber optic infrastructure from damage caused during excavation activities. This helps ensure the safety of our system, employees, the public, and ultimately supports the reduction of emissions since we are preventing natural gas from being released into the atmosphere. When an 811 DigAlert Ticket is created, SDG&E locators go out to the site and mark the location of our gas, electric, and fiber optic underground utility lines to prevent damages and keep our communities safe. SDG&E also takes a proactive approach to damage prevention with enhanced public outreach to customers and contractors.

SDG&E's Gas Damage Prevention Program follows the SMS Plan-Do-Check-Act Cycle for continuous safety improvement. The driving force of the Damage Prevention team is their dedication to employee, contractor, public, and system safety. Their focus is not simply on locating our gas and electric facilities, but they also partner with contractors, residential customers, and the broader community to ensure our system is protected.

Public safety requires collaboration and partnership. SDG&E Damage Prevention Analysts (DPAs) engage excavators and homeowners through a variety of informational outreach events to educate on safe digging practices tailored to the specific type of work. DPAs perform damage investigation for every dig-in, including after-hours, to further improve our Damage Prevention Program.

In 2022 and 2023, SDG&E achieved its lowest Gas Dig-in rate[17] in Company history. In 2024, SDG&E's Damage Prevention team's efforts resulted in the second lowest rate of damages to our

[17] Third party dig-ins per 1,000 USA tickets.

system on record finishing with a Damage Rate of 1.21, meeting our established annual goal. This team is making a significant difference when it comes to protecting the safety of our communities. More specifically, SDG&E's 2024 Gas Damage Prevention Program included:

- Damage Prevention Analysts that supported:
  - 2,501 non dig-in engagements
  - 78 Outreach events
  - Over 180 Stop the Jobs
  - Response to 100% of all Gas Damages

- Public Awareness Campaign:
  - 15 second 811 commercials played on local cable
  - 811 Billboards throughout San Diego County
  - Banners and signage at local attractions (e.g., Petco Park, San Diego Zoo, etc.)
  - Social media campaign

- Quality Management:
  - 9,350 total reviews completed by the Quality Assurance (QA) team since 2018
  - Over 160 findings resulting in educational opportunities with workforce

- 811 Champion Program
  - In 2024, SDG&E launched its 811 Champion Program to empower all SDG&E employees to identify and report an excavation site that may not have an 811 ticket for immediate follow-up by the Damage Prevention team.

## 10. SAFETY MANAGEMENT SYSTEM

As described in Section I.4, above, SDG&E collectively manages safety risk within its Safety Management System. SDG&E's SMS is a process-based, integrated, continuous improvement framework aimed to reduce risk, further enhance the Company's safety culture, and prevent safety incidents. The collective efforts at the business unit and enterprise levels become greater aligned, integrated, and systematic within the SMS framework (see Figure 1, above). SDG&E's SMS provides a standardized approach for managing risk and safety across all assets and operations by implementing processes and risk assessment methodologies that can be consistently applied enterprise wide. The SMS framework creates an integrated approach and a Company-wide resource to guide our actions, decisions, and behaviors, so that risk is efficiently and effectively managed, and our safety culture and safety performance continually improves.

SDG&E's SMS aligns with the American Petroleum Institute's (API) Recommended Practice for Pipeline Safety Management System (API 1173). While API 1173 was developed for natural gas pipeline operators, SDG&E adapted this recommended practice for broader electric and gas utility application. Accordingly, absent an electric industry-equivalent, SDG&E applies this adapted version of API 1173 to both its gas and electric operations. For example, SDG&E added elements specific to wildfire mitigation that are not found in API 1173 throughout its SMS. SDG&E's SMS also incorporates elements of the following guidelines and standards:

- CPUC: Office of Safety Advocate 2018 Annual Report;

- International Standards Organization (ISO) 31000: Risk Management;
- ISO 55000: Asset Management: Overview, Principles, and Terminology;
- ISO 55001: Asset Management: Management Systems – Requirements;
- ISO 22320 and the Incident Command System: Emergency Management; and
- OSHA Occupational Safety Standards: Employee and Contractor Safety.

These integrated elements together support the development of a comprehensive and proactive safety program that produces ever-improving levels of safety.

# V. EMERGENCY PREPAREDNESS & RESPONSE

## 1. EMERGENCY RESPONSE AND CALIFORNIA PUBLIC UTILITIES CODE § 961 -(d)(5), (d)(6) and (d)(8)

In D.12-04-010, the Commission identified the topic of emergency response to meet the requirements of Public Utilities Code sections 961(d)(5), (d)(6), and (d)(8). These sections require the Gas Safety Plan to:

- Provide for appropriate and effective system controls, with respect to both equipment and personnel procedures, to limit the damage from accidents, explosions, fires, and dangerous conditions. Section 961(d)(5).
- Provide timely response to customer and employee reports of leaks and other hazardous conditions and emergency events, including disconnection, reconnection, and pilot-lighting procedures. Section 961(d)(6).
- Prepare for, minimize damage from, and respond to, earthquakes and other major events. Section 961(d)(8).

In addition, the Gas Safety Plan addresses the requirements of Assembly Bill 56, chaptered on October 7, 2011, which codified Public Utilities Code section 956.5 that states:

- Owners and operators of intrastate transmission and distribution lines, at least once each calendar year, shall meet with each local fire department having fire suppression responsibilities in the area where those lines are located to discuss and review contingency plans for emergencies involving the intrastate transmission and distribution lines within the jurisdiction of the local fire department.[18]

SDG&E has several programs, policies, standards, and procedures in place so that the company and its employees are prepared to respond to emergencies. These activities are intended to limit damage from accidents and provide timely response to customer and employee reports of leaks, hazardous conditions, and emergency events such as earthquakes and establish an effective Incident Command System (ICS) and collaborating with first responder agencies.

## 2. SDG&E'S GAS EMERGENCY PREPAREDNESS AND RESPONSE POLICY

SDG&E's Gas Emergency Management Preparedness and Response Policy (ER-1 SD) is designed to create a framework for the protection of our employees, contractors, the public, and our infrastructure in the event of a major emergency related to gas pipeline operations safety, health, and environmental protection processes.

The ER-1 SD documents how SDG&E aligns with the emergency response practices detailed in API 1173 and complies with the Public Utilities Code sections 961(d)(5), (6), and (8), as well

[18] Additional detail on SDG&E's public liaison program can be found at www.sdge.com/safety/sdge-first-responder-liason-activities.

as the emergency response procedures required by 49 C.F.R. §§ 192.613 and 192.615. It documents how the Company prepares and responds to emergencies by using the Plan-Do-Check-Act (PDCA) cycle for continuous improvement of our processes. This plan covers the following emergency response elements:

- SDG&E's Emergency Response Organization, including positions and responsibilities of the Emergency Operations Centers, identification of response resources and interfaces, including local emergency responders.
- Emergency Preparedness/Exercises
- Field Services Emergency Plans
- After Action Review Program
- Business Resumption Planning
- Emergency Action and Fire Prevention Plans
- Natural Disasters or Major Emergencies
- Off-Hour Management Coverage
- Mutual Assistance
- Plan maintenance

The policy incorporates by reference SDG&E procedures and documents that collectively comply with the various requirements of 49 C.F.R. § 192.615 (a 1-2), b 1-3), (c 1-4):

- Operator plans, procedures, and notification requirements;
- The responsibility of customer contact centers, which receive customer reports of emergencies and leaks;
- The responsibility of dispatch offices, which act as the central point for receiving and recording information on reportable incidents, emergencies, and natural disasters affecting the company, and which also process internal gas incident notifications;
- The Emergency Incident Tracking System that is used to record reports of damage to SDG&E pipelines or facilities and to log, track, and notify field personnel and others within the company about emergency situations; and
- Establishing and maintaining liaison with appropriate fire departments.

With PHMSA's amendment to 49 CFR Part 192 through the "Pipeline Safety: Requirement of Valve Installation and Minimum Rupture Detection Standards" final rule on April 8, 2022, The ER-1 SD policy has also been updated to increase coordination with emergency response agencies to enhance public safety and minimize environmental impacts of pipeline ruptures. Additionally, in alignment with the amendments to 49 CFR § 192.613, ER-1 includes procedures for the following activities on transmission pipeline segments with likelihood of damage after extreme weather events:

- Consideration of the nature of the extreme weather event, physical characteristics, operating conditions, location, and prior history in determining the scope of initial inspections
- Communicating with the PHMSA Region Director if the inspection cannot commence within 72 hours after the area can be safely accessed
- Remedial actions to ensure the safe operation of the pipeline based on the inspection which includes but is not limited to:
  - (i) Reducing the operating pressure or shutting down the pipeline
  - (ii) Modifying, repairing, or replacing any damaged pipeline facilities
  - (iii) Preventing, mitigating, or eliminating any unsafe conditions in the pipeline right-of-way
  - (iv) Performing additional patrols, surveys, tests, or inspections
  - (v) Implementing emergency response activities with Federal, State, or local personnel
  - (vi) Notifying affected communities of the steps that can be taken to ensure public safety.

The Gas Emergency Management Preparedness and Response Policy is designed to provide for the safety of customers, employees, and communities and the protection of property in the event of a major emergency related to gas pipeline operations safety, health, and environmental protection processes.

SDG&E prepares and maintains written plans and standards that address emergency or disaster situations, including earthquake response. As part of these plans and standards, employees are trained and equipped to respond promptly; direct their actions toward protecting people first and then property; maintain gas service to customers where possible; and restore the affected pipeline system and company operations to normal status following an emergency or disaster.

These plans and standards may include written gas handling plans, alternative gas handling plans, and various considerations when performing gas handling/pressure control, including the operation of critical valves, control equipment, and instrumentation. Employees are to adhere to these plans and standards when performing these duties and to take precautions to prevent outages, over pressurization, errors in mapping or planning, and other safety concerns. Employees performing specified tasks must be trained on the policies and procedures to complete their duties safely. Business Resumption plans address continuity planning to ensure organizational stability in the event of a major business disruption so that critical functions can continue during and after a disaster with minimal disruption.

Plans for coping with a major emergency include provisions for training; response and recovery; specific responsibility for on-call schedules and duties; inter-organizational assistance; coordination with, and notification of, governmental agencies; media contact; assignments to governmental emergency organizations; and activation of the company's regional Department Operations Center – Gas (DOC-G).

SDG&E's emergency management organization is modeled after the Standardized Emergency

Management System (SEMS), which allows for a multi-level emergency response organization. This means that the severity of the incident determines the level of support and resources that are necessary to respond to the event.

SDG&E has three levels of emergency management support:

- Construction and Operations Center Field Level response for routine local emergencies or incidents involving a small number of customers, leveraging a utility-based Incident Command System, as described below. SDG&E's Gas Operations provides 24/7 emergency response and support through our Gas Emergency Department (GED).
- An Emergency Operations Center (EOC), which is for large-scale events that may involve a significant number of customers across regions or an event that may require coordination and communication with multiple internal and/or external organizations (such as significant earthquakes). SDG&E's EOC is staffed with trained personnel to respond to and recover from major emergencies. SDG&E also has a backup EOC in the event the main center becomes inoperative. SDG&E's EOC coordinates responses with SoCalGas' EOC.
- Department Operations Center – Gas (DOC-G) is a crisis management leadership team that coordinates and provides support to the Utility Field Commanders (UFCs) for operations on gas incidents. During an emergency that requires greater support than the capacity of the local field response, the DOC-G is activated to support the field by allowing the field to focus on the repair and restore efforts while activities such as technical support, logistics, communications, and addressing customer issues are handled by the DOC-G. The DOC-G is located at SDG&E's Greencraig facility. Depending on the nature of the emergency and assets affected, DOC-G may coordinate responses with the SoCalGas Gas Control Center.

