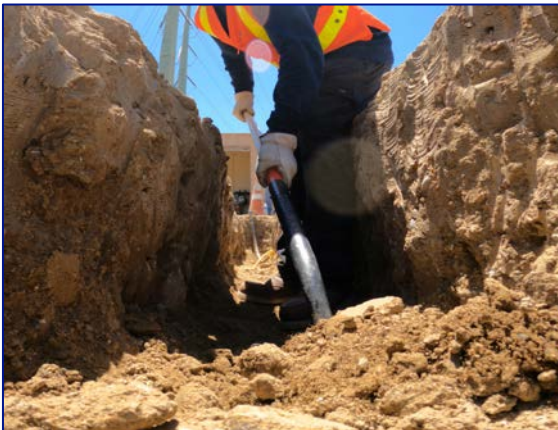




2024 Gas Safety Plan

March 15, 2024



Kevin C. Geraghty
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March 15, 2024

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 2024 Gas Safety Plan

Dear Mr. Zhang:

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

At SDG&E, safety is a core value and is at the foundation of everything we do. This commitment to safety is embedded in our culture and dedicated workers – from executive leadership to front-line workers who safely operate the gas system and serve our customers every day.

SDG&E's safety culture fosters a work environment where employees at all levels, across all work locations and departments are empowered to submit safety suggestions, near misses, identify hazards, raise safety concerns, and "stop the job" if someone is ever uncomfortable with a situation. Very simply, our employees take pride in their work and ownership for safety.

While a strong culture of safety exists today, SDG&E is committed to continuously maturing as a learning organization. To that end, SDG&E embraces a safety management system (SMS) to comprehensively manage safety risk by adapting, expanding, and integrating the SMS framework outlined in American Petroleum Institute Recommended Practice 1173 (API RP 1173). SDG&E's continuous safety culture and safety improvement efforts are reflected in this Gas Safety Plan.

Additions and updates to SDG&E's 2023 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,

A handwritten signature in blue ink, appearing to read "K. Geraghty", is written over a faint, light blue circular stamp.

Summary of New or Significantly Changed Elements

The table below summarizes the portions of the 2024 Gas Safety Plan that are new or have significantly changed, and are included with this submission:

Chapter	New or Significantly Changed Element
Chapter 1: Introduction	• Updated SMS Governance Structure, Figure 2 • Updated Section 5 to add reference to Facilities Integrity Management Program
Chapter 2: Leadership Commitment to Safety	• Updated Introduction section
Chapter 3: Plan Development & Implementation	• Updated Internal Stakeholder Plan Contribution Process section
Chapter 4: Safety Systems	• Updated Transmission Integrity Management Program section • Updated Gas Safety Enhancement Programs section • Updated Facilities Integrity Management Program section • Added Gas Damage Prevention Program section • Updated Safety Management System section
Chapter 5: Emergency Response	• Updated Gas Emergency Management Preparedness section
Chapter 6: State and Federal Regulations	• Updated Figures 4 & 5
Chapter 7: Continuing Operations	• Added Physical Security section • Added Cyber Security section
Chapter 8: Emerging Issues	• Updated Proposed Federal Pipeline Safety Regulation section
Appendix: Safety Policy Documents	• Updated Gas Safety Plan Policy Document Matrix

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2024 GAS SAFETY PLAN

INTRODUCTION

SDG&E: SP.1-SD

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 foundational to who we are and embedded in everything we do. Safety requires deliberate, unwavering, and ongoing leadership commitment and ownership, and active engagement and personal accountability from all employees. SDG&E's safety commitment includes public safety,¹ system safety,² employee safety,³ and contractor safety.⁴

This Gas Safety Plan conveys the safety commitment of SDG&E, sets forth the overarching safety plans, programs, policies, standards, and procedures that are designed to support that commitment, and describes the Company's comprehensive Safety Management System (SMS) framework. As further described below, the SDG&E SMS is the framework that supports and enhances SDG&E's longstanding commitment to safety by facilitating the deliberate and intentional integration of our safety systems and processes. SDG&E's SMS applies this definition of safety to include heightened focus on proactive and predictive risk identification and increased focus on psychological safety and safety culture for continuous public, employee, contractor, asset, system, and cyber safety. This comprehensive view of safety requires strong, ongoing, and demonstrated leadership commitment and active engagement and ownership from all employees.

SDG&E's Gas Safety Plan and SMS Governance Plan are the foundational documents that communicate SDG&E's gas safety commitment. This Gas Safety Plan and the SMS Governance Plan detail SDG&E's practice to advance and enhance a comprehensive approach to safety through risk and hazard identification, hazard and risk controls and mitigations, continuous learning and improvement, leadership commitment, and employee engagement. SDG&E's approach to safety is founded on our value and commitment to continuous improvement, which encourages the endless pursuit of opportunities to listen, learn and improve. Accordingly, both the SDG&E Gas Safety Plan and SMS Governance Plan are living 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 was signed into law on October 7, 2011, and codified as California Public Utilities Code sections 961 and 963. Section 961 requires each gas corporation in California to develop 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

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.

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plan by year-end 2012. Section 963, among other things, establishes that 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.

On April 19, 2012, the Commission approved Decision (D.)12-04-010, which amended the scope of the Commission’s Pipeline Safety Rulemaking (R.) 11-02-019 to include complying with the requirements of Public Utilities Code sections 961 and 963. The Commission directed each of the State’s gas corporations to submit a proposed natural gas system operator safety plan (Gas Safety Plan), with documentation of the workforce comment process described in the decision, by June 29, 2012.

In addition to Public Utilities Code sections 961 and 963, this Gas Safety Plan addresses the requirements of Assembly Bill 56, chaptered on October 7, 2011, which codified Public Utilities Code section 956.5. Section 956.5 requires operators to review, at least once each calendar year, emergency contingency plans with local fire departments having jurisdiction over the area where intrastate transmission and 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

⁵ D.12-04-010 at 19.

⁶ Pub. Util. Code section 963.

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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.

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

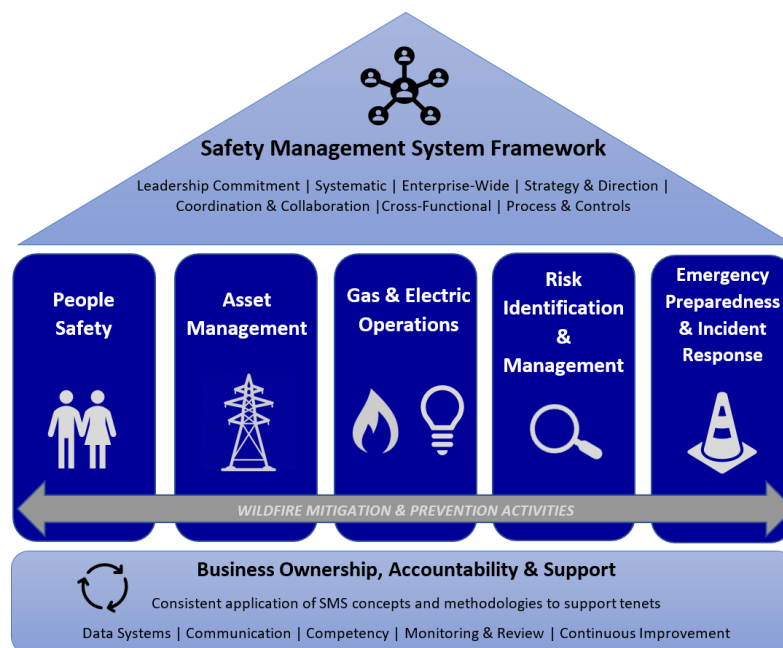
4. SAFETY MANAGEMENT SYSTEM

SDG&E began operating within an enterprise-wide Safety Management System (SMS) framework in 2020. SDG&E's SMS is a systematic framework to collectively manage safety risk to promote continuous improvement. The SMS builds asset, risk, 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.

