

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

_____)	
Order Instituting Rulemaking on the)	
Commission's Own Motion to Adopt New)	Rulemaking 11-02-019
Safety and Reliability Regulations for Natural)	(Filed February 24, 2011)
Gas Transmission and Distribution Pipelines)	
and Related Ratemaking Mechanisms.)	
_____)	

**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M)
NATURAL GAS SYSTEM OPERATOR SAFETY PLAN**

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June 29, 2012

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**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M)
NATURAL GAS SYSTEM OPERATOR SAFETY PLAN**

Pursuant to D.12-04-010, San Diego Gas & Electric Company (SDG&E) hereby submits its proposed Natural Gas System Operator Safety Plan (Safety Plan) for the Commission's consideration.¹ Attachment A is an Executive Summary of our proposed plan. Attachment B is the proposed Safety Plan itself. Note that the format of this plan is designed to be consistent with existing SDG&E safety-related documents. This Safety Plan is labeled "Draft" because it is still subject to Commission review and approval.

Respectfully submitted,

By: /s/ Michael R. Thorp
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¹ See D.12-04-010, mimeo., at 19 and 27.

ATTACHMENT A

**BEFORE THE PUBLIC UTILITIES COMMISSION
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**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M)
NATURAL GAS SYSTEM OPERATOR SAFETY PLAN
EXECUTIVE SUMMARY**

June 29, 2012

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**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M)
NATURAL GAS SYSTEM OPERATOR SAFETY PLAN
EXECUTIVE SUMMARY**

I. INTRODUCTION

At San Diego Gas & Electric Company (SDG&E), the safety of our employees, customers and communities has been and will continue to be our highest priority. Our tradition of providing safe and reliable service spans more than 131 years of our company history. Management’s safety philosophy is expressed in the following Commitment to Safety statement that our senior management team wholeheartedly endorses:

San Diego Gas & Electric’s longstanding commitment to safety focuses on three primary areas – employee safety, customer safety and public safety. 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

While we are proud of our safety and reliability achievements thus far, we know there is always room for improving the overall safety of our pipeline system and infrastructure.¹ SDG&E knows that we cannot be complacent, that we can always do better by applying forward-looking safety strategies, and that we should challenge ourselves to be even more diligent in maintaining the safety of our natural gas system. Our aim is to continuously drive process improvements throughout our pipeline system and operations, to meet state and federal safety regulations, and to stay abreast of industry best practices.

We make every effort to foster a work environment where employees are focused on and engaged in sustaining a culture that emphasizes safety, and in which they are encouraged to openly raise concerns and suggestions for improvement of our safety practices. As discussed in more detail below, we solicited safety-related suggestions via a survey of all gas operations employees and held a follow-up focus group. We intend to follow up on all comments received and schedule additional focus groups to make certain that we are addressing any issues or concerns they have related to our commitment to safety.

SDG&E has developed this natural gas system operator safety plan (Safety Plan) in response to direction from the California Legislature and the California Public Utilities Commission (Commission). This Safety Plan articulates the overarching guiding principles for the safe operation of our natural gas infrastructure and outlines the safety performance expectations and goals and objectives established by SDG&E's senior leadership team. It also provides a comprehensive description of the programs, policies, standards, and procedures, which together form our overall Safety Plan.

¹ This document is being developed for and applies only to SDG&E's natural gas operations in response to the direction from the California Legislature and the California Public Utilities Commission.

According to the Commission, the rationale for developing these natural gas system operator safety plans is to have the utilities reflect upon the existing methods they use to maintain the safe operation of their gas systems, and for them to change, optimize, or enhance those methods with the goal to enhance the overall safety of the gas systems in California.² The safety plans are to convey the “Executive Officer’s” safety performance expectations, policy principles, and goals/objectives for safety performance.³ SDG&E’s Safety Plan is responsive to these directives, and we intend to continue to carry out our own policy and the policy of the state and the Commission that each gas corporation place safety of the public and gas corporation employees as its top priority.⁴

II. BACKGROUND

Public Utilities Code Sections 961 and 963 were recently enacted by Senate Bill (SB) 705.⁵ The new code sections require each gas corporation in California to develop and implement a plan for the safe and reliable operation of its gas pipeline facilities. The Commission is required to accept, modify or reject the plan by year-end 2012.

Sections 961 and 963 require that the new gas pipeline safety plans establish how the utility will achieve certain specified goals. 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.⁶ SDG&E’s Safety Plan follows the organizational structure laid out by the Commission.

² D.12-04-010, mimeo., at 19.

³ D.12-04-010, mimeo., at 19.

⁴ This policy is expressly stated in Public Utilities Code (PUC) Section 963(b)(3).

⁵ CH. 522, Stats. 2011.

⁶ D.12-04-010, mimeo., at 15-17.

III. SAFETY PLAN SUMMARY

This Safety Plan outlines the safety performance expectations, policy principles, and goals and objectives of SDG&E's senior leadership team. It describes the programs, policies, standards, and procedures used by SDG&E to address the applicable elements of Public Utilities Code Sections 961 and § 963.

Through the plan's deployment, we hope to build upon our tradition of providing safe and reliable service by strengthening our safety systems, programs, and emergency response activities; implementing advanced technologies to increase our effectiveness in responding to incidents; augmenting communications with customers, emergency personnel and the general public about the hazards of natural gas and the company's efforts to minimize these hazards; engaging employees and contractors to solicit their ideas on how to increase the overall safety of our system; proactively looking for safety threats and mitigating them; and more.

The intent of this Safety Plan is to provide an overarching safety strategy and framework that will improve upon current best practices, reaffirm the company's long-standing commitment to safety, and establish the means to achieve continuous improvement. Below is a brief summary of the plan elements:

A. Safety Systems

Public Utilities Code Section 961 requires natural gas system operators to:

- (1) Identify and minimize hazards and systemic risks;⁷ and
- (2) Identify the safety-related systems that will be deployed to minimize hazards.⁸

SDG&E has numerous programs in place to try to identify and resolve potential problems before a safety-related incident occurs. These programs include extensive

⁷ PUC Section 961(d)(1).

⁸ PUC Section 961(d)(2).

operating and maintenance plans, public awareness plans, employee training programs, as well as the Transmission Integrity Management Program (TIMP), which provides assessments and improvements on transmission pipelines, and the Distribution Integrity Management Program (DIMP), which focuses on identifying potential threats to distribution lines and deploys measures designed to reduce the likelihood and consequences of pipeline failures.

These programs and plans are backed by a comprehensive set of Gas Standards for design, construction, operations and maintenance that are routinely reviewed and updated to reflect current regulations and best practices. In the area of integrity assessments, SDG&E only uses approved methods. Where operationally feasible, our preferred assessment method for transmission pipelines is in-line inspections (commonly referred to as “smart pigging”). In-line inspections allow pipelines to be internally inspected with sophisticated smart pigging tools.

Our long-term goal is to make our transmission pipeline system 100% “piggable,” where feasible. Currently, over 20% of the total transmission system is piggable and 15% of the pipelines in High Consequence Areas have been smart pigged. Although current regulations require that only pipelines located in High Consequence Areas be assessed under the TIMP, we expand inspections to include non-High Consequence Areas. In many cases, it is more practical to include non-High Consequence Area pipelines in the inspections rather than solely limiting the inspections to the segments of pipeline located in High Consequence Areas. We also perform leak surveys, pipeline patrols, damage prevention programs and corrosion control measures as part of our overall strategy to identify and minimize risk in our gas system.

In addition, our Pipeline Safety Enhancement Plan (PSEP), which is pending before the Commission, will strength test or replace those transmission pipelines that

do not have sufficient documentation of a strength test. Included in the PSEP is a comprehensive valve enhancement plan to increase our ability to respond to pipeline emergencies. In addition, our PSEP offers proposals to enhance the system beyond measures required by the Commission through retrofitting pipelines with existing and emerging technologies to provide advance warning of a potential pipeline failure and decrease the time to identify, investigate, prevent, remedy or manage the effects of such an event.

B. Emergency Response

Public Utilities Code Section 961 establishes several goals for natural gas system operators relating to emergency response:

- (1) Provide for appropriate and effective system controls, with respect to both equipment and personnel procedures, to limit the damage from accidents;⁹
- (2) Provide timely response to customer and employee reports of leaks, hazardous conditions, and emergency events;¹⁰ and
- (3) Prepare for, or minimize damage from, and respond to, earthquakes and other major events.¹¹

Despite our best efforts, the safety of our pipeline system and infrastructure will be tested -- whether by natural forces, such as earthquakes, or unintended dig-ins or pipeline ruptures caused by third-parties. Because these cannot always be avoided, SDG&E has a number of programs, policies, standards and procedures in place so that we and our employees can be 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.

⁹ PUC Section 961(d)(5).

¹⁰ PUC Section 961(d)(6).

¹¹ PUC Section 961(d)(8).

SDG&E conducts regular emergency preparedness drills and special scenario exercises to test and enhance employee proficiency in emergency assignments and to validate the effectiveness of our emergency plans. We also conduct incident debriefs to evaluate processes and employee understanding of policies. Appropriate adjustments to procedures and training are completed if necessary. In addition, employees are required to annually review policies and procedures to strengthen their understanding of emergency protocols.

We also work closely with local first responders and public safety officials to provide them direct access to SDG&E's dispatch office, share information on potential natural gas pipeline hazards, and inform them of our emergency operations and protocols. SDG&E also provides emergency personnel a system map of our high-pressure pipelines and instructions on how to locate our pipeline data via the National Pipeline Mapping System. This helps to provide coordinated response with emergency personnel in the event of a gas emergency.

SDG&E continues to promote awareness of the Underground Service Alert (811, "call-before-you dig") system by reaching out to contractors and the general public through bill inserts, the company website and other methods, to encourage the marking of gas lines before third-party excavation activities begin. SDG&E also continues to be involved in organizations and agencies such as the Common Ground Alliance to reduce third-party dig-ins that cause damage to our pipelines.

C. State and Federal Regulations

Public Utilities Code Section 961 requires that the safety plans of natural gas system operators:

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- (1) Include appropriate protocols for determining maximum allowable operating pressures (MAOPs) on relevant pipeline segments, including all necessary documentation affecting the calculation of MAOPs;¹²
- (2) 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 (DOT) in Part 192 (commencing with Section 192.1) of Title 49 of the Code of Federal Regulations;¹³ and
- (3) 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 DOT pursuant to those statutes.¹⁴

SDG&E has longstanding protocols in place for determining and managing the Maximum Allowable Operating Pressure of our pipelines. Following the San Bruno incident, SDG&E conducted a review of transmission pipelines located in Class 3 and 4 and High-Consequence Areas in Class 1 and 2 areas (basically populated areas) to identify pipelines that did not have sufficient record of a pressure test to verify a margin of safety. Of the approximately 200 miles of transmission lines in these areas, about 61 miles did not have sufficient documentation of a pressure test. About 98% of these lines were constructed before 1961 when the regulations did not require a post-construction pressure test. A similar review is being done on pipelines located in outlying areas. Nothing in our records review process has revealed any significant concerns with the currently-established MAOPs, and we remain confident that these pipelines are fit for service.

As mentioned earlier, SDG&E strives to stay abreast of and contribute to industry best practices and be a leader in the natural gas industry. Through its affiliation with Southern California Gas Company (SoCalGas), SDG&E maintains a

¹² PUC Section 961(d)(7).

¹³ PUC Section 961(d)(9).

¹⁴ PUC Section 961(c).

leadership position in many industry and trade organizations such as the American Gas Association, Gas Technology Institute, and Pipeline Research Council International to share and acquire best practices, identify new safety programs, and support the development of new technology. SDG&E, also through its affiliation with SoCalGas, has been involved in the development of robotic pigs to allow in-line inspection of previously un-piggable pipelines. The technology is finally reaching commercial development and will provide an additional tool for the industry to assess the integrity of their pipeline system. We have also taken advantage of other new promising technologies and have funded research projects to advance the pipeline and infrastructure safety.

D. Continuing Operations

Public Utilities Code Sections 961 and 963 require that natural gas system operators:

- (1) Make safety of the public and gas corporation employees the top priority;¹⁵
- (2) Provide adequate storage and transportation capacity to reliably and safely deliver gas to all customers;¹⁶
- (3) Provide for effective patrol and inspection to detect leaks and other compromised facility conditions and to make timely repairs;¹⁷ and
- (4) Ensure an adequately sized, qualified, and properly trained gas corporation workforce.¹⁸

Beginning on the first day of work, employees are taught that they have a responsibility to report unsafe conditions and have the ability to halt or stop work if

¹⁵ PUC Section 963(b)(3). Note that even though the Commission has specified this as a “Continuing Operations” issue, as explained above in Section III, SDG&E views this requirement as integral to our entire Plan.

¹⁶ PUC Section 961(d)(3).

¹⁷ PUC Section 961(d)(4).

¹⁸ PUC Section 961(d)(10).

they observe unsafe conditions. They attend employee orientation sessions where the company's structure, values and expectations are discussed. At these orientation sessions, leadership facilitates a discussion on safety, emphasizing its foundational nature and the importance of safety in our industry and that safety should never be compromised. After their orientation, employees attend training where they learn how to perform their jobs in a manner that will keep them, our customers and the public safe. Employee training includes two-way discussions regarding the company's practices and procedures, hands-on practice performing the duties associated with the position, one-on-one coaching, and question and answer discussions that are designed to facilitate learning. Our employees' ability to stop work if they observe unsafe conditions and their obligation to report such conditions to management is re-emphasized. Employees must pass rigorous tests during their training, including an assessment of their understanding of safety-related practices and procedures. In the event their position requires they perform DOT-covered pipeline work, they must also successfully pass Operator Qualification testing and maintain that proficiency before they are permitted to perform the work.

Employees who have passed training and Operator Qualification testing then report to their assigned work location on probationary status. During the typical six-month probationary period, employee job performance is closely monitored. Safety policies and procedures are reviewed on a frequent basis – both by management and by co-workers. Employees participate in daily safety tailgate meetings, safety committee meetings, policy and procedure training and reviews, and the behavior-based safety “job observation” program.

Employees receive one-on-one coaching on how to perform their assigned responsibilities safely and efficiently. The coaching is provided by non-management employees (peer to peer) as part of our behavior-based safety programs. Trained

observers provide both positive feedback regarding employees' job safety performance as well as constructive feedback on how they can improve upon any observed at-risk conditions or behaviors. The coaching sessions provide a forum for two-way discussion, and employees are provided an opportunity to make suggestions as to how they believe safety can be improved. Employees are also given methods to provide ongoing safety suggestions through their supervisor, to Safety and Operations staff, through surveys and focus groups, through the employee hotline, and directly to the Commission.

As a result of our safety programs and activities, employee accidents and injuries have begun to dramatically decline. During the past five years, there has been a 49% drop in the OSHA Recordable Rate and a 40% drop in the Lost Time Incident Rate for employee injuries at SDG&E.

As stated, SDG&E takes seriously its responsibility to provide safe and reliable service to its customers. To provide reliable service to customers, we need adequate transportation capacity. Although SDG&E does not operate gas storage fields, SDG&E's transmission system is fully integrated with SoCalGas' system. Over the years, the system requirements have changed and will likely require additional pipeline capacity in the region. SDG&E is evaluating expansion opportunities to enhance the reliability of the gas transmission system serving the San Diego region.

Leak surveys and patrols are also key activities that support a safe operation and help to maintain system reliability. SDG&E uses pipeline patrols to look for signs of leakage, missing pipeline markers, construction activity, and other factors that could affect pipeline safety and operation on transmission pipelines. Recently, SDG&E implemented a computer-based work order and scheduling system to facilitate timely compliance with survey and maintenance requirements and leak repairs. The leakage rate on distribution pipelines has continued to decrease over the past several years due

to improvements to the company's strategic pipeline replacement program -- Distribution Risk Evaluation and Monitoring System, or DREAMS.