SDG&E maintains and tests its emergency response plan and structure by conducting regular emergency preparedness drills and exercises to promote employee proficiency in emergency assignments and to validate the effectiveness of its emergency plans. These training exercises include external agencies and cover a wide range of threats to employee, public, and pipeline safety. Adequacy of response is evaluated during these emergency exercises, lessons learned are identified and corrective actions are taken, which may include plan or process revisions.

Emergency response plans and procedures are also evaluated as a component of an incident investigation, with lessons learned incorporated into plan or process revisions as needed. SDG&E has developed and integrated a utility-based Incident Command System into the company's field response structure, Emergency Operations Center, and Department Operations Centers. The Incident Command System is a standardized approach to incident management that provides all responders an integrated organizational structure that matches the complexities and demands of the incident and can expand or contract to meet incident needs. This integrated organizational structure outlines communication standards for inter-functional (i.e., Transmission, Distribution, etc.) and interagency (i.e., fire service, law enforcement, Caltrans, etc.) cooperation during an emergency incident and responsibilities within the company.

In addition to Incident Command System training, the company provides "First Responder"

training for field management personnel who may respond to emergencies. In 2023, SDG&E hosted workshops to train approximately 60 employees as Utility Field Commanders (UFC) who can provide incident command and control for SDG&E, in partnership with first responders, in the event of an emergency situation. In 2024, SDG&E hosted workshops to train additional employees on UFC, DOC-G, ICS and the Utility Field Safety Officer role. The Utility Field Safety Officer role advises and supports the UFC on all matters relating to operational safety, including the health and safety of our employees during an emergency response.

Plans for routine emergencies differ from a major emergency in that Company personnel respond and address the emergency with no or minimal interaction with other agencies. The Company responds immediately to all emergencies. In addition to the immediate response to emergencies, other potentially hazardous conditions reported to the Company are scheduled dependent upon the specific information reported to the Utility. Emergencies and hazardous conditions are addressed immediately. Those deemed non-hazardous are scheduled based on contributing risk factors. Response times of less than four hours, less than 14 hours and same day have been established for these non-emergency conditions.

## A. MUTUAL ASSISTANCE SUPPORT

Mutual assistance is an essential part of a utility restoration process and contingency planning. Mutual assistance agreements (MAAs) and other types of arrangements to assist before, during, and after an emergency event facilitate the rapid mobilization of personnel, equipment, and supplies. Participation in MAAs is seen as an important component of the federal National Incident Management System (NIMS), which is intended to provide a systematic approach to guide governments at all levels, non-governmental organizations, and the private sector in collaborative emergency preparedness and response activities.[19] The mutual assistance network is a cornerstone of a utility's operations during emergencies.

The Company maintains an agreement for mutual assistance with various non-profit organizations, utilities, and certain municipalities such as the California Utilities Emergency Association (CUEA), Western Regional Mutual Aid Group (WRMAG) and the American Gas Association (AGA).

These agreements cover the rights and obligations of those who respond to requests for assistance, as well as guidelines concerning control of the work of personnel involved in the response.

A requesting utility having a major emergency and in need of the Company's assistance, may make a request for assistance. Emergency Management will facilitate and coordinate the activation of mutual assistance through a meeting of the EM Advisor, appropriate commodity directors and the Executive Officer On-Call (OIC). The OIC will either approve or disapprove the request.

[19] U.S. Dept. of Homeland Security. National Incident Management System (December 2008).

The Emergency Management department maintains checklists and other documents for requesting and responding to requests for mutual assistance.

The individual procedures, policies, and programs associated with this chapter are listed in the Appendix.

The appropriate level of leadership participates in and reviews the scheduling and findings of emergency preparedness activities. Emergency preparedness activities are conducted per the schedule published by Emergency Services.

# VI. STATE AND FEDERAL REGULATIONS

## 1. STATE AND FEDERAL REGULATIONS AND CALIFORNIA PUBLIC UTILITIES CODE § 961- (d)(7), (d)(9) and (c)

In D.12-04-010, the Commission identified the topic of State and federal regulations to meet the requirements of Public Utilities Code sections 961(c), (d)(7) and (d)(9). These sections require that the Gas Safety Plan achieve the following:

- The plan developed, approved, and implemented pursuant to subdivision (b) shall be consistent with best practices in the gas industry and with federal pipeline safety statutes as set forth in Chapter 601 (commencing with Section 60101) of Subtitle VIII of Title 49 of the United States Code and the regulations adopted by the United States Department of Transportation pursuant to those statutes. Section 961(c);

- Include appropriate protocols for determining maximum allowable operating pressures on relevant pipeline segments, including all necessary documentation affecting the calculation of maximum allowable operating pressures. Section 961(d)(7); and

- Meet or exceed the minimum standards for safe design, construction, installation, operation, and maintenance of gas transmission and distribution facilities prescribed by regulations issued by the United States Department of Transportation in Part 192 (commencing with Section 192.1) of Title 49 of the Code of Federal Regulations. Section 961(d)(9).

This chapter describes how SDG&E safely designs, constructs, installs, operates, and maintains gas transmission and distribution facilities in compliance with these directives.

## 2. REGULATORY OVERSIGHT

SDG&E's transmission and distribution pipelines and facilities are operated and maintained primarily pursuant to PHMSA regulations at the federal level, and Commission regulations and requirements at the state level. The Commission is a state partner of PHMSA and is certified by PHMSA for the intrastate regulatory, inspection, and enforcement responsibilities of the transportation of natural gas.

California's rules governing the design, construction, testing, operation, and maintenance of gas transmission and distribution piping systems are specified in the Commission's General Order 112-F, which incorporates 49 CFR Parts 191, 192, 193, and 199.

This Gas Safety Plan and related documents align with General Order 112-F and the applicable parts of Title 49 of the CFR. SDG&E's gas standards, including O&M procedures, are developed to maintain and improve safety, complying with federal and state regulations. The Pipeline Safety & Compliance and Integrity Management & Strategic Planning teams monitor and track changes to legislation and regulations, coordinating the implementation of new requirements.

SDG&E stays current with regulations by monitoring legislative activities and participating in industry associations like the American Gas Association (AGA). The Company updates procedures,

standards, and audit programs, maintaining required documentation to demonstrate compliance. SDG&E will continue to comply with regulations, identifying, evaluating, and reducing system risk through continuous safety enhancements.

## 3. COMPLIANCE WITH GENERAL ORDER 112-F

In accordance with General Order 112-F and, by incorporation, 49 CFR Part 192, SDG&E has implemented and follows policies, procedures, and programs that govern the design, construction, testing, installation, operation, maintenance, and determination of maximum allowable operating pressure for gas transmission and distribution facilities. These policies, procedures, and programs are updated in a timely manner as appropriate in response to changes in regulation, safety advisories, and other safety information.

The individual policies, procedures and programs associated with this Section are listed in the Appendix.

These policies, procedures and programs have been developed to promote safety and comply with the code requirements and are summarized as follows:

3.1 Design: 49 CFR Part 192, Subparts B, C, and D specify the minimum requirements for the material selection and design of pipe and pipeline components. SDG&E's transmission and distribution pipelines and facilities are designed with approved materials that have sufficient wall thickness and/or adequate protection to withstand anticipated external pressures and loads that will be imposed on the pipe after installation. The pipelines and facilities are also designed with materials of sufficient strength to contain internal pressures plus appropriate design and/or safety factors. Components, including valves, flanges, and fittings meet the minimum prescribed requirements specified in the regulations. The design also includes pressure relief or other protective devices to prevent accidental over-pressurization as further described in the maintenance section. SDG&E implements defined procurement processes that facilitate materials traceability.

3.2 Construction: 49 CFR Part 192, Subparts E, F, G and J specify the minimum requirements for the construction and testing of transmission and distribution facilities, including the welding and joining of pipe and components as well as the protection of pipe and facilities from hazards such as unstable soil, landslides, and other hazards that may cause the pipe to move or sustain abnormal loads. SDG&E's transmission and distribution pipelines and facilities are to be constructed in accordance with these requirements.

3.3 Installation: 49 CFR Part 192, Subpart H specifies the minimum requirements for the installation of distribution service lines, service regulators, and customer meters. These requirements include specifications pertaining to the location of this infrastructure, protection from damage, and valve requirements. SDG&E's service lines, service regulators, and customer meters are to be installed in accordance with these requirements.

3.4 Maintenance: 49 CFR Part 192, Subparts M and I specify the minimum requirements for the maintenance of transmission and distribution pipe facilities along with the associated corrosion protection facilities. Maintenance activities include the patrolling

of pipeline, performing leakage surveys, monitoring performance of corrosion protection systems, making repairs, inspection and testing of pressure limiting and regulating equipment, and valve and vault inspection and upkeep. SDG&E maintains its pipelines and facilities in accordance with these requirements.

3.5 Operations: 49 CFR Part 192, Subparts L and K specify the minimum requirements for the operation of transmission and distribution pipeline facilities. Operational activities are included in the O&M plan described in Chapter 4 and included the Emergency Response Plan described in Chapter 5 of this Gas Safety Plan. The operation of the pipeline also includes requirements for a public awareness program, damage prevention program, control room management procedures, odorization of gas, identification of changes in population density along certain transmission lines, and the determination of maximum allowable operating pressure, including requirements for increasing the maximum allowable operating pressure.

## a. BEYOND STATE AND FEDERAL REGULATIONS

SDG&E stays current on emerging issues within the industry through active participation in industry associations to identify continuous improvement opportunities and enhance safety beyond current regulatory requirements.

**Table 1** identifies a non-exhaustive list of industry groups in which SDG&E participates.

**Table 1: List of Industry Participation**

- American Gas Association
- Gas Piping Technology Committee
- Center for Hydrogen Safety
- American National Standards Institute
- The American Petroleum Institute
- American Society of Civil Engineers
- The American Society of Mechanical Engineers technical committees (B31Q, B31.3 B31.8, B31)
- California Accidental Release Prevention (CAL ARP) seismic committee
- California Regional Common Ground Alliance
- California Utilities Emergency Association
- Common Ground Alliance
- Dig Alert (Southern California one-call)
- The Gas Technology Institute
- Inter-Utility Coordination Committee
- Inter-Utility Working group
- The Association for Materials Protection and Performance
- NYSEARCH – National Gas RD&D
- USA North 811 (Northern California and Nevada one-call)
- Pipeline Association for Public Awareness
- Pipeline Research Council International
- Pipeline SMS

- The Western Energy Institute
- Construction Safety Research Alliance

**Figure 4** contains activities that SDG&E is in the process of implementing as a result of its participation in industry groups.

**Figure 4 – Current Activities**

| Current Activities | |
|---|---|
| **Industry Actions** | **Implementation Status & Responsible Organization** |
| Residential Methane Detection (RMD) pilot program to use SDG&E's Advanced Meter communications system to provide alarming and other notification when measured methane-in air-concentration levels exceed pre-set acceptable limits at a monitoring site. | In Progress<br>Gas Engineering/Customer Services |
| Research, Develop and Demonstrate technologies leveraging aircraft systems (manned and unmanned), to conduct various types of Pipeline/Facility inspections and/or surveys to improve safety in remote or difficult-to-access pipeline segments or as incremental activities. | On-going<br>Research and Materials Strategic Programs |
| Mature material manufacturer assessments by enhancing the methodology and centralizing the process behind manufacturer selection to promote consistency, improve material traceability, and reduce risk. | In Progress<br>Gas Engineering – Material Quality Management |
| Mature the TIMP Direct Examination process to produce results compatible with an Engineering Critical Analysis approach to defect assessment. | In Progress<br>Integrity Management |
| Edison Electric Institute's (EEI) development of a Safety Classification and Learning (SCL) Model to track SIF Potential and promote learning and improvement. | On-going<br>Safety |

**Figure 5** contains activities that SDG&E has implemented, which is the result of its participation in industry groups, including the American Gas Association (AGA) and others. Most of the activities are processes that have been initiated and implemented as a regular and routine element. Activities noted as "adopted," mean that the company has incorporated them as part of the normal course of business. The other activities are one-time events that were completed and are noted as "completed."