SDG&E's SMS is a collection of structured, company-wide processes and systems that provide effective risk-based decision-making for daily business functions. Using API 1173 as a general standard for operational safety for gas and electric operations requires alignment of risk management (based on ISO 31000), asset management (based on ISO 55000), and emergency management (based on the Incident Command System), with traditional views of safety management (based on OSHA) to support development of a comprehensive and proactive safety program that produces ever-improving levels of employee, contractor, and public safety.

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

Figure 1
SDG&E's Safety Management System Framework

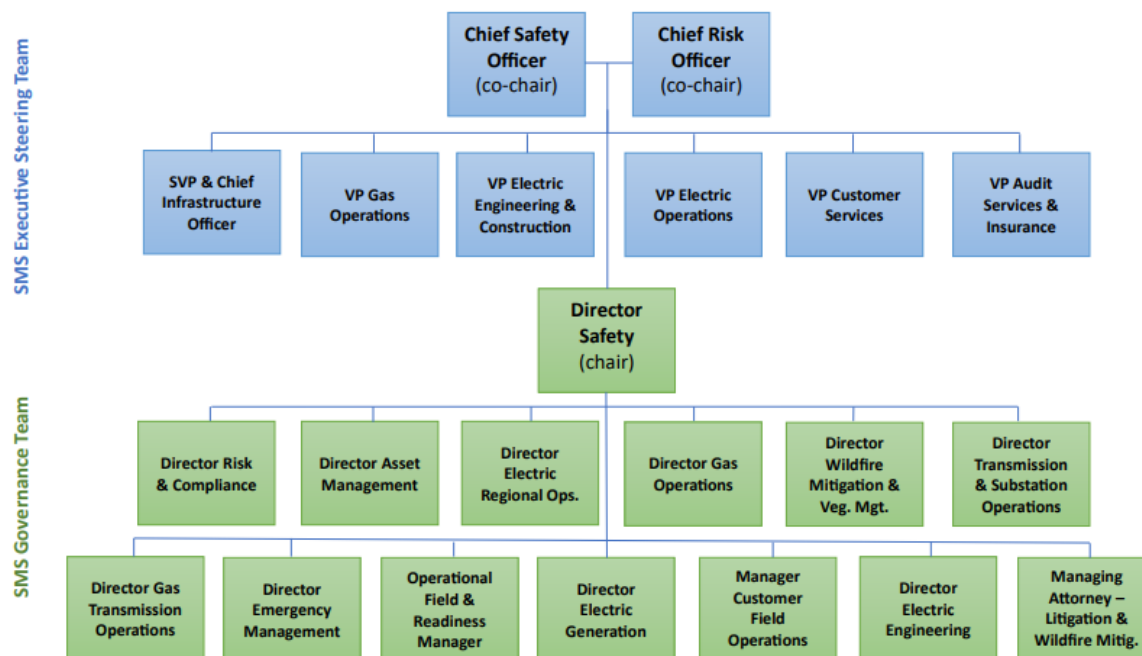


These pillars are the core of an integrated, comprehensive, and risk-informed approach to managing safety under the SMS, in line with basic safety principles and a broader process safety management focus. Activities to effectively manage the risks SDG&E faces are integrated throughout the SMS Framework.

SDG&E's SMS governance structure comprises three teams that oversee, lead, and are responsible for the successful implementation of an enterprise-wide SMS: (1) SMS Executive Steering Team, (2) SMS Governance Team, and (3) SMS Program Management Team. This decentralized organizational structure provides cross-functional governance teams to assess risk and safety issues Company-wide, while retaining risk ownership and accountability at the operational levels. The teams within the SMS governance structure actively engage SDG&E's operational employees to solicit input, insight, and feedback on safety issues. The SMS Governance Team raises and addresses issues regarding the scope, project plan, implementation, ongoing management, data analytics, and continuous improvement of SMS and makes decisions within the scope and authority of this SMS Governance Plan as a collective, cohesive unit.

SDG&E's Chief Safety Officer has ultimate responsibility and accountability for safety. The SMS Executive Steering Team is co-chaired by SDG&E's Chief Safety Officer and Chief Compliance & Risk Officer. The SMS Governance Team is chaired by SDG&E's Director – Safety, who reports directly to the Chief Safety Officer. See Figure 2, below.

Figure 2
SDG&E's SMS Governance Structure



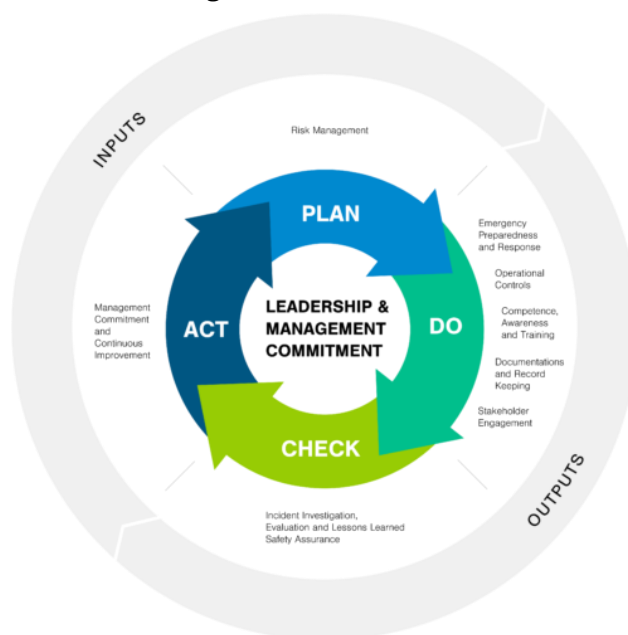
The SMS Executive Steering Team provides oversight, guidance, direction, and resources to the SMS Governance Team for the development, implementation, ongoing maintenance, and continuous improvement of the SMS. The Executive Steering Team also has the responsibility to establish high-level performance measures to help assess the effectiveness of the SMS, and to conduct the annual management review of the SMS. The SMS Governance Team represents centralized authority, accountability, and responsibility to support the execution of the SMS throughout the organization, including designing, developing, implementing, and continuously improving the SMS which is founded on 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
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 ten essential elements of SDG&E's SMS are actualized through the Plan-Do-Check-Act model depicted below in Figure 3. The SMS is about being more deliberate and intentional about

integrating our safety systems and processes. The Company's goal is to continuously strengthen our safety culture by living these values.

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



SDG&E's journey towards a company-wide SMS began more than a decade ago when it first implemented a management system related to safety and environmental compliance, SDG&E's Environmental & Safety Compliance Management Program (ESCMP). ESCMP is conceptually based on the International Standards Organization (ISO) 14001 Environmental Management Systems standard and includes safety components that are unique to SDG&E. SDG&E's integrity management programs are another element of SMS that were instituted to manage and enhance the integrity of our pipeline system.