Our commitment to high quality service and our determination to comply with all applicable regulations are key factors that help to determine the size of our workforce. We continue to evaluate appropriate staffing levels (including the use of contractors) to preserve the safety and integrity of our pipeline system. SDG&E assesses the workforce requirements on an ongoing basis, plans and budgets accordingly, and hires and trains the necessary frontline workforce. Contractors are also required to meet strict requirements. We anticipate growth in our workforce to address many of the new pipeline regulations being implemented by the Commission and DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA).

E. Emerging Issues

Public Utilities Code Section 961 provides that the safety plans of natural gas system operators should also include any additional matter that the Commission determines should be included in the plan.¹⁹ SDG&E is not aware of any matters that the Commission wants to see in our Safety Plan that are not provided above or are not part of the Commission's ongoing efforts in the pipeline safety rulemaking proceeding. However, we view our Safety Plan as a living document that will evolve over time as we continue to seek opportunities to improve our safety practices and programs.

IV. WORKFORCE PARTICIPATION

Public Utilities Code Section 961 provides as follows:

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

¹⁹ PUC Section 961(d)(11).

culture of safety that will minimize accidents, explosions, fires, and dangerous conditions for the protection of the public and the gas corporation workforce.²⁰

To comply with these directives, we took the following actions in the development of the Safety Plan:

- The company engaged management and non-management frontline employees; made pipeline safety presentations; and solicited feedback and ideas on the plan with the goal of gathering meaningful and substantial information to improve pipeline safety. The Safety Plan will be available to all employees and will be stored online and reviewed periodically under the direction of an executive who will be the designated "owner." Systems are being established to allow all employees the opportunity to comment on the Safety Plan and to make ongoing suggestions.
- SDG&E solicited safety-related suggestions via a survey of all gas operations employees. We received more than 70 questionnaire responses with suggestions ranging from tools and training to public awareness and pipeline design. The employee surveys were logged and recorded and the company is in the process of analyzing responses and planning follow-up activities. A follow-up focus group was held with employees to receive clarification and additional input. We intend to schedule additional focus groups to further clarify the input we received and to make certain that we are addressing any issues or concerns they have related to our commitment to safety. We also plan to use these sessions to refine the direction for future pipeline safety improvements.
- We sent information to all of our pipeline contractors asking them for their input and suggestions. As with employee comments, we intend to follow up on

²⁰ PUC Section 961(e).

comments received from our pipeline contractors to make certain we are addressing any issues or concerns they have related to our commitment to safety.

- In all presentations, employees were informed that anyone 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. It included the address of the Director of the Commission’s Consumer Safety and Protection Division and instructed employees to designate “Safety Breach Notification from Gas System Operator Employee–Confidentiality Requested” to seek confidential treatment.²¹
- A summary of the pipeline safety suggestion process, including how to provide ongoing suggestions to Operations Staff and the Commission, is posted on all Operations organization bulletin boards. That posting also directs employees to an Operations SharePoint site where the Safety Plan and the suggestion process are included.

V. MANAGEMENT’S PIPELINE SAFETY EXPECTATIONS, POLICY PRINCIPLES, GOALS, AND OBJECTIVES

SDG&E believes that operating a safe delivery system is the core of what we do and who we are as a utility. The company takes an integrated approach to pipeline integrity and safety, beginning with the design and construction of facilities and followed by continuous monitoring, evaluation and improvement in our business practices, operation and maintenance activities, public outreach, emergency response, employee training, safety programs, and new technologies. We strive to have a workplace culture that encourages open discussion of safety-related issues, emphasizes personal accountability, and promotes creative solutions. We believe these values have

²¹ D.12-04-010, mimeo., at 20.

been the cornerstone of SDG&E's success in providing safe and reliable service, and will continue to guide our actions.

A. Pipeline Safety Expectations

Our expectations are to continue to remain focused on implementing safety enhancement measures, as needed, to provide safe and reliable service to our customers. Moving forward, we are committed to meeting regulatory requirements, evaluating our policies and procedures against industry best practices, moving toward continuous process and system improvements, and engaging our employees in pipeline safety activities.

SDG&E has historically been committed to pipeline and infrastructure safety. Nonetheless, the tragic San Bruno incident and the actions that followed have further emphasized the importance of having strong management systems and programs in place, as well as a well-trained and experienced workforce to manage the day-to-day operation of our pipelines. SDG&E operates about 250 miles of transmission pipeline and two compressor stations as part of our transmission system and nearly 15,000 miles of distribution mains and services for our distribution system. SDG&E expects and demands that employees and contractors take all reasonable measures necessary to provide for the safe operation of these facilities and to protect our workforce, customers, and the public. These expectations are embedded in our training, policies, procedures, programs, self audits, and annual reviews. We recognize the requirement to have records for the safe operation of our facilities and a comprehensive set of programs, policies, standards and procedures to maintain a safe and reliable system. We also recognize that we are not perfect. Over the many decades that our system was constructed and expanded, some records were not kept as we would like them to be. We are committed to addressing this area as we work with the Commission and other regulatory agencies to comply with increasing standards that govern the safety of the

pipeline system. We acknowledge that while our overall system is safe as it exists today, we can still do more to enhance its overall safety and reliability.

B. Pipeline Safety Policy Principles

The Safety Plan builds on a number of key policy principles. These are:

- The unambiguous commitment of senior leadership to safety being our #1 priority.
- Safety is embedded in all of our business practices: system design, construction, ongoing operations, and capital investments.
- We will comply with all safety regulations.
- Personal accountability is key. Employees are given the training and tools they need to do the job safely, and they have the authority to “stop the job” if they believe it's unsafe.
- An open and transparent work environment is critical. All employees have the freedom to raise safety issues without fear of retaliation. They are encouraged to contribute to finding creative solutions to improving safety.

C. Pipeline Safety Goals/Objectives

As we continue to build on our longstanding tradition of safety, we continue to comply with all regulations governing the operation of our pipeline system, are working toward completion of all baseline and reassessment work done under the TIMP, and are expanding our goals and objectives around pipeline safety to include the following:

- Reduction of the number of hazardous leaks on the distribution system;
- Ongoing, proactive assessments of potential safety threats and the development of mitigation actions; and

- Prioritization of projects within the DIMP to maximize safety.

These activities will help to further enhance the overall safety and reliability of our pipeline system.

VI. CONCLUSION

SDG&E has been committed to providing safe and reliable natural gas to our customers for more than 131 years. The company has developed programs, policies, standards and procedures to maintain the safe operation of our natural gas pipelines and facilities. These efforts and activities are built on the foundation that safety is a key part of our daily operations.

This Safety Plan is one of many tools we will employ so that we can continue to provide safe and reliable service to our customers. We will continue to invest in our facilities, people, technology and operations in a manner that complements previous investments and enhances the long-term safety and reliability of our system while avoiding short-sighted or reactive actions that do not improve safety and could result in unnecessary or duplicative expenditures.

SDG&E appreciates this opportunity to articulate our pipeline safety performance expectations, policy principles, and performance goals/objectives, and to describe our various safety-related pipeline programs, policies, standards, and procedures. We look forward to the upcoming critical examination of our Safety Plan, as well as our underlying pipeline safety practices and procedures.

/s/ Michael R. Niggli
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President and Chief Operating Officer

/s/ J. Chris Baker

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/s/ Robert M. Schlax

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Vice President, Controller, Chief Financial Officer, Treasurer and Chief Accounting Officer

/s/ Michael M. Schneider

Michael M. Schneider
Vice President – Customer Operations

/s/ Daniel F. Skopec

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Vice President – Regulatory and Legislative Affairs

/s/ Hal D. Snyder

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Vice President – Customer Solutions

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Vice President – Customer Services

ATTACHMENT B



**NATURAL GAS SYSTEM
OPERATOR SAFETY PLAN -
DRAFT**

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SECTION	DESCRIPTION	REQUIRED ELEMENTS FROM CA Public Utilities Code § 961 and § 963
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2	EXECUTIVE OFFICER’S SAFETY PERFORMANCE EXPECTATIONS	961(b)(4)
3	PLAN DEVELOPMENT & IMPLEMENTATION	961(e)
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**NATURAL GAS SYSTEM
OPERATOR SAFETY PLAN -
DRAFT**

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SUMMARY OF DOCUMENT CHANGES & FILING INSTRUCTIONS	
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Part of SoCalGas O&M Plan (reviewed annually):	No
Part of SDG&E O&M Plan (reviewed annually):	No
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Transmission IMP (TIMP):	No
TIMP 49 CFR Codes & Impacted Sections:	
Part of Distribution IMP (DIMP):	No
Additional 49 CFR Codes Covered by Document:	
Learning Module (LM) Training Code:	



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1. PUBLIC UTILITIES CODE SECTIONS 961 AND 963 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 that each gas corporation in California develop a plan for the safe and reliable operation of its gas pipeline facility and requires that the California Public Utilities Commission (Commission) accept, modify, or reject the 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 (Safety Plan), with documentation of the workforce comment process described in the decision, by June 29, 2012.

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 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”. 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 its 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.”

3. SAFETY PLAN STRUCTURE

This Safety Plan conveys the safety performance expectations of SDG&E’s Senior Management Team, and describes all of the safety plans, programs, policies, standards, and procedures that are designed to accomplish those expectations. In the hierarchy of SDG&E documents that communicate its safety program, this Safety Plan is at the top.

Public Utilities Code Sections 961 and 963 require that the new 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 Safety Plan follows this organizational structure laid out by the Commission and is



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divided into sections corresponding to these 5 categories, with each section representing a required Safety Plan element or other significant element or aspect of the Safety Plan.

SDG&E has numerous existing safety programs, plans, and procedures in place that address specified infrastructure or areas of company activity. The intent of this proposed Safety Plan is not to duplicate these existing safety program components, but to provide an overarching safety strategy that will encompass all the plans, programs, and policies, and affirm SDG&E’s commitment to safety.

The Appendix to this Safety Plan provides a listing of the safety program components discussed in the plan.

4. 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 Safety Plan shall be reviewed by the safety-related program owners and coordinated by the Director of Safety in accordance with the schedule established by the Commission.



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1. INTRODUCTION

In D.12-04-010, the Commission reiterated the requirements of California Public Utilities Code §961 (b)(4). This section requires that the safety plan achieve the following:

§ 961(b)(4) “The commission shall require each gas corporation to periodically review and update the plan, and the commission shall review and accept, modify, or reject an updated plan at regular intervals thereafter. The commission, pursuant to Section 1701.1, shall determine whether a proceeding on a proposed update to a plan requires a hearing, consistent with subdivision (e).”

Section 3.1 of D.12-04-010 also requires that this Safety Plan “convey the Executive Officer’s safety performance expectations, policy principles, and goals/objectives for the gas utility’s safe performance.”

This Section provides the safety performance expectations, policy principles, and goals/objectives for safe performance established by SDG&E’s senior management team.

2. SENIOR MANAGEMENT TEAM SAFETY PERFORMANCE STATEMENT

At SDG&E, the safety of our customers, employees, and communities has been and will be our top priority. This tradition of safety spans more than 131 years, and is the foundation for company programs, policies, procedures, guidelines, and best practices. Management’s pipeline safety expectations can best be described by the following Commitment to Safety statement that our senior management team wholeheartedly endorses:

San Diego Gas & Electric’s longstanding commitment to safety focuses on three primary areas – employee safety, customer safety and public safety. 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



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3. 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 can raise pipeline infrastructure, customer safety, and employee safety concerns and offer suggestions for improvement.

SDG&E’s safety performance will be regularly monitored and evaluated in accordance with all state and federal regulations. Additional performance metrics shall be maintained and evaluated, as appropriate, to foster a culture of continuous safety improvement. These performance metrics shall be reviewed and communicated in accordance with the schedules identified in the specific policy, program, plan or other document incorporated as part of the Safety Plan.

In addition, SDG&E shall monitor 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.

4. GOALS AND OBJECTIVES

SDG&E takes an integrated approach to pipeline integrity and safety, beginning with the design and construction of facilities and followed by continuous evaluation and improvement of operation and maintenance activities, public communication and awareness, emergency response, safety programs and practices, the implementation of new technologies, and a workplace that encourages continual open and informal discussion of safety-related issues.

Our goal is to continuously drive process improvements throughout our pipeline system and operations, to meet state and federal safety regulations, and to stay abreast of industry best practices.

5. PROGRAM REVIEW AND MODIFICATIONS

Upon Commission approval of this Safety Plan, profiles of related documents shall be updated to be readily identified as being subject to this plan. All components of this Safety Plan must be reviewed and updated per their scheduled review period. If changes are needed, they shall be made as soon as practicable, and not deferred until the next scheduled review.

This Safety Plan shall be reviewed by the safety-related program owners and coordinated by the Director of Safety in accordance with the schedule established by the Commission.



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1. PLAN DEVELOPMENT AND IMPLEMENTATION AND CALIFORNIA PUBLIC UTILITIES CODE § 961 (e)

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 961(e). This section requires that the safety plan achieve the following:

- § 961(e) “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.”

2. CPUC DIRECTIVES ON WORKFORCE PARTICIPATION

To comply with PUC 961(e) directives, 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 Safety Division and the designation “Safety Breach Notification from Gas System Operator Employee–Confidentiality Requested” to seek confidential treatment.

3. EMPLOYEE SAFETY PLAN CONTRIBUTION PROCESS

Employees play a critical role in SDG&E's pipeline safety activities and have been an important part in developing this Safety Plan. Going forward, SDG&E will continue to look for regular and substantial safety-related input from its employees.

In the development of this Safety Plan, SDG&E engaged employees and solicited their feedback and ideas on the Plan. This activity was also another opportunity to convey the company's safety-focused messages and encourage open and informal discussion of safety-related issues.



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SDG&E held employee meetings where managers and supervisors discussed components of the draft Safety Plan. SDG&E encouraged employees to ask questions and complete a survey with their process improvement and safety suggestions. In the survey, employees were asked to include their name, work location and a phone number in the event that further information was required to generate a response. However, employees were also told that they were welcome to remain anonymous.

SDG&E asked employees to submit their survey comments in one of the following ways: complete an electronic survey available on a SharePoint site; submit written ideas through company mail to the Field Services Manager; or provide their supervisor/manager with their ideas, which would be forwarded to the Field Services Manager.

SDG&E also explained that employees could provide information directly to the Commission if they choose. Employees were provided with the address of the Director of the Commission’s Consumer Protection and Safety Division and the designation “Safety Breach Notification from Gas System Operator Employee–Confidentiality Requested” to seek confidential treatment.

SDG&E also took the following steps to promote employee participation in the development of the Safety Plan:

- SDG&E created an internal website, which featured copies of the draft Natural Gas System Operator Safety Plan, employee survey and presentation. The site explains to employees how to provide ongoing pipeline safety suggestions and reminds them that they may provide information directly to the Commission if they choose.
- SDG&E circulated employee bulletins which explained how to access the Safety Plan and provide input to the company (supervisor, phone, mail, and website) or directly to the Commission, including the statement in the paragraphs above on how to provide that information to the Commission anonymously. These bulletins remain posted on employee bulletin boards, and will serve as an ongoing reminder to employees on how to provide safety suggestions.
- SDG&E organized a focus group to solicit additional comments from employees who had provided feedback.
- SDG&E added links to the Safety Plan from the company's intranet site.

In addition, SDG&E shared its draft Safety Plan with contractors and asked for their suggestions and recommendations.

SDG&E received over 60 employee survey responses with suggestions ranging from tools and training to public awareness and pipeline design. The employee surveys were logged and recorded and SDG&E is in the process of analyzing responses and planning follow-up activities.



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SDG&E will prepare a summary of the employee feedback received and make it available to employees via the website. Systems are being established to allow employees the opportunity to comment on the Plan and to make ongoing suggestions.

Upon implementation, SDG&E will monitor various aspects of the Plan for process improvements which may include the use of additional focus groups, collaboration with employee safety committees, and hosting employee workshops concentrating on defining improvements to tooling and training.

The Safety Plan will be available to all employees and will be stored online and reviewed periodically.



