

Application No: A.11-11-002
Exhibit No.: SCG-02
Date: December 2, 2011
Witness: Richard Morrow

In the Matter of the Application of San Diego Gas &)
Electric Company (U 902 G) and Southern California) A.11-11-002
Gas Company (U 904 G) for Authority to Revise)
Their Rates Effective January 1, 2013, in Their) (Filed November 1, 2011)
Triennial Cost Allocation Proceeding.)
)

CHAPTER II
AMENDED DIRECT TESTIMONY OF
RICHARD MORROW
OVERVIEW OF THE PROPOSED SAFETY ENHANCEMENT PLAN

**IN SUPPORT OF PROPOSED NATURAL GAS PIPELINE SAFETY
ENHANCEMENT PLAN FOR**

**SOUTHERN CALIFORNIA GAS COMPANY AND
SAN DIEGO GAS & ELECTRIC COMPANY**

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

December 2, 2011

II.

OVERVIEW OF THE PROPOSED SAFETY ENHANCEMENT PLAN

A. The Proposed Pipeline Safety Enhancement Plan is Designed to Meet Four Key Objectives

The Pipeline Safety Enhancement Plan was developed to accomplish four overarching objectives: (1) compliance with the Commission's directives; (2) enhancement of public safety; (3) minimization of customer impacts; and (4) maximization of cost effectiveness.

1. The Proposed Pipeline Safety Enhancement Plan Complies With the Commission's Directives

In D.11-06-017, the Commission describes several key elements that must be included in our proposed Pipeline Safety Enhancement Plan. These key elements are: (1) the completion of the review of records in response to NTSB Safety Recommendations; (2) a plan to test or replace all pipeline segments that do not have sufficient documentation of pressure testing to satisfy the requirements of 49 CFR 192.619(a)(b) or (d); (3) the prioritization of pipeline segments in populated areas and segments with the highest risk; (4) an expeditious timeline; (5) retrofitting to allow for in-line inspections and, where appropriate, improved valves; (6) interim safety enhancement measures; (7) best available expense and cost projections for each plan element; and (8) a rate proposal that provides detailed information regarding projected rate impacts. Our proposed Pipeline Safety Enhancement Plan includes all of these required elements, as summarized below.

a) The Proposed Pipeline Safety Enhancement Plan Includes a Description of the Completion of Our Review of Records in Response to NTSB Safety Recommendations

In D.11-06-017, the Commission directs SoCalGas and SDG&E to “complete their work in response to the National Transportation Safety Board’s [NTSB] recommendations and the Commission’s Resolution L-410.”⁵ Accordingly, in Section IV.C below, we provide a

5 D.11-06-017, Ordering ¶ 2.

1 description of the records review process we completed in response to the NTSB's
2 recommendations and Commission Resolution L-410, and further describe the status of the
3 records review process with respect to the remaining pipeline segments that were not addressed in
4 the NTSB's Safety Recommendations or Commission Resolution L-410, but must nevertheless be
5 addressed per D.11-06-017.

6 b) The Proposed Pipeline Safety Enhancement Plan Includes a Plan to
7 Pressure Test or Replace All Pipeline Segments That Do Not Have
8 Sufficient Documentation of Pressure Testing In Accordance with
9 49 CFR 192.619(a)(b) or (d)

10 D.11-06-017 requires SoCalGas and SDG&E to propose a plan "to comply with the
11 requirement that all in-service natural gas transmission pipeline in California has been pressure
12 tested in accord with 49 CFR 192.619, excluding subsection 49 CFR 192.619(c)."⁶ This
13 proposed plan must "set forth criteria on which pipeline segments were identified for replacement
14 instead of pressure testing."⁷ And a pressure test record "must include all elements required by
15 the regulations in effect when the test was conducted. For pressure tests conducted prior to the
16 effective date of General Order 112, one hour is the minimum acceptable duration for a pressure
17 test."⁸ SoCalGas and SDG&E's proposed plan to meet this objective is set forth in Section IV.D.
18 below.

19 c) The Proposed Pipeline Safety Enhancement Plan Prioritizes Pipeline
20 Segments in Populated and High Consequence Areas and Those Operated
21 at Higher Stress Levels

22 The proposed plan must "start with pipeline segments located in Class 3 and Class 4
23 locations and Class 1 and Class 2 high consequence areas, with pipeline segments in other
24 locations given lower priority for pressure testing."⁹ Moreover, the plan must prioritize "critical
25 pipelines that must run at or near [MAOP] values which result in hoop stress levels at or above

6 *Id.*, Ordering ¶ 4.

7 *Id.*, Ordering ¶ 6.

8 *Id.*, Ordering ¶ 3.

9 *Id.*, Ordering ¶ 4.