These programs have been refined, improved, matured and are in place companywide. SDG&E has leveraged this knowledge and experience to create its SMS to further enhance safe operations, strengthen our safety culture, and improve our safety performance toward the goal of reducing risk to the public, our personnel, and our system and our overarching goal of 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 must be 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 Publish⁷ process, and not deferred until the next scheduled review.

⁷ PP01.040 Submitting a Revised Company Operations Standard for Publication

II. LEADERSHIP COMMITMENT TO SAFETY

At SDG&E, our safety commitment includes employee and contractor safety, customer and public safety, asset and infrastructure safety, physical and cyber safety, and the safety of our gas and electric delivery system. This safety commitment is the foundation of our business and a core value. Our tradition of safety spans more than 130 years and is the basis for company programs, policies, procedures, guidelines, and best practices.

SDG&E has a culture where leadership sets the example and demonstrates safe behaviors expected of its workforce. SDG&E's leadership team is committed to championing people, doing the right thing, shaping the future, and executing on operational excellence; for example, SDG&E has created a Safety Committee of the Board of Directors to provide for greater oversight of safety issues impacting the company. 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, 700, as well as the State of California's Standardized Emergency Management Systems Overview training. Supervisors also engage in 3-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

Further commitment of SDG&E's leadership in operating a safe utility is demonstrated with its voluntary implementation of a company-wide Safety Management System which is founded on the safety principles embodied in American Petroleum Institute Recommended Practice 1173 (API 1173). SDG&E takes a broad, holistic view to asset, risk and safety management and will adopt and apply other SMS principles, as applicable.

1. POLICY PRINCIPLES AND PERFORMANCE EXPECTATIONS

SDG&E's safety-focused culture and supporting organizational structure allow the company to be proactive and accountable in the safe delivery of natural gas and supporting services. The company continuously strives for a work environment where employees at all levels and its contractors can raise pipeline infrastructure, customer safety, and employee safety concerns and offer suggestions for improvement through multiple platforms such as "Stop the Job", local Safety Committees, the Executive Safety Committee, and the implementation of a web-based

and mobile reporting application for near misses and close calls.

SDG&E's safety performance is regularly monitored and evaluated in accordance with all state and federal regulations and additional performance metrics are evaluated to foster a culture of continuous safety improvement. These performance metrics are reviewed and communicated in accordance with the schedules identified in the specific policy, program, plan or other document incorporated as part of the Gas Safety Plan.

In addition, SDG&E monitors the U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) website for new regulations and advisory bulletins and act upon any applicable regulations and bulletins in a timely manner and verify that changes in regulations are reflected in policies, standards, procedures and employee training.

SDG&E regularly assesses its safety culture and encourages two-way communication between employees and management as a means of identifying and managing safety risks. In addition to the reporting of pipeline and occupational safety incidents, management created multiple methods for employees to report and share close calls/near misses to promote continuous learning.

At SDG&E, safety is a core value, so we provide all employees with the training, awareness and competence necessary to safely perform their job responsibilities. We also reinforce this value with our contractors through our Contractor Safety Management activities. We continually monitor contractor safety performance to ensure they remain focused on employee safety, public safety, and the safety of our gas and electric delivery systems. Through these activities, contractors are kept current on all relevant operational, regulatory, and procedural changes affecting their work. Sharing between contractor and Company is encouraged in order to receive feedback on contractor-identified safety issues and to review lessons learned from root cause analysis related to near miss events and incidents.

2. GOALS AND OBJECTIVES

SDG&E leadership and all levels of management have the authority, accountability, and responsibility to appropriately support, implement, and oversee the elements of safety throughout the organization. This includes all aspects of safety relevant to SDG&E's business, including employee and contractor safety, customer and public safety, and the safety of our gas and electric delivery system. They demonstrate leadership commitment to enhancing safety performance by communicating and modeling to their organizations the importance of safety, SDG&E's safety values, and responsibility to enhance our approach to safety.

This Gas Safety Plan is Company policy. SDG&E leadership embraces and supports the Company's Commitment to Safety and this Gas Safety Plan.

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. SDG&E employees are crucial stakeholders and are key to proactive risk identification. All employees are empowered and expected to Stop the Job whenever an unsafe condition or change from plans is perceived. Employees can also submit Near Misses when they identify/experience a risk, hazard, close call or good catch. Effective two-way communication is a key objective of SDG&E's Safety Management System. SDG&E's safety values and leadership commitment starts at the top and are reinforced and consistently communicated from SDG&E's Chief Executive Officer, Chief Safety Officer and Chief Risk Officer and cascades to all employee levels. The five pillars and ten essential elements that are the foundation of our SMS include a specific value dedicated to employee and stakeholder engagement, which is critical to providing clarity to employees, so that policies,

PLAN DEVELOPMENT & IMPLEMENTATION	SDG&E: SP.3-SD
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goals, objectives, and procedures are understood.

Employees play a critical role in SDG&E's safety and have been an important contributor to developing this Gas Safety Plan. Employees raising concerns to management and making recommendations for safety are necessary for continuous improvement as this enables the Company to gather safety-related input from those closest to the work.

To promote a culture of trust and increase the likelihood of reporting known safety risks, the Company is committed to enabling employee participation in the continuous improvement of this Gas Safety Plan. The Gas Safety Plan is posted on the Company intranet site for ready access by all employees and is reviewed and updated annually. The Company intranet site includes means for employees to submit pipeline and occupational safety risks and ideas for improvement. One of the main purposes of these reporting mechanisms is to provide employees a venue for reporting issues outside of the typical supervisor-reporting hierarchy. Employees can also make reports anonymously.

Company communications have been established to make employees aware of the availability of SDG&E's Gas Safety Plan and the importance of reporting known issues and safety improvement ideas. The importance of reporting safety risks is also included in employee training course materials.

Starting in January 2023, SDG&E hosts an annual "Start Strong" offsite safety event where a majority of operational workforce (approx. 1,300 in 2023; 1,400 in 2024) is invited to a half day event focused on safety. This event demonstrates SDG&E's partnership with its Union (IBEW Local 465), their joint commitment to safety, and sets clear goals and expectations for the year ahead. A key objective of this event is to establish a strong foundation for advancing psychological safety where all employees are empowered and feel comfortable to speak up, raise safety concerns, submit near misses, and stop the job whenever they are unsure how to safely perform a task.

The following outlines SDG&E's process management for the gathering and analysis of employee input regarding pipeline safety:

- Starting in 2023, SDG&E commenced regular Gas Working Foremen Summits to solicit input from our operational workforce. Hosted by SDG&E's Gas Operations leadership, this summit brings together Working Foremen to provide updates on initiatives that affect their teams, host leadership and development training, and to gather feedback on ways the foremen and Gas Operations leadership can enhance and contribute to their department goals and the company's mission for safe and reliable operation of its pipeline system.
- Regular Gas Safety Subcommittee (GSS) meetings, led by SDG&E's Gas Safety Center with cross-functional representation of our gas operations workforce with a standing agenda item for roundtable discussion where employees can raise safety concerns or provide input. Any actionable items are assigned and tracked through resolution.