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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 961 (d)(1) and (d)(2). These sections require that the safety plan achieve the following:

- § 961(d)(1) 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.
- § 961(d)(2) 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.

The following plans and programs are in place to identify and minimize hazards and systemic risks in the pipeline infrastructure, and promote public safety and property protection.

- Transmission Integrity Management Program
- Distribution Integrity Management Program
- Operation and Maintenance Plan

In addition, SDG&E has filed its Pipeline Safety Enhancement Plan (PSEP) with the Commission to address requirements for transmission infrastructure that are beyond current federal requirements and GO 112-E.

Each of these programs is subject to continuous improvement efforts and changes are made when warranted to further protect the public and SDG&E workforce.

2. TRANSMISSION INTEGRITY MANAGEMENT PROGRAM (TIMP)

The Transmission Integrity Management Program (TIMP) is an ongoing program that was developed in accordance with the requirements of the Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA), specifically Title 49 Code of Federal Regulations Part 192, Subpart O - Gas Transmission Pipeline Integrity Management.

The TIMP written plan describes how SDG&E complies with the requirements of CFR 192 subpart O. The written plan outlines the approach to implementing the requirements of the Rule and the referenced industry standards, including ASME B31.8S and NACE SP 0502-2008. The document includes a description of each required Program element and identifies or references the procedures and processes for completing those requirements. The TIMP written plan has sixteen chapters that are the policy documents for compliance with the gas transmission pipeline integrity requirements.



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The TIMP is designed to provide assessments and integrity improvements on transmission pipelines by outlining responsible parties, timelines for each process element, lessons learned, and a best practices methodology. Processes are aimed at identifying threats through data gathering and routine testing, assessing materials integrity, and determining remediation, preventive and mitigation steps for those threats.

As part of the program, information concerning the pipeline infrastructure, operating environment 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 specific integrity-related work plans are developed.

SDG&E employs the following pipeline integrity management activities to assess and evaluate pipelines in the system: in-line inspections, pressure testing and direct assessment. Where operationally feasible, the preferred assessment method for transmission pipelines is in-line inspections. These evaluations address the efficacy of the systems in place to maintain the safe operation of the transmission pipeline including corrosion control and damage prevention programs.

The TIMP written plan is reviewed each calendar year as part of the continual improvement process, with modifications being made as necessary.

The TIMP and the related and referenced procedures identify and prescribe activities to minimize transmission systemic risks and document its history and capability.

3. DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM

The Distribution Integrity Management Program (DIMP) is an on-going program that was developed in accordance with the requirements of the DOT and PHMSA, specifically Title 49 Code of Federal Regulations Part 192, Subpart P – Distribution Pipeline Integrity Management. SDG&E published its DIMP written plan in August 2011. The program's purpose is to improve pipeline safety by having operators identify and reduce pipeline integrity risks on distribution pipelines.

SDG&E's DIMP focuses on potential threats and measures designed to reduce the likelihood and consequences of pipeline failures. Specifically, it addresses system knowledge; threats; evaluation and ranking of risk; measures to address risks; performance measurement; results monitoring; effectiveness evaluation; periodic evaluation and improvement; and results reporting. SDG&E's written DIMP plan has nine chapters and requires the integration of data from many sources for analysis and subsequent action based upon the analysis.

The DIMP includes certain activities SDG&E has routinely performed in the past, and it requires the development of a more formal and structured approach toward the company's traditional core regulatory pipeline integrity-related obligations.



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New regulatory reporting requirements have also been added in Subpart P of our DIMP written plan that include the reporting of above-ground leak repairs, hazardous leaks resulting from mechanical fitting failure, the number of excavation tickets, the number of excess flow valves installed, and other safety performance information.

The DIMP written plan and related and referenced procedures identify and prescribe activities to minimize systemic and localized risks to the Distribution system, and document relevant system information.

SDG&E's DIMP is reviewed at a minimum every five calendar years as part of the periodic improvement process, with modifications being made whenever necessary.

4. OPERATION AND MAINTENANCE PLAN

SDG&E's Operation and Maintenance (O&M) plan is a compendium of 119 policies that meet the requirements 49 CFR 192.605 "Procedural manual for operations, maintenance, and emergencies". This plan includes policies that address:

- Operating, maintaining, and repairing the pipeline and 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
- Review of procedures to determine effectiveness and adequacy
- Safety procedures for excavation
- Control room management

The O&M plan is reviewed annually to verify that the referenced documents containing policies and procedures remain in compliance with the requirements of the relevant sections of 49 CFR regulations. The policies and procedures referenced are updated throughout the year in response to new information or regulations, technology or other items that drive improvement to the policy.

Individual documents referenced by the O&M plan undergo full functional reviewed 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 according to the current requirements. To help employees remain knowledgeable of the critical policies and procedures, including those related to safety, SDG&E provides annual review training for all operating employees.

The documents referenced by the O&M plan identify and prescribe activities to minimize pipeline systemic risks and document its history.



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5. PIPELINE SAFETY ENHANCEMENT PLAN

SDG&E submitted its Pipeline Safety Enhancement Plan (PSEP) with the Commission in August of 2011 in response to the Commission’s directive that all gas corporations subject to the Commission’s jurisdiction develop and implement a plan to replace or pressure test all transmission pipelines that have not been tested to modern standards. The Commission also required that gas corporations include in their safety enhancement plans proposals for automating shutoff valves.

The PSEP’s key elements include:

- A two-phased approach and prioritization process for the pressure testing or replacement of transmission pipeline segments that were not tested to modern standards.
- Criteria for determining whether to pressure test or replace pipeline segments.
- A proposal for enhancing SDG&E’s valve infrastructure. This proposal includes installing additional remote control and automated shutoff valves, and installing supporting equipment and system features on transmission pipelines.

All testing, replacement, valve work and other infrastructure activities completed as part of the PSEP shall be completed in accordance with this Safety Plan.

PSEP also offers proposals to enhance the pipeline system beyond measures required by the Commission through retrofitting pipelines 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, and it includes alternatives that can be adopted by the Commission that are designed to reduce costs for customers.



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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 California Public Utilities Code § 961 (d)(5), (d)(6) and (d)(8). These sections require that the Safety Plan achieve the following:

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

SDG&E has a number of 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.

2. EMERGENCY RESPONSE PLAN

The Gas Emergency Response Plan documents how SDG&E complies with the emergency response requirements specified by the Public Utilities Code 961 (d)(5)(6) and (8), as well as the emergency response procedures required by 49 CFR Part 192.615. This plan covers the following emergency response elements:

- SDG&E’s Emergency Response Organization, including positions and responsibilities of the Emergency Operations Center and Gas Emergency Center and Transmission Command Post;
- Emergency preparedness;
- Continuity planning;
- Mutual assistance; and
- Plan maintenance.

The plan incorporates by reference SDG&E procedures and documents that collectively comply with the various requirements of 49 CFR Part 192.615 including:

- The responsibility of customer contact centers, which receive customer reports of emergencies and leaks;



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- 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; and
- The Emergency Incident Reporting 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.

This Emergency Response Plan 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.

SDG&E prepares and maintains written plans that address emergency or disaster situations, including earthquake response. As part of these plans, 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. The 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;
- a Gas Emergency Center at Miramar in coordination with Southern California Gas Company’s Transmission Command Post, which are activated for larger emergencies that involve repair and restoration efforts as well as technical support, logistics, and communications activities; and
- an Emergency Operations Center, which is for large scale events that may involve a large number of customers across regions or an event that may require the coordination and communication with multiple internal and/or external organizations (such as significant earthquakes).



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SDG&E has a regional Gas Emergency Center that coordinates responses with SoCalGas’ Transmission Command Post, and an Emergency Operations Center staffed with trained personnel to respond to and recover from major emergencies. SDG&E also has a backup Emergency Operations Center in the event the main center becomes inoperative.

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.

SDG&E has begun, and shall continue, to integrate elements of the Incident Command System (ICS) into the company’s field response structure. 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.

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



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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 California Public Utilities Code § 961 (c), (d)(7) and (d)(9). These sections require that the safety plan achieve the following:

- § 961(d)(7) 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.
- § 961(d)(9) 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.
- § 961(c) 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.

This chapter provides how SDG&E complies with these directives.

2. REGULATORY OVERSIGHT

SDG&E’s Transmission and Distribution pipelines and facilities are regulated by PHMSA on the federal level, and by the Commission 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.

The State of California’s rules governing the design, construction, testing, operation, and maintenance of gas transmission and distribution piping systems are specified in Commission’s General Order 112-E.

The Commission has incorporated Title 49 of the Code of Federal Regulations (49 CFR), Parts 190, 191, 192, 193, and 199, which govern the design, construction, testing, operation, and maintenance of Gas Piping Systems into its General Order 112-E.

This Safety Plan and the related documents shall remain consistent with industry best practice, General Order 112-E and the applicable Parts of Title 49 of the Code of Federal Regulations.



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SDG&E’s gas standards, including O&M procedures, are developed to comply with federal, state and local regulations. To meet new laws, rules, and regulations, the Gas Engineering department is designated to monitor and track changes to legislation 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. SDG&E 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 these activities to comply with all regulations and requirements.

3. COMPLIANCE WITH GENERAL ORDER 112-E

In accordance with General Order 112-E and by incorporation, 49 CFR Part 192, SDG&E has implemented and follows policies, procedures and programs that govern the design, construction, 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 procedures, policies and programs associated with this Section are listed in the Appendix.

These policies, procedures and programs have been developed to 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 pipe 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 pipe and facilities are also designed with materials of sufficient strength to contain internal pressures plus appropriate 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.



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- 3.2. Construction: 49 CFR Part 192 Subparts E, F, and G specify the minimum requirements for the construction of transmission and distribution facilities, including the welding and joining pipe and components as well as the protection of the pipe and facilities from hazards such as unstable soil, landslides, and other hazards that may cause the pipe to move or sustain abnormal loads. SDG&E’s transmission and distribution pipe 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. SDG&E’s patrol, leak survey, pressure limiting, valve and vault maintenance activities are further explained as follows:
 - 3.4.1. Patrol: Pipeline patrols are performed to look for indications of pipeline leaks, missing pipeline markers, construction activity, right of way encroachment and other factors that may threaten the pipeline. These patrols are to be performed at specified frequencies dependent upon the type of facility and its location.
 - 3.4.2. Leak Survey: SDG&E conducts leakage surveys of its pipelines at frequencies that are specified in the regulations. These surveys are typically conducted using combustible gas detectors. Leak indications are to be recorded and assigned a priority code based upon the concentration of gas recorded by the instrument as well as other relevant factors that may exist in proximity to its location. The highest priority leaks are to be continuously monitored and repaired promptly. Small leaks that pose little threat to the public are to be monitored and repaired based on operating conditions.
 - 3.4.3. Pressure Monitoring and Control: Each pipeline system receives supply from higher pressure pipelines connected to the integrated system. Equipment exists between systems to regulate and control the pressure in each pipeline. Failure of pressure control equipment could result in the accidental over-pressurization of pipelines not designed to withstand the higher pressure of the upstream system. Accordingly, the pipeline systems are to be equipped with appropriate regulating, or limiting devices that will activate in the event the primary



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pressure control device fails. These devices have sufficient capacity and are to be set to prevent the over pressurization of pipe and pipeline components commensurate with regulatory requirements.

Each pressure limiting station and pressure regulating station and its equipment must be inspected once per year. These inspections verify that the equipment is:

- In good mechanical condition;
- Adequate from the standpoint of capacity and reliability of operation for the service in which it is employed;
- Set to control or relieve at the correct pressure consistent with the pressure limits of applicable regulatory requirements; and
- Properly installed and protected from dirt, liquids, or other conditions that might prevent proper operation.

Any defective or inadequate equipment found must be promptly repaired or replaced.

3.4.4. Corrosion Control: Requirements for the protection of metallic pipelines from external, internal and atmospheric corrosion are prescribed in Subpart I – Requirements for Corrosion Control. Corrosion Control Activities include:

- The use of protective coatings and paints to prevent a corrosive atmospheric or soil environment from coming in contact with the external steel surface
- For the external surface of buried steel, the use of Cathodic Protection (CP) systems. CP is a technology that uses direct electrical current to counteract the normal corrosion of a metal pipeline.
- Management of the composition of the gas in the pipeline to prevent the formation of a corrosive environment and prevent internal corrosion.

3.4.5. Valve Maintenance: SDG&E performs maintenance and inspection activities on all valves that may be necessary for the safe operation of its natural gas system. These valves include system isolation valves, inlet and outlet valves to regulator stations, bridge approach valves and high pressure line sectionalizing valves. All identified valves are to be checked and serviced at least once each calendar year. Routine maintenance and inspection activities include:

- Valve is not leaking;
- Valve is properly identified;
- Valves are adequately lubricated; and
- Valve operation is verified



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Any issues requiring immediate action are to be addressed right away. All required follow-up work is managed through the issuance of an appropriate work order to perform needed repair or maintenance activities.

3.4.6. Vault Maintenance: Underground vaults typically house pressure regulating or pressure limiting equipment. The purpose of the vault is to allow access to the equipment for inspection, maintenance, and repair activities. SDG&E performs routine maintenance and inspection on all underground vaults. Vault maintenance normally coincides with the scheduled maintenance of the equipment housed within the vault. These inspections are to be completed once per year. Routine maintenance and inspection activities for underground vaults include:

- Proper operation of ventilation equipment, if so equipped;
- Structural condition of vault walls, floor, ladders, steps, handrails, etc.;
- Structural condition and operation of cover, including hinges and locking devices; and
- Correct for any presence of water, trash or other foreign substances.

Any issues requiring immediate action are properly addressed. All required follow-up work is managed through the issuance of an appropriate work order to perform needed repair or maintenance activities.

3.5. Operations: 49 CFR Part 192 Subpart L and K specifies 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 include the Emergency Response Plan described in Chapter 5 of this 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. SDG&E operates its pipelines and facilities in accordance with these requirements:

3.5.1. Public Awareness Program: The regulations governing public awareness programs require pipeline operators to provide the following elements:

- Damage prevention awareness for excavators;
- Emergency plans for fire, police, and public officials; and
- Public education.

The Public Awareness Program includes elements for the education of the



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affected public, government organizations and excavators including, but not limited to:

- The 811 one-call notification system which is to be used prior to excavation as well as other damage prevention methods;
- The possible hazards associated with unintended releases from a gas pipeline facility;
- Physical indications of a pipeline release of gas;
- Public safety measures to be taken in the event of a pipeline gas release; and
- Procedures to report a pipeline release.

The Public Awareness Program identifies specific audiences to be considered for targeted communications, the frequency of the communication for each audience, and the method of delivery. Many different audiences receive SDG&E communications, including:

- Customers;
- Excavators and land developers;
- Public Officials -- school districts, city and county managers;
- Emergency officials;
- Residents and places of congregation along transmission lines;
- Residents within the distribution service territory; and
- Residents near compressor stations and underground natural gas storage fields.

3.5.2. **Damage Prevention Program:** The purpose of the Damage Prevention Program is to avert gas incidents -- such as dig-ins to SDG&E's pipelines -- and thereby improve public safety and property protection through public education and outreach activities. SDG&E continues to promote awareness of the Underground Service Alert (811, "call-before-you dig") system by reaching out to contractors and the general public through meetings, mailers, bill inserts, the company website and other methods, so that gas lines are properly marked before excavation activities. Pipeline markers are to be accurate and visible. Excavation activity includes excavation, blasting, boring, tunneling, backfilling, the removal of aboveground structures by both explosive or mechanical means, and other earth moving operations.

3.5.3. **Control Room Management:** Gas Control monitors and/or controls pipeline facilities on a 24/7 basis. Gas Control personnel are Operator Qualified per 49 CFR 192 Subpart N and are to maintain pipeline pressures and gas flows within established safe limits while meeting customer supply demands.