**Figure 5 – Implemented Activities**

| Implemented Activities | |
|---|---|
| **Industry Actions** | **Implementation Status & Responsible Organization** |
| Develop technology to electronically track leak survey routes and map the location of found leaks with spatial coordinates and link other data such as level of leakage found. | Adopted<br>Gas Operations - Policies Tools & Strategies |
| Implement a system that links geographic information systems (GIS) with locate and mark data from KorTerra (a ticket management software) to rank the highest risk Underground Service Alert (USA) tickets for prioritized outreach and engagement. | Adopted<br>Gas Operations - Policies Tools & Strategies |
| Review and revise as necessary established construction procedures to provide for appropriate (risk-based) oversight of contractor installed pipeline facilities. | Adopted<br>Gas Operation Services |
| Under the DIMP, evaluate risk associated with trenchless pipeline techniques and implement initiatives to mitigate risks. | Adopted<br>Sewer Lateral Inspection Program<br>Gas Operations Support |
| Under the DIMP, identify distribution assets where increased leak surveys may be appropriate. | Adopted<br>Integrity Management |
| Extend Operator Qualification program to include tasks related to new main and service line construction. | Adopted<br>Pipeline Safety & Compliance |
| Expand excess flow valve (EFV) installation beyond single family residential homes. | Adopted<br>Integrity Management |
| Incorporate an Incident Command System (ICS) type of structure into emergency response protocols. | Adopted<br>Emergency Services |
| Extend transmission integrity management principles outside of High Consequence Areas (HCAs) using a risk-based approach. | Adopted<br>Integrity Management |
| Implement applicable portions of AGA's technical guidance documents: 1) Oversight of new construction tasks to ensure quality; 2) Ways to improve engagement between operators and excavators. | Adopted<br>Gas Operations Services |
| Begin risk-based evaluation on the use of Automatic Shutoff Valves (ASVs), Remote Controlled Valves (RCVs) or equivalent technology on transmission block valves in HCAs. | Adopted<br>Gas Engineering |
| Implement updated meter set protection practices including improved data management. | Adopted<br>Gas Infrastructure Protection Program (GIPP)<br>Gas Operations Support |

| Implemented Activities | |
|---|---|
| **Industry Actions** | **Implementation Status & Responsible Organization** |
| Upgrades for aging equipment used to locate underground pipelines and facilities have been purchased and deployed. The standardized training has been developed and completed. | Adopted<br>Gas Operations Services |
| Utilize algorithms in SDG&E's Advanced Meter program that detect subtle changes in consumption and leaks on the customer side of the meter. These algorithms also find water leaks from excessive natural gas consumption on water heaters. | Adopted<br>Advanced Meter |
| Under dedicated construction oversight for the DIMP Distribution Risk Evaluation and Monitoring System (DREAMS) activities to ensure policy and procedural alignment, safety, and quality of work during construction of medium pressure main and service | Adopted<br>DIMP DREAMS |
| Install Optical Pipeline Monitoring on all new or replacement pipelines one mile or more in length, at least 12 inches in diameter and intended to operate at or above 20 percent of their specified minimum yield strength. Will allow for remote monitoring of potential leaks in real time, identification of non-native ground movements and 3rd party intrusions. | Adopted<br>Gas Engineering |
| Utilize in-the-ditch Non-Destructive Examination methodology to determine pipe attributes by performing tests on the external surface of the pipe. | Adopted<br>Integrity Management |
| Implement Threat Identification process for identification and prioritization of pipe segments where Stress Corrosion Cracking (SCC) may be a threat. | Adopted<br>Integrity Management & Strategic Planning |
| Computer program to evaluate surface loads on buried pipes was validated by PRCI field tests. Program is used to evaluate temporary and permanent loads on our buried pipes. | Adopted<br>Gas Engineering |
| Computer program to evaluate lifting pipe along a trench to ensure the pipe is not being overstressed during installation. | Adopted (for special cases)<br>Gas Engineering |
| Computer Program to evaluate piping stresses at river crossings. | Adopted<br>Gas Engineering |
| 811 Champion program empowers all employees with the knowledge and an efficient process to report potentially unsafe excavation practices. | Adopted<br>Damage Prevention |

# VII. CONTINUING OPERATIONS

## 1. CONTINUING OPERATIONS AND CALIFORNIA PUBLIC UTILITIES CODE §§ 963 (b)(3), 961 (d)(3), (d)(4), and (d)(10)

In D.12-04-010, the Commission identified the topic of "continuing operations" to meet the requirements in Public Utilities sections 963(b)(3) and 961 (d)(3), (d)(4), and (d)(10). These sections require that SDG&E's Gas Safety Plan achieve the following:

- It is the policy of the state that the commission and each gas corporation place safety of the public and gas corporation employees as the top priority. The commission shall take all reasonable and appropriate actions necessary to carry out the safety priority policy of this paragraph consistent with the principle of just and reasonable cost-based rates. Section 963(b)(3).

- Provide adequate storage and transportation capacity to reliably and safely deliver gas to all customers consistent with rules authorized by the commission governing core and noncore reliability and curtailment, including provisions for expansion, replacement, preventive maintenance, and reactive maintenance and repair of its commission-regulated gas pipeline facility. Section 961(d)(3).

- Provide for effective patrol and inspection of the commission-regulated gas pipeline facility to detect leaks and other compromised facility conditions and to effect timely repairs. Section 961(d)(4).

- Ensure an adequately sized, qualified, and properly trained gas corporation workforce to carry out the plan. Section 961(d)(10).

## 2. SAFETY IS A CORE VALUE

SDG&E considers the health and safety of all employees, contractors, and the public to be its core value. This core value is demonstrated through the following statements that describe our approach to safety at SDG&E:

- Individual health and safety and the safety of others is not compromised. Safe work habits are the responsibility of every employee and the foundation of job performance evaluations.

- Occupational injuries and illnesses can be prevented. Identification and reporting of workplace hazards and potential hazards are the responsibility of every employee of SDG&E. Job observations are implemented as part of our program to confirm that employees comply with safe and healthy work practices.

- Management takes an active role in implementing SDG&E's health and safety programs, as stated in our Injury Illness Prevention Program (IIPP), and staying aware of related workplace injuries, near misses, and at-risk behaviors.

- SDG&E performs formal investigations with root cause analysis and follow up on lessons learned for significant Company incidents and near misses. As part of its Incident Investigation, Evaluation, and Lessons Learned, SDG&E maintains a procedure for investigating incidents and near misses that led, or could have led, to an incident with serious consequences. These processes are incorporated into the Company's implementation of SMS, specifically the tenet on Incident Investigation, Evaluation, and Lessons Learned.

- Management is responsible for providing a safe workplace and creating a safety culture that promotes safe behaviors and safeguards to prevent accidents and injuries to employees, contractors, and the public. Employees work together to use equipment in accordance with job training and safety instructions.

- Safety culture is a key component in establishing a safe work environment. SDG&E has implemented a peer-to-peer Behavior Based Safety process, which encourages safe behaviors by performing field observations. The Gas Safety Sub-Committee creates opportunities as an open forum to address employee safety concerns to management. SDG&E periodically assesses its safety culture to confirm the effectiveness of its safety programs. SDG&E seeks to engage all levels of employees through surveys and employee Key Performance Indicators to continually identify areas to improve our safety culture and performance.

- SDG&E complies with applicable federal, state, and local occupational health and safety regulations and implements these through training, company standards, our IIPP, and safety lesson plans. Both pipeline and occupational safety are at the forefront of priorities for SDG&E. Safety is a component of employee training programs and performance appraisals.

## 3. SAFE AND RELIABLE TRANSPORTATION

SDG&E has designed its integrated gas transmission system to meet design standards established by the Commission for core and noncore customer service. The SDG&E gas system is designed to provide service to core customers during a 1-in-35-year peak day condition, under which noncore transportation service is curtailed. The system is also designed to provide for continuous forecast noncore transportation service under a 1-in-10-year cold day condition. SDG&E utilizes detailed hydraulic models of the gas system to evaluate its capacity to meet these design standards and identify improvements as necessary. Both design standards are expected to occur during the winter operating season when core customers' gas usage is the greatest.

In accordance with Commission Decision D.02-11-073, SDG&E provides its system capacity twice per year to the Commission's Energy Division (the most recent filing may be referenced to obtain SDG&E's capacity to serve customer demand during both the winter and summer operating seasons). SDG&E does not have any physical natural gas storage wells in its system. Pursuant to Commission Decision D.07-12-019, SoCalGas handles gas procurement for SDG&E's bundled core customers through a combined SoCalGas/SDG&E core procurement

portfolio.

Information about transportation capacity is available through the ENVOY electronic bulletin board. The link to the ENVOY bulletin board is located at: socalgas-envoy.com

In accordance with SDG&E's policies, the Gas Transmission Planning and Region Engineering departments continuously monitor customer demand on SDG&E's transmission and distribution system, using both actual customer service requests and our long-term demand forecast. Any changes in customer demand are evaluated against the appropriate CPUC-mandated design standards for service to ensure adequate capacity is available. Depending on the customer class, SDG&E has a variety of Commission-approved means to address any capacity deficiencies. When a deficiency is identified, possible solutions are considered, evaluated, and implemented according to SDG&E gas rules and tariffs. For example, a facility improvement that is required to serve a single noncore customer and which provides no benefit to other customers is funded entirely by that customer.

Finally, the SDG&E gas system is continuously monitored to meet current customer demand. As part of the integrated gas transmission system with SoCalGas, the integrity of the SDG&E system falls under the responsibility of the Utility System Operator. Per SoCalGas Rule 41, Utility System Operation, the mission of the Utility Gas System Operator is to maintain system reliability and integrity. This rule provides information on the responsibilities performed to maintain system reliability by each of the SoCalGas departments that contribute to the System Operator function.

SDG&E will continue to perform operating and maintenance activities and make capital investments to support the company's pipeline system and comply with all applicable regulations.

### a. Leak Detection and Repair

SDG&E pipelines are routinely surveyed for leaks at intervals of six months, one year, and three-year intervals, as determined by the pipe material involved (i.e., plastic or steel), the operating pressure, whether the pipe is under cathodic protection, and the proximity of the pipe to various population densities. In addition to routine leak surveys, SDG&E performs special leak surveys, as needed, and on more frequent cycles than those discussed above (e.g., two or three months). Special leak surveys occur at various times, including ahead of street improvements to address pending leaks prior to street moratoriums; after the occurrence of any significant incident (e.g., explosion, earthquake, flooding, landslides, etc.) adjacent to high-pressure pipelines or related facilities; when increasing the maximum allowable operating pressure of a pipeline; when routine survey requirements are not considered adequate because of pipe condition or limited opportunity for gas to vent safely; or when there is a need to monitor pipe condition for special situations, such as material evaluations. Additional special leak surveys are also conducted on pipeline spans, pipelines through/on bridges, and areas of unstable earth.

