

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

TABLE OF CONTENTS	SOCALGAS SP.0-SC
--------------------------	-------------------------

SECTION	DESCRIPTION	REQUIRED ELEMENTS FROM CA Public Utilities Code §§ 956.5, 961, and 963	ELEMENTS FROM RECOMMENDED PRACTICE API 1173*
1	INTRODUCTION	961(b)(1-3)	
2	EXECUTIVE OFFICER’S SAFETY PERFORMANCE EXPECTATIONS	961(b)(4)	5.1, 5.4, 8.1, 10.2
3	PLAN DEVELOPMENT & IMPLEMENTATION	961(e)	5.2, 6.2, 6.3
4	SAFETY SYSTEMS	961(d)(1)	7.1, 7.2, 7.3, 7.4, 7.5, 8.2, 8.3
5	EMERGENCY RESPONSE	956.5, 961(d)(5,6,8)	7.4, 7.6, 12
6	STATE AND FEDERAL REGULATIONS	961(c)(d)(7,9)	6.3, 8.2, 8.3, 8.4
7	CONTINUING OPERATIONS	961(d)(3,4,10) 963(b)(3)	5.4, 5.6, 6.2, 8.3, 9.1, 10.2, 13
8	EMERGING ISSUES	961(d)(11)	
A	APPENDIX – SAFETY POLICY DOCUMENTS	961(a)	14.1, 14.2, 14.3, 14.4

* May be only partially following a multifaceted recommended practice.



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

TABLE OF CONTENTS	SOCALGAS SP.0-SC
--------------------------	-------------------------

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.
Brief: Annual review of Safety Plan. Document remains valid with no changes.

Document Profile Summary	
Responsible Person:	Cho, Jimmie I
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

INTRODUCTION	SoCALGAS: SP.1-SC
---------------------	--------------------------

Table of Contents

1	PUBLIC UTILITIES CODE SECTIONS 961 AND 963 AND CPUC DECISION 12-04-010....	2
2	PURPOSE.....	2
3	SAFETY PLAN STRUCTURE.....	2
4	PROGRAM REVIEW AND MODIFICATIONS	3

INTERNAL

1 PUBLIC UTILITIES CODE SECTIONS 956.5, 961, 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.

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

2 PURPOSE

According to the Commission, "the rationale for developing a gas safety plan is to motivate a gas utility to reflect upon its existing methods and for it to change, to optimize, or to enhance the existing methods,... and 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.

SoCalGas 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 SoCalGas' 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 SoCalGas documents that communicate its safety program, this Safety Plan is at the top.

Public Utilities Code Sections 961 and 963 require that the gas system operator safety plans establish how the utility will achieve certain specified goals, and the Commission has organized these goals into five overall categories: (1) safety systems, (2) emergency response, (3) state and

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

INTRODUCTION	SoCALGAS: SP.1-SC
---------------------	--------------------------

federal regulations, (4) continuing operations, and (5) emerging issues. This Safety Plan follows this organizational structure as outlined by the Commission and is divided into sections corresponding to these five categories, with each section representing a required Safety Plan element or other significant element or aspect of the Safety Plan. The requirements of Code Section 956.5 are addressed within the category of emergency response.

SoCalGas has numerous existing safety programs, plans, and procedures in place that address specified infrastructure or areas of company activity. The intent of this 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 SoCalGas' 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 at an annual frequency period not to exceed 15 months. The program owners must provide justification for any deviation from this review schedule.



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

INTRODUCTION	SoCALGAS: SP.1-SC
---------------------	--------------------------

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.
Brief: Annual review of Safety Plan. Document remains valid with no changes.

Document Profile Summary	
Responsible Person:	Rawls, Wallace
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	Mark Serrano
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPOUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

EXECUTIVE OFFICER’S SAFETY PERFORMANCE EXPECTATIONS, POLICY PRINCIPLES, GOALS, AND OBJECTIVES	SoCALGAS: SP.2-SC
--	--------------------------

Table of Contents

1	INTRODUCTION	2
2	SENIOR MANAGEMENT TEAM SAFETY PERFORMANCE STATEMENT	2
3	POLICY PRINCIPLES AND PERFORMANCE EXPECTATIONS	3
4	GOALS AND OBJECTIVES	3
5	PROGRAM REVIEW AND MODIFICATIONS	4

INTERNAL

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

**EXECUTIVE OFFICER’S SAFETY PERFORMANCE EXPECTATIONS,
POLICY PRINCIPLES, GOALS, AND OBJECTIVES**

SoCALGAS: SP.2-SC

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 SoCalGas Senior Management Team.

2 SENIOR MANAGEMENT COMMITMENT TO SAFETY

At SoCalGas, the safety of our customers, employees, and communities is a core value. This tradition of safety spans more than 140 years, and is the foundation for company programs, policies, procedures, guidelines, and best practices. Management’s safety expectations can best be described by the following Commitment to Safety statement that every member of our Senior Management Team wholeheartedly endorses:

Southern California Gas Company’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.

-- SoCalGas' Commitment to Safety

3 POLICY PRINCIPLES AND PERFORMANCE EXPECTATIONS

SoCalGas' 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. SoCalGas' safety performance will be regularly monitored and evaluated in accordance with all state and federal regulations. Additional performance metrics shall be developed 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, SoCalGas 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. SoCalGas regularly assesses its safety culture and encourages two-way communication between employees and management as a means of identifying and managing safety risks. In addition to the reporting of pipeline and occupational safety incidents, management has created multiple methods for employees to report close calls/near misses.

At SoCalGas safety is a core value so we provide all employees with the training necessary to safely perform their job responsibilities. We further reinforce this principle by including safety performance measures in our employees' performance appraisals.

Safety is a core value not only for our employees, but also for the contractors we use to supplement our workforce. SoCalGas, through its Contractor Safety Management activities, monitors the occupational and pipeline safety records of its contractors and utilizes only those contractors that meet the Company's high safety standards. Through these activities, contractors are kept current on all relevant operational, regulatory, and procedural changes affecting their work. Two-way communication between contractor and Company is also encouraged in order to receive feedback on contractor-identified safety issues and to review lessons learned from root cause analysis related to near miss events and incidents.

4 GOALS AND OBJECTIVES

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

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

EXECUTIVE OFFICER’S SAFETY PERFORMANCE EXPECTATIONS, POLICY PRINCIPLES, GOALS, AND OBJECTIVES	SoCALGAS: SP.2-SC
--	--------------------------

Our goal is to have continual 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

All components of this Safety Plan must be reviewed and updated per their scheduled review period listed in the following table:

Document Type	Review Cycle
Safety Plan	Annually (not to exceed 15 months)
Gas Standards	At least every 5 years
TIMP O&M Control Room Management	At least annually
DIMP	At least every 5 years
Form Instructions	Every 5 years
Environmental	Every 2 years
Information Bulletins	At least annually

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



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

**EXECUTIVE OFFICER’S SAFETY PERFORMANCE EXPECTATIONS,
POLICY PRINCIPLES, GOALS, AND OBJECTIVES**

SoCALGAS: SP.2-SC

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.

Brief: Annual review of Safety Plan. Changed "Safety as a top priority" to "Core Value" in Section 2. Update Jimmie Cho title to “Senior Vice President Gas Engineering and Distribution Operations”.

Document Profile Summary

Responsible Person:	Cho, Jimmie I
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	Schneider, Douglas
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

PLAN DEVELOPMENT & IMPLEMENTATION

SoCALGAS: SP.3-SC

Table of Contents

1	CALIFORNIA PUBLIC UTILITIES CODE § 961 (e)	2
2	CPUC DIRECTIVES ON WORKFORCE PARTICIPATION	2
3	EMPLOYEE SAFETY PLAN CONTRIBUTION PROCESS.....	2
4	EXTERNAL STAKEHOLDER SAFETY PLAN CONTRIBUTION PROCESS	4

INTERNAL

1 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 and General Order 112-F Subpart G Section 301, the Commission has explained that natural gas system operators need to take the following actions:

1. The operator must make its safety plan available to its workforce, and provide for comments and suggestions from the workforce;
2. Gas system operators shall retain a log of the comments and suggestions, including the disposition of the comment or suggestion, with a summary of the rationale for the disposition;
3. Gas system operators shall also inform their employees that any employee who perceives a breach of safety requirements may inform the Commission of the breach, and that the Commission will keep the identity of the employee confidential; and
4. Each gas operator shall provide its workforce with the address of the Director of the Commission’s Consumer Protection and 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 SoCalGas' pipeline safety activities and have been an important part in developing this Safety Plan. Going forward, SoCalGas will continue to gather regular and substantial safety-related input from its employees.

To promote a culture of trust and increase the likelihood of reporting known pipeline or occupational safety risks, the Company is committed to enabling its employees to participate in the continual improvement of this safety plan. The Natural Gas System Operator Safety Plan is posted on the Company intranet site for easy access by all employees. The intranet site includes a summary of the plan content, a link to the document, hotline phone number and address for direct notification to the CPUC, and an electronic form for submitting pipeline and occupational safety risks and ideas for improvement. The purpose of the site is to provide employees a forum for

reporting issues outside of the normal supervisor-reporting hierarchy. Employees can report anonymously if they desire.

Periodic broadcasts are made via Company communication channels to remind employees of the site's availability and the importance of reporting known issues and improvement ideas. The importance of reporting pipeline and occupational safety risks is included in employee training course materials.

The following outlines SoCalGas' process management for the gathering and analysis of future pipeline safety input:

- Meetings with employees will be scheduled as necessary to further examine and clarify any future input received and to make certain that we are addressing issues or concerns related to our commitment to safety.
- Employees can submit their suggestions via written notification, on-line, or by phone. The on-line input system provides employees with comprehensive input tracking from the employee who submitted the input to the appropriate process manager and back. This system provides the ability to give periodic updates to the employee as the investigation progresses. The input received is posted on the website along with the resolution to help communicate improvements or education to other employees. This system is being managed and monitored by a department head manager.
- When input is received, it is promptly assigned to the responsible staff member for thorough investigation and resolution. SoCalGas takes the receipt of input very seriously and acts with a sense of urgency in the investigation of all input received.
- The target timeframe for initially reviewing and assigning a suggestion is as soon as possible and no longer than 5 business days. During investigations, employees are often contacted for additional clarification and to determine the appropriate follow-up actions.
- This follow-up may simply include discussions with the employee who submitted the input to explain how the company is currently meeting or exceeding the objective of their suggestion. The follow-up could also entail the re-training of field personnel or the revision of training materials, best practices and/or gas standards.
- SoCalGas strives to determine disposition of all investigations as quickly as possible; however, the ultimate goal is to complete a thorough investigation which could mean that an issue will not find closure for several weeks as enhancements are planned and implemented. With that said, most suggestions will find closure in less than two weeks. The basis for accepting or rejecting a suggestion will be the extent to which the suggestion improves the safety of the pipeline, and assists us in meeting all regulatory requirements and industry best practices while maintaining optimal operating efficiencies for our customers.

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

PLAN DEVELOPMENT & IMPLEMENTATION	SoCALGAS: SP.3-SC
--	--------------------------

- Employees will be periodically reminded and encouraged through various communication channels to submit their input through this process to ensure the company is capturing all ideas and suggestions related to pipeline safety.

The Safety Plan is available to all employees, and is stored online, reviewed and updated periodically.

4 EXTERNAL STAKEHOLDER SAFETY PLAN CONTRIBUTION PROCESS

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

Contact and communication with external stakeholders (e.g., public, first responders, public officials) is managed via the Public Awareness Plan.

The Contractor Safety Management program includes feedback from contractors regarding occupational and pipeline safety risks at SCG. Contractors are trained on the reporting policy and procedure.

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

PLAN DEVELOPMENT & IMPLEMENTATION	SoCALGAS: SP.3-SC
--	--------------------------

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.
Brief: Annual review of Safety Plan. Document remains valid with no changes.

Document Profile Summary	
Responsible Person:	Rivera, Omar
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

SAFETY SYSTEMS	SoCALGAS: SP.4-SC
-----------------------	--------------------------

Table of Contents

1	SAFETY SYSTEMS AND CALIFORNIA PUBLIC UTILITIES CODE § 961 (d)(1) and (d)(2).....	2
2	TRANSMISSION INTEGRITY MANAGEMENT PROGRAM.....	3
3	DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM.....	3
4	OPERATION AND MAINTENANCE PLAN.....	4
5	PIPELINE SAFETY ENHANCEMENT PLAN	5

INTERNAL

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, SoCalGas implemented its Pipeline Safety Enhancement Plan (PSEP) to address requirements for transmission infrastructure that are beyond current federal requirements.

Each of these programs is subject to continual improvement efforts and changes are made when warranted to further protect the public and SoCalGas workforce.

Pipeline integrity risk evaluations are designed to improve pipeline safety performance and are conducted per the schedule listed in the TIMP and DIMP programs. Included in these risk assessments are lessons learned from internal and external gas pipeline incidents. Risk assessments are reviewed at least annually, and updated as warranted, using data and information gained from operations and maintenance, inspection and testing, integrity-related work, and incident investigations. Company-wide, risk to operations related to loss of experienced and knowledgeable employees is managed through resource allocation and may be supported by our Knowledge Management programs which work with local management to develop succession planning for critical job functions.

2 TRANSMISSION INTEGRITY MANAGEMENT PROGRAM

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 SoCalGas 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 SP0502-2008. 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.

DOT HCA (covered segments) risk evaluations are designed to improve pipeline safety performance and are conducted per the schedule in the TIMP risk assessment requirements.

The TIMP is designed to provide assessments and integrity improvements on transmission pipelines by outlining responsible parties, timelines for each process element, incorporating 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 this 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.

SoCalGas employs the following pipeline integrity management activities to assess and evaluate pipelines in the system: in-line inspections, pressure testing, and direct assessment. Where ILI is one of the methods capable of assessing an identified threat, it is SoCalGas' preferred assessment method. 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 and the related and referenced procedures identify and prescribe activities to minimize transmission systemic risks and document its history and capability.

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

3 DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM

The Distribution Integrity Management Program (DIMP) is an ongoing 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. SoCalGas 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.

SoCalGas' 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. SoCalGas’ written DIMP plan has nine chapters and requires the integration of data from many sources for analysis and subsequent action based upon that analysis.

The DIMP includes certain activities SoCalGas performs, and it requires the continual development of a more formal and structured approach toward the company's traditional core regulatory pipeline integrity-related obligations.

The DIMP written plan and related and referenced procedures identify and prescribe activities to minimize systemic and localized risks to SoCalGas’ distribution system and document relevant system information.

SoCalGas’ 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

SoCalGas Operation and Maintenance (O&M) plan is a compendium of over 140 policies that meet the requirements 49 CFR 192.605 “Procedural manual for operations, maintenance, and emergencies.” This O&M 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; and
- 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 reviews at least every five years. Training programs are reviewed in the same timeframe as associated gas standards so employees are aware of and perform tasks according to the current requirements. To help employees remain knowledgeable of the critical policies and procedures, including those related to safety, SoCalGas provides annual review training for all operating employees.

The documents referenced by the O&M plan identify and prescribe activities whose purpose it is to minimize pipeline systemic risks and document its history through meeting and documenting code/regulation compliance, ensuring system safety and operational excellence, minimizing the potential for and consequences associated with unplanned events such as equipment failure or operator error.

5 PIPELINE SAFETY ENHANCEMENT PLAN

SoCalGas 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 SoCalGas' 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.



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

SAFETY SYSTEMS	SoCALGAS: SP.4-SC
-----------------------	--------------------------

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.
Brief: Annual review of Safety Plan. Updated table of contents to include page number 3 for Transmission Integrity Management Program

Document Profile Summary	
Responsible Person:	Martinez, Maria
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

EMERGENCY RESPONSE	SoCALGAS: SP.5-SC
---------------------------	--------------------------

Table of Contents

1	EMERGENCY RESPONSE AND CALIFORNIA PUBLIC UTILITIES CODE § 961 (d)(5), (d)(6) and (d)(8)	2
2	EMERGENCY RESPONSE PLAN	2

INTERNAL

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

In D.12-04-010, the Commission identified the topic of emergency response to meet the requirements of 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 from 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.

In response to the Safety Enforcement Division inquiry into options to implement Public Utilities Code §956.5, SoCalGas has included §956.5 as a requirement of the Safety Plan:

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

SoCalGas 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 SoCalGas 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:

- SoCalGas' Emergency Response Organization, including positions and responsibilities of the Emergency Operations Center, Gas Emergency Centers, and Transmission Command Post;
- Emergency preparedness;
- Continuity planning;
- Mutual assistance; and

- Plan maintenance.

The Plan incorporates by reference SoCalGas procedures and documents that collectively comply with the various requirements of 49 CFR Part 192.615:

- The responsibility of customer contact centers, which receive customer reports of emergencies and leaks;
- The responsibility of dispatch offices, which act as the central point for receiving and recording information on reportable incidents, emergencies, and natural disasters affecting the company, and which also process internal gas incident notifications; and
- The Emergency Incident Reporting System used to record reports of damage to SoCalGas pipelines or facilities and to log, track, and notify field personnel and others within the company about emergency situations.
- Establishing and maintaining liaison with appropriate First Responders.

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.

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

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

Incident Response

SoCalGas' emergency management organization is modeled after the Federal Emergency Management Agency (FEMA) Incident Command System (ICS), which allows for a multi-level emergency response organization. The Incident Command System is a nationally recognized standardized approach to incident management that provides 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 structure outlines communication standards for inter-functional (e.g., Transmission, Distribution) and inter-agency (e.g., fire,

police, emergency officials) cooperation during an emergency incident and responsibilities within the company to facilitate a unified command.

SoCalGas has three levels of emergency management support:

- Field response for isolated local emergencies or incidents (e.g., third-party dig-ins) managed with district/area resources.
- Gas Emergency Centers (GEC) and Transmission Command Post (TCP), which are activated for larger emergencies that involve, but not limited to, repair and restoration efforts, technical support, logistic, and external communication support.
- Emergency Operations Center (EOC), which supports significant events (e.g., earthquakes, mudslides, wild fires) 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 (e.g., fire, police, etc.) including mutual assistance.