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In the event of an emergency, Gas Control personnel have the ability to stop the flow of gas to a given area, or reroute it, depending on the situation. Gas Control works with the Transmission Command Post, which communicates with the Emergency Operations Center and Gas Emergency Centers, to coordinate activities during an emergency. Gas Control personnel also participate in emergency drills. A fully functional back-up center is maintained and available for use during an emergency.

SDG&E has a control room management program that is integrated with other operating and emergency procedures. Key elements of the control room management plan include:

- Definition of controllers' roles and responsibilities;
- Definition of information, tools, procedures, and processes controllers;
- A fatigue management program;
- An alarm management plan;
- A change management plan to address handling, approving, and implementing changes in pipeline equipment, monitoring, and operation;
- A means to incorporate operating experience into control room management procedures; and
- An established controller training program; compliance validation to meet federal and/or state agencies; and records and documentation that demonstrate compliance with plan mandates.

Portions of the plan's requirements went into effect in August 2011 with the remaining scheduled to take effect in August 2012. SDG&E will continue to take steps to meet plan requirements.

- 3.5.4. Odorization: In its native state natural gas is typically odorless. In compliance with regulations and as a primary safety measure, SDG&E adds chemical compounds to the gas. These chemical compounds produce the distinctive odor associated with natural gas and serve as a means to detect a gas leak. Odor strength is to be maintained at a level so that gas may be readily detectable. The odor level is to be monitored at least monthly at representative locations for verification of odorization adequacy.
- 3.5.5. Population Density: 49 CFR 192 requires that changes in population density, known as Location Class, be monitored for certain transmission pipelines. The SDG&E transmission pipeline system is modeled in Geographic Information System (GIS). The GIS uses geographic data, aerial photography, data collected in the field, publically available data sets and the identification of building and dwelling points to determine class location. Maps with class designations are



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used by operations personnel to look for changed conditions. Observed changes are to be recorded by marking up or redlining a location class map or completing company form designed to record such changes.

- 3.5.6. Maximum Allowable Operating Pressure: A maximum allowable operating pressure (MAOP) is established for each pipeline or piping system. The established MAOP cannot exceed the maximum pressure allowed by regulatory code as specified in 49 CFR §192.611 and 49 CFR §192.619 - 49 CFR §192.623 as applicable. Location Class, design, testing and operating history are all factors that can limit the MAOP of a pipeline or system.

The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 became Public Law 112-90 on January 3, 2012. This law, in part, requires gas transmission operators to verify records accurately reflect the physical and operational characteristics of transmission pipeline in Class 3 and Class 4 locations and Class 1 and Class 2 high-consequence areas and then confirm the established MAOP. SDG&E has begun the records verification process and plans to complete the process in accordance with PHMSA's reporting requirements.



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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 California Public Utilities §963 (b)(3), §961 (d)(3), (d)(4), and (d)(10). These sections require that SDG&E’s Safety Plan achieve the following:

- § 963(b)(3) It is the policy of the state and 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.
- § 961(d)(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.
- § 961(d)(4) 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.
- § 961(d)(10) Ensure an adequately sized, qualified, and properly trained gas corporation workforce to carry out the plan.

2. SAFETY AS THE TOP PRIORITY

SDG&E considers the health and safety of all employees and the general public to be the top priority. This is priority 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 to be compromised. Safe work habits are the responsibility of every employee and the foundation of job performance evaluation.
- Occupational injuries and illnesses can be prevented. Identification and reporting of workplace hazards and potential hazards is the responsibility of every employee of SDG&E.
- Management takes an active role in implementing SDG&E’s health and safety programs as stated in the Injury Illness Prevention Program (IIPP) and staying aware of related workplace injuries.



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- Management is responsible for providing a safe workplace and for promoting behaviors and providing safeguards which prevent accidents and injuries. Employees work together to use equipment in accordance with job training and safety instructions.
- SDG&E complies with applicable federal, state and local occupational health and safety regulations and implements these through training, company standards, the IIPP, and safety lesson plans.

3. SAFE AND RELIABLE STORAGE AND 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 both firm and interruptible noncore transportation service is curtailed. The system is also designed to provide for continuous firm noncore transportation service under a 1-in-10 year cold day condition, during which only interruptible noncore transportation service is subject to curtailment. Both design standards are expected to occur during the winter operating season when core customers' gas usage is the greatest.

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, including providing storage inventory, injection, and withdrawal rights for the combined core portfolio.

SDG&E utilizes detailed hydraulic models of the gas system to evaluate its capacity to meet these design standards, and identify improvements as necessary.

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

4. PATROL AND INSPECTION

The patrol and inspection policies and programs discussed in Chapters 4 and 6 address the activities SDG&E shall perform to detect leaks and other compromised facility conditions and then effect timely repair.

5. SDG&E WORKFORCE SIZE, TRAINING, AND QUALIFICATIONS

5.1. Workforce Size



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SDG&E shall determine appropriate staffing levels to preserve the safety and integrity of its pipeline system. Employee in safety-sensitive positions shall be trained to handle emergencies. Employees shall be cross-trained as needed in various assignments to perform a variety of duties in the event of workforce shortages. The company should assess 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.

In addition, the company shall use pipeline contractors, as necessary and in compliance with bargaining agreements, so that sufficient overall resources are deployed to address maintenance and construction work. SDG&E shall continue to require that contractor employees undergo training and meet specific compliance requirements to perform work on company pipelines and facilities. Contractors shall be monitored to see that they perform their responsibilities consistent with company standards and contract requirements.

5.2. Training

Safety is rooted in all phases of field services 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 delivery by a centralized field training team with most of the instructors having served as technicians at some point in their careers. These instructors are to convey consistent safety messages and confirm understanding of the classroom training by observing employees in simulated situations.

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

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, Locator, Laborer, Regulator Technician, and Gas Patroller, Lead Construction Technician, Energy Technician Residential and Distribution, Construction Technician, Pipeline Technician, and Dispatch Specialist. Employees are required to annually review policies and procedures so that they understand emergency response guidelines and procedures



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SDG&E participates in industry forums, validates that training activities are consistent with regulatory requirements, and identifies when new training opportunities exist. SDG&E has a training curriculum that tests employees' skills in identifying and repairing gas leaks and other real-life 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, a hands-on training course for supervisors on high-pressure gas pipeline work is being developed.

5.2.1. Qualification of Pipeline Personnel

All pipeline operators shall be required to have a written Operator Qualification program so that individuals (employees and contractors) performing DOT-covered tasks are qualified. Such programs shall be reviewed by SDG&E prior to performing on company jobs or pipeline facilities.

The Operator Qualification Program requires that employees are evaluated every five years. 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 inspects or touches a pipe -- ranging from meter readers to customer services field, distribution and transmission personnel -- need to be operator-qualified.

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.

5.2.2. Anti-Drug and Alcohol Misuse Prevention Plan

The purpose of the Anti-Drug and Alcohol Misuse Prevention Plan is to prevent accidents that could result from the use of controlled substances and misuse of 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, a contractor shall also have an Anti-Drug and Alcohol Misuse Prevention Program or work with a third-party to enforce the program and conduct random testing. If contractors are involved in environmentally sensitive or other potentially hazardous projects, they may be



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required to provide additional documentation, such as an Environmental, Safety, and Health Plan; Fire Prevention and Protection Plan; and training and certification materials.



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CONTINUING OPERATIONS	SDG&E: SAFETY-PLAN.7
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SUMMARY OF DOCUMENT CHANGES & FILING INSTRUCTIONS	
Brief: Initial Publication in response to CPUC Decision 12-04-010	
Circulation Code	Filing Instructions

DOCUMENT PROFILE SUMMARY	
NOTE: Do not make any changes to this table. Data in this table is automatically posted during publication.	
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If Merged, Merged to:	
Incoming Materials Inspection Required (MSP only):	
Company:	SDG&E
Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan (reviewed annually):	No
Part of SDG&E O&M Plan (reviewed annually):	No
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Transmission IMP (TIMP):	No
TIMP 49 CFR Codes & Impacted Sections:	
Part of Distribution IMP (DIMP):	No
Additional 49 CFR Codes Covered by Document:	
Learning Module (LM) Training Code:	



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EMERGING ISSUES	SDG&E: SAFETY- PLAN.8
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1. EMERGING ISSUES AND CALIFORNIA PUBLIC UTILITIES CODE § 961 (d)(11)	45
2. COLLABORATION WITH THE CALIFORNIA PUBLIC UTILITIES COMMISSION	45



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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 California Public Utilities § 961 (d)(11). This section requires that the safety plan include the following:

- § 961(d)(11) Any additional matter that the commission determines should be included in the plan.

2. COLLABORATION WITH THE CALIFORNIA PUBLIC UTILITIES COMMISSION

SDG&E is currently addressing the emerging issues of the grandfathering of provisions in 49 CFR Part 192 and the installation of remote-controlled and automatic shutoff valves as part of its Pipeline Safety Enhancement Plan included in Chapter 4 of this Safety Plan. Similarly, SDG&E is addressing the replacement of pipe, including polyethylene made with Aldyl-A resin, as part of its Distribution Integrity Management Program (DIMP).

SDG&E shall continue to work in collaboration with the Commission and other regulatory authorities, and, stay abreast of industry best practices in order to address those hazards not yet identified or addressed within this Safety Plan.



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EMERGING ISSUES	SDG&E: SAFETY-PLAN.8
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SUMMARY OF DOCUMENT CHANGES & FILING INSTRUCTIONS	
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If Merged, Merged to:	
Incoming Materials Inspection Required (MSP only):	
Company:	SDG&E
Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan (reviewed annually):	No
Part of SDG&E O&M Plan (reviewed annually):	No
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Transmission IMP (TIMP):	No
TIMP 49 CFR Codes & Impacted Sections:	
Part of Distribution IMP (DIMP):	No
Additional 49 CFR Codes Covered by Document:	
Learning Module (LM) Training Code:	



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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1. NATURAL GAS SYSTEM OPERATOR SAFETY PLAN APPENDIX

1.1. 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.” SDG&E has numerous existing safety programs, plans, and procedures in place that address specified infrastructure or areas of company activity. This Safety Plan provides an overarching safety strategy 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 Safety Plan chapter.



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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1.2. List of Policy Documents By Chapter

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	190SD	Operator Qualification Task Change Communication
4	Safety Systems	2110SD	Quality Assurance for Gas Standards Related to Integrity Management Program
4	Safety Systems	2111SD	Management of Change - Request & Approval
4	Safety Systems	2112SD	Pipeline Database Update
4	Safety Systems	3084SD	Corrosion Tests General Data Sheet
4	Safety Systems	3222SD	Design Data Sheet (DDS)
4	Safety Systems	3506SD	Notice of Shutdown / Operational Deviation
4	Safety Systems	4090SD	100mV Polarization Form
4	Safety Systems	4091SD	Wax Casing Data Collection Form
4	Safety Systems	677-1SD	Pipeline Condition and Maintenance Report
4	Safety Systems	76-72	Odorant - 50/50 TBM/THT
4	Safety Systems	76-73	Thiophane Odorant
4	Safety Systems	ACF	Assessment Completion Form
4	Safety Systems	C5050	Order Priority
4	Safety Systems	C5140	Shutting-Off Gas Meters
4	Safety Systems	C5160	Gas Meter Turn-On Procedure
4	Safety Systems	C5190	Emergency Response Procedures for Gas Incidents
4	Safety Systems	C5200	Restoration of Service Due to Gas Outage
4	Safety Systems	C5260	Locking and Blanking of a Gas Meter Set
4	Safety Systems	C5390	Gas Curb Meter and Atmospheric Corrosion Inspection and Maintenance
4	Safety Systems	C5450	Pressure Regulation - Residential and Commercial



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	C5480	Purging Service Risers
4	Safety Systems	C5490	Working in the Presence of Escaping Gas
4	Safety Systems	C5500	Reportable Gas Incidents
4	Safety Systems	C5510	Leak Investigation
4	Safety Systems	C5520	Houseline Leakage on Master-Metered Systems
4	Safety Systems	C5660	Purging Gas Meters and Customer Houselines
4	Safety Systems	CRMP1	Control Room Management Plan
4	Safety Systems	CRMP6SD	Gas Control Management of Change
4	Safety Systems	D7103	Gas Meter Location
4	Safety Systems	D7107	Free Standing Header Support
4	Safety Systems	D7109	Gas Service Location
4	Safety Systems	D7110	Abandonment of Gas Service and Gas Light Tap Assemblies
4	Safety Systems	D7113	Evaluation and Disposition of Inactive Services
4	Safety Systems	D7115	Barricades for Gas Meter Sets
4	Safety Systems	D7117	Installing and Turn on Responsibility of Gas Meters
4	Safety Systems	D7121	Locking and Blanking of Gas Meter Sets
4	Safety Systems	D7123	Service Regulator Vent Extensions
4	Safety Systems	D7125	Service Regulators in Curb Meter Boxes
4	Safety Systems	D7127	Curb Meter Box Excavation and Riser Replacement
4	Safety Systems	D7203	Polyethylene Quick Reference
4	Safety Systems	D7211	Handling and Storage of Polyethylene Material
4	Safety Systems	D7213	Polyethylene Heater - Temperature Measurement and Adjustment
4	Safety Systems	D7221	Socket Fusion for Polyethylene



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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	D7222	PE Saddle Fusions
4	Safety Systems	D7225	Tapping Polyethylene Pipelines
4	Safety Systems	D7226	Magic Box - 2"-4"
4	Safety Systems	D7227	Butt Fusion Polyethylene
4	Safety Systems	D7247	Service Risers for Polyethylene
4	Safety Systems	D7249	Valve Installation for Polyethylene
4	Safety Systems	D7255	Casing Assemblies - Plastic Carrier Pipe
4	Safety Systems	D7265	Pneumatic Test Requirements for Pipelines Operating at 60 PSIG or Less
4	Safety Systems	D7275	Repair of Polyethylene
4	Safety Systems	D7283	RFS of Polyethylene
4	Safety Systems	D7325	Service Punch Tee
4	Safety Systems	D7371	Leak Repair Methods for Steel Distribution Pipelines
4	Safety Systems	D7381	Abandonment or Inactivation of Gas Distribution Pipelines
4	Safety Systems	D7383	Steel Pipe Squeezer 6" through 12"
4	Safety Systems	D7905	Minimum Requirements for Pressure Control Operations on Distribution Pipeline Systems
4	Safety Systems	D7911	Purging of Distribution Gas Lines of 60 PSIG
4	Safety Systems	D7912	Purging and Locking Service Risers
4	Safety Systems	D8145	Gas Leakage Surveys - Distribution
4	Safety Systems	D8146	Replacement Criteria for Distribution Mains
4	Safety Systems	D8147	Services - Repair vs. Replace Decisions
4	Safety Systems	D8164	Pressure Monitoring of Distribution Systems
4	Safety Systems	D8167	Valve Inspection and Maintenance - Distribution



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	D8189	Temporary LNG Facility
4	Safety Systems	D8305	Trenchless Construction Methods
4	Safety Systems	D9102	Gas Mapping and Records
4	Safety Systems	D9157	Meter Selection and Spacing Requirements
4	Safety Systems	D9165	Design of Gas Pipeline in Sloping Terrain
4	Safety Systems	DIMP1	Introduction
4	Safety Systems	DIMP2	System Knowledge
4	Safety Systems	DIMP3	Threat Identification
4	Safety Systems	DIMP4	Evaluate and Rank Risk
4	Safety Systems	DIMP5	Identify and Implement Measures to Address Risk
4	Safety Systems	DIMP6	Measure Performance, Monitor Results and Evaluate Effectiveness
4	Safety Systems	DIMP7	Quality Assurance Plan
4	Safety Systems	DIMP8	Periodic Evaluation and Improvement
4	Safety Systems	DIMP9	Report Results
4	Safety Systems	DIMPA	Terms, Definitions and Acronyms
4	Safety Systems	DIMPB	Threat Matrix and Data Model
4	Safety Systems	DIMPD	ICAM Content
4	Safety Systems	DIMPE	Program's Activity to Address Risk - PAAR
4	Safety Systems	F17-1	Annual Performance Measures
4	Safety Systems	F4-1	Change of Threat Form
4	Safety Systems	F8-1	Baseline Assessment Plan Revisions Log
4	Safety Systems	G7008	Material Evaluation and Implementation
4	Safety Systems	G7009	Material Specifications and Purchase Descriptions