PLAN DEVELOPMENT & IMPLEMENTATION	SDG&E: SP.3-SD
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- SDG&E has a Near Miss Reporting program where employees can submit hazards, risks, close calls, good catches and near misses via an online portal or mobile application. All near misses are reviewed and assessed for opportunity for safety improvement. Near Misses can be submitted anonymously.
- Meetings with employees are regularly scheduled to gather input so that we are addressing issues or concerns related to our commitment to safety.
- Regular employee safety council meetings, including executive safety councils, are held.
- Regular supervisor field crew visits to evaluate the work being performed as well as the physical and psychological safety of the crew doing the work.
- Behavior Based Safety (BBS) peer-to-peer job observations to identify and coach safe and potentially at-risk behaviors.
- Quarterly Risk Council meetings.
- Annual Safety Congress and Safety Leadership Award Ceremony where Safety Committees and groups who work closely with the Safety organization to carry out the company's safety goals and initiatives are invited to hear from leadership, guest speakers, participate in workshops, and see various Safety Committee exhibits. Each year at the Safety Congress, SDG&E recognizes safety leaders who live by our safety vision and turn this vision into action.
- To ensure the continuous improvement of our processes, a comprehensive post-incident After-Action Review program has been developed to solicit input from key internal stakeholders. The after-action report includes an improvement plan that is reviewed quarterly with executive leadership to ensure action.

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

3. EXTERNAL STAKEHOLDER SAFETY PLAN CONTRIBUTION PROCESS

To promote a culture of trust and increase the likelihood of reporting known pipeline or occupational safety risks, SDG&E is committed to enabling its contractors and the public to participate in the continual improvement of the Gas Safety Plan.

Contact and communication with external stakeholders (e.g., public, first responders, public officials) is managed via the Public Awareness Plan. Also, for larger projects and programs, a specific outreach and communication plan has been created to gather input, including safety related feedback, from the community and other stakeholders.

SDG&E's Contractor Safety Management program includes feedback from contractors regarding occupational and pipeline safety risks at SDG&E. Contractors are trained on the

PLAN DEVELOPMENT & IMPLEMENTATION	SDG&E: SP.3-SD
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reporting policy and procedure. The contractor safety management program is the way SDG&E is moving its focus on contractors to a single source (Contractor Safety Program Standard G8308 for SDG&E and the Class 1 Contractor Safety Manual for contractors) holding all Business Units and Class 1 Contractors to the same requirements. Internal construction-focused Business Units such as Portfolio and Project Management, Design and Construction Management, and Vegetation Management, also have field safety oversight of all construction work performed by contractors working for those respective groups. This oversight includes instituting safeguards that all contracted work is built in accordance with SDG&E standards, state and federal agency regulations, applicable laws, and Commission Orders.

Contractor input is highly valued and critical to supporting continuous improvement. SDG&E facilitates two-way communication with its contractors to solicit and share safety information such as near misses, incident debriefs, and contractor quarterly newsletters. Additionally, SDG&E leadership hosts safety connection touchpoints with its contractor leadership to identify proactive and preventative solutions, lessons learned and opportunity for safety improvement. The following outlines SDG&E's process management for the gathering and analysis of contractor and external stakeholder input regarding pipeline safety:

- Public Awareness Plan
- 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
- To promote continuous improvement of our processes, a comprehensive post-incident After-Action Review program has been developed to solicit input from key external stakeholders. The after-action report includes an improvement plan that is reviewed quarterly with executive leadership to ensure action.
- Reporting and sharing of near misses and incident debriefs with contractors.

SDG&E's Gas Safety Plan is posted to 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 in order 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 a number of 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 including the following:

- Transmission Integrity Management Program (TIMP)
- Distribution Integrity Management Program (DIMP)
- Facilities Integrity Management Program (FIMP)
- Operation and Maintenance Plan
- Pipeline Safety Enhancement Plan (PSEP)
- Control Room Management Plan
- Gas Safety Enhancement Programs (GSEP)
- Gas Damage Prevention Program
- Safety Management System (SMS)

SDG&E implemented its Pipeline Safety Enhancement Plan (PSEP) to address requirements for transmission infrastructure. SDG&E is also implementing an enterprise-wide SMS that encompasses each of the above-listed plans and programs.

The SMS is a continuous improvement framework. Each of these programs are subject to ongoing review and continual improvement efforts and when warranted, changes are made to further protect the public and SDG&E workforce.

The pipeline integrity management programs (i.e., TIMP, DIMP) were established, in accordance with 49 Code of Federal Regulations (CFR) Part 192, Subparts O, P, and A, to address safety-related risks on the natural gas system. Included in these risk assessments are lessons learned from internal and external gas pipeline incidents. Risk assessments are reviewed at least annually, and updated as warranted, using data and information gained from operations and maintenance, inspection and testing, integrity-related work, and incident investigations.

Operational risk related to loss of experienced and knowledgeable employees is managed through

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working with local management to develop succession planning for critical job functions and is further discussed in Chapter VII, section 4 - SDG&E Workforce Size, Training and Qualifications.

2. TRANSMISSION INTEGRITY MANAGEMENT PROGRAM

The Transmission Integrity Management Program (TIMP) was developed in 2004 in accordance with the requirements of Subpart O – “Gas Transmission Pipeline Integrity Management” of Part 192 of Title 49 of the CFR and is an ongoing program that is continuously reviewed and improved.

The TIMP is designed to provide assessments and integrity improvements on transmission pipelines, as defined by the Department of Transportation (DOT), in high consequence areas (HCAs) by outlining responsible parties, timelines for each process element, incorporating lessons learned. Processes are aimed at identifying threats through data gathering and routine testing, assessing materials integrity, and determining remediation, preventive, and mitigation action for those threats.

As part of TIMP, information concerning the pipeline infrastructure, such as its operating, environmental, and performance history, is integrated into a broad evaluation of the pipeline and its environment. This information is analyzed for each pipeline segment being assessed and used to develop specific integrity-related work plans that are applied to the transmission pipelines at a recurring interval no greater than seven years.

The risk evaluations for DOT-Transmission segments in the scope of the TIMP are designed to improve safety performance and are conducted per the schedule in TIMP risk assessment requirements. Pursuant to Subpart O, SDG&E may use several assessment methods to evaluate pipelines in its system, including in-line inspections (ILI), pressure testing, and direct assessment. ILI is SDG&E’s preferred assessment method, where applicable, because it provides the most comprehensive set of data regarding the condition of the assessed pipeline. Of the total transmission pipelines in the SDG&E system, approximately 157 miles (~72%) are evaluated using ILI methods. These pipeline assessments support the safe operation of the transmission pipeline by enhancing the efficiency and effectiveness of risk mitigation and preventative maintenance measures including corrosion control and the damage prevention programs.

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).

In response to major pipeline incidents (e.g., San Bruno rupture), the Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016 was signed into law on June 22, 2016. This lawmaking strengthened PHMSA’s safety authority and included provisions to drive new regulations focused on enhancing pipeline safety. To date, PHMSA has published three new regulations that have impacted the TIMP:

- The Gas Transmission Safety Rule (“GTSR”) Part 1 titled “Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments” was issued on October 1, 2019, and took effect on July 1, 2020. In response to the changes of 49 CFR Part 192, Subpart O, SDG&E enhanced the TIMP accordingly. Additionally, under TIMP, SDG&E has expanded assessments to additional segments located outside High Consequence Areas (HCAs) in accordance with 49 C.F.R. § 192.710 and developed a Material Properties & Attributes Verification Plan in accordance with 49 C.F.R § 192.607 to support new pipeline analysis requirements.
- PHMSA also amended 49 C.F.R. Parts 192 and 195 through the “Pipeline Safety: Requirement of Valve Installation and Minimum Rupture Detection Standards” final rule, which was published on April 8, 2022, and took effect on October 5, 2022. A risk analysis for each safety-related condition or incident discovered through the TIMP, which must occur within three months of occurrence, as well as an annual risk analysis not to exceed 15 months, have been added to the TIMP; these analyses evaluate the appropriateness of installing Rupture Mitigation Valves (RMVs) on DOT-T pipeline segments.
- The GTSR Part 2, titled “Safety of Gas Transmission Pipelines: Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Change, and Other Related Amendments,” was published August 24, 2022, and took effect on May 24, 2023. The TIMP written plan was updated to address the changes to Subpart M (Maintenance) and Subpart O (Gas Transmission Pipeline Integrity Management) that enhance data gathering for risk assessments and strengthen the repair requirements for integrity assessments.

3. DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM

The Distribution Integrity Management Program (DIMP) is designed to maintain the safe and reliable natural gas supply and delivery system by maintaining gas distribution system integrity. It is an ongoing program that was developed in accordance with the requirements of Subpart P – “Gas Distribution Pipeline Integrity Management” of Part 192 of Title 49 of the Code of Federal Regulations, which became effective February 12, 2010. The program’s purpose is to improve safety through the identification and reduction of pipeline integrity risks on distribution pipelines. Continuous improvement elements are integrated into the program using data and risk identification to drive prioritization of activities.

SDG&E’s DIMP focuses on the continuous identification and evaluation of existing and potential threats using a data driven and risk-informed approach to develop measures designed to reduce both the likelihood and consequences of pipeline failures. Specifically, SDG&E continuously improves its system knowledge, evaluates and ranks risk, implements programs to address risk, measures performance, monitor results, evaluates the effectiveness of risk reducing programs or activities, conducts periodic evaluation, implements improvements, and reports results.

SDG&E’s DIMP plan requires the integration of data from many sources for analysis, and results in program activities based upon that analysis. The written plan and related procedures

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identify and prescribe activities to enhance safety by minimizing systemic and localized risks to SDG&E's distribution system and documenting relevant system information. In 2022, the DIMP teams began the implementation of improvements to the safety-based vintage pipeline replacement activities, addressing specific threats on distribution medium pressure mains, such as corrosion on steel mains and construction defect, material failure/defect, natural cause, prior pinch, and tree root damage for plastic mains. Using a combination of internal SDG&E datasets and external publicly available data sources, the program is shifting from using relative risk analysis to segment-specific quantitative risk results to inform replacement activities.

SDG&E's DIMP is reviewed, at minimum, every five calendar years as part of the continual improvement process, as well as in response to changing conditions or new regulatory requirements.

4. FACILITIES INTEGRITY MANAGEMENT PROGRAM

Consistent with its commitment to continuous improvement and to further enhance safety, SDG&E developed a framework to mitigate safety-related risks associated with transmission and distribution facilities, including Natural Gas Vehicle (NGV) fueling facilities. SDG&E's Facilities Integrity Management Program (FIMP) is based on industry recommended guidelines and practices. FIMP provides a comprehensive, systematic, and integrated approach for managing and enhancing the safety and integrity of facilities and associated equipment. This program includes equipment at Transmission facilities such as compressor stations and pressure limiting stations, renewable natural gas facilities, and natural gas vehicle fueling stations. Activities included in the program go beyond regulatory requirements and are not duplicative of other existing integrity management programs.

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

5. OPERATION AND MAINTENANCE PLAN

SDG&E's Operation and Maintenance (O&M) plan is a compendium of over 175 policies designed to comprehensively address the safe operation and maintenance of our facilities pursuant to the requirements of 49 C.F.R. § 192.605 "Procedural manual for operations, maintenance, and emergencies." 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
- 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 Maximum Allowable Operating Pressure (MAOP)
- A two-phased approach and prioritization of pipelines operated in more populated areas (Phase 1) ahead of pipelines in less populated areas (Phase 2)
- Replacement of pipelines installed prior to 1946 that cannot be assessed using in-line inspection tools, i.e., “non-piggable” pipelines (Phase 1B)

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- 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 beyond those required by the Commission 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. 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 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. Additionally, SDG&E proposed an integrated safety enhancement plan (ISEP) in the TY 2024 GRC application that would reconfirm MAOP of pipeline segments not included in the approved PSEP.

“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 in HCAs and non-HCAs that impact 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.

“Amendments to Parts 192 and 195 to require Valve Installation and Minimum Rupture Detection Standards” Rulemaking: PHMSA published a final rule on April 8, 2022, which

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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. 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 will go out to the site and mark the location of our 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 follow’s 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. In 2023, SDG&E’s Damage Prevention team established a very difficult goal – to improve on our 2022 damage rate, which was the lowest rate in SDG&E history. In 2023, their efforts resulted in the fewest damages to our system on record finishing with a Damage Rate of 1.19, exceeding our established goal. This team is making a significant difference when it comes to protecting the safety of our communities. More specifically, SDG&E’s 2023 Gas Damage Prevention Program included:

- Damage Prevention Analysts that supported:
 - 7,900 non dig-in engagements
 - 80 Outreach events
 - Over 275 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
- Quality Management:
 - 9,350 total reviews completed by the Quality Assurance (QA) team since 2018
 - Over 160 findings resulting in educational opportunities with workforce

9. 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,

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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 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.

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) or Unified ICS with first responder agencies.

2. THE GAS EMERGENCY MANAGEMENT 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 system 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 requirements specified by SMS and complies with the Public Utilities Code sections 961(d)(5), (6) and (8), as well as the emergency response procedures required by 49 C.F.R. §§ 192.613 and 192.615. It

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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.
- 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 in order 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 of 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:

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- (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 Gas Emergency Center.

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.
- 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 the coordination and communication with multiple internal and/or external organizations

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(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.

- SDG&E is in the process of standing up a Deputy Operations Chief – Gas (DOC-G) for major gas-related events. The DOC-G, located at SDG&E's Greencraig facility, is activated for gas incidents and/or emergencies that involve repair and restoration efforts as well as technical support, logistics, and communications activities; depending on the nature of 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 (ICS) 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 that 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. 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 provide assistance 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.⁸ 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.

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.

⁸ U.S. Dept. of Homeland Security. National Incident Management System (December 2008).

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.

Title 49 of the Code of Federal Regulations (49 CFR), Parts 191, 192, 193, and 199, which govern the design, construction, testing, operation, and maintenance of Gas Piping Systems are incorporated into the Commission's General Order 112-F.

SDG&E's gas standards, including O&M procedures, are developed to maintain and continuously improve safety, and comply with federal and State pipeline safety regulations. To meet new laws, rules, and regulations, the departments of Pipeline Safety and Compliance and Integrity Management and Strategic Planning collectively work to monitor and track changes to legislation

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and regulatory requirements. When new regulations are adopted, the department coordinates the implementation of new requirements and documents them so that policies, standards, practices, and training materials are updated, as appropriate.

SDG&E stays current with regulations and requirements by monitoring legislative and regulatory activities and participating in industry associations, such as the American Gas Association (AGA). As an example, some of the past and current activities SDG&E has initiated from its participation in industry organizations can be seen in Figures A and B, at the end of this chapter.

The Company also updates procedures, standards and audit programs and keeps required documentation (e.g., leak survey records, patrols, cathodic protection reads, meter and regulation inspection forms, test data, and other documents) for a specified time period to demonstrate compliance.

