

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the
Commission's Own Motion to Adopt
New Safety and Reliability Regulations
for Natural Gas Transmission and
Distribution Pipelines and Related
Ratemaking Mechanisms.

Rulemaking 11-02-019
(Filed February 24, 2011)

**BRIEF OF THE DIVISION OF RATEPAYER ADVOCATES ON
SOUTHWEST GAS CORPORATION'S IMPLEMENTATION PLAN**

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June 15, 2012

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I. INTRODUCTION

In accordance with Rule 13.11 of the Rules of Practice and Procedure of the California Public Utilities Commission (Commission), and with the schedule set by the Administrative Law Judge, the Division of Ratepayer Advocates (DRA) submits its brief on Southwest Gas Corporation's (SWG) application for approval of its Natural Gas Transmission Pipeline Comprehensive Pressure Testing Implementation Plan, submitted on August 26, 2011 pursuant to Commission Decision (D.) 11-06-017, and for ratepayer funding of the costs of the proposed plan.

DRA recommends that the Commission deny ratepayer funding of the proposed plan's costs, or, in the alternative, direct SWG to make its cost recovery proposal in the general rate case (GRC) application it will file in late 2012.¹

¹ Rulemaking (R.) 11-02-019, Request for Approval of Ratemaking Procedural Proposal of Southwest Gas Corporation (U 905 G) (Memo Account Motion), Jan. 13, 2012, p.2 ("...next general rate case filing, expected to be filed late 2012 with rates effective January 1, 2014.")

II. IMPLEMENTATION PLAN COSTS SHOULD BE BORNE BY SWG

SWG's implementation plan consists of two primary activities: (1) replacing 7.1 miles of pipeline in its Victor Valley Transmission System for which SWG has no pressure test records, at an estimated cost of \$7.15 million; and (2) installing one remote-control shut-off valve (RCV) in its Harper Lake Transmission System, at an estimated cost of \$250,000.² The total cost associated with SWG's proposed plan is \$7.4 million in capital costs, with an associated annual revenue requirement of \$1.5 million.³

DRA proposes no rate recovery of any costs associated with SWG's Plan. SWG should make the necessary system improvements at shareholder expense because SWG's failure to produce adequate pressure test records is why it now proposes to test or replace pipe on its system.

DRA also recommends that Commission deny as unnecessary SWG's request for memorandum account treatment of any implementation plan costs.

DRA submits that the matter of the appropriate implementation plan and cost recovery associated with the plan can be briefly deferred to SWG's next GRC, which is scheduled to be filed later this year for a 2014 Test Year. Given the limited magnitude of SWG's proposed program, addressing these issues in the GRC would not cause an unreasonable delay to implementation.

A. SWG Should Pay for Any Pipe Testing or Replacement in Its Victor Valley Transmission System

In its Victor Valley system, SWG proposes to replace 35,325 feet (6.69 miles) of Class 3 pipe installed in December 1957 and 2,175 feet (0.41 miles) of Class 1 pipe installed in January 1965,⁴ for a total of 37,490 feet or 7.1 miles. SWG "has no readily available pressure test records" for the 7.1 miles of pipe it proposes to replace.⁵

² R.11-02-019, Notice of Filing and Request for Approval of Southwest Gas Corporation's (U 905 G) Natural Gas Transmission Pipeline Comprehensive Pressure Testing Implementation Plan (SWG Application), Aug. 26, 2011, pp. 3-5; SWG Application Exhibit A, Natural Gas Transmission Pipeline Comprehensive Pressure Testing Implementation Plan (SWG Plan), pp. 5, 10-12, 16-17, 19.

³ SWG Application, p.5-6; SWG Plan, pp. 19-20.

⁴ SWG Plan, p.5.

⁵ SWG Plan, p.5.

SWG’s implementation plan identifies pressure testing and replacement as the two “viable” alternatives to meet the requirements of D.11-06-017.⁶ SWG estimates that pressure testing will cost at least \$3.75 million, compared to \$7.1 million for replacement. SWG has chosen replacement as “the best option” because “potential leaks by subjecting the pipe to a 1.575 time pressure test could increase the overall costs and customer constraints....”⁷ The Commission’s Consumer Protection and Safety Division (CPSD) “believes that some of SWG’s concerns can be addressed through currently available measures which might argue in favor of pressure testing rather replacement.”⁸ CPSD states that “SWG has not developed or provided any specifics that allow CPSD to determine the extent of outages that may result ... or that SWG does not have the ability to plan for and execute contingency measures....”⁹ CPSD also “believes replacement of SWG’s Victor Valley Transmission System ... pipeline is reasonable when considering all factors.”¹⁰