1 30% of Specified Minimum Yield Stress.”¹⁰ “Although not the determinative factor, improved
2 safety effects for amounts expended must be considered in prioritizing projects. Segments with
3 the highest risk, however, must be tested or replaced first.¹¹ The decision-making and
4 prioritization process described in Section IV.D meets these requirements.

d) SoCalGas and SDG&E Propose an Expedited Timeline for Implementation of the Proposed Pipeline Safety Enhancement Plan

The plan “must reflect a timeline for completion that is as soon as practicable.”¹²

8 SoCalGas and SDG&E comply with this requirement by proposing an aggressive schedule for the
9 completion of their proposed Pipeline Safety Enhancement Plan in Section IV.D. The
10 Commission can greatly enhance our ability to meet this ambitious schedule by authorizing the
11 establishment of a Pipeline Safety and Reliability Memorandum Account, as requested in our
12 pending Motion filed May 4, 2011, so that we can begin implementing the Commission's clear
13 directives in D.11-06-017 right away.

14 In addition, later in this Chapter, we describe some of the execution challenges that may
15 hinder our ability to meet our proposed schedule, and propose ways in which the Commission
16 may help alleviate some of those challenges.

e) The Pipeline Safety Enhancement Plan Includes Proposals for Retrofitting Pipelines to Allow for In-line Inspection and Enhancing Shut-Off Valves

19 The plan “must consider retrofitting pipeline to allow for inline inspection tools and,
20 where appropriate, improved shut off valves.”¹³ The Pipeline Safety Enhancement Plan addresses
21 this requirement by proposing to design newly-constructed pipelines to accommodate in-line
22 inspection tools, and by proposing a valve enhancement plan that expands upon our existing valve
23 program. These aspects of the Pipeline Safety Enhancement Plan are set forth in Section IV.D
24 and Chapter V, respectively.

10 *Id.*, Ordering ¶ 5.

11 *Id.*, Ordering ¶ 9.

12 *Id.*, Ordering ¶ 5.

13 *Id.*, Ordering ¶ 8.

f) The Pipeline Safety Enhancement Plan Includes Proposed Interim Safety Enhancement Measures

The plan must “include interim safety enhancement measures, including increased patrols and leak surveys, pressure reductions. . . , and other such measures that will enhance public safety.”¹⁴ In Section IV.E, the Pipeline Safety Enhancement Plan describes interim safety enhancement measures, including increased frequency of patrols and leak surveys, pressure reductions, and in-line inspections, which have already been implemented to address identified pipeline segments in populated areas, and will be implemented for pipelines in the less populated areas, as segments that do not have sufficient documentation of a pressure test to meet the directives of D.11-06-017 are identified through the ongoing records review process.

g) The Proposed Pipeline Safety Enhancement Plan Includes Best Available Expense and Cost Projections for Each Plan Component

The proposed plan “must include best available expense and capital cost projections for each Plan component and each year of the implementation period.”¹⁵ The proposed Pipeline Safety Enhancement Plan includes best available expense and cost projections for each plan component in Chapter IX below.

h) The Proposed Pipeline Safety Enhancement Plan Includes a Rate Proposal and Provides Detailed Information Regarding Projected Rate Impacts

The plan “must also include a rate proposal with the following: a. For Pacific Gas and Electric Company only, proposed cost allocation between shareholders and ratepayers; b. Specific rate base and expense amounts for each year proposed to be included in regulated revenue requirement; c. Proposed rate impacts for each year and each customer class; and d. Other such facts and demonstrations necessary to understand the comprehensive rate impact of the Implementation Plan.” In Chapter X, we offer a rate proposal that is supported by detailed rate impact analyses for the proposed Pipeline Safety Enhancement Plan. In addition, for comparative purposes, we provide detailed cost and rate impact analyses for a “Base Case” which solely

14 *Id.*, Ordering ¶ 5.

15 *Id.*, Ordering ¶ 9.

1 includes the work required under D.11-06-017, without the additional safety enhancing elements
2 proposed by SoCalGas and SDG&E that are not required under D.11-06-017.