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	G7011	Standard Specification for Natural and Substitute Fuel Gases
4	Safety Systems	G7013	Qualification of New Construction Contractors
4	Safety Systems	G7313	Steel Pipe Yield, Design Properties and Design Pressure Tables
4	Safety Systems	G7314	Steel Pipe - Selection
4	Safety Systems	G7316	Identification of Steel Pipe and Butt Weld Fittings
4	Safety Systems	G7321	Steel Butt-Weld Fittings - Selection Guide
4	Safety Systems	G7350	Casing Assemblies - Steel Carrier Pipe
4	Safety Systems	G7351	Wear Pads and Bands for Steel Gas Piping
4	Safety Systems	G7353	Branch Connection, Steel - Selection Guide
4	Safety Systems	G7361	Pipeline Testing Requirements
4	Safety Systems	G7362	Strength Testing - Pipelines and Facilities
4	Safety Systems	G7365	Pneumatic Test Requirement for Pipelines Operating Above 60 PSIG
4	Safety Systems	G7369	Hydrostatic Test Requirements
4	Safety Systems	G7371	Repair of Defects in Steel Transmission Piping
4	Safety Systems	G7372	Repair of Defects on an Operating Pipeline by Grinding
4	Safety Systems	G7373	Repair of Non-Leaking Defects on an Operating Pipeline with a Band or Sleeve
4	Safety Systems	G7375	Approved Protective Coatings for Below Ground Corrosion Control
4	Safety Systems	G7376	Field Tape Wrapping Requirements
4	Safety Systems	G7377	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating
4	Safety Systems	G7378	External Surface Preparation and Field-Applied Coating for Above Ground Pipe Spans
4	Safety Systems	G7379	External Surface Preparation and Field Applied Coatings for Buried Pipelines



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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	G7380	Field Application of Grease Coating
4	Safety Systems	G7381	External Surface Preparation and Shop-Applied Coatings for Steel Tanks and Vessels
4	Safety Systems	G7382	Surface Preparation and Shop Applied Coating for General Steel (Primer and Topcoat)
4	Safety Systems	G7383	Surface Preparation and Field-Applied Coating for Interior of Storage Tanks and Vessels
4	Safety Systems	G7384	External Surface Preparation and Field-Applied Coatings for New and Old Steel in a Marine Environment
4	Safety Systems	G7385	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas
4	Safety Systems	G7386	Internal Surface Preparation and Shop-Applied Coating for Drip Legs
4	Safety Systems	G7451	Prevention of Damage to Subsurface Installations
4	Safety Systems	G7507	Map Maintenance Requirements for High Pressure Gas Lines
4	Safety Systems	G7603	Valve Usage and Selection Guide
4	Safety Systems	G7643	Excess Flow Valve (EFV) - Installation and Operation
4	Safety Systems	G7665	Flanges - Selection, Torque and Installation Requirements
4	Safety Systems	G7803	General Welding Requirements
4	Safety Systems	G7805	Welding Field Guide
4	Safety Systems	G7809	Qualification and Re-Qualification of Welders
4	Safety Systems	G7815	Inspection and Testing of Welds on Company Steel Piping
4	Safety Systems	G7909	General Purging Procedures
4	Safety Systems	G8001	Criteria for Cathodic Protection
4	Safety Systems	G8002	100mV Polarization Criteria



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	G8003	Design and Application of Cathodic Protection
4	Safety Systems	G8009	Electrical Test Stations & Bond Assembly
4	Safety Systems	G8013	Cathodic Protection - Mixed Piping Systems
4	Safety Systems	G8014	Magnesium Anodes for Corrosion Control
4	Safety Systems	G8015	Selection and Installation of Rectifiers and Impressed Current Anodes
4	Safety Systems	G8019	Operation and Maintenance of Cathodic Protection Facilities
4	Safety Systems	G8021	Cathodic Protection - Inspection of Exposed Pipe
4	Safety Systems	G8022	System Protection - Inspection of Meter Set Assemblies
4	Safety Systems	G8023	MAOP Evaluation of Corroded Pipe
4	Safety Systems	G8024	Measurement of Remaining Wall Thickness
4	Safety Systems	G8025	Internal Corrosion Management Plan
4	Safety Systems	G8026	External and Internal Transmission Pipeline Inspection
4	Safety Systems	G8027	Cathodic Protection - Electrical Isolation
4	Safety Systems	G8029	Record Keeping - Corrosion Control
4	Safety Systems	G8031	Internal Corrosion Design and Construction Considerations
4	Safety Systems	G8035	Interference - Stray Electrical Current
4	Safety Systems	G8041	Cathodic Protection - Instruments and Testing Equipment
4	Safety Systems	G8042	Copper Sulfate Electrode
4	Safety Systems	G8107	Aboveground Survey Plan
4	Safety Systems	G8108	Alternating Current Attenuation Survey
4	Safety Systems	G8109	Close Interval Survey
4	Safety Systems	G8110	Voltage Gradient Survey
4	Safety Systems	G8111	Soil Resistivity Survey



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	G8112	Inspection of Cased Pipe
4	Safety Systems	G8113	Operator Qualification Program
4	Safety Systems	G8114	Self-Audit Guidelines - Pipeline Integrity Program
4	Safety Systems	G8115	Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure
4	Safety Systems	G8116	Pipeline and Related Definitions
4	Safety Systems	G8121	Location Class - Determination and Changes
4	Safety Systems	G8122	Prevention of Damage to Company Facilities
4	Safety Systems	G8123	Underground Service Alert and Temporary Marking
4	Safety Systems	G8129	Odorization
4	Safety Systems	G8135	Leakage Priority Classification
4	Safety Systems	G8140	Pipeline Patrol
4	Safety Systems	G8141	Pipeline Markers
4	Safety Systems	G8142	Inspection of Pipelines on Bridges, Spans and in Unstable Earth
4	Safety Systems	G8145	Leakage Surveys - Transmission Lines
4	Safety Systems	G8147	Planning Shutdowns On High Pressure Gas Facilities
4	Safety Systems	G8159	Distribution Pressure Regulating and Monitoring Station & Vault - Inspection, Maintenance and Settings
4	Safety Systems	G8160	Pipeline Cleaning Standard
4	Safety Systems	G8161	In-Line Inspection Surveys Standard
4	Safety Systems	G8162	Assessment of Pipeline Integrity Using Guided Wave UT
4	Safety Systems	G8163	In-Line Inspection GPS Control Survey
4	Safety Systems	G8164	Global Positioning System (GPS) Process



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	G8165	Dry Gas - Internal Corrosion Direct Assessment
4	Safety Systems	G8166	Scheduling Remediation
4	Safety Systems	G8168	Immediate Repair Conditions - Transmission Pipelines
4	Safety Systems	G8169	Prevention of Accidental Ignition
4	Safety Systems	G8170	Operations Technology Procedure for HCA Segment Identification
4	Safety Systems	G8171	New and Upgraded Pipelines - CPUC Notification
4	Safety Systems	G8172	Data Gathering and Integration
4	Safety Systems	G8173	Threat Identification
4	Safety Systems	G8174	Risk Assessment of High Consequence Areas
4	Safety Systems	G8178	Baseline Assessment Plan
4	Safety Systems	G8179	External Corrosion Direct Assessment Procedure
4	Safety Systems	G8180	In-Line Inspection (ILI) Procedure
4	Safety Systems	G8184	Bellhole Inspection Requirements
4	Safety Systems	G8185	Casing Wax Fill
4	Safety Systems	G8186	Preventive and Mitigative Measures
4	Safety Systems	G8187	Continual Evaluation
4	Safety Systems	G8188	Stress Corrosion Cracking Direct Assessment Procedure
4	Safety Systems	G8198	Field Sampling and Analysis of Liquids and Solids/Sludge
4	Safety Systems	G8202	Field Guidelines - Emergency Incident Distribution / Customer Service
4	Safety Systems	G8204	Emergency Response Procedures for Gas Incidents - Distribution
4	Safety Systems	G8205	Emergency Response Procedures for Gas Incidents - Transmission
4	Safety Systems	G8206	Emergency Materials List for Gas Incidents
4	Safety Systems	G8208	Natural Disaster or Major Emergency - Employee Instructions



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	G8210	Contact with Fire and Police Departments and Public Agencies
4	Safety Systems	G8216	Incident Command System (ICS) for Emergency Incidents
4	Safety Systems	G8221	Gas Incident Notification
4	Safety Systems	G8222	Pipeline Incident Reports to CPUC and DOT
4	Safety Systems	G8223	Pipeline Safety Reports to CPUC and DOT
4	Safety Systems	G8225	Investigation of Gas Incidents
4	Safety Systems	G8229	Region Reports of Safety-Related Pipeline Conditions
4	Safety Systems	G8231	Public Awareness Program
4	Safety Systems	G8237	Restoration of Service Procedures
4	Safety Systems	G8241	Responsibilities for Maintenance of the Downtown San Diego Emergency Curtailment Map
4	Safety Systems	G8308	Contractor Safety Program
4	Safety Systems	G8320	Working in Flammable Atmospheres
4	Safety Systems	G8365	Respiratory Protection Program
4	Safety Systems	G8603	Designs for Pipelines in Bridges
4	Safety Systems	G8605	Request for Pipeline Design Assistance
4	Safety Systems	G8704	Environmental Training
4	Safety Systems	G8706	Environmental Inspections, Search Warrants, and Internal Notifications
4	Safety Systems	G9103	Pressure Terminology and Establishment of Pressure Levels for Piping
4	Safety Systems	G9105	Design Factors for Steel Piping Systems
4	Safety Systems	G9111	Economic Evaluation for Pipeline Designs in High Consequence Areas
4	Safety Systems	QAP-9	IMP Audit Summary Form
4	Safety Systems	SD5153	Pipeline Location Information



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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	T7320	Requirements for Designing Pipelines to Accommodate Smart Pigs
4	Safety Systems	T7375	Repair of Transmission Pipelines
4	Safety Systems	T7381	Abandonment, Conversion and Reinstatement of Transmission Pipelines
4	Safety Systems	T7413	Minimum Trench Requirements for Transmission Pipelines
4	Safety Systems	T8105	Control Microsystems SCADAPACK
4	Safety Systems	T8129	Supplemental Odorization of Gas at Border Stations
4	Safety Systems	T8144	MAXIMO - Transmission
4	Safety Systems	T8147	Compressor Stations - Operation and Maintenance
4	Safety Systems	T8148	Testing and Maintaining Compressor Station Emergency Shutdown Systems
4	Safety Systems	T8149	Compressor Station Relief Valves
4	Safety Systems	T8151	Hold-Out Procedures for Equipment Isolation
4	Safety Systems	T8155	Fire Prevention and Protection - Transmission
4	Safety Systems	T8165	Gas Transmission System Relief Valves
4	Safety Systems	T8166	Identification Numbers for Pipeline Valves - Transmission
4	Safety Systems	T8167	Valve Inspection and Maintenance - Transmission
4	Safety Systems	T8171	Abnormal Operations - Transmission
4	Safety Systems	TIMP.0	Table of Contents
4	Safety Systems	TIMP.1	Introduction
4	Safety Systems	TIMP.10	Remediation
4	Safety Systems	TIMP.11	Minimizing Environmental & Safety Risks
4	Safety Systems	TIMP.12	Preventive and Mitigative Measures
4	Safety Systems	TIMP.13	Continual Evaluation
4	Safety Systems	TIMP.14	Management of Change



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APPENDIX – SAFETY POLICY DOCUMENTS	SDG&E: APPENDIX.A
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Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	TIMP.15	Quality Assurance Plan
4	Safety Systems	TIMP.16	Record Keeping
4	Safety Systems	TIMP.17	Performance Plan
4	Safety Systems	TIMP.19	Communications Plan
4	Safety Systems	TIMP.20	Regulatory Interaction
4	Safety Systems	TIMP.3	HCA Identification
4	Safety Systems	TIMP.4	Data Gathering and Threat Identification
4	Safety Systems	TIMP.5	Risk Assessment
4	Safety Systems	TIMP.8	Baseline Assessment Plan
4	Safety Systems	TIMP.9	Integrity Assessments
4	Safety Systems	TIMP.A	Terms, Definitions and Acronymns
5	Emergency Response	C5050	Order Priority
5	Emergency Response	C5150	Pardon the Interruption
5	Emergency Response	C5190	Emergency Response Procedures for Gas Incidents
5	Emergency Response	C5200	Restoration of Service Due to Gas Outage
5	Emergency Response	C5490	Working in the Presence of Escaping Gas
5	Emergency Response	C5500	Reportable Gas Incidents
5	Emergency Response	C5510	Leak Investigation
5	Emergency Response	C5630	Power Outage Notification
5	Emergency Response	C5640	Verify Customer Generator Operation (VGEN)
5	Emergency Response	G8137	Underground Leak Investigation
5	Emergency Response	G8139	Company Facility Underground Odor Assessment
5	Emergency Response	G8147	Planning Shutdowns On High Pressure Gas Facilities



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Chapter Number	Chapter Title	Policy	Policy Title
5	Emergency Response	G8168	Immediate Repair Conditions - Transmission Pipelines
5	Emergency Response	G8169	Prevention of Accidental Ignition
5	Emergency Response	G8202	Field Guidelines - Emergency Incident Distribution / Customer Service
5	Emergency Response	G8204	Emergency Response Procedures for Gas Incidents - Distribution
5	Emergency Response	G8205	Emergency Response Procedures for Gas Incidents - Transmission
5	Emergency Response	G8206	Emergency Materials List for Gas Incidents
5	Emergency Response	G8208	Natural Disaster or Major Emergency - Employee Instructions
5	Emergency Response	G8210	Contact with Fire and Police Departments and Public Agencies
5	Emergency Response	G8215	Field Services (Distribution) On-duty Supervisor Responsibilities
5	Emergency Response	G8216	Incident Command System (ICS) for Emergency Incidents
5	Emergency Response	G8221	Gas Incident Notification
5	Emergency Response	G8222	Pipeline Incident Reports to CPUC and DOT
5	Emergency Response	G8223	Pipeline Safety Reports to CPUC and DOT
5	Emergency Response	G8225	Investigation of Gas Incidents
6	State and Federal Regulations	190SD	Operator Qualification Task Change Communication
6	State and Federal Regulations	3222SD	Design Data Sheet (DDS)
6	State and Federal Regulations	3222SD	Design Data Sheet (DDS)
6	State and Federal Regulations	C5050	Order Priority



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Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	C5160	Gas Meter Turn-On Procedure
6	State and Federal Regulations	C5190	Emergency Response Procedures for Gas Incidents
6	State and Federal Regulations	C5200	Restoration of Service Due to Gas Outage
6	State and Federal Regulations	C5260	Locking and Blanking of a Gas Meter Set
6	State and Federal Regulations	C5390	Gas Curb Meter and Atmospheric Corrosion Inspection and Maintenance
6	State and Federal Regulations	C5450	Pressure Regulation - Residential and Commercial
6	State and Federal Regulations	C5480	Purging Service Risers
6	State and Federal Regulations	C5490	Working in the Presence of Escaping Gas
6	State and Federal Regulations	C5500	Reportable Gas Incidents
6	State and Federal Regulations	C5510	Leak Investigation
6	State and Federal Regulations	C5520	Houeline Leakage on Master-Metered Systems



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Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	C5660	Purging Gas Meters and Customer Houelines
6	State and Federal Regulations	C5710	Back Flow Protection - Regulators and Check Valves
6	State and Federal Regulations	CRMP1	Control Room Management Plan
6	State and Federal Regulations	CRMP6	Gas Control Management of Change
6	State and Federal Regulations	CRMP6SD	Gas Control Management of Change
6	State and Federal Regulations	D7103	Gas Meter Location
6	State and Federal Regulations	D7107	Free Standing Header Support
6	State and Federal Regulations	D7109	Gas Service Location
6	State and Federal Regulations	D7110	Abandonment of Gas Service and Gas Light Tap Assemblies
6	State and Federal Regulations	D7113	Evaluation and Disposition of Inactive Services
6	State and Federal Regulations	D7115	Barricades for Gas Meter Sets