SDG&E's maintenance crews investigate leak indications and make repairs as needed. Completing leak repairs generally requires excavating in paved streets and landscaped areas to determine the exact location of the leak. This work often involves pavement

cutting, trenching, and then repair of pipe facilities, followed by backfilling the excavation, compacting the soil, and making permanent repairs to pavement and landscaping as needed. Main leak evaluation and repair work is generally completed to mitigate risks associated with hazards to public safety, and to address infrastructure condition, and material degradation.

## 4. SDG&E WORKFORCE SIZE, TRAINING AND QUALIFICATIONS

### a. Workforce Size

SDG&E determines appropriate staffing levels by taking into consideration multiple factors to preserve the safety, reliability, and integrity of its pipeline system. SDG&E engages in workforce planning, knowledge transfer, training, and succession planning to address current and anticipated resource needs.

Annual baseline employee staffing levels are determined during the annual planning process and contracts are maintained with qualified service providers to complete work and address variability in work demand throughout the year. As part of the planning process, management reviews its projected workforce to adequately fulfill safety, compliance, maintenance, and construction obligations. If local management cannot fulfill these obligations, they raise the need as part of the resource allocation and funding process. During the year, as resource vacancies occur or as work levels significantly change, local management reassesses the need for the workforce and submits a request to fill the vacancies or add to staff. Resource allocation decisions consider employee levels and contractor availability.

Verification of appropriate staffing levels is determined by monitoring specified performance metrics and workloads. These performance metrics include: meeting emergency response goals (e.g., Priority 1 response within 30 minutes) and compliance with distribution pipeline leakage code response times consistent with Company policy. The performance metrics are collected monthly and are reviewed by SDG&E's Board Safety Committee and Senior Management. If SDG&E falls below performance goals, a review and assessment is performed and appropriate resource adjustments are made, if determined necessary.

Employees in safety-sensitive positions are trained and qualified to handle emergencies. Employees are cross-trained as needed in various assignments to perform a variety of duties that allow a flexible workforce to meet sudden changes in work demands. The company assesses its workforce requirements on an ongoing basis (such as an annual planning exercise) to develop hiring and development plans and budgets to supplement or replenish the workforce as necessary to sustain the safety, reliability, and integrity of the pipeline system.

The Company uses contractors, as necessary and in compliance with collective bargaining agreements, so that sufficient overall resources are deployed to address maintenance and construction. SDG&E continues to require that contractors undergo

training and meet specific compliance requirements to perform work on company pipelines and facilities. Contractors are monitored to ensure that they perform their responsibilities consistent with company standards and contract requirements.

**b. Gas Operations Training**

Safety is rooted in all phases of training provided by SDG&E's Gas Operations Training. It starts with the formalized training that employees receive when they begin their career, emphasized on the job, and then re-emphasized during training they receive as they advance to new jobs.

Training courses are delivered to each function/classification in all field job-progressions and vary from two to seven weeks for entry-level positions. Courses are taught utilizing various training methods and are foundationally rooted in SDG&E's Gas Standards and procedures. The courses are delivered by a centralized Gas Operations Training team with most of the instructors having gained practical experience on the job. These instructors convey consistent safety messages and confirm understanding of the classroom training by observing employees perform in simulated field situations.

Integrated in the training courses are the Operator Qualification tasks, as required by 49 CFR Part 192 regulations. The documentation for these qualifications and records are closely monitored and employees are re-trained, re-qualified, or updated whenever significant changes occur in a task regulation or when they are required to re-qualify as prescribed by PHMSA.

Emergency response is covered within the training courses for classifications that have any activities or functions in this area. The classifications include Working Foreman, Welder, Gas Technician B, Gas Technician A, Service Technician, Meter Service Person, Locator, Laborer, Regulator Technician, Instrument Technician, Cathodic Protection Technician, and Gas Patroller. After initial training is conducted by Gas Operations Training, employees are required to annually review policies and procedures so that they understand emergency response guidelines and procedures, including when to contact Corporate Security to address certain threats.

SDG&E has a training curriculum that tests employees' skills in identifying and repairing gas leaks and other real-life emergency situations through simulation exercises. In addition to training programs provided by Gas Operations Training, SDG&E implemented a technical skills training class to help employees new to management become more effective in addressing these situations as supervisors and managers.

As part of the Company's continuing education effort, supervisors and managers are trained by SDG&E's Emergency Management team on the application of a flexible, scalable, sustainable, and measurable scene management process that is ICS compatible in response to emergency incidents.

SDG&E participates in industry forums, validates that training activities are consistent

with regulatory requirements, and identifies when new training opportunities exist.

Training course materials are updated on a regular basis. Root causes of safety incidents and findings of near miss investigations are a significant part of course discussion/instruction to sustain and improve overall employee and system safety.

**c. Qualification of Pipeline Personnel**

All gas pipeline operators are required to have a written Operator Qualification program to establish compliance policies for the DOT Operator Qualification Program as required by 49 Code of Federal Regulations, Subpart N – Qualification of Pipeline Personnel, to qualify employees and contractors performing DOT-covered tasks. The Company's Operator Qualification Program applies to all individuals who perform covered tasks, whether they are employed by the Company, a contractor, a sub-contractor, or any other entity performing covered tasks on behalf of the Company.

The Operator Qualification Program requires that employees are trained, initially qualified, and subsequently re-qualified depending on the task. SDG&E's training frequency conforms to these requirements and the results of the evaluations are recorded -- demonstrating employees' knowledge, skills, and abilities of the job requirements and that they are qualified to perform the required tasks. If employees don't pass, they are not allowed to perform that activity until they have been successfully re-trained and re-qualified. Essentially, any employee who performs a covered task - ranging from customer services field to distribution and transmission personnel - needs to be qualified to perform Operator Qualification tasks.

The Operator Qualification Program also requires that contractors' knowledge, training, and skills conform to the job requirements and that they are qualified to perform the required tasks.

Veriforce is a third-party vendor that offers comprehensive solutions for Operator Qualification (OQ), Drug & Alcohol (D&A), Training, Auditing, and Consulting programs to Operators and contractors nationwide. Beginning in 2012, SDG&E has partnered with Veriforce to manage all gas contractors' OQ and D&A programs using the Veriforce electronic database. The Veriforce partnership allows SDG&E to improve the overall OQ program for gas contractors by requiring them to abide by a common OQ program and tracks their D&A status to maintain compliance. Some key features of using the Veriforce system are: the ability for contractors to have proof of qualifications on the job site; the ability to track qualification failures; and visibility to the D&A status of each contractor company and its employees.

## 5. ANTI-DRUG AND ALCOHOL MISUSE PREVENTION PLAN

SDG&E is committed to maintaining the highest standards for the safety and health of employees and the public. The purpose of SDG&E's Anti-Drug and Alcohol Misuse Prevention Plan is to prevent incidents that could result from the use of controlled substances and alcohol, thereby

reducing fatalities, injuries, and property damage. SDG&E's plan and policies are designed to comply with applicable state and federal laws.[20]

Operators of pipeline facilities subject to 49 CFR Parts 192, 193, and/or 195 are required to test covered employees for the presence of prohibited drugs and alcohol. If performing DOT-covered functions, employees undergo pre-employment drug and alcohol testing and are entered into the random drug testing program. Contractors must also have a Drug and Alcohol Misuse Prevention Program or work with a third party to enforce the program in compliance with DOT regulations, specifically, 49 CFR Part 40, Part 199, and/or Part 382. Contractors must ensure their employees have a negative pre-employment test on file before their first performance of safety-sensitive functions and are entered in their (contractor's) random testing pool.

## 6. PHYSICAL SECURITY

Sempra's physical security program is designed to protect the safety of SDG&E's employees and infrastructure. As a result of continued security threats and the evolving sophistication of adversary attacks, the physical security program is regularly assessed to validate strategic direction and improve alignment with current industry best practices. As a key partner, Corporate Security works collaboratively with SDG&E to mitigate potential physical threats and maintain a safe work environment. Corporate Security supports SDG&E's mission by assisting in the management of physical security risks, enabling risk informed decisions, and proactively adapting to evolving threats and changing business needs.

Corporate Security is responsible for the development and management of physical security programs and policies, including physical security controls, security assessments, investigations, and workplace violence mitigation. Key responsibilities include:

- Investigations
- Access Management
- Employee Safety Protection
- Regulatory Compliance
- Emergency Response
- Facility Monitoring
- Contract Guard Services
- Security Training
- Security Reviews & Vulnerability Assessments
- Risk & Intelligence Analysis
- Law Enforcement Liaison

[20] 49 CFR Part 40, 49 CFR Part 199, 49 CFR Part 382.

Assessments and improvements occur through participation in security events, including detailed discussions and site-specific tabletop exercises, GridEx,[21] the American Gas Association (AGA), and the US Department of Homeland Security (DHS) Transportation Security Administration (TSA). Under closely supervised conditions, these discussions and simulations identify opportunities for improvement that have been prioritized for mediation as part of a continuous improvement strategy for risk mitigation.

## 7. CYBERSECURITY

The Cybersecurity department oversees the management of cybersecurity risks for both Information Technology (IT) and Operational Technologies (OT) across SDG&E, SoCalGas, and Sempra.

The services provided by the Cybersecurity organization are focused on maintaining and improving the Company's security posture in an environment of increasing threat capabilities. Cybersecurity continues to support technology innovations and enhancements within the business by reducing both the likelihood and potential impact of cybersecurity incidents to all business areas within SDG&E, SoCalGas, and Sempra while balancing costs and applying prioritized risk management. Additionally, the department supports enterprise cybersecurity capabilities and provides cybersecurity training and awareness to all users so that they can perform their functions safely, reliably, and securely.

The Cybersecurity program includes the following areas: Cybersecurity Operations, Governance & Risk Management; Cyber Threat Intelligence (CTI) & Vulnerability Management (TVM); Incident Response; Cybersecurity Program Office; Cybersecurity Engineering and Consulting (CEC); and Security Awareness (SA).

The Cybersecurity program utilizes cybersecurity and risk management frameworks, including but not limited to the NIST Cyber Security Framework (CSF), Center for Internet Security (CIS-20), NIST 800-53, and MITRE ATT&CK framework. Additionally, the Companies comply with applicable laws and regulations both at the State and Federal level.

## 8. ENTERPRISE RISK MANAGEMENT

SDG&E's Enterprise Risk Management (ERM) team supports the Company's goal of implementing risk-informed decision making. ERM has the responsibility for developing risk frameworks to identify, analyze, and evaluate emerging risks, facilitating the annual refresh of the Enterprise Risk Registry (ERR), and working with individual operating groups to develop an Operating Unit Risk Registry (OURR). The OURRs are a bottom-up approach to analyzing risk that complements the ERR, which is top-down. Together, the two methods allow SDG&E to link risk assessments with risk treatment decisions, which leads to risk-informed investment prioritization. ERM continues to educate and grow the risk culture by conducting risk workshops and risk webinars with various operating groups. Additionally, ERM performs ad-hoc risk analyses of emerging risks and leads both formal and informal risk-related meetings to support risk owners and managers. These responsibilities work cohesively to promote risk-informed thinking in each department across the Company while

[21] GridEx is a national exercise that simulates cyber and physical attacks on the North American electricity grid.

strengthening the overall risk management process.

The purpose of risk management is the creation and protection of value. It improves performance, encourages innovation, and supports the achievement of objectives. Effective risk management practices not only reinforce a strong and positive safety culture but are also integral to SDG&E's thoughtful and measured approach to adopting risk management structures and processes at all levels. This commitment fosters the development of a risk-aware culture, as the ERM practices and processes are actively utilized by various operational and functional departments to identify safety risks, thereby serving as a critical component of SDG&E's Safety Management System.