Regardless of whether the Commission ultimately finds testing or replacement to be the best option, SWG should bear the costs because both alternatives are driven by SWG’s failure to provide adequate pressure test records for the 7.1 miles of Victor Valley pipe at issue. SWG has a longstanding obligation to maintain traceable, verifiable and complete records, and the activities proposed in its Plan are to correct its failure to meet that obligation. Managing pipeline records is a core aspect of operating gas pipelines safely, and SWG has consistently received ample rate case funding to operate its pipeline system safely and reliably. SWG currently has an authorized rate of return on equity of

⁶ SWG Plan, p.7. Reducing system pressure was identified as an option but “eliminated as a viable alternative, as the reduced pressure would not meet existing or future gas load (i.e. customer use) requirements. In addition, simply reducing pressure will not address questions about the existing pipe with regards to pipe yield strength.” *Id.*

⁷ SWG Plan, p.10.

⁸ R.11-02-019, Technical Report of the Consumer Protection and Safety Division Regarding Southwest Gas Corporation’s Pipeline Safety Implementation Plan (CPSD Report), Jan. 3, 2012, p.9.

⁹ CPSD Report, p.11.

¹⁰ CPSD Report, p.2.

10.5 percent, and the authorized rate of return for its Southern California Division is 7.87 percent.

1. SWG Should Bear All Costs Associated with Replacement of Its Natural Gas Pipelines

If SWG opts to replace rather than test the pipelines in its Victor Valley system, SWG should bear the cost of such replacement, consistent with Commission General Order (GO) 112 and prevailing industry standards.

DRA agrees with CPSD that the costs of testing or replacing the pipe segments installed in 1965 should be borne by SWG shareholders because of SWG's failure to comply with GO 112. CPSD finds that "SWG has provided no documents related to the construction or testing related to the 1965 installation even though such records were required to be maintained by GO 112,"¹¹ and, "[t]herefore, whether tested or replaced, costs related to replacement or testing pipeline in VVTS Class 1 locations should not be borne by SWG's ratepayers."¹² SWG states that "the pipeline was considered a 'distribution' pipeline in 1965 and not a 'transmission' pipeline."¹³ Nonetheless, the installation and subsequent re-classification as transmission both occurred after the adoption of GO 112 in 1961.

SWG should bear the cost of replacing the pipe segments installed in 1957. These segments comprise over 94 percent of the scope and costs of the replacement activities SWG proposes under its implementation plan. SWG represented to the Commission at the time GO 112 was adopted that it complied with industry standards.¹⁴ In its decision

¹¹ CPSD Report, p.7.

¹² CPSD Report, pp. 2-3.

¹³ R.11-02-019 and Application (A.) 11-11-002, Response of Southwest Gas Corporation (U-905-G) to the Technical Report of the Consumer Protection and Safety Division (SWG Response to CPSD Report), Jan. 13, 2012, p.5.

¹⁴ Decision 61269, Investigation into Need of a General Order Governing Design, Construction, Testing, Maintenance and Operation of Gas Transmission Pipeline Systems, Dec. 28, 1960 (effective Jan. 17, 1961), p.4, citing ASA B31.8-1958. The 1958 version of the code mandated the same strength testing and record keeping requirements as the ASA B31.8 standards issued in 1955. See R.11-02-019, Ex. 143, DRA Report on the Pipeline Safety Enhancement Plan of Pacific Gas and Electric Company (DRA Testimony), Chap. 2, p. 21 and Attachment A, pp. 12-13.

adopting GO 112, the Commission described the position of the respondents, including SWG: “They claim ... that the gas utilities in California voluntarily follow the American Standards Association (ASA) code for gas transmission and distribution piping systems.”¹⁵ Those standards have recommended that all gas pipelines be pressure tested since 1935.¹⁶ While SWG may argue about the applicability of industry standards adopted in 1935, SWG should have been following industry standards established in 1955 that required pressure testing and retention of test records.¹⁷ Thus, it is clear that SWG recognizes that it had an obligation to pressure test gas lines by 1955, and to retain those pressure test records. SWG admits that it does not have such records for the 7.1 miles of pipeline it now proposes to replace. Thus, for the investment in new pipeline to replace existing gas transmission pipeline that was installed after 1955, the investment cost should be entirely borne by SWG shareholders.