3 **2. The Proposed Pipeline Safety Enhancement Plan Enhances Public Safety**

4 Safety is a top priority at SoCalGas and SDG&E. Although we are confident in our
5 existing transmission pipeline integrity program and are proud of our excellent safety record, in
6 light of the events in San Bruno and the Commission's directives in this Rulemaking, SoCalGas
7 and SDG&E propose a thoughtful plan that identifies opportunities for increasing that confidence
8 and further enhancing the integrity of the transmission pipeline safety. Consistent with this public
9 safety objective, and the Commission's directives in D.11-06-017, the Pipeline Safety
10 Enhancement Plan identifies pipeline segments in populated and High Consequence Areas that
11 require additional documentation of pressure testing to satisfy the Commission's requirements set
12 forth in D.11-06-017 and proposes a plan to pressure test or replace all such segments. This plan
13 prioritizes pipeline segments in more populated areas ahead of pipeline segments in less
14 populated areas, and also prioritizes pipeline segments based on a comprehensive evaluation of
15 risk factors. Because we have already invested significantly in retrofitting our existing pipelines
16 to accommodate in-line inspection tools, other than replacing pipelines that cannot be retrofitted
17 to accommodate in-line inspection tools, there is little room for proposing further enhancement of
18 our transmission system to allow for in-line inspection. We do propose in our Pipeline Safety
19 Enhancement Plan, however, to take advantage of these prior investments and perform in-line
20 inspections of identified retrofitted pipelines as part of our implementation of the plan. In
21 addition, as directed by the Commission, we propose to enhance our current valve system through
22 a proposed Valve Enhancement Plan to reduce the time required to isolate a pipeline segment in
23 the event of a rupture.

24 Consistent with our innovative and proactive approach to pipeline safety, the Pipeline
25 Safety Enhancement Plan also identifies opportunities for further enhancing the integrity of the
26 transmission pipeline system that are not strictly required to meet the Commission's directives in
27 D.11-06-017. Specifically, we propose to retrofit pipelines that will be exposed for testing and
28 newly constructed pipelines with fiber optic technology, which can further enhance the safety of

1 our system by enabling us to monitor pipeline right-of-way activity in real-time and help drive
2 decisions to send operational crews to investigate when a suspected dig-in has occurred that
3 might, acutely or with some latency, pose a risk to a pipeline's structural integrity. In addition,
4 we propose to retrofit our pipelines to include methane detection monitors, which will enable us
5 to detect gas/air concentration levels approximately $\frac{1}{4}$ or less of what is typically detected by the
6 human sense of smell of natural gas odorant. More timely identification of gas leaks will support
7 the dispatch of operations personnel to specific locations along the pipeline system when methane
8 is detected. Although these proposed technology enhancements will increase the costs of
9 implementing the proposed Pipeline Safety Enhancement Plan above the Base Case, the
10 completion of the work directed by the Commission in D.11-06-017 presents a unique
11 opportunity for us to cost effectively retrofit our transmission pipelines with the latest state-of-
12 the-art technology for sensing conditions that could lead to a pipeline failure long before such a
13 failure might occur.

14 **3. The Proposed Pipeline Safety Enhancement Plan Minimizes Customer**
15 **Impacts**

16 A third foundational element of our proposed plan is minimization of customer impacts.
17 The implementation of our Pipeline Safety Enhancement Plan will require more work on our
18 infrastructure over a ten-year period than has probably ever occurred during a similar time period
19 ever before in our history. Every element of the Proposed Safety Enhancement Plan described
20 below takes into account potential customer impacts and strives to minimize those impacts as
21 much as possible.

22 In general, our proposals are guided by policies to provide uninterrupted gas service to
23 customers whenever possible while the plan is being implemented. It is recognized that some of
24 the planned pressure testing may have an impact on supply availability for some customers. We
25 commit to work with our customers on the scheduling of the work and to do all that is reasonable
26 to provide uninterrupted service.

27 When lines are required to be taken out of service, SoCalGas and SDG&E make every
28 effort to minimize the impact on customers and will continue to do so during our execution of the

1 proposed Pipeline Safety Enhancement Plan. As work is being planned on the gas transmission
2 pipeline system, project managers work internally with Public Affairs who liaison with
3 government agencies. Customer service account managers work with customers as the projects
4 are planned. We make every attempt to work around customer schedules (*e.g.*, planned outages
5 for maintenance and construction) as much as possible. We work with the California Independent
6 System Operator (CAISO) in advance for planned outages that could affect electric generator
7 availability, and make every attempt to schedule the outage during the low demand shoulder
8 months (*i.e.*, April and November). For large customers, our intent is to keep in constant
9 communication up to, during and after the shutdown and have often provided alternate feeds if
10 outages of any duration are unacceptable. We meet with local city councils to inform them of
11 pending projects, hold “Town-Hall” meetings to inform residents of pending projects and allow
12 them to ask questions, and we provide contact information at each end of the job site. At some
13 locations, we work at night to minimize impacts on traffic and business.

14 As a general guideline, notice for suspension of service to noncore customers, would be
15 provided at least thirty days prior to any scheduled service outages required for implementation of
16 the Pipeline Safety Enhancement Plan.

17 Although we are constantly inspecting and maintaining our pipelines, customers and the
18 community in general will be seeing more work being performed on pipelines. This may raise
19 questions and concerns about pipeline safety, and requires that we proactively communicate with
20 our customers and the community at large about these programs – what is being done and why.
21 Additionally, targeted communications will be required for residents and businesses in areas
22 where the work will be performed to keep them informed of what is being done and how it might
23 affect them. In order to achieve this, the proposed Pipeline Safety Enhancement Plan will be
24 supported by a comprehensive customer and public outreach effort.