# VIII. EMERGING ISSUES

## 1. EMERGING ISSUES AND CALIFORNIA PUBLIC UTILITIES CODE § 961(d)(11)

In D.12-04-010, the Commission identified the topic of emerging issues to meet the requirements of Public Utilities section 961(d)(11). This section requires that the gas safety plan include any additional matter that the commission determines should be included in the plan.

## 2. SDG&E MONITORING OF EMERGING ISSUES

SDG&E stays current on emerging issues within the industry through active participation in industry associations, review of PHMSA advisory bulletins, and open communication with legislative, and regulatory groups as well as news and trade publications

SDG&E is continuing to address the emerging issues of the grandfathering of provisions in Title 49 of the Code of Federal Regulation (49 CFR) Part 192 as discussed in Chapter 4 of this Gas Safety Plan, along with the newly implemented requirements for MAOP reconfirmation, repair criteria, Integrity Management improvements, cathodic protection, management of change, and rupture mitigation, under the Gas Transmission Safety Rule.

## 3. COLLABORATION WITH THE CALIFORNIA PUBLIC UTILITIES COMMISSION

SDG&E will continue to work in collaboration with the Commission and other regulatory authorities and stay abreast of industry best practices, to address those emerging issues that are not yet covered by this Gas Safety Plan. Emerging issues include:

- Safety Culture Order Instituting Rulemaking, R.21-10-001
- Senate Bill 1371 "Natural Gas Leakage Abatement"
- Risk Management, Safety Model Assessment Proceeding, R.20-07-013
- Climate Change Adaptation and Resiliency
- Proposed Federal Pipeline Safety Regulations
- Joint Application to Establish Hydrogen Blending Projects, A.22-09-006
- Long-term Gas Planning OIR, R.20-01-007

### a. Safety Culture OIR

In October 2021, the CPUC issued Order Instituting Rulemaking (OIR) 21-10-001 to develop and adopt a safety culture assessment framework and identify the structure, elements, and process necessary to drive each regulated investor-owned electric and natural gas utilities and gas storage operators to establish and continuously improve their organization-wide safety culture. In January 2025, the CPUC approved the *Decision Adopting a Safety Culture Framework for the Large Investor-Owned Utilities*.[22] This Decision adopts a normative framework adapted from the United States Nuclear Regulatory Commission's Safety Culture Common Language and the Institute of Nuclear Power Operations' Ten Traits of a Healthy Nuclear Safety Culture to serve as the basis of the CPUC's Safety Culture

[22] D.25-01-031, issued January 23, 2025.

Assessment framework. Per the schedule adopted in the Decision, SDG&E will undergo a comprehensive safety culture assessment in 2026. SDG&E appreciates the ongoing collaboration with the CPUC, Safety Policy Division, the Joint IOUs and interested parties in addressing this important issue that could have a significant impact on utilities and operators in the state and looks forward to participating in the Utility Safety Culture Working Group, as directed by the Decision.

**b. Senate Bill 1371 "Natural Gas Leakage Abatement"**

Senate Bill (SB) 1371 requires the adoption of rules and procedures to reduce methane emissions from Commission-regulated natural gas pipeline facilities consistent with Public Utilities Code section 961(d) and 49 CFR sections 192.703(c). SDG&E's Leak Abatement Compliance Plan and accompanying Advice Letter were approved, by the Commission, in 2020. Implementation of the activities for each best practice, outlined in the Compliance Plan, began in January 2021 and will continue through 2022. On February 21, 2023, SDG&E submitted Advice Letter 3071-G-A to provide forecasted costs for 2023, 2024 and associated best practices.

SDG&E is an industry leader in the development of new methods and use of new technologies that enable the company to reduce natural gas emissions. Some of these include:

- Improving the accuracy of emissions estimations and reporting;
- Development of Company-Specific emissions factors;
- Special fiber optic cable that detects methane leaks and third-party damage to pipelines;
- Use of "point" sensors that can detect leaks before they can be smelled by people;
- Use of aerial platforms such as helicopters and drones equipped with advanced emission detection technologies to spot emissions from above;
- Developing algorithms that use our Advanced Smart Meter system to identify unusual levels of natural gas consumption that indicate a leak at customers' homes or businesses; and
- Capturing natural gas released during pipeline replacement or safety maintenance and testing, allowing for gas to be saved for later use while eliminating emissions that would otherwise occur.

**c. Risk Management**

SDG&E continues to work with the CPUC to develop and enhance its process to manage risk. The Company strongly agrees that the implementation of SMS for its pipeline operations is a key step towards enhanced asset and risk-based decision-making to ultimately improve safety performance. As such, SDG&E established an enterprise-wide SMS framework in 2020, as further described above. SDG&E is an active participant in ongoing CPUC proceedings related to risk management, including the Safety Model Assessment Proceeding (S-MAP). A key directive of the S-MAP is the Risk-Based Decision-Making Framework (RDF), which generally outlines the technical requirements of the Company's RAMP filing. For each enterprise risk, the RDF also requires the utility to compute a monetized Safety Risk Value using only the Safety Attribute measured in the Company's Enterprise Risk Registry (ERR). The top 40% of ERR risks with a Safety Risk Value greater than zero dollars form the preliminary risks to be assessed in RAMP, subject to ERM's proposed modifications. SDG&E's Enterprise Risk Management (ERM) organization works

annually to refresh risk registries at the enterprise level. Additionally, SDG&E leverages the Operating Unit Risk Registry to inform internal asset management strategies and integrity management to continue the integration of risk and asset management.

SDG&E is committed to taking a risk-based decision-making approach to prioritizing our work and allocating our resources. SDG&E has a comprehensive, rigorous, and iterative system to manage its business risks across the enterprise, which encompasses employee, contractor, customer, public, and infrastructure safety risks. SDG&E has a dedicated organization, ERM, whose role is to facilitate the identification, analysis, evaluation, and prioritization of risks. Effective risk management practices help to reinforce a strong and positive safety culture. SDG&E has undertaken a thoughtful and measured approach to the adoption of risk management structures and processes at all levels, to further the development of a risk-aware culture.

The ERM organization provides governance and facilitates the development of risk frameworks. The operating business organizations manage risks every day for our employees, contractors, the public, and infrastructure. These include safety management programs that are mandated by federal and state occupational, health and safety, and other applicable laws and regulations. These programs are managed at the local level and are further described in this chapter.

SDG&E's ERM organization facilitates a quarterly Directors Risk Council meeting, whose participants often revolve year-over-year, however with the constant emphasis on identifying safety risks, consistently includes SDG&E's Director of Safety and Manager of SMS. Key objectives of this workgroup include (1) discussing current and/or emerging risks influencing utility operations, (2) promote transparency through effective dialogue across the organization to deeply integrate risk culture, and (3) discuss development of risk frameworks including regulatory proceedings, key risk indicators (KRI), industry trends, and others.

### d. Climate Adaptation Planning

To adequately respond to and support energy utilities in their effort to become more resilient to the changing climate and extreme weather conditions, the CPUC has been taking targeted action. On April 26, 2018, the CPUC initiated OIR R.18-04-019 on climate and vulnerability assessment (CAVA), which defined climate change adaptation for energy utilities and promoted efforts to ensure the provision of a reliable and resilient service to customers. The purpose of this Rulemaking is to provide a forum for addressing how energy utilities should plan and prepare for increased operational risks due to changing climate conditions, to continue to fulfill their mission to provide clean, safe, reliable, and affordable service.

CAVA entails the analysis of the following (direct and derived) climate variables – Temperature, Sea-Level Rise, Precipitation, Wildfire, and cascading events. The two-step vulnerability assessment methodology, 1) combines exposure and sensitivity to determine climate-linked asset exposure, and 2) combines this adaptive capacity to determine infrastructure vulnerability. It sets intermediate and long-term timeframes for analysis. The intermediate focuses on the next 10-20 years while the long-term addresses the next 30–50 years. The decision considers the "key time frame" as the next 20–30 years.

Building on this effort to guide climate adaptation planning, the Commission further issued

Decision 20-08-046 on Disadvantaged Vulnerable Communities (DVC) and Utility Vulnerability Assessments in September 2020. It promoted the use of the "best available climate science" to make informed decisions towards building resilient infrastructure and services to tackle climate change. Additionally, for the first time, it required IOUs to submit a Vulnerability Assessment, a Community Engagement Plan (CEP), and a Disadvantaged Survey Report.

On August 1, 2024, the CPUC issued a decision to update climate change adaptation modeling requirements and refine the climate adaptation and vulnerability assessments. It established the Shared Socioeconomic Pathway (SSP) greenhouse gas emissions scenario 3-7.0 as the reference scenario for energy utility use in the CAVA, and updated the timing of CAVA submittal, requiring the assessment be filed on year prior to each utility's RAMP application, starting with PG&E's next CAVA in 2027. SDG&E submitted its Community Engagement Plan (CEP) in 2024, is scheduled to submit its CAVA on May 15, 2025, together with its 2025 RAMP filing.

### e. Pipeline and Hazardous Material Safety Administration (PHMSA) Regulations

As significant and new federal safety regulations develop, SDG&E continues to provide input to assist in effective implementation and desired outcomes that affirms SDG&E's commitment to safety. In conjunction with new PHMSA regulations, SDG&E has been authorized to establish the Gas Safety Enhancement Memorandum Balancing Account (GSEPMA) to record incremental, substantial, and non-speculative costs imposed by PHMSA's amendments to the CFR.[23]

These new regulations are focused on improving pipeline safety and integrity throughout the country and are primarily driven by the "Protecting our Infrastructure of Pipelines Enhancing Safety" (PIPES) Act of 2020. The PIPES Act includes several significant enhancements intended to advance PHMSA's programs addressing public safety and the environment. Some of these enhancements include:

- Updates to PHMSA's leak detection and repair and class location change regulations to enhance public safety while minimizing methane emissions
- Increased funding to federal and state pipeline safety regulatory agencies and new PHMSA workforce development requirements
- Requirements for operator updates to DIMP plans, emergency response plans, and O&M plans to address over-pressurization and respond to incidents
- Modernized safety regulations covering LNG export facilities and authorization for a new National Center of Excellence for LNG Safety
- Strengthened safety regulations covering local gas distribution systems
- Initiation of a leak detection and repair program requirement
- New grant funding for emergency responders, public safety advocates, and community groups
- New regulations for idled natural or other gas transmission and hazardous liquid pipelines

Examples of significant new and upcoming rulemakings include:

[23] D.24-12-074, Ordering Paragraph 10(e).