Plans for routine emergencies differ from a major emergency in that Company personnel respond and address the incident with limited interaction with other first responder agencies. The Company responds immediately to all emergencies. Non-emergency conditions that may be potentially hazardous are evaluated based upon the information reported to the Company. Response times of less than four hours, less than 14 hours and same day have been established for these non-emergency conditions.

Training

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

SoCalGas emergency responders complete FEMA training consistent with their assigned responsibilities. This training may include Incident Command System and “First Responder” training for field management personnel that may respond to emergencies.

Communication and Stakeholder Outreach

SoCalGas conducts a robust outreach program with first responders on a routine basis. Staff conducts outreach to meet with first responders (e.g., fire, police and emergency officials) to discuss pipeline safety and communication. These first responders may also participate in Company drills and exercises both as participants or observers.

SoCalGas' service territory encompasses twelve counties with designated emergency County Coordinators. On an annual basis, a representative from Emergency Services will meet with each County Coordinator to discuss pipeline safety and awareness.

SoCalGas maintains a public awareness program to inform and educate customers, affected public, pertinent public officials, and persons engaged in excavation-related activities about the prevention and recognition of gas pipeline emergencies. This program also includes the process for reporting an incident to SoCalGas and the appropriate public officials including first responders.

Mutual Assistance

The Company maintains mutual assistance agreements with various mutual assistance organizations and utilities to obtain personnel, material, equipment, supplies, tools or any other form of aid or assistance in event of an emergency.

CUEA as well as other organizations serve as a point-of-contact for critical infrastructure utilities and the California Office of Emergency Services (Cal OES) and other Governmental Agencies before, during and after an event.

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

The appropriate level of leadership participates in and reviews the scheduling and findings of emergency preparedness activities.

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

EMERGENCY RESPONSE

SoCALGAS: SP.5-SC

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.

Brief: Annual review of Safety Plan.

1. Updated Section 2 Incident Response to include detailed information about emergency management organization modeled after the Federal Standard.
2. Removed Parts of Section 2 Training to now be included in Incident Response sections.
3. Added Section 2 Training SoCalGas Emergency Responders FEMA.
4. Added to Section 2 Communication Stakeholder Outreach.
5. Added to Section 2 Mutual Assistance.

Document Profile Summary

Responsible Person:	Tracy, Jill
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS	SoCALGAS: SP.6-SC
-------------------------------	-------------------

Table of Contents

1	STATE AND FEDERAL REGULATIONS AND CALIFORNIA PUBLIC UTILITIES CODE § 961 (d)(7), (d)(9) and (c).....	2
2	REGULATORY OVERSIGHT.....	2
3	COMPLIANCE WITH GENERAL ORDER 112-F.....	3

INTERNAL

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 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 SoCalGas complies with these directives.

2 REGULATORY OVERSIGHT

SoCalGas' 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 the Commission's General Order 112-F.¹

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

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

¹ On July 1, 2015, the California Public Utilities Commission issued the Final Decision Adopting GO 112-F which replaced GO 112-E. GO 112-F sought to clarify and extend existing regulations and cover gaps in federal regulations. It went into effect on January 1, 2017.

SoCalGas' gas standards, including O&M procedures, are developed to comply with federal and state pipeline safety regulations. To meet new laws, rules, and regulations, the Pipeline Safety and Compliance 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.

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

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

SoCalGas will continue these activities to comply with all regulations and requirements.

3 COMPLIANCE WITH GENERAL ORDER 112-F

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

The individual 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. SoCalGas' 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 design and/or safety factors. Components, including valves, flanges, and fittings meet the minimum prescribed requirements specified in the regulations. The design also includes pressure relief or other protective devices to prevent accidental over pressurization as further described in the maintenance section. SoCalGas implements defined procurement processes that facilitate materials traceability.

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS	SoCALGAS: SP.6-SC
--------------------------------------	--------------------------

- 3.2 Construction: 49 CFR Part 192 Subparts E, F, G and J specify the minimum requirements for the construction and testing of transmission and distribution facilities, including the welding and joining 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. SoCalGas' transmission and distribution pipe and facilities are to be constructed in accordance with these requirements. Where a contractor is used to supplement SoCalGas pipeline construction workforce, a contractor safety management program is in place to communicate regulatory requirements and monitor contractor's safety record. Construction practices and procedures are aligned where feasible to improve efficiency and effectiveness.
- 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. SoCalGas' 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. SoCalGas maintains its pipelines and facilities in accordance with these requirements. SoCalGas' 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: SoCalGas 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 secondary pressure relieving, regulating, or limiting devices that will activate in the event the primary pressure

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS

SOCALGAS: SP.6-SC

control device fails. The design and use of all gas pressure relieving devices are to conform to appropriate agency regulations and orders. These devices are to have sufficient capacity and be set to prevent the over-pressurization of pipe and pipeline components commensurate with regulatory requirements.

Pressure relief devices at pressure limiting stations and pressure regulating stations must have sufficient capacity to protect the facilities to which they are connected. Each pressure limiting station, relief device (except rupture discs), signaling device, 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: SoCalGas 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 verify:

- Valve is not leaking
- Valve is properly identified;
- Valves are adequately lubricated; and
- Valves are operational.

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS

SoCALGAS: SP.6-SC

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. SoCalGas 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 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.

- 3.5 Operations: 49 CFR Part 192 Subparts Land K specify the minimum requirements for the operation of transmission and distribution pipeline facilities. Operational activities are included in the O&M plan described in Chapter 4 and 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 including requirements for increasing the maximum allowable operating pressure. SoCalGas operates its pipelines and facilities in accordance with these requirements:

- 3.5.1 Public Awareness Program: The main objective of the Public Awareness Program is to raise the awareness of the affected public and key stakeholders of the presence of pipelines and associated facilities in the communities where we serve and operate. A more informed public will contribute to a reduction in pipeline emergencies and releases.

The SoCalGas Public Awareness Program follows the general guidance provided in the American Petroleum Institute Recommended Practice 1162 - Public Awareness Programs for Pipeline Operators. Specifically, the program identifies the audiences to be considered for targeted communications, the frequency of messages, the messages to be delivered to each audience, the methods and vehicles for delivering the messages. Furthermore, SoCalGas has specific measures to evaluate the effectiveness of our program and materials. It identifies communications for sharing pipeline safety

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS

SO CAL GAS: SP.6-SC

risk information with those residing near the pipelines and defines a mechanism whereby the public can report pipeline safety risk issues to SoCalGas.

The following audiences are examples of our key stakeholders:

- 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.

Some of the key messages that the program educates on are the following:

- Use of the 811 one-call notification system prior to excavation and other damage prevention activities;
- 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.

- 3.5.2 **Damage Prevention Program:** The purpose of the Damage Prevention Program is to avert gas incidents -- such as dig-ins to SoCalGas pipelines -- and thereby improve public safety and property protection through public education and outreach activities. SoCalGas 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.

In the event of an emergency, Gas Control personnel have authority and responsibility to maintain system integrity as they deem necessary using the resources available to them at any given time under both abnormal and emergency operating conditions. This includes alerting and directing field or storage personnel to take appropriate action when upsets, abnormal, or emergency conditions arise as well as having compressor stations, regulating stations, and other field locations manned and active during abnormal conditions. The control room also has the

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS

SO CAL GAS: SP.6-SC

authority to request assistance from our out-of-state suppliers to help in maintaining system integrity. In addition, given the nature of the emergency, control room personnel have the authority to activate and operate from our emergency back-up facility.

SoCalGas 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 that affect the ability of Gas Operations Control to safely and effectively manage the flow of gas within the pipeline, including changes in field operations, facilities, and controlling and monitoring equipment;
- 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.

The Plan's requirements went into full effect in August 2012 and is reviewed and updated on an annual basis. SoCalGas 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, SoCalGas 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 SoCalGas transmission pipeline system is modeled in a 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 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 a 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

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS

SOCALGAS: SP.6-SC

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.

- 3.5.7 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. SoCalGas successfully completed the records verification process and confirmed the established MAOP of its Transmission pipelines in Class 3 and Class 4 and Class 1 and Class 2 in high-consequence areas. The results have been submitted to PHMSA through the annual reporting process.

Industry Participation

Figure A

Figure A contains activities that SoCalGas is in the process of implementing, which is a result of its participation in industry groups, including the American Gas Association (AGA) and others. Details of those items can be obtained by consulting the responsible organization.

Current Activities	
Industry Actions	Implementation Type & Responsible Organization
Develop technology to electronically track leak survey routes and map the location of found leaks with spatial coordinates and link other data such as level of leakage found.	In progress Gas Operations - Policies Tools & Strategies
Implement a system that links geographic information systems (GIS) with locate and mark data from KorTerra (a ticket management software) to rank the highest risk Underground Service Alert (USA) tickets for prioritized routing and monitoring.	In progress Gas Operations - Policies Tools & Strategies
Remote methane sensing pilot program to use SoCalGas' Advanced Meter communications system to provide alarming and other notification when measured methane-in air-concentration levels exceed pre-set acceptable limits at a monitoring site.	In progress PSEP
Install fiber optic cabling on all new or replacement pipelines that are over a mile long, at least 12 inches in diameter and intended to operate at or above 20 percent of their specified minimum yield strength. Will allow for remote monitoring of leaks in real time and identification of non-native ground movements.	In progress PSEP
Research and development project to evaluate the feasibility of using small unmanned aircraft systems (drones), to conduct various pipeline/facilities inspections and/or survey on difficult-to-access pipeline segments.	In progress Research and Materials Strategic Programs

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS

SOCALGAS: SP.6-SC

Figure B

Figure B contains activities that SoCalGas has implemented, which is the result of its participation in industry groups, including the American Gas Association (AGA) and others. Most of the activities are processes that have been initiated and implemented as a regular and routine element. Activities noted as “adopted”, mean that the company has incorporated them as part of the normal course of business. The other activities are one-time events that were completed and are noted as “completed”. Details of those items can be obtained by consulting the responsible organization.

Industry Actions	Implementation Type & Responsible Organization
Confirm the established MAOP of transmission pipelines	Completed Pipeline Integrity
Review and revise as necessary established construction procedures to provide for appropriate (risk-based) oversight of contractor installed pipeline facilities.	Adopted Gas Operation Services
Under DIMP, evaluate risk associated with trenchless pipeline techniques and implement initiatives to mitigate risks	Adopted Sewer Lateral Inspection Program Gas Operations Support
Under DIMP, identify distribution assets where increased leak surveys may be appropriate	Adopted Pipeline Integrity
Integrate applicable provisions of AGA's emergency response white paper & checklist into emergency response procedures	Adopted Emergency Services
Extend Operator Qualification program to include tasks related to new main & service line construction	Adopted Pipeline Safety & Compliance
Expand EFV installation beyond single family residential homes	Adopted Pipeline Integrity
Incorporate an Incident Command System (ICS) type of structure into emergency response protocols	Adopted Emergency Services
Extend transmission integrity management principles outside of HCAs using a risk-based approach	Adopted Pipeline Integrity
Implement applicable portions of AGA's technical guidance documents: 1) Oversight of new construction tasks to ensure quality; 2) Ways to improve engagement between operators & excavators	Adopted Gas Operations Services
Begin risk-based evaluation on the use of ASVs, RCVs or equivalent technology on transmission block valves in HCAs	Adopted Gas Engineering
Implement appropriate meter set protection practices identified through the Best Practices Program	Adopted Gas Infrastructure Protection Program (GIPP) Gas Operations Support

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS	SoCALGAS: SP.6-SC
--------------------------------------	--------------------------

Figure B Cont'd

<p>Upgrade aging equipment used to locate underground pipelines and facilities has been purchased and deployed. The standardized training has been developed and completed.</p>	<p style="color: blue;">Adopted</p> <p>Gas Operations Services</p>
<p>Member of the Gold Shovel Standard and all Company Prime Contractors are enrolled in the Gold Shovel Standard.</p>	<p style="color: blue;">Completed</p> <p>Gas Operations Services</p>
<p>Utilize algorithms in SoCalGas' Advanced Meter program that detects subtle changes in consumption and detects leaks on the customer side of the meter. These algorithms detect gas leaks and are also finding water leaks from excessive consumption on water heaters.</p>	<p style="color: blue;">Adopted</p> <p>Advanced Meter</p>

INTERIM



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

STATE AND FEDERAL REGULATIONS

SoCALGAS: SP.6-SC

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.

Brief: Annual review of Safety Plan.

1. Updated the status of implementation of programs in Figure A.
2. Updated completed/adopted Programs in Figure B.

Document Profile Summary

Responsible Person:	Walker, Jennifer
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

CONTINUING OPERATIONS	SoCALGAS: SP.7-SC
-----------------------	-------------------

Table of Contents

1	CONTINUING OPERATIONS AND CALIFORNIA PUBLIC UTILITIES CODE § 963 (B)(3), 961 (D)(3), (D)(4), AND (D)(10)	2
2	SAFETY IS A CORE VALUE	2
3	SAFE AND RELIABLE STORAGE AND TRANSPORTATION	3
4	PATROL AND INSPECTION	4
5	SO CAL GAS WORKFORCE SIZE, TRAINING AND QUALIFICATIONS	4
5.1	WORKFORCE SIZE	4
5.2	GAS OPERATIONS TRAINING.....	5
5.3	QUALIFICATION OF PIPELINE PERSONNEL.....	6
6	ANTI-DRUG AND ALCOHOL MISUSE PREVENTION PLAN	7

INTERNAL

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

In D.12-04-010, the Commission identified the topic of continuing operations to meet the requirements in California Public Utilities §963 (b)(3), §961 (d)(3), (d)(4), and (d)(10). These sections require that SoCalGas' 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 its core value. 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 IS A CORE VALUE

SoCalGas considers the health and safety of all employees and the general public to be its core value. This core value is demonstrated through the following statements that describe our approach to safety at SoCalGas:

- Individual health and safety and the safety of others is not compromised. Safe work habits are the responsibility of every employee and the foundation of job performance evaluation.
- Occupational injuries and illnesses can be prevented. Identification and reporting of workplace hazards and potential hazards is the responsibility of every employee of SoCalGas. Job observations are implemented as part of our program to confirm that employees comply with safe and healthy work practices.
- Management takes an active role in implementing SoCalGas' health and safety programs as stated in the Injury Illness Prevention Program (IIPP) and staying aware of related workplace injuries, near misses, and at-risk behaviors.

- SoCalGas performs formal investigations with root cause analysis and follow up on lessons learned for significant Company incidents and near misses.
- Management is responsible for providing a safe workplace and creating a safety culture that promotes safe behaviors and safeguards to prevent accidents and injuries to employees, contractors and the public. Employees work together to use equipment in accordance with job training and safety instructions.
- Safety culture is a key component in establishing a safe work environment. SoCalGas periodically assesses its safety culture to confirm the effectiveness of its safety programs.
- SoCalGas 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. Both pipeline and occupational safety are at the forefront of priorities for SoCalGas. Safety is a component of employee training programs and performance appraisals.

3 SAFE AND RELIABLE STORAGE AND TRANSPORTATION

SoCalGas has designed its integrated gas transportation and storage system to meet design standards established by the Commission for core and noncore customer service. The SoCalGas 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. SoCalGas utilizes detailed hydraulic models of the gas system to evaluate its capacity to meet these design standards, and identify improvements as necessary. Both design standards are expected to occur during the winter operating season when core customers' gas usage is the greatest.

Information about transportation and storage capacities are available through the ENVOY electronic bulletin board. The link to the ENVOY bulletin board is located at:

<https://scgenvoy.sempra.com>

In accordance with SoCalGas' policies, the Gas Transmission Planning Department and Region Engineering Departments continuously monitor customer demand on SoCalGas' transmission and distribution system, both actual customer service requests and through the long-term demand forecast, and evaluates any changes in customer demand against the appropriate design standard to insure adequate capacity is available to serve. Depending upon the customer class, SoCalGas has a variety of Commission-approved means to address any capacity deficiencies. When a deficiency is identified, possible solutions are considered, evaluated, and implemented according to SoCalGas rules and tariffs. For example, a facility improvement that is required to serve a single noncore customer and which provides no benefit to other customers is funded entirely by that customer.

Additionally, in D.06-09-039, the Commission established a common design standard for SoCalGas and Pacific Gas & Electric Company (PG&E) for “slack capacity” or reserve margin on their backbone transmission systems. Per this decision, the Gas Transmission Planning Department:

“plan and maintain intrastate natural gas backbone transmission systems sufficient to serve all system demand on an average day in a one-in-ten cold and dry-hydroelectric year.”
(D.06-09-039, Ordering Paragraph No. 1)

SoCalGas shall expand storage capacity and operational capability (inventory, injection and withdrawal) in the event the SoCalGas/SDG&E core customer reliability is in jeopardy without such an expansion.

Finally, SoCalGas continuously monitors its system to meet current customer demand. Per SoCalGas Rule 41, Utility System Operation, the mission of the Utility Gas System Operator is to maintain system reliability and integrity. This rule provides information on the responsibilities performed to maintain system reliability by each of the SoCalGas departments that contribute to the System Operator function.

SoCalGas will continue to perform operating and maintenance activities and make capital investments to support the company's pipeline system, maintain and enhance the operational efficiency and responsiveness of storage operations, 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 SoCalGas shall perform to detect leaks and other compromised facility conditions and then effect timely repair.

5 SOCIALGAS WORKFORCE SIZE, TRAINING AND QUALIFICATIONS

5.1 Workforce Size

SoCalGas shall determine appropriate staffing levels to preserve the safety and integrity of its pipeline system.

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

workforce and submits a request to fill the vacancies or add to staff. Resource allocation decisions consider employee levels and contractor availability.

Verification of appropriate staffing levels is determined by monitoring specified performance metrics and workloads. These performance metrics include: meeting emergency response goals (A1 response within 30/45 minutes) and compliance to distribution pipeline leakage code response times consistent with Company policy. The performance metrics used are reviewed monthly by Senior Management. If SoCalGas falls below performance goals, appropriate resource adjustments would be made.