SDG&E will continue to comply with applicable regulations and requirements with a focus on continuing to reduce the overall system risk through a process of continuous safety enhancements by identifying, evaluating, and reducing pipeline integrity risks for its gas system.

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

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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)

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- 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 Type & Responsible
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 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 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 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 Integrity Management

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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
Safety Management Systems

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 Type & 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 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 routing and monitoring.	Adopted 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 Gas Operation Services
Under DIMP, evaluate risk associated with trenchless pipeline techniques and implement initiatives to mitigate risks.	Adopted Sewer Lateral Inspection Program Gas Operations Support
Under DIMP, identify distribution assets where increased leak surveys may be appropriate.	Adopted Pipeline Integrity
Extend Operator Qualification program to include tasks related to new main and service line construction.	Adopted Pipeline Safety & Compliance
Expand excess flow valve (EFV) installation beyond single family residential homes.	Adopted Pipeline Integrity
Incorporate an Incident Command System (ICS) type of structure into emergency response protocols.	Adopted Emergency Services

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Implemented Activities	
Industry Actions	Implementation Type & Responsible Organization
Extend transmission integrity management principles outside of High Consequence Areas (HCAs) using a risk-based approach.	Adopted Pipeline Integrity
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 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 Gas Engineering
Implement appropriate meter set protection practices identified through the Best Practices Program.	Adopted Gas Infrastructure Protection Program (GIPP) Gas Operations Support
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 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 Advanced Meter
Under DIMP Distribution Risk Evaluation and Monitoring System (DREAMS), increased construction oversight to ensure safety, quality, and monitor construction progress of medium pressure main and service replacements.	Adopted 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 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 Integrity Management
Implement Threat Identification process for identification and prioritization of pipe segments where Stress Corrosion Cracking (SCC) may be a threat.	Adopted 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 Gas Engineering



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Implemented Activities	
Industry Actions	Implementation Type & Responsible Organization
Computer program to evaluate lifting pipe along a trench to ensure the pipe is not being overstressed during installation.	Adopted (for special cases) Gas Engineering
Computer Program to evaluate piping stresses at river crossings.	Adopted Gas Engineering

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 storage assets on 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.

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. Associated with this process, SDG&E addresses elements of a resource mitigation plan through workforce planning, knowledge transfer, training, and succession planning.

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 (Priority 1 response within 60 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, appropriate resource adjustments are made.

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 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 our 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. 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 employee's skills in identifying and repairing gas leaks and other real-life emergency situations through simulation exercises. These exercises are also included in first responder training. In addition, the company 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 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. Such programs are reviewed by the Operator Qualification department prior to performing work on pipelines or pipeline facilities.

The Operator Qualification Program requires that employees are trained, initially qualified, and subsequently re-qualified every three or five years 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. An external vendor, who is one of the nation's leaders in regulatory compliance for Operator Qualification, has been retained to provide training, testing, Operator Qualification, and record retention for our pipeline contractors.

Veriforce is a third-party vendor who 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. DRUG AND ALCOHOL MISUSE PREVENTION PLAN

The purpose of the Drug and Alcohol Misuse Prevention Plan is to prevent accidents that could result from the use of controlled substances and alcohol, thereby reducing fatalities, injuries and property damage. The Company's plan and policies are designed to comply with state and federal law.

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. ADDRESSING THE COVID-19 PANDEMIC

Using the ICS concept and setting clear objectives, SDG&E was able to effectively develop and implement updated health and safety policies and procedures based on Federal, State, and Local Pandemic guidelines. COVID-19 Emergency Orders have been lifted but SDG&E will reinstate enhanced protocols as necessary to address potential future pandemic or public health emergencies. SDG&E's COVID-19 policies and procedures consisted of: Quarantine and Notification protocols, COVID-19 Prevention Programs and policies such as Face Covering Requirements, Social Distance Guidance, Safety Practices for Construction Sites, and Entered Work Orders. These safety policies and procedures mitigated risk and enhanced the safety of our employees, contractor, and communities we serve.

Additional reinforcement of COVID-19 health and safety protocols included safety messages and signage throughout each facility. This signage highlights the importance of self-screening for symptoms and exposure, physical distancing, wearing face coverings, handwashing, personal hygiene,

and the location of safety supplies. All facilities have additional supplies available, including disposable face coverings and hand sanitizer. The company has implemented various enhancements to its mechanical systems (HVAC) to mitigate the potential for pathogen propagation due to a pandemic event. Specifically, MERV-13 (Minimum Efficiency Rating Value) air filters were installed throughout our HVAC systems and air circulation has also been optimized to maximum capacity. Lastly, enhanced cleaning occurs at every occupied facility, and additional supplies are available to clean individual workstations and equipment.

7. PHYSICAL SECURITY

Sempra's physical security program is designed to project 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** - Corporate Security Agents investigate hundreds of incidents each year across SDG&E and SoCalGas to include burglary, theft, vandalism, suspicious activity, workplace violence, etc.
- **Access Management** - Corporate Security manages access control and badging for SDG&E and SoCalGas including over 5,000 electronically controlled access points.
- **Employee Safety Protection** – SDG&E employees can contact Corporate Security 24/7 for emergency assistance. Employees are instructed to first contact 911 in emergency situations and then Corporate Security who can provide aid to employees while performing company work.
- **Regulatory Compliance** – Corporate Security ensures compliance with physical security regulations, standards, and guidelines affecting gas and electric critical infrastructure.
- **Emergency Response** – Corporate Security representatives are first responders for security matters.
- **Facility Monitoring** – The Corporate Security Operations Center (CSOC) monitors company facilities and alarm events to detect and respond to security threats, helping to ensure the safety of employees and assets. Using advanced technology, the CSOC identifies suspicious activity, enabling prompt risk assessment and mitigation.

- **Contract Guard Services** - Oversight of more than 150 guards at SDG&E, and SoCalGas facilities.
- **Security Training** - Several training opportunities are offered to employees and external entities focusing on physical security awareness, active shooter, travel safety, situational awareness, and others.
- **Security Reviews & Vulnerability Assessments** – Corporate Security Agents perform site security reviews to identify security vulnerabilities and recommend mitigations.
- **Risk & Intelligence Analysis** – The Risk & Intelligence Program anticipates, identifies, and assesses threats and provides actionable strategic and tactical intelligence to mitigate and exploit risk.
- **Law Enforcement Liaison** – Corporate Security maintains close working relationships with international, federal, state, and local public safety and intelligence agencies to assist with investigations, emergency planning and response, and to receive information regarding security threats.

Assessments and improvements occur through participation in security events, including detailed discussions and site-specific tabletop exercises, GridEx, 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.

8. CYBER SECURITY

At SDG&E and SoCalGas (the Companies), we recognize the paramount importance of cybersecurity. Our mission is to ensure the safe and reliable delivery of electric and gas services to our customers, including critical infrastructure providers within our Southern California service territory. This encompasses financial services, telecommunication providers, and other utilities. Our service area spans millions of people, major cities, bustling ports, critical military bases, and numerous defense contractors and small businesses.

The Cybersecurity organization is responsible for cybersecurity risk management of the information and operational technologies for the Companies.

The Cybersecurity organization's services are dedicated to safeguarding and enhancing the Companies' security stance in an evolving landscape of heightened threat capabilities. Our efforts contribute to technological advancements and improvements across the business while effectively mitigating the likelihood and impact of cybersecurity incidents. We achieve this balance by managing costs and applying risk management priorities. Furthermore, our department fosters enterprise-wide cybersecurity capabilities and ensures that all users can execute their functions securely, reliably, and with safety awareness.