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| "Leak Detection and Repair" Rulemaking | The "Pipeline Safety: Gas Pipeline Leak Detection and Repair" Notice of Proposed Rule Making (NPRM) was issued by PHMSA on May 5, 2023. In response to the PIPES Act of 2020 and in support of the Biden-Harris Administration's U.S. Methane Emissions Reduction Action Plan, the proposed regulatory amendments in the Gas Pipeline Leak Detection and Repair Rule are intended to reduce both intentional and unintentional greenhouse gas emissions. Operators must develop an advanced leak detection program (ALDP) with a list of leak detection technologies and practices re-evaluated on a periodic basis. This includes leak grading and repair criteria, increased leakage survey and patrolling frequency, failure investigation requirements, and design, configuration, and maintenance requirements to eliminate leaks and minimize releases of gas. Additional regulatory revisions emphasize public safety and environmental safety from all hazards. PHMSA submitted a pre-publication of the final rule on January 17, 2025, but promptly withdrew the rule as a result of the Regulatory Freeze Pending Review executive order. SDG&E continues to monitor activity related to this rulemaking. |
| "Safety of Gas Distribution Pipelines and Other Pipeline Safety Initiatives" Rulemaking | The "Pipeline Safety: Safety of Gas Distribution Pipelines and Other Pipeline Safety Initiatives" NPRM was issued by PHMSA on August 24, 2023. PHMSA is proposing regulatory amendments that will require operators of gas distribution pipelines to update their DIMP; emergency response plans; operations and maintenance manuals, including the expansion of MOC to the distribution system and associated activities, as well as the introduction of traceable, verifiable, and complete record-keeping for distribution pipeline systems; and other safety practices.<br><br>These proposals implement provisions of the Leonel Rondon Pipeline Safety Act—part of the PIPES Act of 2020—and a National Transportation Safety Board (NTSB) recommendation directed toward preventing catastrophic incidents resulting from over-pressurization of low-pressure gas distribution systems similar to that which occurred on a gas distribution pipeline system in Merrimack Valley on September 13, 2018. The rule would take effect 12 months after publication. |
| "Pipeline Safety: Class Location Change" Rulemaking | PHMSA anticipates publishing the "Pipeline Safety: Class Location Change" final rule to add an alternative set of requirements operators may use when implementing integrity management principles where the class location of a pipeline segment has changed from a Class 1 location to a Class 3 location.<br>• Operators would be required to notify PHMSA if they use integrity management activities to manage pipeline segments that have changed from a Class 1 to a Class 3 location.<br>• The alternative set of requirements would apply only to those pipeline segments that have changed class location following the effective date of the rulemaking. |

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| | • A Class 1 to Class 3 location segment would be defined as a High Consequence Area segment and subject to 49 CFR Part 192, Subpart O. |
| "Pipeline Operational Status" Rulemaking | PHMSA will issue a NPRM addressing risk-based regulations for idled pipe including requirements for allowing idled pipelines to resume operations. |
| "Carbon Dioxide and Hazardous Liquid Pipelines" Rulemaking | PHMSA issued a pre-publication of the NPRM on January 17, 2025, addressing regulations for the transportation of carbon dioxide pipeline in a gaseous state. However, the NPRM was promptly withdrawn as a result of the Regulatory Freeze Pending Review executive order.[24] During this rulemaking, PHMSA will consider whether applying the minimum safety standards of 49 C.F.R, Part 195, which apply to the transportation of carbon dioxide in the liquid state, will ensure safety. |

### f. Joint Application to Establish Hydrogen Blending Demonstration Projects, A.22-09-006

The joint gas utilities, SDG&E, SoCalGas, Pacific Gas & Electric, and Southwest Gas submitted an amended Joint Application to Establish Hydrogen Blending Projects with the Commission on March 1, 2024. The application requests authorization of live hydrogen blending pilots. The application was designed so that the utilities' respective pilots are differentiated, complementary, and reflective of key components of the California gas network including distribution pipe and transmission pipe. The proposed hydrogen blending demonstration projects, if approved, will generate crucial information and knowledge with the ultimate goal of informing a safe hydrogen injection standard for the state. Additionally, "live blending" into the gas network is the best way for SDG&E to understand and learn how to safely measure, manage, design, operate, observe, assess, analyze, and mitigate risks associated with the behavior of hydrogen in a blended gas system.

### g. Long-term Gas Planning OIR, R.20-01-007

The Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and Perform Long-Term Gas System Planning (Long-term Gas System Planning OIR, R.20-01-007), was opened in January 2020 to "respond to past and prospective events that together will require changes to certain policies, processes, and rules that govern the natural gas utilities in California. With respect to past events, several operational issues in Southern California prompt the Commission to reconsider the reliability and compliance standards for gas public utilities. Over the next 25 years, state and municipal laws concerning greenhouse gas emissions will result in the replacement of gas-fueled technologies and, in turn, reduce the demand for natural gas."[25]

As of February 9, 2024, SDG&E is awaiting an updated Scoping Memo for Phase 3 of this proceeding, which is expected to be issued by March 31, 2024. Based on information to date, Phase 3 of this proceeding may include development of policies that can impact and inform SDG&E's Gas Safety Plan, including policies related to "balancing the need for pipeline safety with the need to avoid

[24] 90 FR 8249.
[25] Order Instituting Rulemaking, R.20-01-007 at p. 2.

spending that will burden future gas ratepayers,"[26] as well as workforce issues and other considerations for long-term system planning.

[26] R.20-01-007, January 5, 2022, Scoping Memo at p. 9.

# GAS SAFETY PLAN APPENDIX

In D.12-04-010, the Commission stated gas operator safety plans "may reference existing components or include Exhibits or Attachments that cross-reference to other existing utility documentation[.]" Id. at 19. SDG&E has numerous existing safety programs, plans, and procedures in place that address specified infrastructure or areas of company activity. This Gas Safety Plan provides an overview that encompasses the plans, programs, and policies referenced in this document and affirms SDG&E's commitment to safety. The following matrix is a guide to the documents making up these plans, programs, and policies. Documents have been identified by their policy number and title and cross-referenced to the Gas Safety Plan chapter.

## Policy Document – Gas Safety Plan Matrix

| Gas Safety Plan Chapter | | | | | |
|---|---|---|---|---|---|
| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| 108-03213 | Pardon the Interruption | | X | | |
| 2111SD | Management of Change - Request & Approval | X | | | |
| 2112SD | Pipeline Database Update | X | | | |
| 2120SD | Pipeline Feature Data Collection | X | | | |
| 3084SD | Corrosion Tests General Data Sheet | X | | | |
| 3222SD | Design Data Sheet (DDS) | X | | X | X |
| 3506SD | Notice of Shutdown | X | | | |
| 40-00 | Polyethylene Pipe and Tubing | X | | | |
| 4090SD | 100mV Polarization Form | X | | | |
| 4091SD | Wax Casing Data Collection Form | X | | | |
| 50-15 | Pipe Nipples | X | | | |
| 41-06.1 | Pipe - Steel, Grades B through X65 | X | | | |
| 52-65 | Fittings - Threaded, Malleable Iron | X | | | |
| 52-80 | Couplings - Electrofusion, Polyethylene | X | | | |
| 52-81 | Fittings, Socket & Saddle, Polyethylene Heat Fusion | X | | | |
| 52-82 | Fittings, Butt Type, Polyethylene Heat Fusion | X | | | |
| 52-96 | Fittings - Butt Weld Steel | X | | | |
| 54-17 | Flanges and Flanged Fittings | X | | | |
| 54.17.1 | Cast Iron Flanges | X | | | |
| 56-40 | Stop Cocks | X | | | |
| 56-50 | Steel to Plastic Transition Fittings | X | | | |
| 56-70.1 | Risers - Service, Anodeless | X | | | |
| 56-70.16 | Riser - Service Head Adapter | X | | | |
| 58-10 | Valves – Thermoplastic | X | | | |
| 58.15.2 | Valves; Ball, Steel Floating | X | | | |
| 58-70 | Valves - Plug, Lubricated, Positive Shut-Off | X | | | |
| 58-82 | Valves - Ball, Steel, Trunnion Mounted | X | | | |
| 58-96.6 | Valve - Relief, Large | X | | | |
| 677-1SD | Pipeline Condition and Maintenance Report | X | | | |
| 76-72 | Odorant - 50/50 TBM/THT | X | | | |
| 76-73 | Thiophane Odorant | X | | | |
| 78-02AM | Meters – Rotary | | | | X |
| 78-03AM | Meters – Turbine | | | | X |

| Gas Safety Plan Chapter | | | | | |
|---|---|---|---|---|---|
| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| ACF-SD | Assessment Completion Form | X | | | |
| C5050 | Order Completion and Priority Scheduling | X | X | X | |
| C5140 | Shutting-Off Gas Meters | X | | | |
| C5160 | Gas Meter Turn-On Procedure | X | | X | |
| C5190 | Emergency Response Procedures for Gas Incidents | X | X | X | |
| C5200 | Restoration of Service Due to Gas Outage | X | X | X | |
| C5260 | Locking and Blanking of a Gas Meter Set | X | | X | X |
| C5370 | Large Meters - Houseline Testing | | | | X |
| C5385 | Maintenance & Lubricating of ¾" and 1" Service Valves | X | | | |
| C5390 | Gas Curb Meter and Atmospheric Corrosion Inspection and Maintenance | X | | X | X |
| C5450 | Pressure Regulation - Residential and Commercial | X | | X | |
| C5460 | Fumigation Shut-Off and Back-On Orders | | | | X |
| C5480 | Purging Service Risers | X | | X | X |
| C5490 | Working in the Presence of Escaping Gas | X | X | X | X |
| C5500 | Reportable Gas Incidents | X | X | X | |
| C5510 | Leak Investigation - Customer Service Field (CSF) | X | X | X | X |
| C5520 | Houseline Leakage on Master-Metered Systems | X | | X | X |
| C5540 | Setting Gas Meters | | | | X |
| C5580 | Re-Insulating Gas Meters | | | | X |
| C5630 | Power Outage Notification | | X | | |
| C5640 | Verify Customer Generator Operation (VGEN) | | X | | |
| C5660 | Purging Gas Meters and Customer Houselines | X | | X | X |
| C5665 | Odor Conditioning of New Customer-Owned Pipelines - Size (AC630) Meters and Larger | | | | X |
| C5700 | Service Policy | | | | X |
| C5710 | Back Flow Protection - Regulators and Check Valves | | | X | X |
| CRMP6SD | Gas Control Management of Change | X | | X | |
| D7103 | Gas Meter Location | X | | X | |
| D7109 | Gas Service Location | X | | X | |
| D7110 | Abandonment of Gas Service | X | | X | X |

| Gas Safety Plan Chapter | | | | | |
|---|---|---|---|---|---|
| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| D7113 | Evaluation and Disposition of Inactive Services | X | | X | |
| D7115 | Barricades for Gas Meter Sets | X | | X | |
| D7119 | Earthquake Valves on Meter Sets | | | | X |
| D7123 | Service Regulator Vent Extensions | X | | X | |
| D7125 | Service Regulators in Curb Meter Boxes | X | | X | |
| D7127 | Curb Meter Box Excavation and Riser Replacement | X | | X | |
| D7203 | Polyethylene (PE) Pipe and Fittings – General Application Requirements | X | | X | |
| D7211 | Handling and Storage of Polyethylene (PE) Material | X | | X | |
| D7213 | Polyethylene Heater - Temperature Measurement and Adjustment | X | | | X |
| D7216 | Mechanical Tapping Tee Inspection | | | | X |
| D7221 | Socket Fusion for Polyethylene | X | | X | X |
| D7222 | PE Saddle Fusions | X | | X | X |
| D7225 | Tapping/Stopping Polyethylene (PE) Fittings | X | | X | X |
| D7227 | Butt Fusion Polyethylene | X | | X | X |
| D7233 | Electrofusion for Polyethylene | | | X | |
| D7237 | Transition Fittings | | | X | |
| D7247 | Service Risers for Polyethylene (PE) Installations | X | | X | |
| D7248 | Service Riser Integrity Observation and/or Inspection | X | | X | |
| D7249 | Valve Installation and Valve Box Assemblies for Polyethylene | X | | X | |
| D7251 | Composite Coating Repair for Anodeless Risers | X | | X | |
| D7252 | Service Head Adapter - 3/4 Inch | | | X | X |
| D7255 | Casing Assemblies - Plastic Carrier Pipe | X | | X | X |
| D7257 | Tracer Wire Installation for Polyethylene (PE) Pipe Installations | | | X | |
| D7265 | Pneumatic Test Requirements for Pipelines Operating at 60 PSIG or Less | X | | X | X |
| D7275 | Polyethylene (PE) Pipe Repair | X | | X | X |
| D7276 | Polyethylene (PE) Tapping Tee Repair | X | | X | X |
| D7279 | Squeezing Polyethylene Pipe - 1/2" through 8" | | | | X |