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

The Company uses contractors, as necessary and in compliance with bargaining agreements, so that sufficient overall resources are deployed to address maintenance and construction. SoCalGas 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 Gas Operations Training

Safety is rooted in all phases of training provided by Gas Operations Training and Development. 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 Gas Operations Training and Development team with most of the instructors having gained practical experience on the job. These instructors convey consistent safety messages and confirm understanding of the classroom training by observing employees perform in simulated field situations at SoCalGas' training complex in Pico Rivera.

Integrated in the training courses are the Operator Qualification tasks, as required by 49 CFR Part 192 regulations. The documentation for these qualifications and records are closely monitored and employees are re-trained, re-qualified or updated whenever

significant changes occur in a task regulation or when they are required to re-qualify as prescribed by PHMSA.

Emergency response is covered within the training courses for classifications that have any activities or functions in this area. The classifications include 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, including when to contact Corporate Security to address certain threats.

SoCalGas has a training curriculum that tests employees' skills in identifying and repairing gas leaks and other real-life emergency situations through simulation exercises. These exercises are also included in first responder training. In addition, the Company implemented a technical skills training class to help employees new to management become more effective in addressing these situations as supervisors and managers.

As part of the Company's continuing education effort, a hands-on training course for supervisors on high-pressure gas pipeline work has been developed and is being taught to new supervisors.

SoCalGas participates in industry forums, validates that training activities are consistent with regulatory requirements, and identifies when new training opportunities exist.

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

5.3 Qualification of Pipeline Personnel

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

The Operator Qualification Program requires that employees are trained, initially qualified and subsequently re-qualified every three or five years depending on the task. SoCalGas' 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

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

CONTINUING OPERATIONS

SOCALGAS: SP.7-SC

employees don't pass, they are not allowed to perform that activity until they have been successfully re-trained and re-qualified. Essentially, any employee who performs a covered task -- ranging from meter readers to customer services field, distribution and transmission personnel -- need to be qualified to perform Operator Qualification tasks.

The Operator Qualification Program also requires that contractors' knowledge, training and skills conform to the job requirements and that they are qualified to perform the required tasks. An external vendor who is one of the nation's leaders in regulatory compliance for Operator Qualification has been retained to provide training, testing, Operator Qualification, and record retention for our pipeline contractors.

6 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, employees undergo pre-employment drug and alcohol testing and are entered into the random drug testing program. Contractors shall also have an Anti-Drug and Alcohol Misuse Prevention Program or work with a third-party to enforce the program in compliance with DOT regulations, specifically, 49 CFR Part 40, Part 199 and/or Part 382. Contractors shall ensure their employees have a negative pre-employment test on file before their first performance of safety-sensitive functions and are entered in their (contractor's) random testing pool.



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

CONTINUING OPERATIONS	SoCALGAS: SP.7-SC
------------------------------	--------------------------

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.
Brief: Annual review of Safety Plan. Changed "Safety as a top priority" to "Core Value" in Section 1 and Section 2.

Document Profile Summary	
Responsible Person:	Rivera, Omar
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

EMERGING ISSUES	SoCALGAS: SP.8-SC
------------------------	--------------------------

Table of Contents

- 1 EMERGING ISSUES AND CALIFORNIA PUBLIC UTILITIES CODE § 961 (d)(11) 2
- 2 SOCALGAS AND EMERGING ISSUES..... 2
- 3 COLLABORATION WITH THE CALIFORNIA PUBLIC UTILITIES COMMISSION 2

INTERNAL

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 SOCALGAS AND EMERGING ISSUES

SoCalGas stays current on emerging issues within the industry through active participation in industry associations and open communication with legislative and regulatory groups. Chapter 6 of this Safety Plan identifies the on-going safety enhancement actions the industry has committed to and SoCalGas' targeted date of implementation.

SoCalGas is continuing to address the emerging issues of the grandfathering of provisions in Title 49 of the Code of Federal Regulation (49 CFR) Part 192 and the installation of remote-controlled and automatic shutoff valves as part of its Pipeline Safety Enhancement Plan (PSEP) as discussed in Chapter 4 of this Safety Plan. Similarly, SoCalGas is addressing the replacement of pipe, including polyethylene made with Aldyl-A resin, as part of its Distribution Integrity Management Program.

3 COLLABORATION WITH THE CALIFORNIA PUBLIC UTILITIES COMMISSION

SoCalGas 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 emerging issues that pose hazards and are not yet within this Safety Plan.

- Senate Bill 1371 "Natural Gas Leakage Abatement"
- CARB Oil and Gas Rule
- Risk Management
 - Climate Change Adaptation and Resiliency
 - Enhanced Use of Satellite and Aerial Monitoring for Damage Assessments
 - New Fiber Optic System for Pipeline Damage Prevention and Leak Detection

Senate Bill 1371 “Natural Gas Leakage Abatement”

Rulemaking R.15-01-008 has commenced to carry out the intent of Senate Bill (SB) 1371. SB 1371 requires the adoption of rules and procedures to minimize natural gas leakage from Commission-regulated natural gas pipeline facilities consistent with Public Utilities Code Section 961(d) and 49 CFR § 192.703(c). The goal for the Commission through the rulemaking and in the spirit of SB 1371 is to reduce greenhouse gas emissions. SoCalGas has been an active participant in the rulemaking and has provided comments as well as met the reporting requirements set forth under SB 1371.

SoCalGas continues to be engaged in this rulemaking and is piloting several new technologies that will help quantify and detect emission from more complex facilities. Prior to approval of the attached Biennial Methane Compliance Plan, SoCalGas provided a scope to the CPUC and CARB for their participation and monitoring of these pilot studies. The results of these pilot studies will be provided to both agencies and may be included in the Compliance Plan attached. CPUC has indicated their interest to witness some of the pilots.



SoCalGas Pilots Unmanned Aerial Vehicles for Leak Quantification

SoCalGas continues to advocate for affordable methods to reduce methane losses from the system to ensure disadvantaged communities and customers are not disproportionately impacted by the costs to implement new best practices. Furthermore, SoCalGas is advocating to ensure safety is not deprioritized and methane reducing efforts are synchronized with safety programs. For example, SoCalGas has recommended research related to methane detection and monitoring be set aside in its own research portfolio within SB1371 to not detract from the other critically important research funds such as those dollars needed for enhancements to robotic pigging tools.

SoCalGas filed a tier three advice letter, AL 5211, on October 31, 2017 with a forecast of the cost to implement activities to comply with twenty-six best practices as required by D.17-06-015. As required by SB1371, the proposed plan, “Biannual Methane Emissions Compliance Plan” is an attachment to this chapter and describes the historical work, changes in operational procedures, technology, and resources needed to comply with the requirements set forth by the CPUC, in addition to a projection of estimated emission reductions and cost effectiveness.

Documents filed under this proceeding can be found at the following web site:
<http://www.socalgas.com/regulatory/R1501008.shtml>.

CARB Oil and Gas Rule

The CARB Oil and Gas Rule final regulation approval by the Office of Administrative Law (OAL) was effective October 1, 2017 and the rule implementation became effective on January 1, 2018. Although this rule is environmental focused, the new requirements will also have co-benefits to support safety. This new regulation impacts SoCalGas operations at Transmission Compressor Stations and Underground Storage Fields. SoCalGas will now be required to implement quarterly leak detection and repair, requires storage fields to implement a monitoring plan, and allows for limited delay of repair in deference to operational and safety related issues.

Risk Management

SoCalGas continues to work with the CPUC to develop and enhance its process to manage risk. SoCalGas is an active participant in the CPUC’s proceedings on Risk Management under its application (A.17-10-008), which was filed in October 2017. Additionally, SoCalGas issued its very first risk-informed GRC application and has requested funding in its most recent General Rate Case¹ to further the development of its risk management processes. Additional detail may be found under the General Rate Case Policy Testimony of Ms. Diana Day.

¹ General Rate Case (GRC-2019) proceeding is A. 17-10-008 and the various testimonies can be found at SoCalGas’ website, <http://www.socalgas.com/regulatory/A17-410-10084.shtml>.

Climate Change Adaptation and Resiliency

Under the broad umbrella of risk management, SoCalGas is addressing certain risks that have emerged as industry-specific issues, such as climate change adaptation. SoCalGas is focused on safety initiatives to address climate change issues including drought, wildfires, and mudslides. SoCalGas is working with the California Energy Commission on a climate change adaptation and vulnerable study that will help provide strategies for the natural gas infrastructure to be more resilient to climate change events. As part of SoCalGas' RAMP filing, SoCalGas is conducting research to understand the impacts to all the Utility systems in recent extreme events such as the wildfires in California as well as hurricanes and floods throughout the country to better identify vulnerabilities and opportunities to enhance resiliency for the natural gas infrastructure.

SoCalGas is exploring capabilities to utilize the Advance Meter network to support emergency services during catastrophic events such as mudslides, wildfires, and earthquakes. During the recent wildfire and mudslide events in California, SoCalGas used meter response and meter throughput data to identify possible impacted areas. The Utility Emergency Response Team was able to use this information to partner with first responders to support search and rescue activities.

Enhanced Use of Satellite and Aerial Monitoring for Damage Assessments

The recent Thomas Fire followed by the intense rain storm in the Montecito area causing massive mud and debris flows is a good example of the need to continually enhance our tools to assess damage and focus response after an emergency incident. SoCalGas had recently started its satellite monitoring program that can now provide before and after images of the impacted area to help identify impacted infrastructure. Also, SoCalGas has been piloting new aerial drones that provide high definition imagery and methane detection to support damage assessments in these types of incidents. SoCalGas will be implementing integration of the imagery and methane sensing from these new tools into the Geographic Information System (GIS) to support hydrology and other geohazard events like the Montecito incident.

New Fiber Optic System for Pipeline Damage Prevention and Leak Detection

SoCalGas recently began installing its first fiber optic system to help prevent third party dig-ins by detecting vibration from these encroachments. The system also can detect leaks on the pipeline.



Work gets underway on laying fiber optic cable

Proposed Federal Pipeline Safety Regulations

As significant new pipeline safety regulations are being developed by the Pipeline and Hazardous Material Safety Administration (PHMSA), SoCalGas continues to provide input to help ensure effective implementation and desired outcomes. Examples of significant regulations on the horizon include:

- The Safety of Gas Transmission & Gathering Lines rule. The Notice of Proposed Rule Making (NPRM) was published on 4/8/2015 and comments were submitted on 7/7/2016. A final rule is expected to be published in 2018.
<https://www.regulations.gov/document?D=PHMSA-2011-0023-0118>
- Safety of Underground Natural Gas Storage Facilities. An interim final rule (IFR) was published by PHMSA/OPS (Pipeline and Hazardous Materials Safety Administration / Office of Pipeline Safety) in the Federal Register on December 19, 2016 (Volume 81, Number 243). This interim final rule (IFR) revises the Federal pipeline safety regulations to address critical safety issues related to downhole facilities, including wells, wellbore tubing, and casing, at underground natural gas storage facilities. A final rule is expected to be published in 2018.
<https://www.federalregister.gov/documents/2016/12/19/2016-30045/pipeline-safety-safety-of-underground-natural-gas-storage-facilities>
- Valve Installation and Minimum Rupture Detection Standards. An NPRM is expected to be published in 2018.
- Anticipated new draft underground storage DOGGR regulations to be slated for finalization some time in 2018 as well as the potential for new regulations stemming from the recommendations proposed in the state commissioned independent CCST study.



NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

EMERGING ISSUES	SoCALGAS: SP.8-SC
------------------------	--------------------------

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.

Brief: Annual review of Safety Plan.

1. Added Sections:

- “Climate Change Adaptation and Resiliency”.
- “Enhanced Use of Satellite and Aerial Monitoring for Damage Assessments”.
- “New Fiber Optic Systems for Pipeline Damage Prevention and Leak Detection” under Risk Management in Section 3.

2. Updated sections Senate Bill 1371 “Natural Gas Leakage Abatement” and included “Biannual Methane Emissions Compliance Plan” under section 3.

3. Included “CARB Oil and Gas Rule” under Section 3.

4. Added Proposed Federal Pipeline Safety Regulations in Section 3.

5. Mention of AMI network supporting emergency response.

Document Profile Summary

Responsible Person:	Haines, Deanna
Published On:	02/22/2018
Last Full Review Completed On:	
Writer:	
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	

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.” SoCalGas 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 SoCalGas’ 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.

INTERIM

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

1.2. List of Policy Documents By Chapter

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	100.0152	Self Audit Requirements - Gas Measurement (Distribution, Transmission & Storage)
4	Safety Systems	104.0001	Environmental Training
4	Safety Systems	104.0017	Pipeline Liquids - Field Handling
4	Safety Systems	104.06	Respiratory Protection Program
4	Safety Systems	107.0004	Material Evaluation and Implementation
4	Safety Systems	107.0324	General Operating Instructions for the Metrotech® Model 480B Pipe and Cable Locator - "Split Box"
4	Safety Systems	140.04	Condition/Location of Meter Installations and Report of Inaccessible/Removed Meters
4	Safety Systems	142.0065	Meter Set - Meter Turn-On
4	Safety Systems	142.0075	Closing Meters - Methods and Procedures
4	Safety Systems	142.01	Order Completion Schedule and Priority Scheduling
4	Safety Systems	142.02	Leak Investigation - Customer Service
4	Safety Systems	142.5660	Purging Gas Meters and Customer Houelines
4	Safety Systems	151.0010	Environmental Inspections, Search Warrants, and Internal Notifications
4	Safety Systems	166.0015	Fire Prevention and Protection - Transmission and Storage
4	Safety Systems	166.0025	Prevention of Accidental Ignition of Natural Gas
4	Safety Systems	166.0055	Contractor Safety Observation Areas
4	Safety Systems	166.0076	Working in Flammable Atmospheres
4	Safety Systems	166.0077	Confined Space Operations
4	Safety Systems	167.0100	Operator Qualification Program
4	Safety Systems	167.0125	Self-Audit Guidelines - Pipeline Integrity Program
4	Safety Systems	167.0200	Data Gathering and Integration
4	Safety Systems	167.0203	Threat Identification
4	Safety Systems	167.0204	Risk Assessment of High Consequence Areas
4	Safety Systems	167.0207	TIMP Risk Algorithm
4	Safety Systems	167.0208	Baseline and Reassessment Plan

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	167.0209	External Corrosion Direct Assessment Procedure
4	Safety Systems	167.0210	In-Line Inspection Procedure
4	Safety Systems	167.0211	Bellhole Inspection Requirements
4	Safety Systems	167.0212	Casing Wax Fill
4	Safety Systems	167.0214	Preventive and Mitigative Measures
4	Safety Systems	167.0215	Continual Evaluation
4	Safety Systems	167.0216	Stress Corrosion Cracking Direct Assessment Procedure
4	Safety Systems	167.0217	Supplemental Data Determination
4	Safety Systems	167.0218	Pipeline Cleaning Standard
4	Safety Systems	167.0220	In-Line Inspection Surveys Standard
4	Safety Systems	167.0224	Dry Gas - Internal Corrosion Direct Assessment
4	Safety Systems	167.0229	Internal Corrosion Management Plan
4	Safety Systems	167.0230	Internal Corrosion Design and Construction Considerations
4	Safety Systems	167.0232	Field Sampling and Analysis of Liquids and Solids/Sludge
4	Safety Systems	167.0235	Immediate Repair Conditions - Transmission Pipelines
4	Safety Systems	167.0236	Scheduling Remediation
4	Safety Systems	167.0240	Assessment of Pipeline Integrity Using Guided Wave UT
4	Safety Systems	167.0245	Global Positioning System (GPS) Process
4	Safety Systems	167.0246	GPS Control Survey
4	Safety Systems	167.0247	Aboveground Survey Plan
4	Safety Systems	167.0248	Alternating Current Attenuation Survey
4	Safety Systems	167.0249	Close Interval Survey
4	Safety Systems	167.0250	Voltage Gradient Survey
4	Safety Systems	167.0251	Soil Resistivity Survey
4	Safety Systems	167.0252	Inspection of Cased Pipe
4	Safety Systems	167.0260	Fiber Optic Cable Installation for Pipeline Monitoring
4	Safety Systems	167.04	Contractor Safety Program
4	Safety Systems	167.15	Hot Work Permit Program
4	Safety Systems	180.0003	Material Specifications and Purchase Descriptions
4	Safety Systems	180.0005	Steel Pipe - Selection Requirements
4	Safety Systems	180.0010	Steel Butt-Weld Fittings - Selection Guide

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	180.0015	Wedding Bands, Reinforcing Sleeves and Canopies - Selection Guide
4	Safety Systems	180.0020	Flanges - Selection, Torque and Installation Requirements
4	Safety Systems	180.0030	Branch Connection, Steel - Selection Guide
4	Safety Systems	180.0035	Leak Repair Clamps and Sleeves - Selection Guide
4	Safety Systems	180.0040	Pressure Control Fittings - Selection Guide
4	Safety Systems	180.005	Steel Pipe Yield, Design Properties and Design Pressure Tables
4	Safety Systems	180.0085	Valve Usage and Selection Guide
4	Safety Systems	180.0100	Prefabricated Vaults - Design and Selection Guide
4	Safety Systems	182.0010	Request for Pipeline Design Assistance
4	Safety Systems	182.0040	Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure
4	Safety Systems	182.0050	MAOP Evaluation of Corroded Pipe
4	Safety Systems	182.0055	Identification of Steel Pipe and Butt Weld Fittings
4	Safety Systems	182.0060	Service Risers
4	Safety Systems	182.0080	Casing Assemblies - Steel Carrier Pipe
4	Safety Systems	182.0087	Inspection of Pipeline Cable-Suspension Bridges
4	Safety Systems	182.0090	Designs for Pipelines in Bridges
4	Safety Systems	182.0093	Wear Pads and Bands for Steel Gas Piping
4	Safety Systems	182.0140	Polyethylene Plastic Pipe - General Application Requirements
4	Safety Systems	182.0148	Casing Assemblies - Plastic Carrier Pipe
4	Safety Systems	182.0150	Polyethylene (PE) Service Selection Guide
4	Safety Systems	182.0160	Purging Pipelines and Components
4	Safety Systems	182.0162	Purging and Locking Service Risers
4	Safety Systems	182.0165	Tap Requirements
4	Safety Systems	182.0170	Strength Testing - High Pressure Pipelines and Facilities
4	Safety Systems	182.0185	Pressure Terminology and Establishment of Pressure Levels for Piping
4	Safety Systems	182.0190	Class Location - Determination and Changes
4	Safety Systems	182.0200	Design Factors for Steel Piping Systems
4	Safety Systems	183.0001	Emergency Planning - Government
4	Safety Systems	183.0015	Field Services Emergency Plans
4	Safety Systems	183.0017	Emergency Exercise