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

Cybersecurity processes are largely designed and assessed based on the National Institute of Standards and Technology Cybersecurity Framework and the DOE's Cybersecurity Capability Maturity Model standards. This does not imply that we meet any technical standards, specifications, or requirements, only that we use these standards as a guide to help us identify, assess, and manage cybersecurity risks relevant to our business. Additionally, the Companies comply with applicable laws and regulations both at the state and federal level.

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 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 AND 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, regulatory groups as well as news and trade publications. Chapter 6 of this Gas Safety Plan identifies on-going safety enhancement actions and SDG&E's targeted date of implementation.

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 (OIR), R.21-10-001
- Senate Bill 1371 "Natural Gas Leakage Abatement"
- Risk Management
- 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 of 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 utility and gas storage operator to establish and continuously improve their organization-wide safety culture. Accordingly, this OIR provides guidance on the form and content of the safety culture assessments for regulated electric and natural gas investor-owned utilities (IOU) and gas storage operators, provides a venue for a review of their safety culture as an organization, and will determine a process for ongoing review and refinement of their safety culture assessments in future years. SDG&E looks forward to continuing collaborating 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.

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.⁹

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;
- Use of infrared cameras to check for leaks after new pipelines are installed;
- Special fiber optic cable that detects methane leaks and third-party damage to pipelines;
- Infrared “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 management decision-making to ultimately improve safety performance. As such, SDG&E has established an enterprise-wide SMS framework, as further described above. SDG&E is an active participant in ongoing CPUC proceedings related to risk 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, Enterprise Risk Management (ERM), whose role is to facilitate the identification, analysis, evaluation, and

⁹ AL 3071-G-A is currently pending before the Commission.

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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 over and facilitates the development of risk policies and procedures. 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 works annually to refresh Risk Registries at the Enterprise level. The Enterprise Risk Registry is a starting point for the RAMP and feeds into the Company's risk-informed decision-making framework processes. Additionally, SDG&E leverages the operating unit risk registries to inform internal asset management strategies and integrity management to continue the integration of risk and asset management.

d. Climate Change Adaptation and Resiliency

Under the broad umbrella of risk management, SDG&E is addressing certain risks that have emerged as industry-specific issues, such as climate change adaptation. SDG&E is focused on safety initiatives to address climate change issues including drought, wildfires, and mudslides. SDG&E is working with the California Energy Commission and the CPUC on climate change adaptation. SMS encourages operators to use the results of their risk assessments to continue to drive down the likelihood of asset-related safety incidents and events - this approach is being implemented as the risk management processes are matured and improved. The Company views climate change as a driver and/or trigger to some of the top-identified safety risks and the results of the maturation of risk management is being integrated into the SoCalGas and SDG&E RAMP and GRC filings. For example, to address the risk of climate change, the 2021 RAMP Report focuses on the drivers of climate change and the potential resulting impacts, which in turn yielded the adaptation assessment and mitigation efforts presented in the risk chapters of this 2021 RAMP Report. SDG&E continues to conduct research to understand the impacts to all the Utility systems in recent extreme events such as the wildfires in California as well as hurricanes and floods throughout the country to better identify vulnerabilities and opportunities to enhance resiliency for the natural gas infrastructure.

e. Proposed Federal Pipeline Safety 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 and implementing SMS. In conjunction with these new PHMSA regulations, SDG&E has requested authorization to establish the Gas Safety Enhancement Programs Balancing Account (GSEPBA) to record incremental, substantial, and non-speculative costs imposed by certain amendments by the PHMSA to the CFR.

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These new regulations are focused on improving pipeline safety and integrity throughout the U.S and primarily driven by the “Protecting our Infrastructure of Pipelines Enhancing Safety” (PIPES) Act Reauthorization Bill. On December 27, 2020, the President signed into law the 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 incident response
- 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
- Requires Final Rule for Pipeline Safety Gas Transmission and Gathering Pipelines to be issued within 90 days of enactment
- New regulations for idled natural or other gas transmission and hazardous liquid pipelines

Examples of significant new or expected upcoming regulations include and upcoming rulemakings include:

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 anticipates publishing the final rule by March 2024, with the rule taking effect six months later.

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.

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.

PHMSA anticipates publishing the final rule in May 2024, with the rule taking effect 12 months later.

Pipeline Safety: Class Location Change Rulemaking: PHMSA anticipates publishing the “Pipeline Safety: Class Location Change” final rule in December of 2024 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.

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. The alternative set of requirements would apply only to those pipeline segments that have changed class location following the effective date of the rulemaking:

- 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 will issue a NPRM addressing regulations for the transportation of carbon dioxide pipeline in a gaseous state. 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, have been directed to submit an amended Joint Application to Establish Hydrogen Blending Projects. This amended application shall be refiled with the Commission no later than March 1, 2024, and proposes the creation of live hydrogen blending demonstration projects by each utility. The application has been 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

The Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and

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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.”¹⁰

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 spending that will burden future gas ratepayers,”¹¹ as well as workforce issues and other considerations for long-term system planning.

¹⁰ Order Instituting Rulemaking R. 20-01-007 - <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M325/K641/325641802.PDF>

¹¹ January 5, 2022 Scoping Memo at page 9 - <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M436/K692/436692151.PDF>



GAS SAFETY PLAN APPENDIX

In Decision (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 affirm 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
190SD	Operator Qualification Task Change Communication	X		X	
2110SD	Management of Change for Gas Standards Related to Integrity Management Programs	X			
2111SD	Management of Change - Request & Approval	X			
2112SD	Pipeline Database Update	X			
3084SD	Corrosion Tests General Data Sheet	X			
3222SD	Design Data Sheet (DDS)	X		X	X
3506SD	Notice of Shutdown / Operational Deviation	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			
52-80	Couplings - Electrofusion, Polyethylene	X			
52-81	Fittings, Socket & Saddle, Polyethylene Heat Fusion	X			
52-82	Fittings, Butt Type, Polyethylene Heat Fusion	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			
58-82	Valves - Ball, Steel, Trunnion Mounted	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
ACF-SD	Assessment Completion Form	X			
C5050	Order Completion and Priority Scheduling	X	X	X	
C5140	Shutting-Off Gas Meters	X			
C5150	Pardon the Interruption		X		
C5160	Gas Meter Turn-On Procedure	X		X	
C5190	Emergency Response Procedures for Gas Incidents	X	X	X	



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Gas Safety Plan Chapter					
Policy	Title	4	5	6	7
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
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	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 Houseline's	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 and Gas Light Tap Assemblies	X		X	X
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	

Gas Safety Plan Chapter					
Policy	Title	4	5	6	7
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	
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
D7279	Squeezing Polyethylene Pipe - 1/2" through 8"				X
D7293	Qualification Requirements for Polyethylene Fitters			X	X
D7321	Service Connections to Steel Pipelines			X	
D7325	Service Punch Tee	X		X	X
D7341	Raising or Repairing 3/4 Inch and 1 Inch Steel Risers				X
D7371	Leak Repair Methods for Steel Distribution Pipelines	X		X	X
D7373	Pipe Cold Squeezer Huskie PS-45				X
D7381	Abandonment or Inactivation of Gas Distribution Pipelines	X		X	X