| Gas Safety Plan Chapter | | | | | |
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| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| D7293 | Qualification Requirements for Polyethylene Fitters | | | X | X |
| D7321 | Service Connections to Steel Pipelines | | | X | |
| D7325 | Service Punch Tee | X | | X | X |
| D7341 | Raising, Repairing, or Installing a Bypass on a ¾ and 1-Inch Steel or Anodeless Risers | | | | X |
| D7371 | Leak Repair Methods for Steel Distribution Pipelines | X | | X | X |
| D7373 | Cold Pipe Squeezer Operations and Maintenance Procedures | | | | X |
| D7381 | Abandonment or Inactivation of Gas Distribution Pipelines | X | | X | X |
| D7382 | Requirements for Hot/Cold Squeezing of Steel Pipelines | | | | X |
| D7383 | Steel Pipe Squeezer 6" through 12" | X | | | X |
| D7385 | Retire from Service (RFS) of ¾-Inch and 1-Inch Service Nipples on Mains to be Upgraded | | | | X |
| D7403 | Underground Distribution (UD) Trenches and Utility Positioning | | | X | X |
| D7411 | Trench Excavation Requirements for Steel Distribution Mains Operating at Greater Than 60 PSIG | | | X | X |
| D7412 | Excavation Requirements: Trench with Two Distribution Mains or 3-Inch and Larger Steel Distribution Mains Operating At 60 PSIG or Less | | | X | |
| D7427 | Standard Gas Main Positions for Distribution Mains | | | X | |
| D7428 | Gas Trench Only (GTO) Specifications for San Diego County | | | | |
| D7461 | Gas Facilities Box (Inside Dimensions 2' X 3') | | | X | |
| D7465 | Prefabricated Vaults - Design and Selection Guide | | | X | X |
| D7705 | Regulator Station Installation Procedures | | | | X |
| D7711 | Regulator Station Design and Planning | | | X | X |
| D7715 | Control Piping | | | X | X |
| D7905 | Requirements for Pressure Control Operations on Distribution Pipeline Systems | X | | X | X |

| Gas Safety Plan Chapter | | | | | |
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| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| D7907 | Qualification Requirements Distribution Pressure Control | | | | X |
| D7911 | Purging 60 PSIG or Less Distribution Gas Lines into Service | X | | X | X |
| D7912 | Locking and Tagging Service Risers | X | | X | X |
| D7919 | Changing a 3/4 Inch and 1-Inch Service Valves | | | | X |
| D7927 | Mueller® D-5™ and Mueller® D-4™ Drilling Machine Instructions | | | | X |
| D7929 | Mueller Line Stopper Unit No. 1 | | | | X |
| D7931 | Mueller® E-5 Drilling Machine, Mueller® E-4 Drilling Machine, and Mueller® EH-5 Drilling Machine | | | | X |
| D7933 | Stopping Off Procedure for Shop Made Service Ys and RFS Nipples | | | | X |
| D7955 | Pressure Control - 2" Top Half Fitting | | | | X |
| D7956 | Pressure Control - 3" and 4" Top Half Fitting | | | | X |
| D7957 | Pressure Control: 2-Inch Service Tee | | | | X |
| D8146 | Replacement Criteria for Distribution Mains and Services | X | | X | |
| D8164 | Pressure Monitoring of Distribution Systems | X | | X | X |
| D8167 | Valve Inspection and Maintenance - Distribution | X | | X | X |
| D8168 | Quality Assurance (QA) Leakage Mitigation Assessment Requirements | X | | X | |
| D8171 | Curb Valve Inspections on Distribution Services | X | | X | |
| D8175 | Quality Assurance (QA) Pipeline Operations & Gas Instrument Shop Assessment Requirements | X | | X | |
| D8189 | Temporary LNG Facility | X | | | X |
| D8194 | Sensit G2 Multigas Detector and SMART-CAL Operation and Maintenance Procedures | | | | X |
| D8305 | Trenchless Construction Methods | X | | X | X |
| D8306 | Prevention of Sewer Lateral Intrusions and Damage | | | | X |
| D8310 | Polyethylene (PE) Pipe Inserted in Metal Casings | | | X | |

| Gas Safety Plan Chapter | | | | | |
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| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| D9102 | Gas Mapping and Records | X | | X | |
| D9103 | Gas Distribution Terms and Definitions | | | X | |
| D9131 | Design of Polyethylene Services | | | X | |
| D9135 | Mains: Fittings and Fitting Selection | | | X | |
| D9157 | Meter Selection and Spacing Requirements | X | | X | |
| D9181 | Valve Selection and Location- Services | X | | X | |
| D9183 | Excess Flow Valve Sizing | | | X | |
| DIMP1 | Introduction | X | | | |
| DIMP2 | System Knowledge | X | | | |
| DIMP3 | Threat Identification | X | | | |
| DIMP4 | Evaluate and Rank Risk | X | | | |
| DIMP5 | Identify and Implement Measures to Address Risk | X | | | |
| DIMP6 | Measure Performance, Monitor Results and Evaluate Effectiveness | X | | | |
| DIMP8 | Periodic Evaluation and Improvement | X | | | |
| DIMP9 | Report Results | X | | | |
| DIMPA | Terms, Definitions and Acronyms | X | | | |
| ER-1SD | Gas Emergency Response Plan | X | X | X | |
| ESHSD-0000 | Phone Numbers | | | | X |
| ESHSD-1100 | Rule 1100 - Injury and Illness Prevention Program | | | | X |
| ESHSD-1200 | Rule 1200 - General Safety and Health Rules | | | | X |
| ESHSD-1300 | Vehicle and Forklift Safety | | | | X |
| ESHSD-1400 | Office Safety | | | | X |
| ESHSD-1500 | Fire Prevention | | | | X |
| ESHSD-1600 | Emergency Action Plan (EAP) | | | | X |
| ESHSD-1700 | Workplace Security | | | | X |
| ESHSD-1800 | Incident and Injury Reporting | | | | X |
| ESHSD-2100 | General Construction, Maintenance and Operation Safety Rules | | | | X |
| ESHSD-2200 | Aerial Lift and Hoisting Equipment | | | | X |
| ESHSD-3100 | Electric - General Safety Rules | | | | X |
| ESHSD-3300 | Electric Substation and Maintenance | | | | X |
| ESHSD-3400 | Overhead Electric - Distribution and Transmission | | | | X |
| ESHSD-3600 | Underground Electric - Distribution and Transmission | | | | X |
| ESHSD-3800 | Electrical Safety Hazards | | | | X |

| Gas Safety Plan Chapter | | | | | |
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| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| ESHSD-4100 | Gas Distribution and Transmission | | | | X |
| ESHSD-9999 | Definitions | | | | X |
| F4-1SD | Threat Evaluation Form | X | | | |
| F8-1SD | Transmission Pipeline Assessment Plan Revisions Log | X | | | |
| G7002 | Material Traceability for High-Pressure Systems | X | | | |
| G7008 | Material Evaluation and Implementation | X | | | |
| G7011 | Standard Specification for Natural and Substitute Fuel Gases | X | | X | |
| G7017 | Hydrogen Sulfide (H2S) Management | X | | X | |
| G7022 | Welding Inspector Operator Qualification | X | | X | X |
| G7313 | Steel Pipe Yield, Design Properties and Design Pressure Tables | X | | | |
| G7314 | Steel Pipe - Selection Requirements | X | | X | X |
| G7316 | Identification of Steel Pipe and Butt Weld Fittings | X | | X | X |
| G7321 | Steel Butt-Weld Fittings - Selection Guide | X | | X | X |
| G7345 | Installation and Application of Mueller and TDW M Stop Control Fittings | | | | X |
| G7350 | Casing Assemblies - Steel Carrier Pipe | X | | X | X |
| G7351 | Wear Pads and Bands for Steel Gas Piping | X | | X | X |
| G7353 | Branch Connection, Steel - Selection Guide | X | | X | X |
| G7355 | Tinker & Rasor Holiday Detector Operation | | | | X |
| G7361 | Pipeline Testing Requirements | X | | X | X |
| G7365 | Pneumatic Test Requirement for Pipelines Operating Above 60 PSIG | X | | X | X |
| G7369 | Hydrostatic Test Requirements | X | | X | X |
| G7371 | Repair of Defects in Steel Pressure Piping | X | | X | X |
| G7372 | Repair of Defects on an Operating Pipeline by Grinding | X | | | X |
| G7373 | Repair of Non-Leaking Defects on an Operating Pipeline with a Band or Sleeve | X | | | X |
| G7374 | Repair of Defects on Operating Pipelines Using Abandon Nipple | | | | X |
| G7375 | Approved Protective Coatings for Below Ground Corrosion Control | X | | X | X |
| G7376 | Field Tape Wrapping Requirements | X | | X | X |

| Gas Safety Plan Chapter | | | | | |
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| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| G7377 | External Surface Preparation, Field Application and Repairs of Fusion Bonded Epoxy Coating | X | | X | X |
| G7379 | External Surface Preparation and Field Applied Coatings for Buried Pipelines | X | | X | X |
| G7380 | External Surface Preparation and Field Application of Grease Wrap | X | | X | X |
| G7381 | External Surface Preparation and Coating Application for Steel Tanks and Vessels (New & Refurbished) | X | | X | |
| G7382 | Surface Preparation and Coating for Above Ground Piping and Steel Components | X | | | X |
| G7383 | Internal Surface Preparation and Coating Application for Tanks, Vessels & Drip Legs (New & Refurbished) | X | | X | |
| G7385 | External Surface Preparation and Shop-Applied Coating for High Corrosion Service areas | X | | X | X |
| G7402 | Notification of Excavation and Construction Activities - Assembly Bill Number 1937/ PUC Code 955.5 | | | X | X |
| G7408 | Backfill and Compaction Method | | | X | X |
| G7409 | Typical Placement of Bedding, Shading, and Imported or Native Backfill Materials for Distribution Mains Operating At 60 PSIG or Less | | | | X |
| G7410 | Applications of Slurry Mixtures in Excavations | | | | X |
| G7450 | General Construction Requirements for Distribution Mains | | | | X |
| G7451 | Company and Company-Contractor Damage Prevention Excavation Requirements | X | | | |
| G7453 | General Excavation Requirements | | | X | |
| G7460 | General Construction Requirements for Distribution Service Lines | | | | X |
| G7505 | General Procedures for Field As-Builts | | | X | |
| G7506 | Archiving of High-Pressure Records in PDMS | X | | | X |
| G7507 | GIS Maintenance Requirements for High Pressure Gas Lines | X | | | |
| G7508 | Records Management for High Pressure Project Closeout | X | | | |