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	183.0030	Contact with Fire and Police Departments and Public Agencies
4	Safety Systems	183.0040	Natural Disaster or Major Emergency - Employee Instructions
4	Safety Systems	183.0075	Off-Hour Management Coverage - Headquarters and Region Operations
4	Safety Systems	183.01	Shutdown Procedures and Isolation Area Establishment for Distribution Pipeline Facilities
4	Safety Systems	183.0100	Emergency Incident Notifying
4	Safety Systems	183.0105	Incident Command System (ICS) for Emergency Incidents
4	Safety Systems	183.0110	Field Procedure - Emergency Incidents Transmission
4	Safety Systems	183.0120	Emergency Outage Procedure
4	Safety Systems	183.0130	Materials and Supplies for Emergency Situations
4	Safety Systems	183.0160	Dispatch Office - Message Center Reports
4	Safety Systems	183.0165	Emergency Incident Reporting
4	Safety Systems	183.03	Field Guidelines - Emergency Incident Distribution / Customer Service
4	Safety Systems	183.05	Message Center Reporting (MCR)
4	Safety Systems	183.06	Region Reports of Safety-Related Pipeline Conditions
4	Safety Systems	183.07	Pipeline Incident Reports to CPUC and PHMSA; National Transportation Safety Board (NTSB) Accident Investigation
4	Safety Systems	183.08	Pipeline Safety Reports and Notifications to CPUC and DOT
4	Safety Systems	184.0015	Construction Planning for Mains and Supply Lines
4	Safety Systems	184.0016	Main Construction Project Routing
4	Safety Systems	184.0031	Pressure Monitoring of Distribution Systems
4	Safety Systems	184.0060	General Construction Requirements for Distribution Service Lines
4	Safety Systems	184.0075	Evaluation and Disposition of Inactive Services
4	Safety Systems	184.0080	Abandonment of Gas Services and Gas Light Tap Assemblies
4	Safety Systems	184.0085	Abandonment or Inactivation of Gas Distribution Pipelines
4	Safety Systems	184.0095	Polyethylene (PE) Pipe and Fittings - General Installation Requirements

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	184.0115	Tapping/ Stopping PE Fittings
4	Safety Systems	184.0121	Service Riser Integrity Observations and/or Inspection
4	Safety Systems	184.0123	Composite Coating Repair for Anodeless Risers
4	Safety Systems	184.0124	Coring for Mini Riser Vault (MRV) Installation
4	Safety Systems	184.0130	Polyethylene Heater - Temperature Measurement and Adjustment
4	Safety Systems	184.0150	Leak Testing of Distribution Piping with MAOP = 60 PSIG
4	Safety Systems	184.0170	Trenchless Construction Methods
4	Safety Systems	184.0175	Prevention of Damage to Subsurface Installations
4	Safety Systems	184.0200	Underground Service Alert and Temporary Marking
4	Safety Systems	184.0215	Annual Report of Leak Repairs on Federal Lands
4	Safety Systems	184.0235	Polyethylene (PE) Pipe Repair
4	Safety Systems	184.0275	Inspection Schedule - Regulator Station, Power Generating Plant Regulation Equipment Requirements
4	Safety Systems	184.03	Replacement Criteria for Distribution Mains and Services
4	Safety Systems	184.0300	Squeezing and Reopening Mains and Services
4	Safety Systems	184.0335	Steel Pipe Squeezers 6" through 12"
4	Safety Systems	184.0340	Squeezing Polyethylene (PE) Pipe - 1/2" Through 8"
4	Safety Systems	184.0355	Pressure Control Machines - 2" Through 12"
4	Safety Systems	184.0360	Pressure Control - Fittings 2" and Under Pressure Limitations and Related Equipment
4	Safety Systems	184.0366	Pressure Control: Drilling Operations For DH-5 Drilling Machine
4	Safety Systems	184.0370	Pressure Control: Drilling Operations For D-5 Drilling Machine
4	Safety Systems	184.04	Supply Line Identification and Records
4	Safety Systems	184.0405	Pressure Control - Stop Bottom Outlet Fittings
4	Safety Systems	184.0450	Pressure Control - Completion Plugs and Bushings 3/4" - 1-1/4"
4	Safety Systems	184.0455	Pressure Control - DH-5 Machine 2" and 3" Insert/Extract
4	Safety Systems	184.0480	Pressure Control - Completion Plugs

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	184.0575	Pressure Control: Stop Standard 2" Service Tee With D-5 Machine
4	Safety Systems	184.0585	Remove 1" Street Ell from a Service Clamp - Install a 1" Threaded Both Ends (TBE) Nipple in Clamp
4	Safety Systems	184.0590	Pressure Control Qualification Requirements
4	Safety Systems	184.06	Gas-Handling and Pressure Control
4	Safety Systems	184.09	Prevention of Excavation Damage to Company Facilities
4	Safety Systems	184.12	Inspection of Pipelines on Bridges and Spans
4	Safety Systems	184.16	Valve Inspection and Maintenance - Distribution
4	Safety Systems	184.17	Temporary LNG Facility
4	Safety Systems	185.0001	Meter Locations
4	Safety Systems	185.0008	Meter Guard - Installation Requirements
4	Safety Systems	185.02	Pressure Regulation - Residential and Commercial
4	Safety Systems	185.0228	Meter Set Assembly Inspections
4	Safety Systems	185.0287	Over-Pressure/Under-Pressure Protection - Maintenance, Installation and Settings
4	Safety Systems	185.0300	MSA - Installing, Rebuilding and Inspections
4	Safety Systems	185.0474	Control Microsystems SCADAPACK
4	Safety Systems	186.0002	Design and Application of Cathodic Protection
4	Safety Systems	186.0005	Cathodic Protection - Mixed Piping System
4	Safety Systems	186.0015	Condition Assessment of Unprotected Distribution Steel Piping
4	Safety Systems	186.0035	Criteria for Cathodic Protection
4	Safety Systems	186.0036	100mV Polarization Criteria
4	Safety Systems	186.0040	Magnesium Anodes for Corrosion Control
4	Safety Systems	186.005	Cathodic Protection - Instruments and Testing Equipment
4	Safety Systems	186.0052	Copper Sulfate Electrode
4	Safety Systems	186.006	Selection and Installation of Rectifiers and Impressed Current Anodes
4	Safety Systems	186.0070	Insulating MSA's
4	Safety Systems	186.0075	Electrical Test Stations & Bond Assembly
4	Safety Systems	186.0100	Approved Protective Coatings for Below Ground Corrosion Control

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	186.0102	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating
4	Safety Systems	186.0103	External Surface Preparation and Field Applied Coatings for Buried Pipelines
4	Safety Systems	186.0104	Surface Preparation and Coating for Above Ground Piping and Steel Components
4	Safety Systems	186.0108	External Surface Preparation and Coating Application for Steel Tanks and Vessels (New & Refurbished)
4	Safety Systems	186.0109	Internal Coating of Tanks, Vessels, & Drip Legs
4	Safety Systems	186.0110	Field Tape Wrapping Requirements
4	Safety Systems	186.0111	Field Application of Grease Coating
4	Safety Systems	186.0117	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas
4	Safety Systems	186.0120	Interference - Stray Electrical Current
4	Safety Systems	186.0135	Operation and Maintenance of Cathodic Protection Facilities
4	Safety Systems	186.0170	Record Keeping - Corrosion Control
4	Safety Systems	186.0180	Cathodic Protection Test Orders - Monitoring Isolated Facilities
4	Safety Systems	186.02	Cathodic Protection - Inspection of Exposed Pipe
4	Safety Systems	186.06	Cathodic Protection - Electrical Isolation
4	Safety Systems	186.07	Hot Line Insulating Sleeves
4	Safety Systems	186.09	Cathodic Protection - Casings
4	Safety Systems	187.0050	Cutting Into Gas Mains, MSAs and Abandoned Substructures - Safety Precautions
4	Safety Systems	187.0055	General Welding Requirements
4	Safety Systems	187.0056	Welding Field Guide
4	Safety Systems	187.0115	Fusion Requirements for Polyethylene Pipe
4	Safety Systems	187.0120	Fusing Socket Connections - Polyethylene (PE) Pipe
4	Safety Systems	187.0125	Electrofusion Process - General Instructions
4	Safety Systems	187.0126	Magic Box - 2"-4"
4	Safety Systems	187.0138	PE Saddle Fusions
4	Safety Systems	187.0140	Transition Fittings
4	Safety Systems	187.0146	Excess Flow Valve (EFV) - Installation and Operation

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	187.0155	Butt Fusing 2", 3" and 4" PE Pipe (Manual Machines)
4	Safety Systems	187.0158	4", 6" and 8" Polyethylene (PE) Butt Fusion (Hydraulic Machines)
4	Safety Systems	187.0175	Inspection and Testing of Welds on Company Steel Piping
4	Safety Systems	187.0180	Qualification and Re-Qualification of Welders
4	Safety Systems	187.0181	Qualification of Personnel - Polyethylene Pipe Joiners
4	Safety Systems	188.0001	Standard Specification for Natural and Substitute Fuel Gases
4	Safety Systems	189.0001	Odorization
4	Safety Systems	189.0010	Supplemental Odorization of Gas at Border Stations
4	Safety Systems	190	Operator Qualification Task Change Communication
4	Safety Systems	191.0020	Inspection of Construction Field Work
4	Safety Systems	191.0025	Scoring of Construction Work Inspected
4	Safety Systems	191.01	Investigation of Accidents and Pipeline Failures
4	Safety Systems	191.0210	Qualification of New Construction Contractors
4	Safety Systems	192.0010	Preparation of Construction Sketches
4	Safety Systems	192.0025	GIS Maintenance Requirements for High Pressure Gas Lines
4	Safety Systems	192.0026	High Pressure Project Reconciliation, Closeout and Turnover
4	Safety Systems	192.0030	Completion Drawing Set Requirements for High Pressure Pipelines
4	Safety Systems	192.02	Procedure for HCA Segment Identification
4	Safety Systems	203.005	Self Audit Guidelines - Distribution
4	Safety Systems	203.007	Pipeline Patrol and Unstable Earth Self Audit
4	Safety Systems	203.008	Pipelines on Bridges and Spans Self-Audit
4	Safety Systems	203.016	Leak Survey Self-Audit
4	Safety Systems	203.017	Valve Inspections and Maintenance Self-Audit
4	Safety Systems	2110	Management of Change for Gas Standards Related to Integrity Management Programs
4	Safety Systems	2111	Management of Change - Request & Approval
4	Safety Systems	2112	Pipeline Database Update
4	Safety Systems	2120	Pipeline Feature Data Collection

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	223.0001	CPUC and PHMSA Notification of Major New and Upgraded Pipelines and Pressure Test Failures of Pipelines
4	Safety Systems	223.0002	Minimum Trench Requirements for Transmission Pipelines
4	Safety Systems	223.0030	Investigation of Failures on Distribution and Transmission Pipeline Facilities
4	Safety Systems	223.0031	Abnormal Operations - Transmission
4	Safety Systems	223.0065	Pipeline Patrol and Unstable Earth Inspections
4	Safety Systems	223.0075	Pipeline Markers
4	Safety Systems	223.0095	External and Internal Transmission Pipeline Inspection
4	Safety Systems	223.0100	Leakage Surveys
4	Safety Systems	223.0103	Aerial Leakage Surveys
4	Safety Systems	223.0125	Leakage Classification and Mitigation Schedules
4	Safety Systems	223.0130	Abandonment, Conversion and Reinstatement of Transmission Pipelines
4	Safety Systems	223.0140	Excavating, Shoring and Sloping
4	Safety Systems	223.0145	Planning Shutdowns for Transmission and Storage
4	Safety Systems	223.0155	Planning Pipeline Blowdowns
4	Safety Systems	223.0177	Measurement of Remaining Wall Thickness
4	Safety Systems	223.0180	Repair of Defects in Steel Pressure Piping
4	Safety Systems	223.0183	Repair of Defects on an Operating Pipeline by Grinding
4	Safety Systems	223.0185	Repair Leak on an Operating Pipeline With Band or Sleeve
4	Safety Systems	223.0188	Epoxy Grouted Non-Leaking Steel Sleeve Repairs - Above and Below Ground Piping
4	Safety Systems	223.0190	Repair of Non-Leaking Defects on an Operating Pipeline with a Band or Sleeve
4	Safety Systems	223.0195	Repair on Operating Pipelines Using a Welded Steel Patch
4	Safety Systems	223.0210	Vault Maintenance and Inspection
4	Safety Systems	223.0215	Valve Inspection and Maintenance - Transmission
4	Safety Systems	223.0230	Identification Numbers for Pipeline Valves - Transmission
4	Safety Systems	223.0233	Transmission Line Identification and Records

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS
SOCALGAS: SP.A-SC

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	223.0240	Compressor Station Emergency Shutdown Systems
4	Safety Systems	223.0250	Compressor Station Equipment - Isolation and Purging for Maintenance or Alterations
4	Safety Systems	223.0255	Testing and Maintaining Compressor Station Emergency Shutdown Systems
4	Safety Systems	223.0265	Identification Numbers for Station Valves
4	Safety Systems	223.0275	Main Reciprocating Gas Compressor Unit Operation - Transmission and Storage Operations
4	Safety Systems	223.0280	Main Reciprocating Gas Compressor Maintenance - Transmission and Storage Operations
4	Safety Systems	223.0315	Operation and Maintenance of Generator Units - Transmission and Storage Operations
4	Safety Systems	223.0325	Main Centrifugal Gas Compressor Unit Operation
4	Safety Systems	223.0330	Main Centrifugal Gas Compressor Unit Maintenance
4	Safety Systems	223.0345	Pressure Relief/Pressure Limiting Devices, Testing/Inspection
4	Safety Systems	223.0375	MAXIMO - Transmission and Storage Operations
4	Safety Systems	223.0400	Gas Detectors in Compressor Stations
4	Safety Systems	223.0410	Requirements for Designing Pipelines to Accommodate Smart Pigs
4	Safety Systems	223.0415	Pipeline and Related Definitions
4	Safety Systems	3084	Corrosion Tests General Data Sheet
4	Safety Systems	3222	Design Data Sheet (DDS)
4	Safety Systems	3506	Notice of Shutdown / Operational Deviation
4	Safety Systems	3689	System Qualification Record
4	Safety Systems	4090	100mV Polarization Form
4	Safety Systems	4091	Wax Casing Data Collection Form
4	Safety Systems	5153	Pipeline Location Information
4	Safety Systems	5330	Operating and Maintenance Order (OMO)
4	Safety Systems	677-1	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	CRMP1	Control Room Management Plan
4	Safety Systems	CRMP6	Gas Control Management of Change

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS
SOCALGAS: SP.A-SC

Chapter Number	Chapter Title	Policy	Policy Title
4	Safety Systems	F17-1	Annual Performance Measures
4	Safety Systems	F4-1	Threat Evaluation Form
4	Safety Systems	F8-1	Baseline Assessment Plan Revisions Log
4	Safety Systems	TIMP.0	Table of Contents
4	Safety Systems	TIMP.10	Remediation
4	Safety Systems	TIMP.11	Minimizing Environmental and 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
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 Integration
4	Safety Systems	TIMP.5	Threat and 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 Acronyms
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	DIMP8	Periodic Evaluation and Improvement
4	Safety Systems	DIMP9	Report Results
4	Safety Systems	DIMPA	Terms, Definitions and Acronyms
5	Emergency Response	142.01	Order Completion Schedule and Priority Scheduling
5	Emergency Response	183.0001	Emergency Planning - Government
5	Emergency Response	183.0015	Field Services Emergency Plans

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
5	Emergency Response	183.0017	Emergency Exercise
5	Emergency Response	183.0035	Emergency Action and Fire Prevention Plan
5	Emergency Response	183.0075	Off-Hour Management Coverage - Headquarters and Region Operations
5	Emergency Response	183.01	Shutdown Procedures and Isolation Area Establishment for Distribution Pipeline Facilities
5	Emergency Response	183.0105	Incident Command System (ICS) for Emergency Incidents
5	Emergency Response	183.0165	Emergency Incident Reporting
5	Emergency Response	183.03	Field Guidelines - Emergency Incident Distribution / Customer Service
5	Emergency Response	183.05	Message Center Reporting (MCR)
5	Emergency Response	183.06	Region Reports of Safety-Related Pipeline Conditions
5	Emergency Response	183.07	Pipeline Incident Reports to CPUC and PHMSA; National Transportation Safety Board (NTSB) Accident Investigation
5	Emergency Response	183.08	Pipeline Safety Reports and Notifications to CPUC and PHMSA
5	Emergency Response	184.0335	Steel Pipe Squeezers 6" through 12"
5	Emergency Response	191.01	Investigation of Accidents and Pipeline Failures
5	Emergency Response	223.0001	CPUC and PHMSA Notification of Major New and Upgraded Pipelines and Pressure Test Failures of Pipelines
5	Emergency Response	223.0032	Incident Evaluation Process on Gas Systems
5	Emergency Response	01.010-I	Emergency Incidents/Local Instructions
5	Emergency Response	01.010-OC	Emergency Incidents/Local Instructions
5	Emergency Response	01.010-P	Emergency Incidents/Local Instructions
5	Emergency Response	10.010-COM	BRP - Dispatch/Arso