25 In order to reach the many key customer groups, this plan encompasses use of a
26 comprehensive blend of communications channels. This will include in-person customer
27 meetings, news releases, community print ads, special events, e-mails and e-newsletters, social,
28 interactive and mobile media, direct mail, bill messages and newsletters, as well as a dedicated

1 microsite on both www.socalgas.com and www.sdge.com. Specific outreach efforts in areas
2 where there will be significant work will include local and community meetings, direct mailed
3 letters sent to residents and businesses prior to commencement of the project, door hangers, email
4 blasts, and news releases all directing the customer to view the dedicated microsite that will
5 include interactive maps indicating project locations and timing. Messages will be delivered in
6 English and Spanish, and other in-language messages will be developed based on the geographic
7 area of the projects.

8 Each of these outreach efforts will include basic information on pipeline safety, the
9 importance and benefits of the work being done, and how the project will impact nearby residents
10 and businesses. Additionally, an important part of the education is the explanation of the
11 philosophy and framework of how the cost of the program is distributed across customers.

12 **4. The Proposed Pipeline Safety Enhancement Plan Maximizes the Cost**

13 **Effectiveness of Investments in the SoCalGas/SDG&E Transmission System**

14 Cost effectiveness is the final major guiding principle of our Pipeline Safety Enhancement
15 Plan. From the onset of this effort, the SoCalGas and SDG&E approach has been anchored in the
16 philosophy that the goal of our work should be comprehensive system enhancements/
17 improvements to achieve long-term safety and cost effectiveness. SoCalGas and SDG&E further
18 this goal by crafting a plan that avoids duplication of efforts, complements existing infrastructure
19 and prior investments in the SoCalGas and SDG&E pipeline system, and looks to technological
20 advances in pipeline safety. We believe our plan proposed in the Chapters that follow achieves
21 this objective.

22 **B. The Proposed Scope of the Pipeline Safety Enhancement Plan is Comprehensive and**
23 **the Schedule is Ambitious**

24 In D.11-06-017 the Commission outlines a framework for California to lead the nation in
25 natural gas pipeline safety by exceeding current Federal regulations and requiring that all in-
26 service California transmission pipelines have documentation of pressure testing to meet strict
27 regulatory standards that, prior to the issuance of D.11-06-017, only applied to pipelines
28 constructed and placed in service after 1970.

1 Prior to the issuance of D.11-06-017, in response to the safety recommendations issued by
2 the NTSB to PG&E on January 3, 2011, SoCalGas and SDG&E initiated a thorough review of
3 transmission pipeline segments located in Class 3 and 4 locations and Class 1 and 2 High
4 Consequence Areas to identify those pipeline segments that do not have sufficient documentation
5 of pressure testing to meet modern safety standards. Combined, SoCalGas and SDG&E reviewed
6 the records for a total of 1,622 miles of transmission pipelines operating in Class 3 and 4 location
7 and High Consequence Areas and identified approximately 385¹⁶ miles of transmission pipeline
8 that did not have sufficient documentation of pressure testing to satisfy modern requirements. All
9 of these pipeline segments must be tested or replaced in order to satisfy the directives set forth in
10 D.11-06-017.

11 In addition to addressing these 385 miles of transmission pipelines located in Class 3 and
12 4 locations and Class 1 and 2 High Consequence Areas, in order to satisfy the directives set forth
13 in D.11-06-017, SoCalGas and SDG&E will also need to test or replace all remaining pipeline
14 segments that do not have sufficient documentation of pressure testing to satisfy modern
15 standards. Based on preliminary review of records and assumptions based on the review of
16 pipelines located in Class 3 and 4 locations and High Consequence Areas, SoCalGas and SDG&E
17 estimate that about an additional 2,000 miles of transmission pipeline segments will need to be
18 assessed to determine whether they require pressure testing or replacement.

19 Because of the scope and complexity of work required to implement the Commission's
20 directives, and to satisfy the Commission's prioritization requirements, we propose to implement
21 our Pipeline Safety Enhancement Plan in two separate phases. Phase 1 covers the ten-year period
22 from 2012 through 2021. This phase includes the pressure testing or replacement of those
23 pipelines in Class 3 or 4 locations and Class 1 and 2 High Consequence Areas that do not have
24 sufficient documentation of pressure testing to satisfy the Commission's directives. Phase 1 also
25 includes the placement of additional remote control and automatic shut-off valves on the
26 transmission system, and installation of technology enhancements to enhance our ability to