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Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	D7117	Installing and Turn on Responsibility of Gas Meters
6	State and Federal Regulations	D7121	Locking and Blanking of Gas Meter Sets
6	State and Federal Regulations	D7123	Service Regulator Vent Extensions
6	State and Federal Regulations	D7125	Service Regulators in Curb Meter Boxes
6	State and Federal Regulations	D7125	Service Regulators in Curb Meter Boxes
6	State and Federal Regulations	D7127	Curb Meter Box Excavation and Riser Replacement
6	State and Federal Regulations	D7203	Polyethylene Quick Reference
6	State and Federal Regulations	D7204	PE Fusion Card
6	State and Federal Regulations	D7211	Handling and Storage of Polyethylene Material
6	State and Federal Regulations	D7214	Joining Polyethylene with Mechanical Fittings
6	State and Federal Regulations	D7221	Socket Fusion for Polyethylene



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Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	D7222	PE Saddle Fusions
6	State and Federal Regulations	D7225	Tapping Polyethylene Pipelines
6	State and Federal Regulations	D7227	Butt Fusion Polyethylene
6	State and Federal Regulations	D7233	Electrofusion for Polyethylene
6	State and Federal Regulations	D7237	Transitions : Polyethylene to Steel
6	State and Federal Regulations	D7241	Direct Burial of Polyethylene
6	State and Federal Regulations	D7247	Service Risers for Polyethylene
6	State and Federal Regulations	D7249	Valve Installation for Polyethylene
6	State and Federal Regulations	D7252	Service Head Adapter - 3/4 INCH
6	State and Federal Regulations	D7255	Casing Assemblies - Plastic Carrier Pipe
6	State and Federal Regulations	D7257	Tracer Wire Installation for Polyethylene



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Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	D7265	Pneumatic Test Requirements for Pipelines Operating at 60 PSIG or Less
6	State and Federal Regulations	D7275	Repair of Polyethylene
6	State and Federal Regulations	D7283	RFS of Polyethylene
6	State and Federal Regulations	D7293	Qualification and Re-Qualification Requirements for Polyethylene Fitters
6	State and Federal Regulations	D7303	General Requirements - Steel Distribution System
6	State and Federal Regulations	D7321	Service Connections
6	State and Federal Regulations	D7325	Service Punch Tee
6	State and Federal Regulations	D7371	Leak Repair Methods for Steel Distribution Pipelines
6	State and Federal Regulations	D7381	Abandonment or Inactivation of Gas Distribution Pipelines
6	State and Federal Regulations	D7403	Underground Distribution (UD) Trenches and Utility Positioning
6	State and Federal Regulations	D7411	Trench Excavation Requirements for 60-400 PSIG MAOP Distribution Mains



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6	State and Federal Regulations	D7412	Excavation Requirements for Trench with Two Distribution Mains
6	State and Federal Regulations	D7427	Standard Gas Main Positions
6	State and Federal Regulations	D7461	Gas Facilities Box (Inside Dimensions 2' X 3')
6	State and Federal Regulations	D7465	Prefabricated Vaults - Design and Selection Guide
6	State and Federal Regulations	D7711	Regulator Station Design and Planning
6	State and Federal Regulations	D7715	Control Piping
6	State and Federal Regulations	D7905	Minimum Requirements for Pressure Control Operations on Distribution Pipeline Systems
6	State and Federal Regulations	D7911	Purging of Distribution Gas Lines of 60 PSIG
6	State and Federal Regulations	D7912	Purging and Locking Service Risers
6	State and Federal Regulations	D8145	Gas Leakage Surveys - Distribution
6	State and Federal Regulations	D8146	Replacement Criteria for Distribution Mains



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Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	D8164	Pressure Monitoring of Distribution Systems
6	State and Federal Regulations	D8167	Valve Inspection and Maintenance - Distribution
6	State and Federal Regulations	D8167	Valve Inspection and Maintenance - Distribution
6	State and Federal Regulations	D8305	Trenchless Construction Methods
6	State and Federal Regulations	D8310	Polyethylene Pipe Inserted in Metal Casings
6	State and Federal Regulations	D9102	Gas Mapping and Records
6	State and Federal Regulations	D9103	Terms and Definitions
6	State and Federal Regulations	D9131	Design of Polyethylene Services
6	State and Federal Regulations	D9135	Mains: Fittings and Fitting Selection
6	State and Federal Regulations	D9157	Meter Selection and Spacing Requirements
6	State and Federal Regulations	D9183	Excess Flow Valve and Service Pipe Sizing



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6	State and Federal Regulations	G7011	Standard Specification for Natural and Substitute Fuel Gases
6	State and Federal Regulations	G7314	Steel Pipe - Selection
6	State and Federal Regulations	G7316	Identification of Steel Pipe and Butt Weld Fittings
6	State and Federal Regulations	G7321	Steel Butt-Weld Fittings - Selection Guide
6	State and Federal Regulations	G7350	Casing Assemblies - Steel Carrier Pipe
6	State and Federal Regulations	G7351	Wear Pads and Bands for Steel Gas Piping
6	State and Federal Regulations	G7353	Branch Connection, Steel - Selection Guide
6	State and Federal Regulations	G7361	Pipeline Testing Requirements
6	State and Federal Regulations	G7362	Strength Testing - Pipelines and Facilities
6	State and Federal Regulations	G7365	Pneumatic Test Requirement for Pipelines Operating Above 60 PSIG
6	State and Federal Regulations	G7369	Hydrostatic Test Requirements



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Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	G7371	Repair of Defects in Steel Transmission Piping
6	State and Federal Regulations	G7375	Approved Protective Coatings for Below Ground Corrosion Control
6	State and Federal Regulations	G7376	Field Tape Wrapping Requirements
6	State and Federal Regulations	G7377	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating
6	State and Federal Regulations	G7378	External Surface Preparation and Field-Applied Coating for Above Ground Pipe Spans
6	State and Federal Regulations	G7379	External Surface Preparation and Field Applied Coatings for Buried Pipelines
6	State and Federal Regulations	G7380	Field Application of Grease Coating
6	State and Federal Regulations	G7381	External Surface Preparation and Shop-Applied Coatings for Steel Tanks and Vessels
6	State and Federal Regulations	G7383	Surface Preparation and Field-Applied Coating for Interior of Storage Tanks and Vessels
6	State and Federal Regulations	G7384	External Surface Preparation and Field-Applied Coatings for New and Old Steel in a Marine Environment
6	State and Federal Regulations	G7385	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas



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6	State and Federal Regulations	G7408	Hand Backfill and Compaction Method
6	State and Federal Regulations	G7453	General Excavation Requirements
6	State and Federal Regulations	G7603	Valve Usage and Selection Guide
6	State and Federal Regulations	G7615	Replacement and Raising of Valve Boxes
6	State and Federal Regulations	G7631	Main Line Ball Valve Assembly - Classes 150 & 300 2 Inch, 3 Inch, and 4 Inch
6	State and Federal Regulations	G7635	Main Line Ball Valve Assembly - Classes 150 & 300 6 Inch and 8 Inch
6	State and Federal Regulations	G7637	Line Valve Assembly 10 Inch
6	State and Federal Regulations	G7643	Excess Flow Valve (EFV) - Installation and Operation
6	State and Federal Regulations	G7649	2 Inch Ball Valve Assembly for Hot Taps
6	State and Federal Regulations	G7665	Flanges - Selection, Torque and Installation Requirements
6	State and Federal Regulations	G7803	General Welding Requirements



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6	State and Federal Regulations	G7805	Welding Field Guide
6	State and Federal Regulations	G7809	Qualification and Re-Qualification of Welders
6	State and Federal Regulations	G7815	Inspection and Testing of Welds on Company Steel Piping
6	State and Federal Regulations	G7815	Inspection and Testing of Welds on Company Steel Piping
6	State and Federal Regulations	G7817	Radiographic Procedures and Radiographer Qualifications
6	State and Federal Regulations	G7821	Angles and Bends in Steel Piping
6	State and Federal Regulations	G7909	General Purging Procedures
6	State and Federal Regulations	G7955	4 Inch Ball Valve Assembly for Hot Tapping to 800 PSIG
6	State and Federal Regulations	G7963	A 2-Inch Tapping Assembly for Hot Tapping 400 and 800 PSIG Pipelines
6	State and Federal Regulations	G8001	Criteria for Cathodic Protection
6	State and Federal Regulations	G8002	100mV Polarization Criteria



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6	State and Federal Regulations	G8003	Design and Application of Cathodic Protection
6	State and Federal Regulations	G8009	Electrical Test Stations & Bond Assembly
6	State and Federal Regulations	G8013	Cathodic Protection - Mixed Piping Systems
6	State and Federal Regulations	G8014	Magnesium Anodes for Corrosion Control
6	State and Federal Regulations	G8019	Operation and Maintenance of Cathodic Protection Facilities
6	State and Federal Regulations	G8021	Cathodic Protection - Inspection of Exposed Pipe
6	State and Federal Regulations	G8022	System Protection - Inspection of Meter Set Assemblies
6	State and Federal Regulations	G8023	MAOP Evaluation of Corroded Pipe
6	State and Federal Regulations	G8025	Internal Corrosion Management Plan
6	State and Federal Regulations	G8026	External and Internal Transmission Pipeline Inspection
6	State and Federal Regulations	G8027	Cathodic Protection - Electrical Isolation



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6	State and Federal Regulations	G8027	Cathodic Protection - Electrical Isolation
6	State and Federal Regulations	G8027	Cathodic Protection - Electrical Isolation
6	State and Federal Regulations	G8029	Record Keeping - Corrosion Control
6	State and Federal Regulations	G8031	Internal Corrosion Design and Construction Considerations
6	State and Federal Regulations	G8035	Interference - Stray Electrical Current
6	State and Federal Regulations	G8115	Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure
6	State and Federal Regulations	G8116	Pipeline and Related Definitions
6	State and Federal Regulations	G8121	Location Class - Determination and Changes
6	State and Federal Regulations	G8122	Prevention of Damage to Company Facilities
6	State and Federal Regulations	G8123	Underground Service Alert and Temporary Marking
6	State and Federal Regulations	G8129	Odorization



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6	State and Federal Regulations	G8135	Leakage Priority Classification
6	State and Federal Regulations	G8140	Pipeline Patrol
6	State and Federal Regulations	G8141	Pipeline Markers
6	State and Federal Regulations	G8142	Inspection of Pipelines on Bridges, Spans and in Unstable Earth
6	State and Federal Regulations	G8145	Leakage Surveys - Transmission Lines
6	State and Federal Regulations	G8147	Planning Shutdowns On High Pressure Gas Facilities
6	State and Federal Regulations	G8159	Distribution Pressure Regulating and Monitoring Station & Vault - Inspection, Maintenance and Settings
6	State and Federal Regulations	G8168	Immediate Repair Conditions - Transmission Pipelines
6	State and Federal Regulations	G8169	Prevention of Accidental Ignition
6	State and Federal Regulations	G8172	Data Gathering and Integration
6	State and Federal Regulations	G8184	Bellhole Inspection Requirements



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6	State and Federal Regulations	G8185	Casing Wax Fill
6	State and Federal Regulations	G8202	Field Guidelines - Emergency Incident Distribution / Customer Service
6	State and Federal Regulations	G8204	Emergency Response Procedures for Gas Incidents - Distribution
6	State and Federal Regulations	G8205	Emergency Response Procedures for Gas Incidents - Transmission
6	State and Federal Regulations	G8206	Emergency Materials List for Gas Incidents
6	State and Federal Regulations	G8208	Natural Disaster or Major Emergency - Employee Instructions
6	State and Federal Regulations	G8210	Contact with Fire and Police Departments and Public Agencies
6	State and Federal Regulations	G8215	Field Services (Distribution) On-duty Supervisor Responsibilities
6	State and Federal Regulations	G8216	Incident Command System (ICS) for Emergency Incidents
6	State and Federal Regulations	G8221	Gas Incident Notification
6	State and Federal Regulations	G8223	Pipeline Safety Reports to CPUC and DOT



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6	State and Federal Regulations	G8225	Investigation of Gas Incidents
6	State and Federal Regulations	G8229	Region Reports of Safety-Related Pipeline Conditions
6	State and Federal Regulations	G8231	Public Awareness Program
6	State and Federal Regulations	G8237	Restoration of Service Procedures
6	State and Federal Regulations	G8241	Responsibilities for Maintenance of the Downtown San Diego Emergency Curtailment Map
6	State and Federal Regulations	G8320	Working in Flammable Atmospheres
6	State and Federal Regulations	G8365	Respiratory Protection Program
6	State and Federal Regulations	G8603	Designs for Pipelines in Bridges
6	State and Federal Regulations	G8605	Request for Pipeline Design Assistance
6	State and Federal Regulations	G8719	Hydrostatic Test Water Disposal
6	State and Federal Regulations	G9103	Pressure Terminology and Establishment of Pressure Levels for Piping



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6	State and Federal Regulations	G9105	Design Factors for Steel Piping Systems
6	State and Federal Regulations	G9109	Electrical Facilities in Hazardous Areas
6	State and Federal Regulations	T7303	General Construction Requirements - Steel Transmission System
6	State and Federal Regulations	T7320	Requirements for Designing Pipelines to Accommodate Smart Pigs
6	State and Federal Regulations	T7375	Repair of Transmission Pipelines
6	State and Federal Regulations	T7381	Abandonment, Conversion and Reinstatement of Transmission Pipelines
6	State and Federal Regulations	T7413	Minimum Trench Requirements for Transmission Pipelines
6	State and Federal Regulations	T8129	Supplemental Odorization of Gas at Border Stations
6	State and Federal Regulations	T8147	Compressor Stations - Operation and Maintenance
6	State and Federal Regulations	T8148	Testing and Maintaining Compressor Station Emergency Shutdown Systems
6	State and Federal Regulations	T8149	Compressor Station Relief Valves



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6	State and Federal Regulations	T8151	Hold-Out Procedures for Equipment Isolation
6	State and Federal Regulations	T8155	Fire Prevention and Protection - Transmission
6	State and Federal Regulations	T8165	Gas Transmission System Relief Valves
6	State and Federal Regulations	T8166	Identification Numbers for Pipeline Valves - Transmission
6	State and Federal Regulations	T8167	Valve Inspection and Maintenance - Transmission
6	State and Federal Regulations	T8171	Abnormal Operations - Transmission
6	State and Federal Regulations	G8113	Operator Qualification Program
6	State and Federal Regulations	G9111	Economic Evaluation for Pipeline Designs in High Consequence Areas
7	Continuing Operations	C5260	Locking and Blanking of a Gas Meter Set
7	Continuing Operations	C5370	Large Meters - Houeline Testing
7	Continuing Operations	C5390	Gas Curb Meter and Atmospheric Corrosion Inspection and Maintenance
7	Continuing Operations	C5460	Fumigation Shut-Off and Back-On Orders



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7	Continuing Operations	C5480	Purging Service Risers
7	Continuing Operations	C5490	Working in the Presence of Escaping Gas
7	Continuing Operations	C5510	Leak Investigation
7	Continuing Operations	C5520	Houeline Leakage on Master-Metered Systems
7	Continuing Operations	C5540	Setting Gas Meters
7	Continuing Operations	C5580	Re-Insulating Gas Meters
7	Continuing Operations	C5660	Purging Gas Meters and Customer Houelines
7	Continuing Operations	C5665	Odor Conditioning of New Customer-Owned Pipelines - Size (AC630) Meters and Larger
7	Continuing Operations	C5680	GMI GT Instrument Operation and Maintenance Procedure
7	Continuing Operations	C5700	Service Policy
7	Continuing Operations	CSSD071220	Sempra Energy Foundation's 2007 Fire Relief Fund Information Handout
7	Continuing Operations	D7110	Abandonment of Gas Service and Gas Light Tap Assemblies
7	Continuing Operations	D7117	Installing and Turn on Responsibility of Gas Meters