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
5	Emergency Response	10.020-COM	BRP - Customer Services, Distribution, and Meter & Regulation
5	Emergency Response	104.0030	Hazardous Waste Shipping
5	Emergency Response	104.0040	Hazardous Material Shipping
5	Emergency Response	104.0150	Proposition 65 Compliance
5	Emergency Response	167.0200	Data Gathering and Integration
5	Emergency Response	167.0210	In-Line Inspection Procedure
5	Emergency Response	167.30	Lead and Metals in Surface Coatings: Hazard Compliance Program
5	Emergency Response	183.0030	Contact with Fire and Police Departments and Public Agencies
5	Emergency Response	183.0040	Natural Disaster or Major Emergency - Employee Instructions
5	Emergency Response	183.0100	Emergency Incident Notifying
5	Emergency Response	183.0110	Field Procedure - Emergency Incidents Transmission
5	Emergency Response	183.0120	Emergency Outage Procedure
5	Emergency Response	183.0130	Materials and Supplies for Emergency Situations
5	Emergency Response	183.0160	Dispatch Office - Message Center Reports
5	Emergency Response	184.0250	Halt Tool - Gas Emergency Leak Clamp
5	Emergency Response	OD8	The Gas Emergency Response Plan
5	Emergency Response	PA-1	Public Awareness Plan
5	Emergency Response	01.010-N	Emergency Incidents/Local Instructions
5	Emergency Response	184.0245	Leak Investigation - Distribution
5	Emergency Response	223.0145	Planning Shutdowns for Transmission and Storage

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
5	Emergency Response	167.0235	Immediate Repair Conditions - Transmission Pipelines
5	Emergency Response	166.0025	Prevention of Accidental Ignition of Natural Gas
5	Emergency Response	223.0031	Abnormal Operations - Transmission
5	Emergency Response	104.0085	PCB Spill Clean-up and Decontamination
5	Emergency Response	104.02	Notification Requirements for Release/Spill Events
5	Emergency Response	1957	Gas Stub Tag
6	State and Federal Regulations	100.0152	Self Audit Requirements - Gas Measurement (Distribution, Transmission & Storage)
6	State and Federal Regulations	104.0220	Hydrostatic Test Water Management
6	State and Federal Regulations	104.06	Respiratory Protection Program
6	State and Federal Regulations	140.04	Condition/Location of Meter Installations and Report of Inaccessible/Removed Meters
6	State and Federal Regulations	142.0065	Meter Set - Meter Turn-On
6	State and Federal Regulations	142.0075	Closing Meters - Methods and Procedures
6	State and Federal Regulations	142.01	Order Completion Schedule and Priority Scheduling
6	State and Federal Regulations	142.02	Leak Investigation - Customer Service
6	State and Federal Regulations	142.0275	Back Flow Protection - Regulators and Check Valves
6	State and Federal Regulations	142.5660	Purging Gas Meters and Customer Houelines
6	State and Federal Regulations	166.0015	Fire Prevention and Protection - Transmission and Storage
6	State and Federal Regulations	166.0025	Prevention of Accidental Ignition of Natural Gas
6	State and Federal Regulations	166.0076	Working in Flammable Atmospheres
6	State and Federal Regulations	167.0100	Operator Qualification Program

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	167.0200	Data Gathering and Integration
6	State and Federal Regulations	167.0211	Bellhole Inspection Requirements
6	State and Federal Regulations	167.0212	Casing Wax Fill
6	State and Federal Regulations	167.0229	Internal Corrosion Management Plan
6	State and Federal Regulations	167.0230	Internal Corrosion Design and Construction Considerations
6	State and Federal Regulations	167.0235	Immediate Repair Conditions - Transmission Pipelines
6	State and Federal Regulations	180.0005	Steel Pipe - Selection Requirements
6	State and Federal Regulations	180.0010	Steel Butt-Weld Fittings - Selection Guide
6	State and Federal Regulations	180.0015	Wedding Bands, Reinforcing Sleeves and Canopies - Selection Guide
6	State and Federal Regulations	180.0020	Flanges - Selection, Torque and Installation Requirements
6	State and Federal Regulations	180.0030	Branch Connection, Steel - Selection Guide
6	State and Federal Regulations	180.0035	Leak Repair Clamps and Sleeves - Selection Guide
6	State and Federal Regulations	180.0050	Control Piping
6	State and Federal Regulations	180.0085	Valve Usage and Selection Guide
6	State and Federal Regulations	180.0100	Prefabricated Vaults - Design and Selection Guide
6	State and Federal Regulations	182.0010	Request for Pipeline Design Assistance
6	State and Federal Regulations	182.0020	Electrical Facilities in Hazardous Areas
6	State and Federal Regulations	182.0040	Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure
6	State and Federal Regulations	182.0050	MAOP Evaluation of Corroded Pipe
6	State and Federal Regulations	182.0055	Identification of Steel Pipe and Butt Weld Fittings

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	182.0070	Angles and Bends in Steel Piping
6	State and Federal Regulations	182.0080	Casing Assemblies - Steel Carrier Pipe
6	State and Federal Regulations	182.0087	Inspection of Pipeline Cable-Suspension Bridges
6	State and Federal Regulations	182.0090	Designs for Pipelines in Bridges
6	State and Federal Regulations	182.0093	Wear Pads and Bands for Steel Gas Piping
6	State and Federal Regulations	182.0130	Steel Service Design 61-1000 PSIG
6	State and Federal Regulations	182.0140	Polyethylene Plastic Pipe - General Application Requirements
6	State and Federal Regulations	182.0148	Casing Assemblies - Plastic Carrier Pipe
6	State and Federal Regulations	182.0150	Polyethylene (PE) Service Selection Guide
6	State and Federal Regulations	182.0160	Purging Pipelines and Components
6	State and Federal Regulations	182.0162	Purging and Locking Service Risers
6	State and Federal Regulations	182.0165	Tap Requirements
6	State and Federal Regulations	182.0170	Strength Testing - High Pressure Pipelines and Facilities
6	State and Federal Regulations	182.0185	Pressure Terminology and Establishment of Pressure Levels for Piping
6	State and Federal Regulations	182.0190	Class Location - Determination and Changes
6	State and Federal Regulations	182.0200	Design Factors for Steel Piping Systems
6	State and Federal Regulations	183.0001	Emergency Planning - Government
6	State and Federal Regulations	183.0015	Field Services Emergency Plans
6	State and Federal Regulations	183.0017	Emergency Exercise
6	State and Federal Regulations	183.0030	Contact with Fire and Police Departments and Public Agencies

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	183.0040	Natural Disaster or Major Emergency - Employee Instructions
6	State and Federal Regulations	183.0075	Off-Hour Management Coverage - Headquarters and Region Operations
6	State and Federal Regulations	183.01	Shutdown Procedures and Isolation Area Establishment for Distribution Pipeline Facilities
6	State and Federal Regulations	183.0105	Incident Command System (ICS) for Emergency Incidents
6	State and Federal Regulations	183.0110	Field Procedure - Emergency Incidents Transmission
6	State and Federal Regulations	183.0120	Emergency Outage Procedure
6	State and Federal Regulations	183.0130	Materials and Supplies for Emergency Situations
6	State and Federal Regulations	183.0160	Dispatch Office - Message Center Reports
6	State and Federal Regulations	183.0165	Emergency Incident Reporting
6	State and Federal Regulations	183.03	Field Guidelines - Emergency Incident Distribution / Customer Service
6	State and Federal Regulations	183.05	Message Center Reporting (MCR)
6	State and Federal Regulations	183.06	Region Reports of Safety-Related Pipeline Conditions
6	State and Federal Regulations	183.08	Pipeline Safety Reports and Notifications to CPUC and DOT
6	State and Federal Regulations	184.0031	Pressure Monitoring of Distribution Systems
6	State and Federal Regulations	184.0035	Regulator Station Design and Planning
6	State and Federal Regulations	184.0050	General Construction Requirements for Distribution Mains
6	State and Federal Regulations	184.0055	Hand Backfill and Compaction Method
6	State and Federal Regulations	184.0060	General Construction Requirements for Distribution Service Lines
6	State and Federal Regulations	184.0075	Evaluation and Disposition of Inactive Services
6	State and Federal Regulations	184.0080	Abandonment of Gas Services and Gas Light Tap Assemblies

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	184.0085	Abandonment or Inactivation of Gas Distribution Pipelines
6	State and Federal Regulations	184.0090	Valve Selection and Installation - Services
6	State and Federal Regulations	184.0095	Polyethylene (PE) Pipe and Fittings - General Installation Requirements
6	State and Federal Regulations	184.0105	Polyethylene (PE) Pipe Inserted – Main in Metal Casing
6	State and Federal Regulations	184.011	Notification of Excavation and Construction Activities - Assembly Bill Number 1937/ PUC Code 955.5
6	State and Federal Regulations	184.0110	Inserting PE Pipe - Service Riser Adapter
6	State and Federal Regulations	184.0125	Tracer Wire Installation for Polyethylene (PE) Pipe Installations
6	State and Federal Regulations	184.0150	Leak Testing of Distribution Piping with MAOP = 60 PSIG
6	State and Federal Regulations	184.0170	Trenchless Construction Methods
6	State and Federal Regulations	184.0200	Underground Service Alert and Temporary Marking
6	State and Federal Regulations	184.0235	Polyethylene (PE) Pipe Repair
6	State and Federal Regulations	184.0275	Inspection Schedule - Regulator Station, Power Generating Plant Regulation Equipment Requirements
6	State and Federal Regulations	184.03	Replacement Criteria for Distribution Mains and Services
6	State and Federal Regulations	184.0355	Pressure Control Machines - 2" Through 12"
6	State and Federal Regulations	184.0360	Pressure Control - Fittings 2" and Under Pressure Limitations and Related Equipment
6	State and Federal Regulations	184.0366	Pressure Control: Drilling Operations For DH-5 Drilling Machine
6	State and Federal Regulations	184.0370	Pressure Control: Drilling Operations For D-5 Drilling Machine
6	State and Federal Regulations	184.04	Supply Line Identification and Records
6	State and Federal Regulations	184.0405	Pressure Control - Stop Bottom Outlet Fittings

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	184.0450	Pressure Control - Completion Plugs 3/4" - 1-1/4"
6	State and Federal Regulations	184.0455	Pressure Control - DH-5 Machine 2" and 3" Insert/Extract
6	State and Federal Regulations	184.0480	Pressure Control - Completion Plugs
6	State and Federal Regulations	184.0575	Pressure Control: Stop Standard 2" Service Tee With D-5 Machine
6	State and Federal Regulations	184.0585	Remove 1" Street Ell from a Service Clamp - Install a 1" Threaded Both Ends (TBE) Nipple in Clamp
6	State and Federal Regulations	184.0585	Remove 1" Street Ell from a Service Clamp - Install a 1" Threaded Both Ends (TBE) Nipple in Clamp
6	State and Federal Regulations	184.0590	Pressure Control Qualification Requirements
6	State and Federal Regulations	184.06	Gas-Handling and Pressure Control
6	State and Federal Regulations	184.09	Prevention of Excavation Damage to Company Facilities
6	State and Federal Regulations	184.12	Inspection of Pipelines on Bridges and Spans
6	State and Federal Regulations	184.16	Valve Inspection and Maintenance - Distribution
6	State and Federal Regulations	185.0001	Meter Locations
6	State and Federal Regulations	185.0007	Curb Meter Box Installation
6	State and Federal Regulations	185.0008	Meter Guard - Installation Requirements
6	State and Federal Regulations	185.02	Pressure Regulation - Residential and Commercial
6	State and Federal Regulations	185.0228	Meter Set Assembly Inspections
6	State and Federal Regulations	185.0287	Over-Pressure/Under-Pressure Protection - Maintenance, Installation and Settings
6	State and Federal Regulations	185.0300	MSA - Installing, Rebuilding and Inspections
6	State and Federal Regulations	186.0002	Design and Application of Cathodic Protection

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	186.0005	Cathodic Protection - Mixed Piping System
6	State and Federal Regulations	186.0015	Condition Assessment of Unprotected Distribution Steel Piping
6	State and Federal Regulations	186.0035	Criteria for Cathodic Protection
6	State and Federal Regulations	186.0036	100mV Polarization Criteria
6	State and Federal Regulations	186.0040	Magnesium Anodes for Corrosion Control
6	State and Federal Regulations	186.0070	Insulating MSA's
6	State and Federal Regulations	186.0075	Electrical Test Stations & Bond Assembly
6	State and Federal Regulations	186.0100	Approved Protective Coatings for Below Ground Corrosion Control
6	State and Federal Regulations	186.0102	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating
6	State and Federal Regulations	186.0103	External Surface Preparation and Field Applied Coatings for Buried Pipelines
6	State and Federal Regulations	186.0108	External Surface Preparation and Coating Application for Steel Tanks and Vessels (New & Refurbished)
6	State and Federal Regulations	186.0109	Internal Coating of Tanks, Vessels, & Drip Legs
6	State and Federal Regulations	186.0110	Field Tape Wrapping Requirements
6	State and Federal Regulations	186.0111	Field Application of Grease Coating
6	State and Federal Regulations	186.0117	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas
6	State and Federal Regulations	186.0120	Interference - Stray Electrical Current
6	State and Federal Regulations	186.0135	Operation and Maintenance of Cathodic Protection Facilities
6	State and Federal Regulations	186.0170	Record Keeping - Corrosion Control
6	State and Federal Regulations	186.0180	Cathodic Protection Test Orders - Monitoring Isolated Facilities

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	186.02	Cathodic Protection - Inspection of Exposed Pipe
6	State and Federal Regulations	186.06	Cathodic Protection - Electrical Isolation
6	State and Federal Regulations	186.07	Hot Line Insulating Sleeves
6	State and Federal Regulations	186.09	Cathodic Protection - Casings
6	State and Federal Regulations	187.0055	General Welding Requirements
6	State and Federal Regulations	187.0056	Welding Field Guide
6	State and Federal Regulations	187.0120	Fusing Socket Connections - Polyethylene (PE) Pipe
6	State and Federal Regulations	187.0138	PE Saddle Fusions
6	State and Federal Regulations	187.0139	PE Fusion Card
6	State and Federal Regulations	187.0145	Valve Installation and Valve Box Assemblies for Polyethylene
6	State and Federal Regulations	187.0146	Excess Flow Valve (EFV) - Installation and Operation
6	State and Federal Regulations	187.0155	Butt Fusing 2", 3" and 4" PE Pipe (Manual Machines)
6	State and Federal Regulations	187.0158	4", 6" and 8" Polyethylene (PE) Butt Fusion (Hydraulic Machines)
6	State and Federal Regulations	187.0175	Inspection and Testing of Welds on Company Steel Piping
6	State and Federal Regulations	187.0180	Qualification and Re-Qualification of Welders
6	State and Federal Regulations	187.0181	Qualification of Personnel - Polyethylene Pipe Joiners
6	State and Federal Regulations	187.0200	Radiographic Examination API 1104
6	State and Federal Regulations	187.0210	Service-To-Main Connection (SMC)
6	State and Federal Regulations	188.0001	Standard Specification for Natural and Substitute Fuel Gases
6	State and Federal Regulations	189.0001	Odorization

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	189.0010	Supplemental Odorization of Gas at Border Stations
6	State and Federal Regulations	190	Operator Qualification Task Change Communication
6	State and Federal Regulations	191.0020	Inspection of Construction Field Work
6	State and Federal Regulations	191.0025	Scoring of Construction Work Inspected
6	State and Federal Regulations	191.01	Investigation of Accidents and Pipeline Failures
6	State and Federal Regulations	192.0020	Preparation of Completion Sketch
6	State and Federal Regulations	203.005	Self Audit Guidelines - Distribution
6	State and Federal Regulations	203.007	Pipeline Patrol and Unstable Earth Self Audit
6	State and Federal Regulations	203.008	Pipelines on Bridges and Spans Self-Audit
6	State and Federal Regulations	203.016	Leak Survey Self-Audit
6	State and Federal Regulations	203.017	Valve Inspections and Maintenance Self-Audit
6	State and Federal Regulations	223.0002	Minimum Trench Requirements for Transmission Pipelines
6	State and Federal Regulations	223.0003	General Construction Requirements - Steel Transmission System
6	State and Federal Regulations	223.0030	Investigation of Failures on Distribution and Transmission Pipeline Facilities
6	State and Federal Regulations	223.0031	Abnormal Operations - Transmission
6	State and Federal Regulations	223.0065	Pipeline Patrol and Unstable Earth Inspections
6	State and Federal Regulations	223.0075	Pipeline Markers
6	State and Federal Regulations	223.0095	External and Internal Transmission Pipeline Inspection
6	State and Federal Regulations	223.0100	Leakage Surveys

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	223.0103	Aerial Leakage Surveys
6	State and Federal Regulations	223.0125	Leakage Classification and Mitigation Schedules
6	State and Federal Regulations	223.0125	Leakage Classification and Mitigation Schedules
6	State and Federal Regulations	223.0130	Abandonment, Conversion and Reinstatement of Transmission Pipelines
6	State and Federal Regulations	223.0140	Excavating, Shoring and Sloping
6	State and Federal Regulations	223.0145	Planning Shutdowns for Transmission and Storage
6	State and Federal Regulations	223.0155	Planning Pipeline Blowdowns
6	State and Federal Regulations	223.0180	Repair of Defects in Steel Pressure Piping
6	State and Federal Regulations	223.0195	Repair on Operating Pipelines Using a Welded Steel Patch
6	State and Federal Regulations	223.0210	Vault Maintenance and Inspection
6	State and Federal Regulations	223.0215	Valve Inspection and Maintenance - Transmission
6	State and Federal Regulations	223.0230	Identification Numbers for Pipeline Valves - Transmission
6	State and Federal Regulations	223.0240	Compressor Station Emergency Shutdown Systems
6	State and Federal Regulations	223.0250	Compressor Station Equipment - Isolation and Purging for Maintenance or Alterations
6	State and Federal Regulations	223.0255	Testing and Maintaining Compressor Station Emergency Shutdown Systems
6	State and Federal Regulations	223.0275	Main Reciprocating Gas Compressor Unit Operation - Transmission and Storage Operations
6	State and Federal Regulations	223.0280	Main Reciprocating Gas Compressor Maintenance - Transmission and Storage Operations