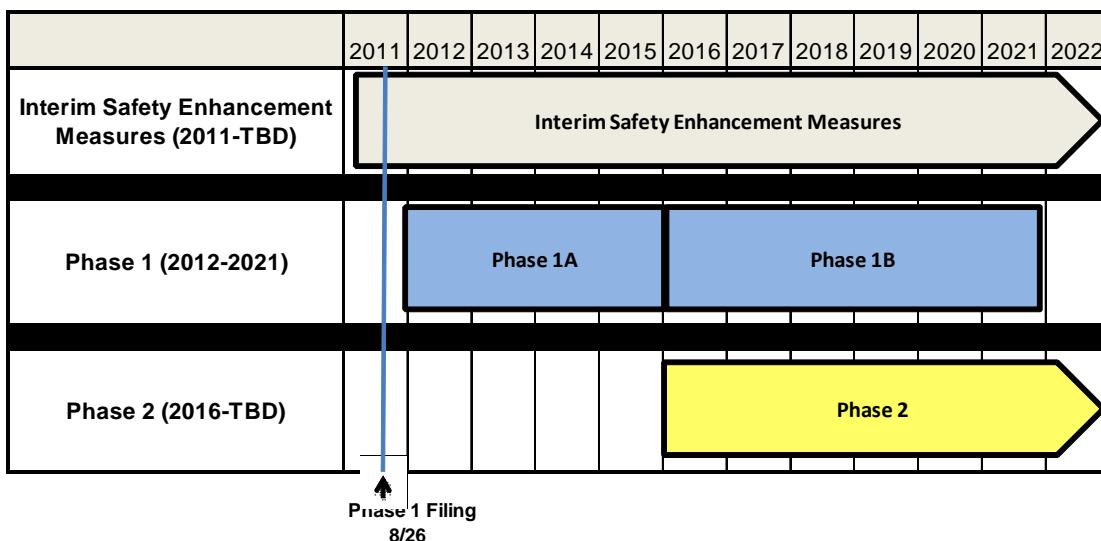
16 This figure includes approximately 377 miles of pre-1970 and 8 miles of post-1970 pipelines, as of June 24,
 2011. This proposed Pipeline Safety Enhancement Plan does not include any costs for testing or replacing
 pipelines constructed post-1970.

1 monitor our transmission pipeline system. As discussed above, and in greater detail in Chapter
2 IV, our Pipeline Safety Enhancement Plan includes a proposal to replace pre-1946 pipeline
3 segments that were manufactured using non-state-of-the-art construction and fabrication methods.
4 This proposal, which is also proposed to be implemented in Phase 1, addresses the Commission's
5 stated goal of bringing all transmission pipelines in-service in California into compliance with
6 modern standards, and the directive to consider retrofitting our pipelines to accommodate in-line
7 inspection tools.

8 Phase 1 has been broken down into two parts. In Phase 1A, which spans 2012 through
9 2015, we propose to pressure test or replace the 385 miles of transmission pipelines located in
10 Class 3 and 4 locations and High Consequence Areas that do not have sufficient documentation of
11 pressure testing to satisfy modern standards. Any Phase 1A pipeline segments that cannot be
12 tested or replaced with manageable customer impacts during the 2012 through 2015 timeframe
13 will be addressed in Phase 1B, which spans the years 2016 through 2021. Also in Phase 1B,
14 SoCalGas and SDG&E propose to replace pre-1946 pipeline segments that were manufactured
15 using non-state-of-the-art construction and fabrication methods.

16 In Phase 2, we propose to address all remaining transmission pipelines that do not have
17 sufficient documentation of pressure testing to satisfy the Commission's directives. The review
18 of the records for these pipeline segments will be completed by July 2012, and we propose to
19 begin implementing Phase 2 in parallel with Phase 1B, beginning in the year 2016. The proposed
20 phased timeline for the Pipeline Safety Enhancement Plan is illustrated in Figure II-1 below. As
21 noted in the timeline, our interim safety enhancement measures have already been implemented
22 this year, and we propose to continue implementing those measures until the execution of our
23 proposed Pipeline Safety Enhancement Plan is complete. These measures, if approved as part of
24 this plan, will be implemented for Phase 2 pipelines upon completion of the Phase 2 records
25 review process.

Figure II-1
Proposed Pipeline Safety Enhancement Plan Timeline



C. The Commission Should Authorize the Recovery of Costs Incurred in 2011

The Commission should authorize us to recover the costs we have incurred to date, and will incur, by the time the Commission issues a decision approving our proposed plan. Although the San Bruno pipeline rupture did not occur in our service territory and there are no indications that our existing transmission pipeline integrity management program is not effectively managing the integrity of our transmission pipeline systems, we have been called upon to swiftly and proactively implement costly measures in response to the San Bruno pipeline rupture. On January 3, 2011, noting a potential discrepancy in the pipeline records obtained during the course of its investigation of the San Bruno pipeline rupture, the NTSB issued Safety Recommendations to PG&E directing PG&E to conduct an exhaustive review of pipeline records for all transmission pipelines operated in Class 3 and 4 locations and High Consequence Areas. Although the NTSB Safety Recommendations were not directed at us, at the request of the Commission, we also conducted an exhaustive review of our records for pipelines operated in Class 3 and 4 locations and High Consequence Areas, and incurred costs above and beyond those anticipated in our most recent General Rate Cases. To support the Commission's efforts, we conducted this review as quickly as possible, incurring significant costs in the process.