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7	Continuing Operations	D7119	Earthquake Valves on Meter Sets
7	Continuing Operations	D7121	Locking and Blanking of Gas Meter Sets
7	Continuing Operations	D7213	Polyethylene Heater - Temperature Measurement and Adjustment
7	Continuing Operations	D7214	Joining Polyethylene with Mechanical Fittings
7	Continuing Operations	D7216	Mechanical Tapping Tee Inspection
7	Continuing Operations	D7221	Socket Fusion for Polyethylene
7	Continuing Operations	D7222	PE Saddle Fusions
7	Continuing Operations	D7225	Tapping Polyethylene Pipelines
7	Continuing Operations	D7226	Magic Box - 2"-4"
7	Continuing Operations	D7227	Butt Fusion Polyethylene
7	Continuing Operations	D7241	Direct Burial of Polyethylene
7	Continuing Operations	D7252	Service Head Adapter - 3/4 INCH
7	Continuing Operations	D7265	Pneumatic Test Requirements for Pipelines Operating at 60 PSIG or Less



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7	Continuing Operations	D7275	Repair of Polyethylene
7	Continuing Operations	D7279	Squeezing Polyethylene
7	Continuing Operations	D7283	RFS of Polyethylene
7	Continuing Operations	D7293	Qualification and Re-Qualification Requirements for Polyethylene Fitters
7	Continuing Operations	D7325	Service Punch Tee
7	Continuing Operations	D7341	Raising or Repairing 3/4 Inch and 1 Inch Steel Risers
7	Continuing Operations	D7371	Leak Repair Methods for Steel Distribution Pipelines
7	Continuing Operations	D7373	Pipe Cold Squeezer Huskie PS-45
7	Continuing Operations	D7381	Abandonment or Inactivation of Gas Distribution Pipelines
7	Continuing Operations	D7382	Requirements for Hot/Cold Squeezing of Steel Pipelines
7	Continuing Operations	D7383	Steel Pipe Squeezer 6" through 12"
7	Continuing Operations	D7385	RFS of ¾ Inch and 1 Inch Service Nipples on Mains to be Upgraded
7	Continuing Operations	D7403	Underground Distribution (UD) Trenches and Utility Positioning



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7	Continuing Operations	D7411	Trench Excavation Requirements for 60-400 PSIG MAOP Distribution Mains
7	Continuing Operations	D7705	Regulator Station Installation Procedures
7	Continuing Operations	D7709	Services of Regulator Technicians for Gas Construction - Distribution
7	Continuing Operations	D7905	Minimum Requirements for Pressure Control Operations on Distribution Pipeline Systems
7	Continuing Operations	D7907	Qualification Requirements Distribution Pressure Control
7	Continuing Operations	D7911	Purging of Distribution Gas Lines of 60 PSIG
7	Continuing Operations	D7912	Purging and Locking Service Risers
7	Continuing Operations	D7919	Changing a 3/4 Inch and 1 Inch Service Valve
7	Continuing Operations	D7927	Mueller 'D-4' and 'D-5' Tapping Machine Instructions
7	Continuing Operations	D7929	Mueller Line Stopper Unit No. 1
7	Continuing Operations	D7931	Mueller 'E-4' and 'E-5' Tapping Machine
7	Continuing Operations	D7933	Stopping Off Procedure for Service Nipples
7	Continuing Operations	D7955	Pressure Control - 2" Top Half Fitting



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7	Continuing Operations	D7955	Pressure Control - 2" Top Half Fitting
7	Continuing Operations	D7956	Pressure Control - 3" and 4" Top Half Fitting
7	Continuing Operations	D7957	2-Inch Service Tee for Gas Mains 60 psig or Less
7	Continuing Operations	D8145	Gas Leakage Surveys - Distribution
7	Continuing Operations	D8164	Pressure Monitoring of Distribution Systems
7	Continuing Operations	D8167	Valve Inspection and Maintenance - Distribution
7	Continuing Operations	D8305	Trenchless Construction Methods
7	Continuing Operations	G7345	Application of Mueller and TDW M Stop Control Fittings
7	Continuing Operations	G7355	Holiday Detector Operation
7	Continuing Operations	G7361	Pipeline Testing Requirements
7	Continuing Operations	G7365	Pneumatic Test Requirement for Pipelines Operating Above 60 PSIG
7	Continuing Operations	G7369	Hydrostatic Test Requirements
7	Continuing Operations	G7371	Repair of Defects in Steel Transmission Piping



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7	Continuing Operations	G7372	Repair of Defects on an Operating Pipeline by Grinding
7	Continuing Operations	G7373	Repair of Non-Leaking Defects on an Operating Pipeline with a Band or Sleeve
7	Continuing Operations	G7374	Repair of Defects on Operating Pipelines Using Abandon Nipple
7	Continuing Operations	G7375	Approved Protective Coatings for Below Ground Corrosion Control
7	Continuing Operations	G7376	Field Tape Wrapping Requirements
7	Continuing Operations	G7377	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating
7	Continuing Operations	G7378	External Surface Preparation and Field-Applied Coating for Above Ground Pipe Spans
7	Continuing Operations	G7379	External Surface Preparation and Field Applied Coatings for Buried Pipelines
7	Continuing Operations	G7380	Field Application of Grease Coating
7	Continuing Operations	G7382	Surface Preparation and Shop Applied Coating for General Steel (Primer and Topcoat)
7	Continuing Operations	G7384	External Surface Preparation and Field-Applied Coatings for New and Old Steel in a Marine Environment
7	Continuing Operations	G7385	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas
7	Continuing Operations	G7386	Internal Surface Preparation and Shop-Applied Coating for Drip Legs



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7	Continuing Operations	G7408	Hand Backfill and Compaction Method
7	Continuing Operations	G7409	Imported or Native Backfill
7	Continuing Operations	G7410	Slurry Backfill
7	Continuing Operations	G7605	Valving Responsibility - Distribution
7	Continuing Operations	G7605	Valving Responsibility - Distribution
7	Continuing Operations	G7615	Replacement and Raising of Valve Boxes
7	Continuing Operations	G7636	Lubrication of Plug Vavles
7	Continuing Operations	G7636	Lubrication of Plug Vavles
7	Continuing Operations	G7643	Excess Flow Valve (EFV) - Installation and Operation
7	Continuing Operations	G7803	General Welding Requirements
7	Continuing Operations	G7805	Welding Field Guide
7	Continuing Operations	G7815	Inspection and Testing of Welds on Company Steel Piping
7	Continuing Operations	G7909	General Purging Procedures



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7	Continuing Operations	G7951	Tapping Through 4, 6 and 8 Inch Ball Valves
7	Continuing Operations	G7959	Tapping Through a 2 Inch Ball Valve
7	Continuing Operations	G7967	Tapping Through a 2 Inch Mueller PCF With a "DH-5" Drilling Machine on Mains Exceeding 60 PSIG
7	Continuing Operations	G7971	Stopping Off a 2 Inch Mueller PCF with a "D-5" Drilling Machine on Mains Exceeding 60 PSIG
7	Continuing Operations	G7975	Pressure Control Machines - TD Williamson 1200 Unit
7	Continuing Operations	G7979	Operation of Line Stopper Units 3SW-500 and 4SW-500 on 4 Inch Through 12 Inch PCF's
7	Continuing Operations	G8002	100mV Polarization Criteria
7	Continuing Operations	G8003	Design and Application of Cathodic Protection
7	Continuing Operations	G8003	Design and Application of Cathodic Protection
7	Continuing Operations	G8006	Connect Copper Wire To Steel Pipe - Pin Brazing, Thermite Welding and Braze Welding Processes
7	Continuing Operations	G8009	Electrical Test Stations & Bond Assembly
7	Continuing Operations	G8013	Cathodic Protection - Mixed Piping Systems
7	Continuing Operations	G8014	Magnesium Anodes for Corrosion Control



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	G8015	Selection and Installation of Rectifiers and Impressed Current Anodes
7	Continuing Operations	G8019	Operation and Maintenance of Cathodic Protection Facilities
7	Continuing Operations	G8021	Cathodic Protection - Inspection of Exposed Pipe
7	Continuing Operations	G8022	System Protection - Inspection of Meter Set Assemblies
7	Continuing Operations	G8023	MAOP Evaluation of Corroded Pipe
7	Continuing Operations	G8025	Internal Corrosion Management Plan
7	Continuing Operations	G8026	External and Internal Transmission Pipeline Inspection
7	Continuing Operations	G8027	Cathodic Protection - Electrical Isolation
7	Continuing Operations	G8035	Interference - Stray Electrical Current
7	Continuing Operations	G8037	Induced High Voltage Alternating Current (HVAC) on Pipelines
7	Continuing Operations	G8043	Corrosion Control of Underground Hazardous Substance Storage Tanks
7	Continuing Operations	G8107	Aboveground Survey Plan
7	Continuing Operations	G8108	Alternating Current Attenuation Survey



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	G8109	Close Interval Survey
7	Continuing Operations	G8113	Operator Qualification Program
7	Continuing Operations	G8113	Operator Qualification Program
7	Continuing Operations	G8122	Prevention of Damage to Company Facilities
7	Continuing Operations	G8129	Odorization
7	Continuing Operations	G8130	Operation of Odorometer and Odorator
7	Continuing Operations	G8133	ODORIZATION-YZ NJEX Odorant Injection System Maintenance
7	Continuing Operations	G8135	Leakage Priority Classification
7	Continuing Operations	G8137	Underground Leak Investigation
7	Continuing Operations	G8137	Underground Leak Investigation
7	Continuing Operations	G8138	Optical Methane Detector Operation and Maintenance
7	Continuing Operations	G8139	Company Facility Underground Odor Assessment
7	Continuing Operations	G8139	Company Facility Underground Odor Assessment



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	G8140	Pipeline Patrol
7	Continuing Operations	G8141	Pipeline Markers
7	Continuing Operations	G8142	Inspection of Pipelines on Bridges, Spans and in Unstable Earth
7	Continuing Operations	G8145	Leakage Surveys - Transmission Lines
7	Continuing Operations	G8159	Distribution Pressure Regulating and Monitoring Station & Vault - Inspection, Maintenance and Settings
7	Continuing Operations	G8168	Immediate Repair Conditions - Transmission Pipelines
7	Continuing Operations	G8184	Bellhole Inspection Requirements
7	Continuing Operations	G8185	Casing Wax Fill
7	Continuing Operations	G8189	Heath Detecto-Pak® III Flame Ionization Gas Leak Detection Unit
7	Continuing Operations	G8192	RMLD - Remote Methane Leak Detector
7	Continuing Operations	G8202	Field Guidelines - Emergency Incident Distribution / Customer Service
7	Continuing Operations	G8204	Emergency Response Procedures for Gas Incidents - Distribution
7	Continuing Operations	G8205	Emergency Response Procedures for Gas Incidents - Transmission



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	G8215	Field Services (Distribution) On-duty Supervisor Responsibilities
7	Continuing Operations	T7375	Repair of Transmission Pipelines
7	Continuing Operations	T7381	Abandonment, Conversion and Reinstatement of Transmission Pipelines
7	Continuing Operations	T7413	Minimum Trench Requirements for Transmission Pipelines
7	Continuing Operations	T8148	Testing and Maintaining Compressor Station Emergency Shutdown Systems
7	Continuing Operations	T8149	Compressor Station Relief Valves
7	Continuing Operations	T8165	Gas Transmission System Relief Valves
7	Continuing Operations	T8167	Valve Inspection and Maintenance - Transmission
7	Continuing Operations	ESHSD-0000	Phone Numbers
7	Continuing Operations	ESHSD-1100	Rule 1100 - Injury and Illness Prevention Program
7	Continuing Operations	ESHSD-1200	Rule 1200 - General Safety and Health Rules
7	Continuing Operations	ESHSD-1300	Motor Vehicle Operations
7	Continuing Operations	ESHSD-1400	Office Safety



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	ESHSD-1500	Fire Prevention
7	Continuing Operations	ESHSD-1600	Emergency Action Plan (EAP)
7	Continuing Operations	ESHSD-1700	Workplace Security
7	Continuing Operations	ESHSD-1800	Incident and Injury Reporting
7	Continuing Operations	ESHSD-2100	General Construction, Maintenance and Operation Safety Rules
7	Continuing Operations	ESHSD-2200	Aerial Lift Equipment
7	Continuing Operations	ESHSD-3100	Electric - General Safety Rules
7	Continuing Operations	ESHSD-3300	Electric Substation and Maintenance
7	Continuing Operations	ESHSD-3400	Overhead Electric - Distribution and Transmission
7	Continuing Operations	ESHSD-3600	Underground Electric - Distribution and Transmission
7	Continuing Operations	ESHSD-3800	Electrical Safety Hazards
7	Continuing Operations	ESHSD-4100	Gas Distribution and Transmission
7	Continuing Operations	ESHSD-9999	Definitions



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	ESHSD-1200	Rule 1200 - General Safety and Health Rules
7	Continuing Operations	ESHSD-2100	General Construction, Maintenance and Operation Safety Rules
7	Continuing Operations	3222SD	Design Data Sheet (DDS)
7	Continuing Operations	D7204	PE Fusion Card
7	Continuing Operations	D7255	Casing Assemblies - Plastic Carrier Pipe
7	Continuing Operations	D7465	Prefabricated Vaults - Design and Selection Guide
7	Continuing Operations	D7711	Regulator Station Design and Planning
7	Continuing Operations	D7715	Control Piping
7	Continuing Operations	D8189	Temporary LNG Facility
7	Continuing Operations	G7013	Qualification of New Construction Contractors
7	Continuing Operations	G7314	Steel Pipe - Selection
7	Continuing Operations	G7316	Identification of Steel Pipe and Butt Weld Fittings
7	Continuing Operations	G7321	Steel Butt-Weld Fittings - Selection Guide



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	G7350	Casing Assemblies - Steel Carrier Pipe
7	Continuing Operations	G7351	Wear Pads and Bands for Steel Gas Piping
7	Continuing Operations	G7353	Branch Connection, Steel - Selection Guide
7	Continuing Operations	G7603	Valve Usage and Selection Guide
7	Continuing Operations	G7665	Flanges - Selection, Torque and Installation Requirements
7	Continuing Operations	G7809	Qualification and Re-Qualification of Welders
7	Continuing Operations	G7817	Radiographic Procedures and Radiographer Qualifications
7	Continuing Operations	G7821	Angles and Bends in Steel Piping
7	Continuing Operations	G8029	Record Keeping - Corrosion Control
7	Continuing Operations	G8031	Internal Corrosion Design and Construction Considerations
7	Continuing Operations	G8115	Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure
7	Continuing Operations	G8116	Pipeline and Related Definitions
7	Continuing Operations	G8121	Location Class - Determination and Changes



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	G8172	Data Gathering and Integration
7	Continuing Operations	G8222	Pipeline Incident Reports to CPUC and DOT
7	Continuing Operations	G8223	Pipeline Safety Reports to CPUC and DOT
7	Continuing Operations	G8229	Region Reports of Safety-Related Pipeline Conditions
7	Continuing Operations	PA-1	Public Awareness Program
7	Continuing Operations	G8603	Designs for Pipelines in Bridges
7	Continuing Operations	G8605	Request for Pipeline Design Assistance
7	Continuing Operations	G8717	Industrial Waste Discharge to Sanitary Sewer
7	Continuing Operations	G8719	Hydrostatic Test Water Disposal
7	Continuing Operations	G8736	Proposition 65 Compliance
7	Continuing Operations	G9103	Pressure Terminology and Establishment of Pressure Levels for Piping
7	Continuing Operations	G9105	Design Factors for Steel Piping Systems
7	Continuing Operations	G9109	Electrical Facilities in Hazardous Areas