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
6	State and Federal Regulations	223.0315	Operation and Maintenance of Generator Units - Transmission and Storage Operations
6	State and Federal Regulations	223.0325	Main Centrifugal Gas Compressor Unit Operation
6	State and Federal Regulations	223.0330	Main Centrifugal Gas Compressor Unit Maintenance
6	State and Federal Regulations	223.0345	Pressure Relief/Pressure Limiting Devices, Testing/Inspection
6	State and Federal Regulations	223.0400	Gas Detectors in Compressor Stations
6	State and Federal Regulations	223.0410	Requirements for Designing Pipelines to Accommodate Smart Pigs
6	State and Federal Regulations	223.0415	Pipeline and Related Definitions
6	State and Federal Regulations	3222	Design Data Sheet (DDS)
6	State and Federal Regulations	3506	Notice of Shutdown / Operational Deviation
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	TIMP.17	Performance Plan
7	Continuing Operations	100.0152	Self Audit Requirements - Gas Measurement
7	Continuing Operations	104.0087	Crude Oil Contamination by PCB
7	Continuing Operations	104.0095	Hydrogen Sulfide Lead Acetate Tape Analyzer Maintenance
7	Continuing Operations	104.0150	Proposition 65 Compliance
7	Continuing Operations	104.0210	Industrial Waste Discharge to Sanitary Sewer
7	Continuing Operations	104.0220	Hydrostatic Test Water Management

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	104.06	Respiratory Protection Program
7	Continuing Operations	106.0063	Fire Extinguishing Equipment
7	Continuing Operations	142.0060	Service Policy
7	Continuing Operations	142.0275	Back Flow Protection - Regulators and Check Valves
7	Continuing Operations	142.1189	Premise Access
7	Continuing Operations	PA-1	Public Awareness Program
7	Continuing Operations	166.0032	Low-Voltage Electrical Safety Program
7	Continuing Operations	166.0055	Contractor Safety Observation Areas
7	Continuing Operations	166.09	Heat Illness Prevention for Outdoor Work
7	Continuing Operations	167.0100	Operator Qualification Program
7	Continuing Operations	167.0200	Data Gathering and Integration
7	Continuing Operations	167.0212	Casing Wax Fill
7	Continuing Operations	167.0214	Preventive and Mitigative Measures
7	Continuing Operations	167.0215	Continual Evaluation
7	Continuing Operations	167.0230	Internal Corrosion Design and Construction Considerations
7	Continuing Operations	167.0260	Fiber Optic Cable Installation for Pipeline Monitoring
7	Continuing Operations	167.04	Contractor Safety Program
7	Continuing Operations	180.0005	Steel Pipe - Selection Requirements

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	180.0010	Steel Butt-Weld Fittings - Selection Guide
7	Continuing Operations	180.0015	Wedding Bands, Reinforcing Sleeves and Canopies - Selection Guide
7	Continuing Operations	180.0020	Flanges - Selection, Torque and Installation Requirements
7	Continuing Operations	180.0030	Branch Connection, Steel - Selection Guide
7	Continuing Operations	180.0040	Pressure Control Fittings - Selection Guide
7	Continuing Operations	180.0050	Control Piping
7	Continuing Operations	180.0085	Valve Usage and Selection Guide
7	Continuing Operations	180.0090	Valve Casing Assembly - Selection Guide
7	Continuing Operations	180.0100	Prefabricated Vaults - Design and Selection Guide
7	Continuing Operations	182.0010	Request for Pipeline Design Assistance
7	Continuing Operations	182.0020	Electrical Facilities in Hazardous Areas
7	Continuing Operations	182.0040	Changing Maximum Allowable Operating Pressure and MOP
7	Continuing Operations	182.005	Service Pipe and Excess Flow Valve Sizing
7	Continuing Operations	182.0055	Identification of Steel Pipe and Butt Weld Fittings
7	Continuing Operations	182.0070	Angles and Bends in Steel Piping
7	Continuing Operations	182.0080	Casing Assemblies - Steel Carrier Pipe
7	Continuing Operations	182.0085	Pipe End Closures
7	Continuing Operations	182.0090	Designs for Pipelines in Bridges

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	182.0093	Wear Pads and Bands for Steel Gas Piping
7	Continuing Operations	182.0125	Steel Service Design - 60 psig or less
7	Continuing Operations	182.0130	Steel Service Design 61-1000 PSIG
7	Continuing Operations	182.0140	Polyethylene Plastic Pipe - General Application Requirements
7	Continuing Operations	182.0148	Casing Assemblies - Plastic Carrier Pipe
7	Continuing Operations	182.0150	Polyethylene (PE) Service Selection Guide
7	Continuing Operations	182.0165	Tap Requirements
7	Continuing Operations	182.0170	Strength Testing - High Pressure Pipelines and Facilities
7	Continuing Operations	182.0185	Pressure Terminology and Establishment of Pressure Levels for Piping
7	Continuing Operations	182.0190	Class Location - Determination and Changes
7	Continuing Operations	182.0200	Design Factors for Steel Piping Systems
7	Continuing Operations	183.0015	Field Services Emergency Plans
7	Continuing Operations	183.01	Shutdown Procedures and Isolation Area Establishment for Distribution Pipeline Facilities
7	Continuing Operations	183.0110	Field Procedure - Emergency Incidents Transmission
7	Continuing Operations	183.0160	Dispatch Office - Message Center Reports
7	Continuing Operations	183.06	Region Reports of Safety-Related Pipeline Conditions
7	Continuing Operations	183.07	Pipeline Incident Reports to CPUC and PHMSA; National Transportation Safety Board (NTSB) Accident Investigation
7	Continuing Operations	183.08	Pipeline Safety Reports and Notifications to CPUC and DOT

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	184.0035	Regulator Station Design and Planning
7	Continuing Operations	184.0050	General Construction Requirements for Distribution Mains
7	Continuing Operations	184.0055	Hand Backfill and Compaction Method
7	Continuing Operations	184.0060	General Construction Requirements for Distribution Service Lines
7	Continuing Operations	184.0090	Valve Selection and Installation - Services
7	Continuing Operations	184.0095	Polyethylene (PE) Pipe and Fittings - General Installation Requirements
7	Continuing Operations	184.0105	Polyethylene (PE) Pipe Inserted – Main in Metal Casing
7	Continuing Operations	184.0110	Inserting PE Pipe - Service Riser Adapter
7	Continuing Operations	184.0125	Tracer Wire Installation for Polyethylene (PE) Pipe Installations
7	Continuing Operations	184.0150	Leak Testing of Distribution Piping with MAOP = 60 PSIG
7	Continuing Operations	184.0170	Trenchless Construction Methods
7	Continuing Operations	184.0235	Polyethylene (PE) Pipe Repair
7	Continuing Operations	184.0240	PE Tapping Tee and Service Saddle Repair
7	Continuing Operations	184.09	Prevention of Excavation Damage to Company Facilities
7	Continuing Operations	184.12	Inspection of Pipelines on Bridges and Spans
7	Continuing Operations	184.17	Temporary LNG Facility
7	Continuing Operations	185.0001	Meter Locations
7	Continuing Operations	185.0005	Curb Meter Box - Installation Requirements

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	185.0007	Curb Meter Box Installation
7	Continuing Operations	185.0008	Meter Guard - Installation Requirements
7	Continuing Operations	185.0010	MSA Standard Designs and Selection Chart
7	Continuing Operations	185.02	Pressure Regulation - Residential and Commercial
7	Continuing Operations	185.0228	Meter Set Assembly Inspections
7	Continuing Operations	185.0287	Over-Pressure/Under-Pressure Protection - Maintenance, Installation and Settings
7	Continuing Operations	185.0300	MSA - Installing, Rebuilding and Inspections
7	Continuing Operations	185.0560	Pressure Regulation Overpressure Protection
7	Continuing Operations	186.0002	Design and Application of Cathodic Protection
7	Continuing Operations	186.0035	Criteria for Cathodic Protection
7	Continuing Operations	186.0036	100mV Polarization Criteria
7	Continuing Operations	186.0040	Magnesium Anodes for Corrosion Control
7	Continuing Operations	186.0075	Electrical Test Stations & Bond Assembly
7	Continuing Operations	186.0090	Corrosion Control of Underground Hazardous Substance Storage Tanks
7	Continuing Operations	186.0103	External Surface Preparation and Field Applied Coatings for Buried Pipelines
7	Continuing Operations	186.0135	Operation and Maintenance of Cathodic Protection Facilities
7	Continuing Operations	186.0170	Record Keeping - Corrosion Control
7	Continuing Operations	186.0190	Induced High Voltage Alternating Current (HVAC) on Pipelines

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	186.09	Cathodic Protection - Casings
7	Continuing Operations	186.224	Well Production Casing – Determination and Need for Cathodic Protection
7	Continuing Operations	186.225	Design and Application of Cathodic Protection – Well Production Casings
7	Continuing Operations	186.226	Determination of Effective Cathodic Protection on Well Production Casings
7	Continuing Operations	187.0050	Cutting Into Gas Mains, MSAs and Abandoned Substructures
7	Continuing Operations	187.0055	General Welding Requirements
7	Continuing Operations	187.0056	Welding Field Guide
7	Continuing Operations	187.0115	Fusion Requirements for Polyethylene Pipe
7	Continuing Operations	187.0120	Fusing Socket Connections - Polyethylene (PE) Pipe
7	Continuing Operations	187.0125	Electrofusion Process - General Instructions
7	Continuing Operations	187.0138	PE Saddle Fusions
7	Continuing Operations	187.0139	PE Fusion Card
7	Continuing Operations	187.0145	Valve Installation and Valve Box Assemblies for Polyethylene
7	Continuing Operations	187.0146	Excess Flow Valve (EFV) - Installation and Operation
7	Continuing Operations	187.0155	Butt Fusing 2", 3" and 4" PE Pipe (Manual Machines)
7	Continuing Operations	187.0158	4", 6" and 8" Polyethylene (PE) Butt Fusion (Hydraulic Machines)
7	Continuing Operations	187.0175	Inspection and Testing of Welds on Company Steel Piping

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	187.0180	Qualification and Re-Qualification of Welders
7	Continuing Operations	187.0181	Qualification of Personnel - Polyethylene Pipe Joiners
7	Continuing Operations	187.0200	Radiographic Examination API 1104
7	Continuing Operations	187.0210	Service-To-Main Connection (SMC)
7	Continuing Operations	189.01	Odorization - Roles and Responsibilities
7	Continuing Operations	191.0020	Inspection of Construction Field Work
7	Continuing Operations	191.0025	Scoring of Construction Work Inspected
7	Continuing Operations	191.01	Investigation of Accidents and Pipeline Failures
7	Continuing Operations	191.0210	Qualification of New Construction Contractors
7	Continuing Operations	192.0025	GIS Maintenance Requirements for High Pressure Gas Lines
7	Continuing Operations	192.0026	High Pressure Project Reconciliation, Closeout and Turnover
7	Continuing Operations	192.0030	Completion Drawing Set Requirements for High Pressure Pipelines
7	Continuing Operations	223.0002	Minimum Trench Requirements for Transmission Pipelines
7	Continuing Operations	223.0003	General Construction Requirements - Steel Transmission System
7	Continuing Operations	223.0030	Investigation of Failures on Distribution and Transmission Pipeline Facilities
7	Continuing Operations	223.0065	Pipeline Patrol and Unstable Earth Inspections
7	Continuing Operations	223.0075	Pipeline Markers
7	Continuing Operations	223.0095	External and Internal Transmission Pipeline Inspection

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	223.0100	Leakage Surveys
7	Continuing Operations	223.0125	Leakage Classification and Mitigation Schedules
7	Continuing Operations	223.0130	Abandonment, Conversion and Reinstatement of Transmission Pipelines
7	Continuing Operations	223.0145	Planning Shutdowns for Transmission and Storage
7	Continuing Operations	223.0180	Repair of Defects in Steel Pressure Piping
7	Continuing Operations	223.0215	Valve Inspection and Maintenance - Transmission
7	Continuing Operations	223.0255	Testing and Maintaining Compressor Station Emergency Shutdown Systems
7	Continuing Operations	223.0275	Main Reciprocating Gas Compressor Unit Operation
7	Continuing Operations	223.0280	Main Reciprocating Gas Compressor Maintenance
7	Continuing Operations	223.0315	Operation and Maintenance of Generator Units
7	Continuing Operations	223.0345	Pressure Relief/Pressure Limiting Devices, Testing/Inspection
7	Continuing Operations	223.0375	MAXIMO - Transmission and Storage Operations
7	Continuing Operations	223.0400	Gas Detectors in Compressor Stations
7	Continuing Operations	223.0410	Requirements for Designing Pipelines to Accommodate Smart Pigs
7	Continuing Operations	223.0415	Pipeline and Related Definitions
7	Continuing Operations	224.0015	Security and Accounting - Underground Storage Field Production Fluids
7	Continuing Operations	224.0030	Well Kill and Loading
7	Continuing Operations	224.02	Operation of Underground Storage Wells

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	224.070	Reservoir Integrity and Inventory Assessment
7	Continuing Operations	224.101	Storage Well Design
7	Continuing Operations	224.107	Well Integrity Inspection
7	Continuing Operations	224.108	Blowout Contingency Plan
7	Continuing Operations	3222	Design Data Sheet (DDS)
7	Continuing Operations	40-00	Polyethylene Pipe and Tubing
7	Continuing Operations	41-06.1	Pipe - Steel, Grades B through X70
7	Continuing Operations	50-15	Pipe Nipples
7	Continuing Operations	52-65	Fittings - Threaded, Malleable Iron
7	Continuing Operations	52-80	Couplings - Electrofusion, Polyethylene
7	Continuing Operations	52-82	FITTINGS, BUTT TYPE, POLYETHYLENE HEAT FUSION
7	Continuing Operations	52-96	Fittings - Butt Weld Steel
7	Continuing Operations	54-17	Flanges and Flanged Fittings
7	Continuing Operations	54-17.1	Cast Iron Flanges
7	Continuing Operations	56-40	Stop Cocks
7	Continuing Operations	56-70.1	Risers - Service, Anodeless
7	Continuing Operations	57-15	Canopies, High Pressure
7	Continuing Operations	58-08	Excess Flow Valve Assemblies

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	58-10	Valves - Thermoplastic
7	Continuing Operations	58-15.2	Valves; Ball, Steel Floating
7	Continuing Operations	58-70	Valves - Plug, Lubricated, Positive Shut-Off
7	Continuing Operations	58-82	Valves - Ball, Steel, Trunnion Mounted
7	Continuing Operations	58-96.6	Valve - Relief, Large
7	Continuing Operations	70-45	Regulator - Service, Standard Pressure
7	Continuing Operations	70-47	Regulators - High Pressure Spring Loaded
7	Continuing Operations	76-95	Pressure Vessels
7	Continuing Operations	78-01	Meters - Diaphragm
7	Continuing Operations	78-02	Meters - Rotary
7	Continuing Operations	IIPP.01	IIPP-Table of Contents
7	Continuing Operations	IIPP.02	IIPP-Introduction
7	Continuing Operations	IIPP.1	Injury and Illness Prevention Program
7	Continuing Operations	IIPP.10	IIPP-Safety Meetings
7	Continuing Operations	IIPP.11	IIPP-Best Safety Practices
7	Continuing Operations	IIPP.2	IIPP-Supervisor Responsibilities
7	Continuing Operations	IIPP.2	IIPP-Supervisor Responsibilities
7	Continuing Operations	IIPP.3	IIPP-Records

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	IIPP.4	IIPP-Employee Responsibilities
7	Continuing Operations	IIPP.4	IIPP-Employee Responsibilities
7	Continuing Operations	IIPP.5	IIPP-Communications
7	Continuing Operations	IIPP.6	IIPP-Corrective Actions
7	Continuing Operations	IIPP.7	IIPP-Appendices
7	Continuing Operations	IIPP.7	IIPP-Appendices
7	Continuing Operations	IIPP.8	IIPP-Local Safety Plans
7	Continuing Operations	QUALPROG	Quality Program Manual for Owner-User Inspection of Air Tanks
7	Continuing Operations	104.071	Draeger Pac® 7000 Personal Gas Monitor
7	Continuing Operations	107.0293	RMLD - Remote Methane Leak Detector
7	Continuing Operations	107.0296	Sensit G2 Multigas Detector and SMART-CAL Equipment Operations and Maintenance Procedures
7	Continuing Operations	142.0146	Fumigation Close and Back-On Orders
7	Continuing Operations	142.5660	Purging Gas Meters and Customer Houelines
7	Continuing Operations	167.0211	Bellhole Inspection Requirements
7	Continuing Operations	167.0212	Casing Wax Fill
7	Continuing Operations	167.0229	Internal Corrosion Management Plan
7	Continuing Operations	167.0235	Immediate Repair Conditions - Transmission Pipelines

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	167.0247	Aboveground Survey Plan
7	Continuing Operations	167.0248	Alternating Current Attenuation Survey
7	Continuing Operations	167.0249	Close Interval Survey
7	Continuing Operations	182.0050	MAOP Evaluation of Corroded Pipe
7	Continuing Operations	182.0162	Purging and Locking Service Risers
7	Continuing Operations	183.03	Field Guidelines - Emergency Incident Distribution / Customer Service
7	Continuing Operations	184.0031	Pressure Monitoring of Distribution Systems
7	Continuing Operations	184.0080	Abandonment of Gas Services and Gas Light Tap Assemblies
7	Continuing Operations	184.0085	Abandonment or Inactivation of Gas Distribution Pipelines
7	Continuing Operations	184.011	Notification of Excavation and Construction Activities - Assembly Bill Number 1937/ PUC Code 955.5
7	Continuing Operations	184.0130	Polyethylene Heater - Temperature Measurement and Adjustment
7	Continuing Operations	184.0233	Mechanical Tapping Tee Inspection
7	Continuing Operations	184.0335	Steel Pipe Squeezers 6" through 12"
7	Continuing Operations	184.0368	Pressure Control - TD Williamson Unit1200
7	Continuing Operations	184.09	Prevention of Excavation Damage to Company Facilities
7	Continuing Operations	184.16	Valve Inspection and Maintenance - Distribution
7	Continuing Operations	186.0005	Cathodic Protection - Mixed Piping System