1 Following that records review, we voluntarily and proactively implemented several safety
2 enhancement measures on pipeline segments for which we do not have sufficient documentation
3 of pressure testing to validate that the pipelines are operating within an appropriate margin of
4 safety. Again, although we knew we would incur significant costs, we voluntarily implemented
5 these measures to support the Commission's efforts to restore public confidence in the integrity of
6 the California natural gas pipeline system.

7 Our proactive approach to safety did not begin on September 9. We have consistently
8 demonstrated a proactive approach to maintaining the integrity of our transmission pipelines in a
9 manner that meets or exceeds regulatory requirements. In D.11-06-017, the Commission directs
10 California pipeline operators to consider retrofitting their transmission pipelines to allow for
11 internal inspection tools. The capability, reliability and availability of these in-line inspection
12 tools have greatly improved over the last ten years. In recognition of these improvements, we
13 have already implemented an extensive and concerted effort to retrofit our transmission pipeline
14 system to allow the use of this technology. Currently approximately 50% of our transmission
15 system is configured to allow for internal inspection tools, with additional retrofits that are
16 outside the scope of this proceeding in progress.

17 The Commission should authorize the recovery of those costs we have and will incur, as a
18 direct result of the San Bruno pipeline rupture, that are above and beyond those forecast in our
19 most recent General Rate Cases. To date, we have incurred costs of approximately \$3 million
20 and forecast that we will spend a total of about \$7 million by year-end above and beyond those
21 forecast in our most recent General Rate Cases. All of these costs are attributable to our review
22 of records and our implementation of interim safety enhancement measures.

23 **D. The Costs of the Pipeline Safety Enhancement Plan Will Benefit All Customers, Not**
24 **One Group More Than Another**

25 The costs of enhancing California's natural gas transmission pipeline system to exceed
26 current Federal and State regulations and lead the nation in natural gas pipeline safety are
27 projected to be significant. The estimated direct costs for implementing Phase 1 (both Phase 1A

1 and Phase 1B) of the proposed Pipeline Safety Enhancement Plan are projected to be
2 approximately \$2.5 billion for SoCalGas customers and \$600 million for SDG&E customers.

3 Implementing these new safety enhancements will benefit all customers. Accordingly,
4 the costs of the Pipeline Safety Enhancement Plan should be allocated in a manner that, on a
5 percentage rate impact basis, is relatively equitable across our different customer classes.
6 Fundamentally, all customers in our service territories will benefit equally from these investments
7 in transmission pipeline safety.

8 Therefore, we propose that the incremental costs of implementing these new safety
9 standards be tracked separately from other pipeline system costs and allocated on an equal
10 percent of margin basis.¹⁷ Furthermore, we propose that these costs be identified as a surcharge
11 in each customer's monthly bill. Recovery of these costs through a line-item surcharge will
12 provide transparency to our customers regarding the purpose for these costs. SoCalGas and
13 SDG&E estimate that by 2015, Phase 1A will result in a \$2.89/month surcharge on residential
14 bills for both SoCalGas and SDG&E.¹⁸

15 Today, a majority of transmission costs are allocated to large electric generators,
16 manufacturers, refineries, and other large businesses that have very few employees—relative to
17 the overall service territory population. The costs being ordered by the Commission, such as
18 those associated with pressure testing, replacement of pipelines and automated valves, go beyond
19 current Federal safety standards for pipelines. Industries and businesses will not realize
20 significant improvements in transmission service from these safety-related investments; therefore,
21 it would be inappropriate to allocate these costs to these large throughput non-core customers in
22 the same manner that transmission costs are allocated today. Furthermore, such an approach
23 would likely encourage most, if not all, of these customers to eventually seek service from FERC-

¹⁷ Equal Percent of Authorized Margin (EPAM) is the same cost allocation approach taken with the recovery of increases in margin requirements during cost allocation periods.

¹⁸ This surcharge will almost double through the rest of the decade as the investments contemplated in Phase 1B are made, but it will eventually decline in the following decade as O&M work is completed and those investments begin to depreciate.

1 regulated transmission pipelines that are not required to recover the additional pipeline safety
2 costs being ordered in this California proceeding.