| Gas Safety Plan Chapter | | | | | |
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| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| G7520 | Requirements for Designing Pipelines to Accommodate Smart Pigs | X | | | |
| G7603 | Valve Usage and Selection Guide | X | | X | X |
| G7605 | Valving Responsibility - Distribution | | | | X |
| G7615 | Replacement and Raising of Valve Boxes | | | X | X |
| G7636 | Lubrication of Plug Valves | | | | X |
| G7643 | Excess Flow Valve (EFV) - Installation and Operation | X | | X | X |
| G7649 | 2 Inch Ball Valve Assembly for Drilling Through Pressurized Pipelines | | | X | |
| G7665 | Flanges - Selection, Torque and Installation Requirements | X | | X | X |
| G7803 | General Welding Requirements | X | | X | X |
| G7805 | Welding Field Guide | X | | X | X |
| G7809 | Qualification and Re-Qualification of Welders | X | | X | X |
| G7815 | Inspection and Testing of Welds on Company Steel Piping | X | | X | X |
| G7817 | Radiographic Examination API 1104 | | | X | X |
| G7821 | Angles and Bends in Steel Piping | | | X | X |
| G7909 | Purging Pipelines and Components | X | | X | X |
| G7910 | Purging Pipelines Using Air Movers for Cold Tie Operations | X | | X | X |
| G7951 | Drilling 4, 6 and 8-Inch Ball Valves | | | | X |
| G7955 | 4 Inch Ball Valve Assembly for Hot Tapping to 800 PSIG | | | X | |
| G7959 | Pressure Control: Drilling Operations for DH-5 Drilling Machine Using a 2-Inch Ball Valve | | | | X |
| G7963 | 2 Inch Drilling Assembly for Drilling Existing 400 And 800 PSIG Pipelines | | | X | |
| G7979 | Mueller Line Stopper Units 3SW (500) And 4SW (400) | | | | X |
| G7980 | Pressure Control: Mueller EH-5 Drilling Machine | X | | X | |
| G8001 | Criteria for Cathodic Protection | X | | X | |
| G8002 | 100mV Polarization Criteria | X | | X | X |
| G8003 | Design and Application of Cathodic Protection | X | | X | X |

| Gas Safety Plan Chapter | | | | | |
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| **Policy** | **Title** | **4** | **5** | **6** | **7** |
| G8006 | Bond Wire and Lug Assembly and Braze Welding Processes | | | | X |
| G8009 | Electrical Test Stations & Bond Assembly | X | | X | X |
| G8013 | Cathodic Protection - Mixed Piping Systems | X | | X | X |
| G8014 | Galvanic Anodes for Corrosion Control | X | | X | X |
| G8015 | Selection and Installation of Rectifiers and Impressed Current Anodes | X | | | X |
| G8019 | Operation and Maintenance of Cathodic Protection Facilities | X | | X | X |
| G8020 | Cathodic Protection Test Orders - Monitoring Isolated Facilities | X | | X | X |
| G8021 | Inspection of Exposed Pipe | X | | X | X |
| G8022 | Atmospheric Corrosion (ACOR) - Inspection of Meter Set Assemblies | X | | X | X |
| G8023 | Predicted Failure Pressure Analysis for Corrosion Metal Loss | X | | X | X |
| G8024 | Ultrasonic Thickness Examination for Materials | X | | | |
| G8025 | Internal Corrosion Management Plan | X | | X | X |
| G8026 | External and Internal Transmission Pipeline Inspection | X | | X | X |
| G8027 | Cathodic Protection - Electrical Isolation | X | | X | X |
| G8028 | Cathodic Protection - Casings | X | | X | X |
| G8029 | Record Keeping - Corrosion Control | X | | X | X |
| G8031 | Internal Corrosion Design and Construction Considerations | X | | X | X |
| G8035 | Interference - Stray Electrical Current | X | | X | X |
| G8037 | Induced High Voltage Alternating Current (HVAC) on Pipelines | | | | X |
| G8041 | Cathodic Protection - Instruments and Testing Equipment | X | | | |
| G8042 | Copper Sulfate Electrode | X | | | |
| G8043 | Corrosion Control of Underground Hazardous Substance Storage Tanks | | | | X |
| G8107 | Aboveground Survey Plan | X | | | X |
| G8108 | Alternating Current Attenuation Survey | X | | | X |
| G8109 | Close Interval Survey | X | | | X |
| G8110 | Voltage Gradient Survey | X | | | |

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| G8111 | Soil Resistivity Survey | X | | | |
| G8112 | Inspection of Cased Pipe | X | | | |
| G8113 | Operator Qualification Program | X | | X | X |
| G8114 | Self-Audit Guidelines - Pipeline Integrity Program | X | | | |
| G8115 | Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure | X | | X | X |
| G8116 | Pipeline and Related Definitions | X | | X | X |
| G8121 | Class Location - Determination and Changes | X | | X | X |
| G8122 | Prevention of 3rd Party Excavator and Company Contractor Excavation Damage to Company Subsurface Installations | X | | X | X |
| G8123 | Underground Service Alert and Temporary Marking | X | | X | |
| G8129 | Odorization | X | | X | X |
| G8130 | Operation of Odorator | | | | X |
| G8133 | ODORIZATION-YZ NJEX Odorant Injection System Maintenance | | | | X |
| G8135 | Leak Classification and Mitigation Schedules | X | | X | X |
| G8137 | Leak Investigation | | X | | X |
| G8138 | Optical Methane Detector Operation and Maintenance | | | | X |
| G8139 | Company Facility Odor Assessment | | X | | X |
| G8140 | Pipeline Patrol and Unstable Earth Inspections | X | | X | X |
| G8141 | Pipeline Markers | X | | X | X |
| G8142 | Inspection of Pipelines on Bridges and Spans | X | | X | X |
| G8145 | Leakage Surveys | X | | X | X |
| G8147 | Planning Shutdowns on High Pressure Gas Facilities | X | X | X | |
| G8159 | Distribution Pressure Regulating and Monitoring Station & Vault - Inspection, Maintenance and Settings | X | | X | X |
| G8160 | Pipeline Cleaning Standard | X | | | |
| G8161 | In-Line Inspection Surveys Standard | X | | | |
| G8162 | Assessment of Pipeline Integrity Using Guided Wave UT | X | | | |
| G8163 | GPS Control Survey | X | | | |
| G8164 | Global Positioning System (GPS) Process | X | | | |

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| G8166 | Analysis of Assessment Findings | X | | | |
| G8168 | Response to Conditions Discovered on Transmission Pipelines | X | X | X | X |
| G8169 | Prevention of Accidental Ignition of Natural Gas | X | X | X | |
| G8170 | Procedure for HCA Segment Identification | X | | | |
| G8171 | CPUC and PHMSA Notification of Major New and Uprated Pipelines and Pressure Test Failures of Pipelines | X | | | |
| G8172 | Data Gathering and Integration | X | X | X | X |
| G8173 | Threat Identification and Evaluation | X | | | |
| G8174 | TIMP Risk Assessment | X | | | |
| G8177 | TIMP Risk Algorithm | X | | | |
| G8178 | Transmission Pipeline Assessment Plan | X | | | |
| G8179 | External Corrosion Direct Assessment Procedure | X | | | |
| G8180 | In-Line Inspection Procedure | X | X | | |
| G8184 | Bellhole Inspection Requirements | X | | X | X |
| G8185 | Casing Wax Fill | X | | X | X |
| G8186 | Preventive and Mitigative Measures | X | | | |
| G8187 | Continual Evaluation | X | | | |
| G8188 | Stress Corrosion Cracking Direct Assessment Procedure | X | | | |
| G8192 | RMLD - Remote Methane Leak Detector | | | | X |
| G8198 | Field Sampling and Analysis of Liquids and Solids/Sludge | X | | | |
| G8202 | Field Guidelines - Emergency Incident Distribution / Customer Service | X | X | X | X |
| G8204 | Emergency Response Procedures for Gas Incidents - Distribution | X | X | X | X |
| G8205 | Emergency Response Procedures for Gas Incidents - Transmission | X | X | X | X |
| G8206 | Emergency Materials List for Gas Incidents | X | X | X | |
| G8208 | Natural Disaster or Major Emergency - Employee Instructions | X | X | X | |
| G8210 | Contact with Fire and Police Departments and Public Agencies | X | X | X | |
| G8215 | Field Services (Distribution) On-duty Supervisor (ODS) Responsibilities | | X | X | X |

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| G8217 | Supplemental Data Determination | X | | | |
| G8222 | Pipeline Incident Reports to CPUC and PHMSA; National Transportation Safety Board (NTSB) Accident Investigation | X | X | | X |
| G8223 | Pipeline Safety Reports and Notifications to CPUC and PHMSA | X | X | X | X |
| G8225 | Investigation of Pipeline Accidents and Failures | X | X | X | |
| G8229 | Reports of Safety-Related Pipeline Conditions | X | X | X | X |
| G8237 | Restoration of Service Policy and Responsibilities | X | X | X | |
| G8241 | Responsibilities for Maintenance of the Downtown San Diego Emergency Curtailment Map | X | X | X | |
| G8245 | Above Ground Leakage Classification and Mitigation Schedules | X | X | X | |
| G8308 | Contractor Safety Program | X | | | |
| G8315 | Confined Space Operations | | | X | X |
| G8316 | Event Learning Process (ELP) | | X | | X |
| G8320 | Working in Flammable Atmospheres | X | | X | |
| G8345 | Hot Work Permit Program | | | X | |
| G8356 | Silica Dust Exposure Control Plan’ | X | | X | |
| G8365 | Respiratory Protection Program | X | | X | |
| G8366 | Heat Illness Prevention | | | | X |
| G8373 | Wildfire Smoke Protection Program | X | | X | |
| G8603 | Designs for Pipelines in Bridges | X | | X | X |
| G8605 | Request for Pipeline Engineering Assistance | X | | X | X |
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| G8717 | Industrial Waste Discharges to the Sanitary Sewer | | | | X |
| G8719 | Hydrostatic Test Water Management | | | X | X |
| G8736 | Proposition 65 Compliance | | X | | X |
| G9103 | Pressure Terminology and Establishment of Pressure Levels for Piping | X | | X | X |
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| G9109 | Electrical Facilities in Hazardous Areas | | | X | X |

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| G9165 | Requirements for Installing Gas Pipelines in or adjacent to Sloping Terrain | X | | X | X |
| GC1SD | Gas Control Emergency Plan | X | | X | X |
| PA-1SD | Public Awareness Plan | | X | | X |
| PP01.002SD | Management of Company Operations Standards - Definitions | | X | | X |
| SDSD1020 | Message Center Reporting (MCR) | X | | | |
| SMS-A1B | Employee Safety Incident Notification Process | X | | | |
| SMS-A5G | Process to Utilize Incident Evaluation Findings and Lessons Learned | X | | | |
| SMS-B1B | Process for Employees and Contractors to Raise Risk and Safety Concerns | X | | X | X |
| SMS-B2A | Process to Identify and Manage External Stakeholders as Effective Safety Partners | | X | | X |
| SMS-D2B | Process to Identify Necessary Maintenance and Testing Procedures for Safety Critical Assets | X | | | X |
| SMS-D3A | Process for Management of Change for Safe Continuation of Operations | X | | X | X |
| SMS-I1A | Process to Consistently Manage and Assess the Effectiveness of Safety Training and Awareness Programs | X | | | X |
| SMS-SWA | Stop/Pause Work Authority Process | X | | | |
| T7303 | General Construction Requirements - Steel Transmission System | | | X | X |
| T7381 | Abandonment, Conversion and Reinstatement of Transmission Pipelines | X | | X | X |
| T7413 | Minimum Trench Requirements for Transmission Pipelines | X | | X | X |
| T8129 | Supplemental Odorization of Gas at Border Stations | X | | X | |
| T8144 | MAXIMO - Transmission | X | | | |
| T8147 | Gas Detectors in Gas Compressor Stations | X | | X | X |
| T8148 | Testing and Maintaining Compressor Station Emergency Shutdown Systems | X | | X | X |
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| T8166 | Identification Numbers for Pipeline Valves - Transmission | X | | X | |
| T8167 | Valve Inspection and Maintenance - Transmission | X | | X | X |
| T8170 | Failure Analysis Process for Gas Systems | X | | X | X |
| T8171 | Abnormal Operations - Transmission | X | X | X | |
| T8172 | Inspection Schedule - Regulator Station, Power Generating Plant Regulation Equipment Requirements | X | | X | |
| T8173 | Pressure Relief/ Pressure Limiting Devices Testing / Inspection | X | | X | X |
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