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	186.006	Selection and Installation of Rectifiers and Impressed Current Anodes
7	Continuing Operations	186.0100	Approved Protective Coatings for Below Ground Corrosion Control
7	Continuing Operations	186.0102	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating
7	Continuing Operations	186.0104	Surface Preparation and Coating for Above Ground Piping and Steel Components
7	Continuing Operations	186.0110	Field Tape Wrapping Requirements
7	Continuing Operations	186.0111	Field Application of Grease Coating
7	Continuing Operations	186.0117	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas
7	Continuing Operations	186.0120	Interference - Stray Electrical Current
7	Continuing Operations	186.02	Cathodic Protection - Inspection of Exposed Pipe
7	Continuing Operations	186.06	Cathodic Protection - Electrical Isolation
7	Continuing Operations	187.0126	Magic Box - 2"-4"
7	Continuing Operations	187.0170	Connect Copper Wire To Steel Pipe - Pin Brazing, Thermite Welding and Braze Welding Processes
7	Continuing Operations	189.0001	Odorization
7	Continuing Operations	189.0002	ODORIZATION-YZ NJEX Odorant Injection System Maintenance
7	Continuing Operations	189.005	Operation of Odorometer
7	Continuing Operations	189.0056	Odor Conditioning of New Customer-Owned Pipelines - Size 4 Meter (AC630) and Larger
7	Continuing Operations	223.0032	Incident Evaluation Process on Gas Systems

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Chapter Number	Chapter Title	Policy	Policy Title
7	Continuing Operations	223.0103	Aerial Leakage Surveys
7	Continuing Operations	223.0104	Optical Methane Detector Operation and Maintenance
7	Continuing Operations	223.0181	Repair of Defects on Operating Pipelines Using Abandon Nipple
7	Continuing Operations	223.0183	Repair of Defects on an Operating Pipeline by Grinding
7	Continuing Operations	223.0190	Repair of Non-Leaking Defects on an Operating Pipeline with a Band or Sleeve
7	Continuing Operations	184.0245	Leak Investigation - Distribution
7	Continuing Operations	184.0443	Pressure Control - 2", 3" and 4" Top Half Fitting

INTERIM

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

1.3. Policy Document – Safety Plan Matrix

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
01.010-I	Emergency Incidents/Local Instructions		X			
01.010-N	Emergency Incidents/Local Instructions		X			
01.010-OC	Emergency Incidents/Local Instructions		X			
01.010-P	Emergency Incidents/Local Instructions		X			
10.010-COM	BRP - Dispatch/Arso		X			
10.020-COM	BRP - Customer Services, Distribution, and Meter & Regulation		X			
100.0152	Self Audit Requirements - Gas Measurement (Distribution, Transmission & Storage)	X		X	X	
104.0001	Environmental Training	X				
104.0017	Pipeline Liquids - Field Handling	X				
104.0030	Hazardous Waste Shipping		X			
104.0040	Hazardous Material Shipping		X			
104.0085	PCB Spill Clean-up and Decontamination		X			
104.0087	Crude Oil Contamination by PCB				X	
104.0095	Hydrogen Sulfide Lead Acetate Tape Analyzer Maintenance				X	
104.0150	Proposition 65 Compliance		X		X	
104.02	Notification Requirements for Release/Spill Events		X			
104.0210	Industrial Waste Discharge to Sanitary Sewer				X	
104.0220	Hydrostatic Test Water Management			X	X	
104.06	Respiratory Protection Program	X		X	X	
104.071	Draeger Pac® 7000 Personal Gas Monitor				X	
106.0063	Fire Extinguishing Equipment				X	
107.0004	Material Evaluation and Implementation	X				
107.0293	RMLD - Remote Methane Leak Detector				X	
107.0296	Sensit G2 Multigas Detector and SMART-CAL Equipment Operations and Maintenance Procedures				X	
107.0324	General Operating Instructions for the Metrotech® Model 480B Pipe and Cable Locator - "Split Box"	X				
140.04	Condition/Location of Meter Installations and Report of Inaccessible/Removed Meters	X		X		
142.0060	Service Policy				X	
142.0065	Meter Set - Meter Turn-On	X		X		
142.0075	Closing Meters - Methods and Procedures	X		X		
142.01	Order Completion Schedule and Priority Scheduling	X	X	X		

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
142.0146	Fumigation Close and Back-On Orders				X	
142.02	Leak Investigation - Customer Service	X		X		
142.0275	Back Flow Protection - Regulators and Check Valves			X	X	
142.1189	Premise Access				X	
142.5660	Purging Gas Meters and Customer Houelines	X		X	X	
151.0010	Environmental Inspections, Search Warrants, and Internal Notifications	X				
166.0015	Fire Prevention and Protection - Transmission and Storage	X		X		
166.0025	Prevention of Accidental Ignition of Natural Gas	X	X	X		
166.0032	Low-Voltage Electrical Safety Program				X	
166.0055	Contractor Safety Observation Areas	X			X	
166.0076	Working in Flammable Atmospheres	X		X		
166.0077	Confined Space Operations	X				
166.09	Heat Illness Prevention for Outdoor Work				X	
167.0100	Operator Qualification Program	X		X	X	
167.0125	Self-Audit Guidelines - Pipeline Integrity Program	X				
167.0200	Data Gathering and Integration	X	X	X	X	
167.0203	Threat Identification	X				
167.0204	Risk Assessment of High Consequence Areas	X				
167.0207	TIMP Risk Algorithm	X				
167.0208	Baseline and Reassessment Plan	X				
167.0209	External Corrosion Direct Assessment Procedure	X				
167.0210	In-Line Inspection Procedure	X	X			
167.0211	Bellhole Inspection Requirements	X		X	X	
167.0212	Casing Wax Fill	X		X	X	
167.0214	Preventive and Mitigative Measures	X			X	
167.0215	Continual Evaluation	X			X	
167.0216	Stress Corrosion Cracking Direct Assessment Procedure	X				
167.0217	Supplemental Data Determination	X				
167.0218	Pipeline Cleaning Standard	X				
167.0220	In-Line Inspection Surveys Standard	X				
167.0224	Dry Gas - Internal Corrosion Direct Assessment	X				
167.0229	Internal Corrosion Management Plan	X		X	X	
167.0230	Internal Corrosion Design and Construction Considerations	X		X	X	
167.0232	Field Sampling and Analysis of Liquids and Solids/Sludge	X				
167.0235	Immediate Repair Conditions - Transmission Pipelines	X	X	X	X	
167.0236	Scheduling Remediation	X				

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
167.0240	Assessment of Pipeline Integrity Using Guided Wave UT	X				
167.0245	Global Positioning System (GPS) Process	X				
167.0246	GPS Control Survey	X				
167.0247	Aboveground Survey Plan	X			X	
167.0248	Alternating Current Attenuation Survey	X			X	
167.0249	Close Interval Survey	X			X	
167.0250	Voltage Gradient Survey	X				
167.0251	Soil Resistivity Survey	X				
167.0252	Inspection of Cased Pipe	X				
167.0260	Fiber Optic Cable Installation for Pipeline Monitoring	X			X	
167.04	Contractor Safety Program	X			X	
167.15	Hot Work Permit Program	X				
167.30	Lead and Metals in Surface Coatings: Hazard Compliance Program		X			
180.0003	Material Specifications and Purchase Descriptions	X				
180.0005	Steel Pipe - Selection Requirements	X		X	X	
180.0010	Steel Butt-Weld Fittings - Selection Guide	X		X	X	
180.0015	Wedding Bands, Reinforcing Sleeves and Canopies - Selection Guide	X		X	X	
180.0020	Flanges - Selection, Torque and Installation Requirements	X		X	X	
180.0030	Branch Connection, Steel - Selection Guide	X		X	X	
180.0035	Leak Repair Clamps and Sleeves - Selection Guide	X		X		
180.0040	Pressure Control Fittings - Selection Guide	X			X	
180.005	Steel Pipe Yield, Design Properties and Design Pressure Tables	X				
180.0050	Control Piping			X	X	
180.0085	Valve Usage and Selection Guide	X		X	X	
180.0090	Valve Casing Assembly - Selection Guide				X	
180.0100	Prefabricated Vaults - Design and Selection Guide	X		X	X	
182.0010	Request for Pipeline Design Assistance	X		X	X	
182.0020	Electrical Facilities in Hazardous Areas			X	X	
182.0040	Changing Maximum Allowable Operating Pressure and Maximum Operating Pressure	X		X	X	
182.005	Service Pipe and Excess Flow Valve Sizing				X	
182.0050	MAOP Evaluation of Corroded Pipe	X		X	X	
182.0055	Identification of Steel Pipe and Butt Weld Fittings	X		X	X	
182.0060	Service Risers	X				
182.0070	Angles and Bends in Steel Piping			X	X	
182.0080	Casing Assemblies - Steel Carrier Pipe	X		X	X	

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
182.0085	Pipe End Closures				X	
182.0087	Inspection of Pipeline Cable-Suspension Bridges	X		X		
182.0090	Designs for Pipelines in Bridges	X		X	X	
182.0093	Wear Pads and Bands for Steel Gas Piping	X		X	X	
182.0125	Steel Service Design - 60 psig or less				X	
182.0130	Steel Service Design 61-1000 PSIG			X	X	
182.0140	Polyethylene Plastic Pipe - General Application Requirements	X		X	X	
182.0148	Casing Assemblies - Plastic Carrier Pipe	X		X	X	
182.0150	Polyethylene (PE) Service Selection Guide	X		X	X	
182.0160	Purging Pipelines and Components	X		X		
182.0162	Purging and Locking Service Risers	X		X	X	
182.0165	Tap Requirements	X		X	X	
182.0170	Strength Testing - High Pressure Pipelines and Facilities	X		X	X	
182.0185	Pressure Terminology and Establishment of Pressure Levels for Piping	X		X	X	
182.0190	Class Location - Determination and Changes	X		X	X	
182.0200	Design Factors for Steel Piping Systems	X		X	X	
183.0001	Emergency Planning - Government	X	X	X		
183.0015	Field Services Emergency Plans	X	X	X	X	
183.0017	Emergency Exercise	X	X	X		
183.0030	Contact with Fire and Police Departments and Public Agencies	X	X	X		
183.0035	Emergency Action and Fire Prevention Plan		X			
183.0040	Natural Disaster or Major Emergency - Employee Instructions	X	X	X		
183.0075	Off-Hour Management Coverage - Headquarters and Region Operations	X	X	X		
183.01	Shutdown Procedures and Isolation Area Establishment for Distribution Pipeline Facilities	X	X	X	X	
183.0100	Emergency Incident Notifying	X	X			
183.0105	Incident Command System (ICS) for Emergency Incidents	X	X	X		
183.0110	Field Procedure - Emergency Incidents Transmission	X	X	X	X	
183.0120	Emergency Outage Procedure	X	X	X		
183.0130	Materials and Supplies for Emergency Situations	X	X	X		
183.0160	Dispatch Office - Message Center Reports	X	X	X	X	
183.0165	Emergency Incident Reporting	X	X	X		
183.03	Field Guidelines - Emergency Incident Distribution / Customer Service	X	X	X	X	
183.05	Message Center Reporting (MCR)	X	X	X		
183.06	Region Reports of Safety-Related Pipeline Conditions	X	X	X	X	

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
183.07	Pipeline Incident Reports to CPUC and PHMSA; National Transportation Safety Board (NTSB) Accident Investigation	X	X		X	
183.08	Pipeline Safety Reports and Notifications to CPUC and DOT	X	X	X	X	
184.0015	Construction Planning for Mains and Supply Lines	X				
184.0016	Main Construction Project Routing	X				
184.0031	Pressure Monitoring of Distribution Systems	X		X	X	
184.0035	Regulator Station Design and Planning			X	X	
184.0050	General Construction Requirements for Distribution Mains			X	X	
184.0055	Hand Backfill and Compaction Method			X	X	
184.0060	General Construction Requirements for Distribution Service Lines	X		X	X	
184.0075	Evaluation and Disposition of Inactive Services	X		X		
184.0080	Abandonment of Gas Services and Gas Light Tap Assemblies	X		X	X	
184.0085	Abandonment or Inactivation of Gas Distribution Pipelines	X		X	X	
184.0090	Valve Selection and Installation - Services			X	X	
184.0095	Polyethylene (PE) Pipe and Fittings - General Installation Requirements	X		X	X	
184.0105	Polyethylene (PE) Pipe Inserted – Main in Metal Casing			X	X	
184.011	Notification of Excavation and Construction Activities - Assembly Bill Number 1937/ PUC Code 955.5			X	X	
184.0110	Inserting PE Pipe - Service Riser Adapter			X	X	
184.0115	Tapping/ Stopping PE Fittings	X				
184.0121	Service Riser Integrity Observations and/or Inspection	X				
184.0123	Composite Coating Repair for Anodeless Risers	X				
184.0124	Coring for Mini Riser Vault (MRV) Installation	X				
184.0125	Tracer Wire Installation for Polyethylene (PE) Pipe Installations			X	X	
184.0130	Polyethylene Heater - Temperature Measurement and Adjustment	X			X	
184.0150	Leak Testing of Distribution Piping with MAOP = 60 PSIG	X		X	X	
184.0170	Trenchless Construction Methods	X		X	X	
184.0175	Prevention of Damage to Subsurface Installations	X				
184.0200	Underground Service Alert and Temporary Marking	X		X		
184.0215	Annual Report of Leak Repairs on Federal Lands	X				
184.0233	Mechanical Tapping Tee Inspection				X	
184.0235	Polyethylene (PE) Pipe Repair	X		X	X	
184.0240	PE Tapping Tee and Service Saddle Repair				X	
184.0245	Leak Investigation - Distribution		X		X	
184.0250	Halt Tool - Gas Emergency Leak Clamp		X			
184.0275	Inspection Schedule - Regulator Station, Power Generating Plant Regulation Equipment Requirements	X		X		

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
184.03	Replacement Criteria for Distribution Mains and Services	X		X		
184.0300	Squeezing and Reopening Mains and Services	X				
184.0335	Steel Pipe Squeezers 6" through 12"	X	X		X	
184.0340	Squeezing Polyethylene (PE) Pipe - 1/2" Through 8"	X				
184.0355	Pressure Control Machines - 2" Through 12"	X		X		
184.0360	Pressure Control - Fittings 2" and Under Pressure Limitations and Related Equipment	X		X		
184.0366	Pressure Control: Drilling Operations For DH-5 Drilling Machine	X		X		
184.0368	Pressure Control - TD Williamson Unit1200				X	
184.0370	Pressure Control: Drilling Operations For D-5 Drilling Machine	X		X		
184.04	Supply Line Identification and Records	X		X		
184.0405	Pressure Control - Stop Bottom Outlet Fittings	X		X		
184.0443	Pressure Control - 2", 3" and 4" Top Half Fitting				X	
184.0450	Pressure Control - Completion Plugs 3/4" - 1-1/4"	X		X		
184.0455	Pressure Control - DH-5 Machine 2" and 3" Insert/Extract	X		X		
184.0480	Pressure Control - Completion Plugs	X		X		
184.0575	Pressure Control: Stop Standard 2" Service Tee With D-5 Machine	X		X		
184.0585	Remove 1" Street Ell from a Service Clamp - Install a 1" Threaded Both Ends (TBE) Nipple in Clamp	X		X		
184.0590	Pressure Control Qualification Requirements	X		X		
184.06	Gas-Handling and Pressure Control	X		X		
184.09	Prevention of Excavation Damage to Company Facilities	X		X	X	
184.12	Inspection of Pipelines on Bridges and Spans	X		X	X	
184.16	Valve Inspection and Maintenance - Distribution	X		X	X	
184.17	Temporary LNG Facility	X			X	
185.0001	Meter Locations	X		X	X	
185.0005	Curb Meter Box - Installation Requirements				X	
185.0007	Curb Meter Box Installation			X	X	
185.0008	Meter Guard - Installation Requirements	X		X	X	
185.0010	MSA Standard Designs and Selection Chart				X	
185.02	Pressure Regulation - Residential and Commercial	X		X	X	
185.0228	Meter Set Assembly Inspections	X		X	X	
185.0287	Over-Pressure/Under-Pressure Protection - Maintenance, Installation and Settings	X		X	X	
185.0300	MSA - Installing, Rebuilding and Inspections	X		X	X	
185.0474	Control Microsystems SCADAPACK	X				
185.0560	Pressure Regulation Overpressure Protection				X	

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS
SOCALGAS: SP.A-SC

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
186.0002	Design and Application of Cathodic Protection	X		X	X	
186.0005	Cathodic Protection - Mixed Piping System	X		X	X	
186.0015	Condition Assessment of Unprotected Distribution Steel Piping	X		X		
186.0035	Criteria for Cathodic Protection	X		X	X	
186.0036	100mV Polarization Criteria	X		X	X	
186.0040	Magnesium Anodes for Corrosion Control	X		X	X	
186.005	Cathodic Protection - Instruments and Testing Equipment	X				
186.0052	Copper Sulfate Electrode	X				
186.006	Selection and Installation of Rectifiers and Impressed Current Anodes	X				X
186.0070	Insulating MSA's	X		X		
186.0075	Electrical Test Stations & Bond Assembly	X		X	X	
186.0090	Corrosion Control of Underground Hazardous Substance Storage Tanks					X
186.0100	Approved Protective Coatings for Below Ground Corrosion Control	X		X	X	
186.0102	Field Application of Fusion Bonded Epoxy to Joints and Field Repair of Fusion Bonded Epoxy Coating	X		X	X	
186.0103	External Surface Preparation and Field Applied Coatings for Buried Pipelines	X		X	X	
186.0104	Surface Preparation and Coating for Above Ground Piping and Steel Components	X				X
186.0108	External Surface Preparation and Coating Application for Steel Tanks and Vessels (New & Refurbished)	X		X		
186.0109	Internal Coating of Tanks, Vessels, & Drip Legs	X		X		
186.0110	Field Tape Wrapping Requirements	X		X	X	
186.0111	Field Application of Grease Coating	X		X	X	
186.0117	External Surface Preparation and Shop-Applied Coating for High Corrosion Service Areas	X		X	X	
186.0120	Interference - Stray Electrical Current	X		X	X	
186.0135	Operation and Maintenance of Cathodic Protection Facilities	X		X	X	
186.0170	Record Keeping - Corrosion Control	X		X	X	
186.0180	Cathodic Protection Test Orders - Monitoring Isolated Facilities	X		X		
186.0190	Induced High Voltage Alternating Current (HVAC) on Pipelines					X
186.02	Cathodic Protection - Inspection of Exposed Pipe	X		X	X	
186.06	Cathodic Protection - Electrical Isolation	X		X	X	
186.07	Hot Line Insulating Sleeves	X		X		
186.09	Cathodic Protection - Casings	X		X	X	
186.224	Well Production Casing – Determination and Need for Cathodic					X