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Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	T7303	General Construction Requirements - Steel Transmission System
7	Continuing Operations	T7320	Requirements for Designing Pipelines to Accommodate Smart Pigs
7	Continuing Operations	T8147	Compressor Stations - Operation and Maintenance
7	Continuing Operations	C5710	Back Flow Protection - Regulators and Check Valves



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1.3. Policy Document – Safety Plan Matrix

Pipeline Safety Plan Chapter					
(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)					
Policy	Title	4	5	6	7
190SD	Operator Qualification Task Change Communication	X		X	
2110SD	Quality Assurance for Gas Standards Related to Integrity Management Program	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			
4090SD	100mV Polarization Form	X			
4091SD	Wax Casing Data Collection Form	X			
677-1SD	Pipeline Condition and Maintenance Report	X			
76-72	Odorant - 50/50 TBM/THT	X			
76-73	Thiophane Odorant	X			
ACF	Assessment Completion Form	X			
C5050	Order Priority	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	
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	



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Pipeline Safety Plan Chapter					
(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)					
Policy	Title	4	5	6	7
C5510	Leak Investigation	X	X	X	X
C5520	Houeline 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 Houelines	X		X	X
C5665	Odor Conditioning of New Customer-Owned Pipelines - Size (AC630) Meters and Larger				X
C5680	GMI GT Instrument Operation and Maintenance Procedure				X
C5700	Service Policy				X
C5710	Back Flow Protection - Regulators and Check Valves			X	X
CRMP1	Control Room Management Plan	X		X	
CRMP6	Gas Control Management of Change			X	
CRMP6SD	Gas Control Management of Change	X		X	
CSSD071220	Sempra Energy Foundation's 2007 Fire Relief Fund Information Handout				X
D7103	Gas Meter Location	X		X	
D7107	Free Standing Header Support	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	
D7117	Installing and Turn on Responsibility of Gas Meters	X		X	X
D7119	Earthquake Valves on Meter Sets				X
D7121	Locking and Blanking of Gas Meter Sets	X		X	X
D7123	Service Regulator Vent Extensions	X		X	



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Pipeline Safety Plan Chapter					
(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)					
Policy	Title	4	5	6	7
D7125	Service Regulators in Curb Meter Boxes	X		X	
D7127	Curb Meter Box Excavation and Riser Replacement	X		X	
D7203	Polyethylene Quick Reference	X		X	
D7204	PE Fusion Card			X	X
D7211	Handling and Storage of Polyethylene Material	X		X	
D7213	Polyethylene Heater - Temperature Measurement and Adjustment	X			X
D7214	Joining Polyethylene with Mechanical Fittings			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 Polyethylene Pipelines	X		X	X
D7226	Magic Box - 2"-4"	X			X
D7227	Butt Fusion Polyethylene	X		X	X
D7233	Electrofusion for Polyethylene			X	
D7237	Transitions : Polyethylene to Steel			X	
D7241	Direct Burial of Polyethylene			X	X
D7247	Service Risers for Polyethylene	X		X	
D7249	Valve Installation 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			X	
D7265	Pneumatic Test Requirements for Pipelines Operating at 60 PSIG or Less	X		X	X
D7275	Repair of Polyethylene	X		X	X
D7279	Squeezing Polyethylene				X
D7283	RFS of Polyethylene	X		X	X
D7293	Qualification and Re-Qualification Requirements for Polyethylene Fitters			X	X
D7303	General Requirements - Steel Distribution System			X	
D7321	Service Connections			X	



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Pipeline Safety Plan Chapter					
(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)					
Policy	Title	4	5	6	7
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
D7382	Requirements for Hot/Cold Squeezing of Steel Pipelines				X
D7383	Steel Pipe Squeezer 6" through 12"	X			X
D7385	RFS of ¾ Inch and 1 Inch Service Nipples on Mains to be Upgraded				X
D7403	Underground Distribution (UD) Trenches and Utility Positioning			X	X
D7411	Trench Excavation Requirements for 60-400 PSIG MAOP Distribution Mains			X	X
D7412	Excavation Requirements for Trench with Two Distribution Mains			X	
D7427	Standard Gas Main Positions			X	
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
D7709	Services of Regulator Technicians for Gas Construction - Distribution				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 Service Valve				X



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(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)					
Policy	Title	4	5	6	7
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 Nipples				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
D8145	Gas Leakage Surveys - Distribution	X		X	X
D8146	Replacement Criteria for Distribution Mains	X		X	
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
D8305	Trenchless Construction Methods	X		X	X
D8310	Polyethylene 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	
D9165	Design of Gas Pipeline in Sloping Terrain	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			
DIMP7	Quality Assurance Plan	X			



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<small>(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)</small>					
Policy	Title	4	5	6	7
DIMP8	Periodic Evaluation and Improvement	X			
DIMP9	Report Results	X			
DIMPA	Terms, Definitions and Acronyms	X			
DIMPB	Threat Matrix and Data Model	X			
DIMPD	ICAM Content	X			
DIMPE	Program's Activity to Address Risk - PAAR	X			
ESHSD-0000	Phone Numbers				X
ESHSD-1100	Rule 1100 - Injury and Illness Prevention Program				X
ESHSD-1200	Rule 1200 - General Safety and Health Rules				X
ESHSD-1300	Motor Vehicle Operations				X
ESHSD-1400	Office Safety				X
ESHSD-1500	Fire Prevention				X
ESHSD-1600	Emergency Action Plan (EAP)				X
ESHSD-1700	Workplace Security				X
ESHSD-1800	Incident and Injury Reporting				X
ESHSD-2100	General Construction, Maintenance and Operation Safety Rules				X
ESHSD-2200	Aerial Lift 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
F17-1	Annual Performance Measures	X			
F4-1	Change of Threat Form	X			
F8-1	Baseline Assessment Plan Revisions Log	X			
G7008	Material Evaluation and Implementation	X			
G7009	Material Specifications and Purchase Descriptions	X			
G7011	Standard Specification for Natural and	X		X	



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Policy	Title	4	5	6	7
	Substitute Fuel Gases				
G7013	Qualification of New Construction Contractors	X			X
G7313	Steel Pipe Yield, Design Properties and Design Pressure Tables	X			
G7314	Steel Pipe - Selection	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
G7362	Strength Testing - Pipelines and Facilities	X		X	
G7365	Pneumatic Test Requirement for Pipelines Operating Above 60 PSIG	X		X	X
G7369	Hydrostatic Test Requirements	X		X	X
G7371	Repair of Defects in Steel Transmission 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
G7378	External Surface Preparation and Field-Applied Coating for Above Ground Pipe Spans	X		X	X



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Pipeline Safety Plan Chapter					
<small>(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)</small>					
Policy	Title	4	5	6	7
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 Shop-Applied Coatings for Steel Tanks and Vessels	X		X	
G7382	Surface Preparation and Shop Applied Coating for General Steel (Primer and Topcoat)	X			X
G7383	Surface Preparation and Field-Applied Coating for Interior of Storage Tanks and Vessels	X		X	
G7384	External Surface Preparation and Field-Applied Coatings for New and Old Steel in a Marine Environment	X		X	X
G7385	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas	X		X	X
G7386	Internal Surface Preparation and Shop-Applied Coating for Drip Legs	X			X
G7408	Hand Backfill and Compaction Method			X	X
G7409	Imported or Native Backfill				X
G7410	Slurry Backfill				X
G7451	Prevention of Damage to Subsurface Installations	X			
G7453	General Excavation Requirements			X	
G7507	Map Maintenance Requirements for High Pressure Gas Lines	X			
G7603	Valve Usage and Selection Guide	X		X	X
G7605	Valving Responsibility - Distribution				X
G7615	Replacement and Raising of Valve Boxes			X	X
G7631	Main Line Ball Valve Assembly - Classes 150 & 300 2 Inch, 3 Inch, and 4 Inch			X	
G7635	Main Line Ball Valve Assembly - Classes 150 & 300 6 Inch and 8 Inch			X	
G7636	Lubrication of Plug Vavles				X
G7637	Line Valve Assembly 10 Inch			X	



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<small>(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)</small>					
Policy	Title	4	5	6	7
G7643	Excess Flow Valve (EFV) - Installation and Operation	X		X	X
G7649	2 Inch Ball Valve Assembly for Hot Taps			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 Procedures and Radiographer Qualifications			X	X
G7821	Angles and Bends in Steel Piping			X	X
G7909	General Purging Procedures	X		X	X
G7951	Tapping Through 4, 6 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	A 2-Inch Tapping Assembly for Hot Tapping 400 and 800 PSIG Pipelines			X	
G7967	Tapping Through a 2 Inch Mueller PCF With a "DH-5" Drilling Machine on Mains Exceeding 60 PSIG				X
G7971	Stopping Off a 2 Inch Mueller PCF with a "D-5" Drilling Machine on Mains Exceeding 60 PSIG				X
G7975	Pressure Control Machines - TD Williamson 1200 Unit				X
G7979	Operation of Line Stopper Units 3SW-500 and 4SW-500 on 4 Inch Through 12 Inch PCF's				X
G8001	Criteria for Cathodic Protection	X		X	
G8002	100mV Polarization Criteria	X		X	X
G8003	Design and Application of Cathodic Protection	X		X	X
G8006	Connect Copper Wire To Steel Pipe - Pin				X



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(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)					
Policy	Title	4	5	6	7
	Brazing, Thermite Welding and Braze Welding Processes				
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	System Protection - 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
G8029	Record Keeping - Corrosion Control	X		X	X
G8031	Internal Corrosion Design and Construction Considerations	X		X	X
G8035	Interference - Stray Electrical Current	X		X	X
G8037	Induced High Voltage Alternating Current (HVAC) on Pipelines				X
G8041	Cathodic Protection - Instruments and Testing Equipment	X			
G8042	Copper Sulfate Electrode	X			
G8043	Corrosion Control of Underground Hazardous Substance Storage Tanks				X
G8107	Aboveground Survey Plan	X			X
G8108	Alternating Current Attenuation Survey	X			X
G8109	Close Interval Survey	X			X
G8110	Voltage Gradient Survey	X			
G8111	Soil Resistivity Survey	X			
G8112	Inspection of Cased Pipe	X			



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Pipeline Safety Plan Chapter					
(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)					
Policy	Title	4	5	6	7
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	Location Class - Determination and Changes	X		X	X
G8122	Prevention of Damage to Company Facilities	X		X	X
G8123	Underground Service Alert and Temporary Marking	X		X	
G8129	Odorization	X		X	X
G8130	Operation of Odorometer and Odorator				X
G8133	ODORIZATION-YZ NJEX Odorant Injection System Maintenance				X
G8135	Leakage Priority Classification	X		X	X
G8137	Underground Leak Investigation		X		X
G8138	Optical Methane Detector Operation and Maintenance				X
G8139	Company Facility Underground Odor Assessment		X		X
G8140	Pipeline Patrol	X		X	X
G8141	Pipeline Markers	X		X	X
G8142	Inspection of Pipelines on Bridges, Spans and in Unstable Earth	X		X	X
G8145	Leakage Surveys - Transmission Lines	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	In-Line Inspection GPS Control Survey	X			



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<small>(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)</small>					
Policy	Title	4	5	6	7
G8164	Global Positioning System (GPS) Process	X			
G8165	Dry Gas - Internal Corrosion Direct Assessment	X			
G8166	Scheduling Remediation	X			
G8168	Immediate Repair Conditions - Transmission Pipelines	X	X	X	X
G8169	Prevention of Accidental Ignition	X	X	X	
G8170	Operations Technology Procedure for HCA Segment Identification	X			
G8171	New and Upgraded Pipelines - CPUC Notification	X			
G8172	Data Gathering and Integration	X	X	X	X
G8173	Threat Identification	X			
G8174	Risk Assessment of High Consequence Areas	X			
G8178	Baseline Assessment Plan	X			
G8179	External Corrosion Direct Assessment Procedure	X			
G8180	In-Line Inspection (ILI) 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			
G8189	Heath Detecto-Pak® III Flame Ionization Gas Leak Detection Unit				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	



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<small>(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)</small>					
Policy	Title	4	5	6	7
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
G8216	Incident Command System (ICS) for Emergency Incidents	X	X	X	
G8221	Gas Incident Notification	X	X	X	
G8222	Pipeline Incident Reports to CPUC and DOT	X	X		X
G8223	Pipeline Safety Reports to CPUC and DOT	X	X	X	X
G8225	Investigation of Gas Incidents	X	X	X	
G8229	Region Reports of Safety-Related Pipeline Conditions	X	X	X	X
G8231	Public Awareness Program	X		X	
G8237	Restoration of Service Procedures	X	X	X	
G8241	Responsibilities for Maintenance of the Downtown San Diego Emergency Curtailment Map	X	X	X	
G8308	Contractor Safety Program	X			
G8320	Working in Flammable Atmospheres	X		X	
G8365	Respiratory Protection Program	X		X	
G8603	Designs for Pipelines in Bridges	X		X	X
G8605	Request for Pipeline Design Assistance	X		X	X
G8704	Environmental Training	X			
G8706	Environmental Inspections, Search Warrants, and Internal Notifications	X			
G8717	Industrial Waste Discharge to Sanitary Sewer				X
G8719	Hydrostatic Test Water Disposal			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
G9111	Economic Evaluation for Pipeline Designs in	X		X	



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(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)					
Policy	Title	4	5	6	7
	High Consequence Areas				
PA-1	Public Awareness Program		X		X
QAP-9	IMP Audit Summary Form	X			
SD5153	Pipeline Location Information	X			
T7303	General Construction Requirements - Steel Transmission System			X	X
T7320	Requirements for Designing Pipelines to Accommodate Smart Pigs	X		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
T8105	Control Microsystems SCADAPACK	X			
T8129	Supplemental Odorization of Gas at Border Stations	X		X	
T8144	MAXIMO - Transmission	X			
T8147	Compressor Stations - Operation and Maintenance	X		X	X
T8148	Testing and Maintaining Compressor Station Emergency Shutdown Systems	X		X	X
T8149	Compressor Station Relief Valves	X		X	X
T8151	Hold-Out Procedures for Equipment Isolation	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
T8171	Abnormal Operations - Transmission	X	X	X	
TIMP.0	Table of Contents	X			
TIMP.1	Introduction	X			
TIMP.10	Remediation	X			
TIMP.11	Minimizing Environmental & Safety Risks	X			



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<small>(See 1.3. "List of Policy Documents By Chapter" for the Policy Title)</small>					
Policy	Title	4	5	6	7
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			
TIMP.19	Communications Plan	X			
TIMP.20	Regulatory Interaction	X			
TIMP.3	HCA Identification	X			
TIMP.4	Data Gathering and Threat Identification	X			
TIMP.5	Risk Assessment	X			
TIMP.8	Baseline Assessment Plan	X			
TIMP.9	Integrity Assessments	X			
TIMP.A	Terms, Definitions and Acronymns	X			



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SUMMARY OF DOCUMENT CHANGES & FILING INSTRUCTIONS	
Brief: Initial Publication in response to CPUC Decision 12-04-010	
Circulation Code	Filing Instructions

DOCUMENT PROFILE SUMMARY	
NOTE: Do not make any changes to this table. Data in this table is automatically posted during publication.	
Document Number:	Appendix.A
Document Title:	Appendix- Safety Policy Documents
Contact Person:	TBD
Current Revision Date:	6/29/2012
 Last Full Review Completed On:	6/29/2012
Document Status:	Active
Document Type:	MANUALS
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 If Merged, Merged to:	
Incoming Materials Inspection Required (MSP only):	
Company:	SoCalGas
Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan (reviewed annually):	No
Part of SDG&E O&M Plan (reviewed annually):	No
O&M 49 CFR Codes & Impacted Sections of Document:	
 Part of Transmission IMP (TIMP):	No
 TIMP 49 CFR Codes & Impacted Sections:	
 Part of Distribution IMP (DIMP):	No
 Additional 49 CFR Codes Covered by Document:	
Learning Module (LM) Training Code:	