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Gas Safety Plan Chapter					
Policy	Title	4	5	6	7
D7382	Requirements for Hot/Cold Squeezing of Steel Pipelines				X
D7383	Steel Pipe Squeezer 6" through 12"	X			X
D7385	RFS of 3/4 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 60-400 PSIG MAOP Distribution Mains			X	X
D7412	Excavation Requirements for Trench with Two Distribution Mains			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	Minimum Requirements for Pressure Control Operations on Distribution Pipeline Systems	X		X	X
D7907	Qualification Requirements Distribution Pressure Control				X
D7911	Purging of Distribution Gas Lines of 60 PSIG	X		X	X
D7912	Purging and Locking Service Risers	X		X	X
D7919	Changing a 3/4 Inch and 1 Inch Stopcock				X
D7927	Mueller 'D-4' and 'D-5' Tapping Machine Instructions				X
D7929	Mueller Line Stopper Unit No. 1				X
D7931	Mueller 'E-4' and 'E-5' Tapping Machine				X
D7933	Stopping Off Procedure for Service Ys				X
D7955	Pressure Control - 2" Top Half Fitting				X
D7956	Pressure Control - 3" and 4" Top Half Fitting				X
D7957	2-Inch Service Tee for Gas Mains 60 psig or Less				X
D8146	Replacement Criteria for Distribution Mains and Services	X		X	

Gas Safety Plan Chapter					
Policy	Title	4	5	6	7
D8147	Services - Repair vs. Replace Decisions	X			
D8164	Pressure Monitoring of Distribution Systems	X		X	X
D8167	Valve Inspection and Maintenance - Distribution	X		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	
D9102	Gas Mapping and Records	X		X	
D9103	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	
D9183	Excess Flow Valve and Service Pipe 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				
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



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Policy	Title	4	5	6	7
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 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
ESHSD-4100	Gas Distribution and Transmission				X
ESHSD-9999	Definitions				X
F17-1SD	Annual Performance Measures	X			
F4-1SD	Threat Evaluation Form	X			
F8-1SD	Baseline Assessment Plan Revisions Log	X			
G7008	Material Evaluation and Implementation	X			
G7011	Standard Specification for Natural and Substitute Fuel Gases	X		X	
G7017	Hydrogen Sulfide (H ₂ S) 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	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	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



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Gas Safety Plan Chapter					
Policy	Title	4	5	6	7
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
G7377	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating	X		X	X
G7379	External Surface Preparation and Field Applied Coatings for Buried Pipelines	X		X	X
G7380	Field Application of Grease Coating	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 Coating of Tanks, Vessels, & Drip Legs	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	Hand Backfill and Compaction Method			X	X
G7409	Imported or Native Backfill				X
G7410	Slurry Backfill				X
G7450	General Construction Requirements for Distribution Mains				X
G7451	Prevention of Damage to Subsurface Installations	X			
G7453	General Excavation Requirements			X	
G7460	General Construction Requirements for Distribution Service Lines				X
G7505	General Procedures for Field As-Built			X	



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: Appendix-SD
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Gas Safety Plan Chapter					
Policy	Title	4	5	6	7
G7506	Archiving of High-Pressure Records in PDMS	X			X
G7507	Map Maintenance Requirements for High Pressure Gas Lines	X			
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 Inch, 6 Inch and 8 Inch Ball Valves				X
G7955	4 Inch Ball Valve Assembly for Hot Tapping to 800 PSIG			X	
G7959	Tapping Through a 2 Inch Ball Valve				X
G7963	2 Inch Drilling Assembly for Drilling Existing 400 And 800 PSIG Pipelines			X	
G7967	Drilling Through A 2 Inch Mueller PCF With A "DH-5" Drilling Machine on Mains Above 60 PSIG				X
G7971	Stopping Off A 2 Inch Mueller PCF With A "DH-5" Drilling Machine on Mains Operating Above 60 PSIG				X
G7979	Line Stopper Units 3SW-500 And 4SW				X
G7980	Pressure Control: Mueller EH-5 Drilling	X		X	

Gas Safety Plan Chapter					
Policy	Title	4	5	6	7
	Machine				
G8001	Criteria for Cathodic Protection	X		X	
G8002	100mV Polarization Criteria	X		X	X
G8003	Design and Application of Cathodic Protection	X		X	X
G8006	Connect Copper Wire to Steel Pipe - Pin Brazing, Thermite Welding and Braze Welding Processes				X
G8009	Electrical Test Stations & Bond Assembly	X		X	X
G8013	Cathodic Protection - Mixed Piping Systems	X		X	X
G8014	Magnesium 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
G8021	Cathodic Protection - Inspection of Exposed Pipe	X		X	X
G8022	Atmospheric Corrosion (ACOR) - Inspection of Meter Set Assemblies	X		X	X
G8023	MAOP Evaluation of Corroded Pipe	X		X	X
G8024	Measurement of Remaining Wall Thickness	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



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Policy	Title	4	5	6	7
G8110	Voltage Gradient Survey	X			
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 Excavation Damage to Company Facilities	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 - Distribution		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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Policy	Title	4	5	6	7
G8166	Scheduling Remediation	X			
G8168	Immediate Repair Conditions - 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 Upgraded Pipelines and Pressure Test Failures of Pipelines	X			
G8172	Data Gathering and Integration	X	X	X	X
G8173	Threat Identification	X			
G8174	Risk Assessment of High Consequence Areas	X			
G8177	TIMP Risk Algorithm	X			
G8178	Baseline and Reassessment 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 Responsibilities		X	X	X



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G8216	Incident Command System (ICS) for Emergency Incidents	X	X	X	
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 Gas Incidents	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	
G8308	Contractor Safety Program	X			
G8315	Confined Space Operations			X	X
G8316	Incident Evaluation Process on Gas Systems		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 for Outdoor Work				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
G8704	Environmental Training	X			
G8706	Environmental Inspections, Search Warrants, Subpoenas, and Internal Notifications	X			
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
G9105	Design Factors for Steel Piping Systems	X		X	X
G9109	Electrical Facilities in Hazardous Areas			X	X
G9125	Valve Automation	X		X	X



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Policy	Title	4	5	6	7
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
T7375	Repair of Transmission Pipelines	X		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
T8149	Compressor Station Relief Valves	X		X	X



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T8151	Compressor Station Equipment: Isolation and Hold-Out Procedures for Maintenance or Alterations	X		X	
T8155	Fire Prevention and Protection - Transmission	X		X	
T8165	Gas Transmission System Relief Valves	X		X	X
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
T8206	Tap Requirements	X		X	X
TIMP.0	Table of Contents	X			
TIMP.1	Introduction	X			
TIMP.10	Remediation	X			
TIMP.11	Minimizing Environmental and Safety Risks	X			
TIMP.12	Preventive and Mitigative Measures	X			
TIMP.13	Continual Evaluation	X			
TIMP.14	Management of Change	X			
TIMP.15	Quality Assurance Plan	X			
TIMP.16	Record Keeping	X			
TIMP.17	Performance Plan	X		X	
TIMP.19	Communications Plan	X			
TIMP.20	Regulatory Interaction	X			
TIMP.3	HCA Identification	X			
TIMP.4	Data Gathering and Integration	X			
TIMP.5	Threat and Risk Assessment	X			
TIMP.8	Baseline Assessment Plan	X			
TIMP.9	Integrity Assessments	X			
TIMP.A	Terms, Definitions and Acronyms	X			