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
	Protection					
186.225	Design and Application of Cathodic Protection – Well Production Casings				X	
186.226	Determination of Effective Cathodic Protection on Well Production Casings				X	
187.0050	Cutting Into Gas Mains, MSAs and Abandoned Substructures - Safety Precautions	X			X	
187.0055	General Welding Requirements	X		X	X	
187.0056	Welding Field Guide	X		X	X	
187.0115	Fusion Requirements for Polyethylene Pipe	X			X	
187.0120	Fusing Socket Connections - Polyethylene (PE) Pipe	X		X	X	
187.0125	Electrofusion Process - General Instructions	X			X	
187.0126	Magic Box - 2"-4"	X			X	
187.0138	PE Saddle Fusions	X		X	X	
187.0139	PE Fusion Card			X	X	
187.0140	Transition Fittings	X				
187.0145	Value Installation and Valve Box Assemblies for Polyethylene			X	X	
187.0146	Excess Flow Valve (EFV) - Installation and Operation	X		X	X	
187.0155	Butt Fusing 2", 3" and 4" PE Pipe (Manual Machines)	X		X	X	
187.0158	4", 6" and 8" Polyethylene (PE) Butt Fusion (Hydraulic Machines)	X		X	X	
187.0170	Connect Copper Wire To Steel Pipe - Pin Brazing, Thermite Welding and Braze Welding Processes				X	
187.0175	Inspection and Testing of Welds on Company Steel Piping	X		X	X	
187.0180	Qualification and Re-Qualification of Welders	X		X	X	
187.0181	Qualification of Personnel - Polyethylene Pipe Joiners	X		X	X	
187.0200	Radiographic Examination API 1104			X	X	
187.0210	Service-To-Main Connection (SMC)			X	X	
188.0001	Standard Specification for Natural and Substitute Fuel Gases	X		X		
189.0001	Odorization	X		X	X	
189.0002	ODORIZATION-YZ NJEX Odorant Injection System Maintenance				X	
189.0010	Supplemental Odorization of Gas at Border Stations	X		X		
189.005	Operation of Odorometer				X	
189.0056	Odor Conditioning of New Customer-Owned Pipelines - Size 4 Meter (AC630) and Larger				X	
189.01	Odorization - Roles and Responsibilities				X	
190	Operator Qualification Task Change Communication	X		X		
191.0020	Inspection of Construction Field Work	X		X	X	
191.0025	Scoring of Construction Work Inspected	X		X	X	

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
191.01	Investigation of Accidents and Pipeline Failures	X	X	X	X	
191.0210	Qualification of New Construction Contractors	X			X	
192.0010	Preparation of Construction Sketches	X				
192.0020	Preparation of Completion Sketch			X		
192.0025	GIS Maintenance Requirements for High Pressure Gas Lines	X			X	
192.0026	High Pressure Project Reconciliation, Closeout and Turnover	X			X	
192.0030	Completion Drawing Set Requirements for High Pressure Pipelines	X			X	
192.02	Procedure for HCA Segment Identification	X				
1957	Gas Stub Tag		X			
203.005	Self Audit Guidelines - Distribution	X		X		
203.007	Pipeline Patrol and Unstable Earth Self Audit	X		X		
203.008	Pipelines on Bridges and Spans Self-Audit	X		X		
203.016	Leak Survey Self-Audit	X		X		
203.017	Valve Inspections and Maintenance Self-Audit	X		X		
2110	Management of Change for Gas Standards Related to Integrity Management Programs	X				
2111	Management of Change - Request & Approval	X				
2112	Pipeline Database Update	X				
2120	Pipeline Feature Data Collection	X				
223.0001	CPUC and PHMSA Notification of Major New and Upgraded Pipelines and Pressure Test Failures of Pipelines	X	X			
223.0002	Minimum Trench Requirements for Transmission Pipelines	X		X	X	
223.0003	General Construction Requirements - Steel Transmission System			X	X	
223.0030	Investigation of Failures on Distribution and Transmission Pipeline Facilities	X		X	X	
223.0031	Abnormal Operations - Transmission	X	X	X		
223.0032	Incident Evaluation Process on Gas Systems		X		X	
223.0065	Pipeline Patrol and Unstable Earth Inspections	X		X	X	
223.0075	Pipeline Markers	X		X	X	
223.0095	External and Internal Transmission Pipeline Inspection	X		X	X	
223.0100	Leakage Surveys	X		X	X	
223.0103	Aerial Leakage Surveys	X		X	X	
223.0104	Optical Methane Detector Operation and Maintenance				X	
223.0125	Leakage Classification and Mitigation Schedules	X		X	X	
223.0130	Abandonment, Conversion and Reinstatement of Transmission Pipelines	X		X	X	
223.0140	Excavating, Shoring and Sloping	X		X		
223.0145	Planning Shutdowns for Transmission and Storage	X	X	X	X	

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS
SOCALGAS: SP.A-SC

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
223.0155	Planning Pipeline Blowdowns	X		X		
223.0177	Measurement of Remaining Wall Thickness	X				
223.0180	Repair of Defects in Steel Pressure Piping	X		X	X	
223.0181	Repair of Defects on Operating Pipelines Using Abandon Nipple				X	
223.0183	Repair of Defects on an Operating Pipeline by Grinding	X			X	
223.0185	Repair Leak on an Operating Pipeline With Band or Sleeve	X				
223.0188	Epoxy Grouted Non-Leaking Steel Sleeve Repairs - Above and Below Ground Piping	X				
223.0190	Repair of Non-Leaking Defects on an Operating Pipeline with a Band or Sleeve	X			X	
223.0195	Repair on Operating Pipelines Using a Welded Steel Patch	X		X		
223.0210	Vault Maintenance and Inspection	X		X		
223.0215	Valve Inspection and Maintenance - Transmission	X		X	X	
223.0230	Identification Numbers for Pipeline Valves - Transmission	X		X		
223.0233	Transmission Line Identification and Records	X				
223.0240	Compressor Station Emergency Shutdown Systems	X		X		
223.0250	Compressor Station Equipment - Isolation and Purging for Maintenance or Alterations	X		X		
223.0255	Testing and Maintaining Compressor Station Emergency Shutdown Systems	X		X	X	
223.0265	Identification Numbers for Station Valves	X				
223.0275	Main Reciprocating Gas Compressor Unit Operation - Transmission and Storage Operations	X		X	X	
223.0280	Main Reciprocating Gas Compressor Maintenance - Transmission and Storage Operations	X		X	X	
223.0315	Operation and Maintenance of Generator Units - Transmission and Storage Operations	X		X	X	
223.0325	Main Centrifugal Gas Compressor Unit Operation	X		X		
223.0330	Main Centrifugal Gas Compressor Unit Maintenance	X		X		
223.0345	Pressure Relief/Pressure Limiting Devices, Testing/Inspection	X		X	X	
223.0375	MAXIMO - Transmission and Storage Operations	X			X	
223.0400	Gas Detectors in Compressor Stations	X		X	X	
223.0410	Requirements for Designing Pipelines to Accommodate Smart Pigs	X		X	X	
223.0415	Pipeline and Related Definitions	X		X	X	
224.0015	Security and Accounting - Underground Storage Field Production Fluids				X	
224.0030	Well Kill and Loading				X	
224.02	Operation of Underground Storage Wells				X	

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS
SOCALGAS: SP.A-SC

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
224.070	Reservoir Integrity and Inventory Assessment					X
224.101	Storage Well Design					X
224.107	Well Integrity Inspection					X
224.108	Blowout Contingency Plan					X
3084	Corrosion Tests General Data Sheet	X				
3222	Design Data Sheet (DDS)	X		X		X
3506	Notice of Shutdown / Operational Deviation	X		X		
3689	System Qualification Record	X				
40-00	Polyethylene Pipe and Tubing					X
4090	100mV Polarization Form	X				
4091	Wax Casing Data Collection Form	X				
41-06.1	Pipe - Steel, Grades B through X70					X
50-15	Pipe Nipples					X
5153	Pipeline Location Information	X				
52-65	Fittings - Threaded, Malleable Iron					X
52-80	Couplings - Electrofusion, Polyethylene					X
52-82	FITTINGS, BUTT TYPE, POLYETHYLENE HEAT FUSION					X
52-96	Fittings - Butt Weld Steel					X
5330	Operating and Maintenance Order (OMO)	X				
54-17	Flanges and Flanged Fittings					X
54-17.1	Cast Iron Flanges					X
56-40	Stop Cocks					X
56-70.1	Risers - Service, Anodeless					X
57-15	Canopies, High Pressure					X
58-08	Excess Flow Valve Assemblies					X
58-10	Valves - Thermoplastic					X
58-15.2	Valves; Ball, Steel Floating					X
58-70	Valves - Plug, Lubricated, Positive Shut-Off					X
58-82	Valves - Ball, Steel, Trunnion Mounted					X
58-96.6	Valve - Relief, Large					X
677-1	Pipeline Condition and Maintenance Report	X				
70-45	Regulator - Service, Standard Pressure					X
70-47	Regulators - High Pressure Spring Loaded					X
76-72	Odorant - 50/50 TBM/THT	X				
76-73	Thiophane Odorant	X				
76-95	Pressure Vessels					X
78-01	Meters - Diaphragm					X

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter						
Policy	Title	4	5	6	7	
78-02	Meters - Rotary				X	
ACF	Assessment Completion Form	X				
CRMP1	Control Room Management Plan	X		X		
CRMP6	Gas Control Management of Change	X		X		
DIMP1	Introduction	X				
DIMP2	System Knowledge	X				
DIMP3	Threat Identification	X				
DIMP4	Evaluate and Rank Risk	X				
DIMP5	Identify and Implement Measures to Address Risk	X				
DIMP6	Measure Performance, Monitor Results and Evaluate Effectiveness	X				
DIMP8	Periodic Evaluation and Improvement	X				
DIMP9	Report Results	X				
DIMPA	Terms, Definitions and Acronyms	X				
F17-1	Annual Performance Measures	X				
F4-1	Threat Evaluation Form	X				
F8-1	Baseline Assessment Plan Revisions Log	X				
IIPP.01	IIPP-Table of Contents				X	
IIPP.02	IIPP-Introduction				X	
IIPP.1	Injury and Illness Prevention Program				X	
IIPP.10	IIPP-Safety Meetings				X	
IIPP.11	IIPP-Best Safety Practices				X	
IIPP.2	IIPP-Supervisor Responsibilities				X	
IIPP.3	IIPP-Records				X	
IIPP.4	IIPP-Employee Responsibilities				X	
IIPP.5	IIPP-Communications				X	
IIPP.6	IIPP-Corrective Actions				X	
IIPP.7	IIPP-Appendices				X	
IIPP.8	IIPP-Local Safety Plans				X	
OD8	The Gas Emergency Response Plan		X			
PA-1	Public Awareness Plan		X		X	
QUALPROG	Quality Program Manual for Owner-User Inspection of Air Tanks				X	
TIMP.0	Table of Contents	X				
TIMP.1	Introduction	X				
TIMP.10	Remediation	X				
TIMP.11	Minimizing Environmental and Safety Risks	X				
TIMP.12	Preventive and Mitigative Measures	X				
TIMP.13	Continual Evaluation	X				

NATURAL GAS SYSTEM OPERATOR SAFETY PLAN

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

Pipeline Safety Plan Chapter					
Policy	Title	4	5	6	7
TIMP.14	Management of Change	X			
TIMP.15	Quality Assurance Plan	X			
TIMP.16	Record Keeping	X			
TIMP.17	Performance Plan	X		X	
TIMP.19	Communications Plan	X			
TIMP.20	Regulatory Interaction	X			
TIMP.3	HCA Identification	X			
TIMP.4	Data Gathering and Integration	X			
TIMP.5	Threat and Risk Assessment	X			
TIMP.8	Baseline Assessment Plan	X			
TIMP.9	Integrity Assessments	X			
TIMP.A	Terms, Definitions and Acronyms	X			

APPENDIX – SAFETY POLICY DOCUMENTS	SOCALGAS: SP.A-SC
---	--------------------------

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.
 Brief: Annual review of Safety Plan. Updated titles of standards, removed standards no longer valid and added standards associated with the Gas Safety Plan.

Document Profile Summary	
Responsible Person:	Walker, Jennifer
Published On:	02/23/2018
Last Full Review Completed On:	
Writer:	Salazar, Jeffery
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	

**SOUTHERN CALIFORNIA GAS COMPANY
NATURAL GAS SYSTEM OPERATOR SAFETY PLAN
EXECUTIVE ATTESTATION**

March 15, 2018

BACKGROUND

California Senate Bill (SB) 705 approved by the Governor in October 2011 created Public Utilities Code Sections 961 and 963.¹ These 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. Southern California Gas Company (SoCalGas) published its initial Natural Gas System Operator Safety Plan (Safety Plan) in December 2012. A revised Safety Plan was accepted by the Safety and Enforcement Division of the California Public Utilities Commission (CPUC) in June of 2013.

As part of the initial plan filing with the CPUC, each Officer of SoCalGas signed an executive summary to the Safety Plan which included a commitment to safety and articulated the Company's pipeline safety performance expectations, policy principles, and performance goals and objectives. The following attestation has been developed to document each Officer's commitment to safety and support for the Safety Plan.

COMMITMENT TO SAFETY

At SoCalGas, the safety of our employees, customers, and communities has been and will continue to be a core value. Management's safety philosophy is expressed in the following *Commitment to Safety* statement that our senior management team wholeheartedly endorses:

¹ CH. 522, Stats. 2011.

Southern California Gas Company'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.

-- SoCalGas' 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. 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 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.

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 SoCalGas' senior leadership team. It also provides a comprehensive description of the programs, policies, standards, and procedures, which together form our overall Safety Plan.

ATTESTATION

We fully embrace and endorse our commitment to safety and our support for the Safety Plan dated March 15, 2018.

/s/ Patricia Wagner

Patricia Wagner
Chief Executive Officer

/s/ Bret Lane

Bret Lane
President & Chief Operating Officer

/s/ Lisa Alexander

Lisa Alexander
Vice President, Customer Solutions & Communications

/s/ J. Chris Baker

J. Chris Baker
Chief Information Officer

/s/ David Buczkowski

David Buczkowski
Vice President – Gas Engineering & System Integrity

/s/ Jimmie I. Cho

Jimmie I. Cho
Senior Vice President – Gas Engineering & Distribution Operations

/s/ Diana L. Day

Diana L. Day
Vice President – Enterprise Risk Management & Compliance

/s/ Bruce Folkmann

Bruce Folkmann
Vice President – Controller & Chief Financial Officer

/s/ Paul Goldstein

Paul Goldstein
Vice President – Gas Acquisition

/s/ Jawaad Malik

Jawaad Malik
Vice President – Accounting & Finance

/s/ Eugene Mitchell

Eugene Mitchell
Vice President – State Governmental Affairs & External Affairs

/s/ Gina Orozco-Mejia

Gina Orozco-Mejia
Vice President - Gas Distribution Operations

/s/ Neil Navin

Neil Navin
Vice President – Gas Transmission & Storage

/s/ Lee Schavrien

Lee Schavrien
Chief Regulatory Officer

/s/ Michael M. Schneider

Michael M. Schneider
Vice President – Operations Support & Chief Environmental Officer

/s/ Rodger R. Schwecke

Rodger R. Schwecke
Senior Vice President – Transmission, Storage, & System Operations

/s/ Daniel F. Skopec

Daniel F. Skopec
Vice President – Regulatory Affairs

/s/ Hal D. Snyder

Hal D. Snyder
Chief Human Resources & Chief Administrative Officer

/s/ Sharen Tomkins

Sharon Tomkins
Vice President & General Counsel

/s/ Denita A. Willoughby

Denita A. Willoughby
Vice President – Supply Management & Logistics

/s/ Gillian Wright

Gillian Wright
Vice President – Customer Services

INTERNAL

NOTE: Do not alter or add any content from this page down; the following content is automatically generated.

Brief: Annual Review of Safety Plan. Updated titles and new Officers.

Document Profile Summary

Responsible Person:	Salazar, Jeffery
Published On:	03/08/2018
Last Full Review Completed On:	
Writer:	Salazar, Jeffery
Document Status:	Active
Document Type:	MANUALS
Category (Prior FCD system only):	
If Merged, Merged To Document Number:	
Utility:	SoCalGas
Department:	Pipeline Safety & Compliance
Number of Common Document (if applicable):	
Contains OPQUAL Covered Task:	No
Part of SoCalGas O&M Plan:	No
Part of SDG&E O&M Plan:	No
Last O&M Review date:	
O&M 49 CFR Codes & Impacted Sections of Document:	
Part of Non-O&M Parts 191-193 Plan	No
Non-O&M 49 CFR Codes & Impacted Sections of Document	
Part of Distribution IMP (DIMP)	No
Part of Transmission IMP (TIMP)	No
Part of Storage IMP (SIMP)	No
Impacts GO112F	No
GO112F Codes & Impacted Sections of Document	
Impacts GO58A	No
GO58A Codes & Impacted Sections of Document	
Impacts GO58B	No
GO58B Codes & Impacted Sections of Document	
Indices/Binders in Which Document is Filed:	OSP
NOP Learning Module (LM) Training Code:	