3 **E. The Commission Can Help Mitigate Some Execution Challenges and Risks that May**
4 **Increase Costs and/or Delay Implementation**

5 **1. General Construction Permitting Challenges**

6 SoCalGas and SDG&E operate transmission and distribution pipelines in 242 cities and
7 13 counties. Execution of the implementation plan will involve or lead to a substantial amount of
8 construction activity within numerous cities and counties that will have permitting authority over
9 various aspects of the plan projects. Various State and Federal agencies such the California
10 Department of Transportation, California State Lands Commission, Federal Aviation
11 Administration, California Department of Transportation, California Highway Patrol, as well as,
12 county and municipal building and safety, public works, environmental health and safety and
13 local fire departments, may all have permitting authority, depending on the location of a
14 particular project.

15 Where required under local jurisdictions, SoCalGas and SDG&E currently apply for and
16 obtain local ministerial permits. This process can often take considerable time and effort. The
17 timing associated with a local jurisdiction's review and approval process is beyond the control of
18 the utilities, and will significantly impact planning and scheduling. Continuing budget constraints
19 and resource issues can hinder the ability of a local jurisdiction to review and approve permits in
20 a timely manner. In addition, permit conditions and requirements will also have significant
21 impacts on construction costs and project scheduling. One common example of a local
22 jurisdiction construction permit requirement that may significantly impact construction costs and
23 project scheduling is the imposition of paving requirements that go beyond the actual trench
24 limits. Another common example is the imposition of restrictive work hour limitations that
25 significantly limit construction progress each day. The more restrictive the permit conditions, the
26 more time consuming and costly a project is likely to be.

27 In addition, there is the potential for significant local public resistance to the issuance of
28 permit approvals needed to complete projects. Local permitting agencies often attempt to

1 regulate the utilities beyond the ministerial permitting level, and in turn, subject SoCalGas and
2 SDG&E to various discretionary approval processes as part of various construction activities.
3 These approval processes can escalate to become contentious and can even lead to legal
4 challenges that must be overcome. Further, these discretionary permitting processes have the
5 potential to preclude a project from being constructed all together. Although there is a very real
6 possibility that some projects may experience such significant permit delays and challenges, such
7 delays and challenges are not considered “normal” and are not normally included in preliminary
8 planning, scheduling and cost estimates. These construction permitting challenges further
9 demonstrate the importance of having an extensive external communication program to support
10 pipeline testing and replacement activities.

11 **2. Availability of Materials and Qualified Personnel**

12 To meet the Commission’s directives in D.11-06-017, California’s natural gas pipeline
13 operators will be required to simultaneously undertake an unprecedented volume of pressure
14 testing and construction work on an expedited schedule. Critical material components, such as
15 pipe, valves and fittings, may be in short supply due to increased demand. This is especially true
16 where, as here, multiple utilities will be striving to complete similar work simultaneously, and on
17 an aggressive schedule, thus competing for the same resources. Additionally, qualified personnel,
18 both internal company labor and contractor personnel, may not be available in the time required
19 to support the planned schedule for this volume of work. In order to execute this effort, it is
20 anticipated that SoCalGas and SDG&E will need to employ over 200 additional full-time
21 employees during a relatively short time period. Hiring increases of this magnitude in an
22 expedited timeframe may be particularly difficult to implement if other State utilities are seeking
23 to employ additional employees with similar qualifications as well. Shortages in the availability
24 and materials and qualified personnel could not only delay completion of the plan, but could also
25 increase costs beyond those initially contemplated.

26 **3. Environmental Permitting Challenges**

27 Similar to the general construction permitting context, the environmental permitting
28 processes that may be required for many of the projects set forth in the plan are fraught with

1 challenges. Unless Federal, State and local jurisdictions make each project's particular
2 environmental permitting a matter of utmost priority, then environmental permitting has the
3 potential to significantly delay and incrementally increase the cost of implementing many of the
4 larger projects contemplated under the plan. This emphasis on prioritization extends to the need
5 to maintain sufficient staffing to support the permitting process and provide certainty and
6 consistency with respect to the various regulatory requirements throughout the numerous
7 jurisdictions in which SoCalGas and SDG&E operate.

8 For example, a pipeline replacement project within the coastal zone that has the potential
9 to impact sensitive coastal resources would likely trigger multiple Federal, State, and local
10 permits/approvals. This complex regulatory environment requires project proponents to
11 overcome significant agency coordination challenges and navigate a process that may include
12 conflicting policies and procedures. Moreover, within individual agencies there are often
13 multiple departments with conflicting regulatory objectives.

14 Projects crossing lands under Federal jurisdiction provide another example of
15 environmental and land use permitting challenges that may affect the timely execution of the
16 Implementation Plan. Projects in these geographical areas must also comply with a host of
17 additional laws and regulations including the National Environmental Policy Act, Federal Mineral
18 Leasing Act and the Federal Land Policy and Management Plan. These laws and regulations are
19 administered by an additional suite of regulatory agencies, including the Bureau of Land
20 Management, National Park Service and United States Forest Service. Federal agency
21 involvement with Implementation Plan projects present additional coordination challenges
22 between State and Federal agencies. In addition, Federal agency priorities may hinder timely
23 execution of the Implementation Plan. For example, the Bureau of Land Management has been
24 directed by the Secretary of the Interior to give renewable energy projects the highest priority
25 when processing permit requests. SoCalGas and SDG&E request that the Commission support an
26 outreach and education effort with applicable Federal agencies to emphasize the purpose of and
27 need for timely execution of the Implementation Plan to enhance public safety and agree to
28 prioritize the processing of the necessary project approvals.

1 **4. Proposals for Commission Alleviation of Implementation Challenges**

2 We believe that a strong partnership with the Commission is essential to successfully
3 overcoming these challenges to project implementation. Although there is little the Commission
4 can do to help alleviate constraints on the availability of materials and qualified personnel, there
5 are several actions that the Commission can take to alleviate many of the permitting challenges
6 that California pipeline operators will face as they begin executing their proposed implementation
7 plans.

8 First, to minimize the potential for construction permitting delays and challenges, the
9 Commission should expressly state in its decision approving the Implementation Plan that
10 execution of the approved Implementation Plan is a matter of statewide concern, and as such, the
11 Commission has preemptory authority over conflicting local zoning regulations, ordinances,
12 codes or requirements to the extent that such local authority would deny, or significantly delay
13 execution of the Pipeline Safety Implementation Plan, while affirming that California natural gas
14 pipeline operators are required to obtain all necessary non-preempted permits prior to
15 commencing construction.

16 Second, the Commission can help communicate to all agencies responsible for issuing
17 permits that these projects are a priority because they will enhance public safety and the integrity
18 of an essential public service. The Commission, with support by the utilities, should create a plan
19 to educate State, Federal and local agencies that will be called upon to provide environmental
20 approvals of Implementation Plan projects, so that these projects may receive priority treatment in
21 the permit application approval process. This simple request to all applicable agencies to make
22 Implementation Plan projects a priority will provide direction and guidance for those agencies
23 that are subject to the demands of various competing project applicants. Moreover the
24 Commission should partner with the natural gas utilities in developing and conducting outreach
25 and education efforts to communicate the purpose and need for timely execution of the
26 Implementation Plan.

27 Third, the Commission can request that applicable permitting agencies set aside personnel
28 and consultant resources that can be funded by the natural gas utilities to focus on these

1 infrastructure projects. Under current economic conditions, all levels of government are resource
2 constrained. The natural gas utilities will rely on agencies to process their permits in a timely and
3 responsive manner. Often, however, human resource availability is intermittent or constrained.
4 Examples of permitting State agencies that may face human resource constraints include the
5 California Department of Fish and Game (CDFG) and the State Water Resources Control Board
6 and associated Regional Water Quality Control Boards.

7 Recent experience indicates that resource constraints are likely to pose a significant
8 challenge to timely execution of the Pipeline Safety Enhancement Plan. For example, SoCalGas
9 has had an agreement drafted to fund a CDFG resource to process a programmatic permit for over
10 a year; yet, the resource deficit is so dire at CDFG, that no one is available at the agency to
11 review or approve execution of the funding agreement. Unfortunately, many agencies have
12 suffered significantly in terms of resources during these economic times. The Commission can
13 help alleviate this challenge, however, by assigning someone to work with the agencies to
14 establish funding agreements that will set aside specific resources to process the permit
15 applications and greatly expedite the timely issuance of permits.

16 Fourth, the Commission can request that all environmental agencies develop, or
17 expeditiously approve pending applications for programmatic permits that will ensure consistent
18 permit conditions and mitigation requirements for these projects to create certainty for planning
19 purposes. The activities involved with these safety infrastructure projects are similar from one
20 project to another. Nevertheless, the utilities may be required to obtain permits that reflect
21 dramatically different conditions and mitigation requirements from one region to another for the
22 same activity. This creates uncertainty in the planning process for these projects and can create
23 significant delays and/or unnecessary costs. In some cases, compensatory mitigation must be
24 acquired prior to project commencement, which could take years if, for example, the mitigation
25 requires the acquisition of land. The Commission can support creating certainty in project
26 conditions and mitigation by assigning someone to support the natural gas utilities at all levels
27 within these agencies to develop programmatic permits, such as for pressure testing.

1 As explained herein, the scope of work to be completed to satisfy the Commission's
2 objectives is large. Our proposed schedule for executing this plan is necessarily ambitious in
3 order to meet the Commission's directive to develop a plan to test or replace identified pipelines
4 "as soon as practicable." In order to adhere to our proposed schedule, we must begin the work of
5 planning and permitting individual pressure testing and replacement projects right away.
6 Accordingly, SoCalGas and SDG&E urge the Commission to issue a decision authorizing us to
7 begin executing our proposed Pipeline Safety Enhancement Plan as soon as possible.

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