For any pipeline installed subsequent to 1955, the ASA Code requires that records be retained for hydrostatic tests. Section 841.417 of the Records Section of the 1955 Code provides: “The operating company shall maintain in its file for the useful life of each pipeline and main, records showing the type of fluid used for test and the test pressure.”¹⁸ Even if for some reason SWG had been remiss about keeping appropriate records for the hydrostatic tests performed in the past, the ASA code adopted in 1955 makes clear that records for such tests are to be maintained for the useful life of the pipeline and main. This was 20 years after the initial ASA Code requiring hydrostatic tests was adopted in 1935. Any utility that had not been following the industry standard for hydrostatic testing and maintaining accurate records of the test should have been doing so by 1955. SWG’s ratepayers had nothing to do with SWG’s failure to follow the industry standard. Thus, where SWG replaces pipeline installed after 1955 with new

¹⁵ D.61269, p.4.

¹⁶ The American Standards Association (ASA) first issued the American Standard Code for Pressure Piping in 1935. See R.11-02-019, Ex. 143, DRA Report on the Pipeline Safety Enhancement Plan of Pacific Gas and Electric Company (DRA Testimony), Chap. 2, pp. 20-21 and Attachment A, pp. 2-4.

¹⁷ D.61269, p.4; see also fn. 14, above.

¹⁸ ASA B31.1.8-1955, Section 841.417; see DRA Testimony, Attachment A, p.12.

pipeline, SWG should pay for the associated cost if it is unable to produce the appropriate records to show that a hydrostatic test was performed.

2. SWG Should Bear All Costs Associated with Pressure Testing of Its Natural Gas Pipelines

SWG states that it prefers to replace rather than test pipe segments for which it does not have records available. If, however, the Commission directs SWG to instead that pressure test those pipelines, SWG shareholders should bear the associated costs. SWG should pay for all pressure tests of the pipeline for which it cannot produce records because pressure testing and record retention were an industry standard when the pipelines SWG proposes to replace were installed.¹⁹ As a prudent manager of its system, SWG should have pressure tested its pipelines over the years, and should have kept records of those tests, as well as other maintenance history.²⁰ As a utility with a statutory obligation to operate its system safely,²¹ SWG had an obligation to comply with industry standards developed to ensure safe operation of pipeline systems, including retention of all records required for safe operation. Further, GO 28 has expressly required SWG to retain certain records, which would have included pressure test records, since 1912. SWG represented to the Commission at the time that GO 112 was adopted that it complied with industry standards.²² Those standards have recommended that all gas pipelines be pressure tested since 1935.

SWG has had an obligation under GO 28 to retain certain records, such as pressure test records, since 1912.²³ General Order 28, reissued in December 1947 without modification to the 1912 GO, requires SWG to retain “[a]ll records, contracts, estimates, and memoranda pertaining to original cost of property and to Additions and

¹⁹ The American Standards Association (ASA) first issued the American Standard Code for Pressure Piping in 1935. See R.11-02-019, Ex. 143, DRA Report on the Pipeline Safety Enhancement Plan of Pacific Gas and Electric Company (DRA Testimony), Chap. 2, pp. 20-21 and Appendix A.

²⁰ DRA Testimony, pp. 21-22 and Appendix A; see also General Order 28.

²¹ Pub. Util. Code § 451.

²² D.61269, p.4.

²³ General Order Numbers 28 and 58.

Betterments.”²⁴ If SWG had properly retained records associated with the cost of hydrostatic testing; those records would verify that a test was performed on the pipeline.

SWG’s failure to retain pressure test records is an unreasonable error or omission; the financial consequences must be borne by SWG, not its ratepayers. DRA recommends that SWG be held responsible for the costs associated with pressure testing (or its functional equivalent) for all transmission pipeline that SWG has identified in its plan where SWG cannot locate records showing a test was performed in accordance with industry standards.

B. SWG Should Pay To Install a Remote Control Valve in its Harper Lake Transmission System

SWG proposes to install one remote-control shut-off valve (RCV) in its Harper Lake Transmission System.²⁵ SWG estimates the cost of installing one remote-control valve to be \$250,000.²⁶ CPSD finds this proposal “reasonable in light of SWG estimates for its technicians to reach manual valves in an emergency.”²⁷

DRA agrees with CPSD that it would be reasonable for SWG to install the proposed RCV.²⁸ Installation of the RCV should, however, be treated as a capital addition made prior to SWG’s next GRC. That is, it should be booked to plant when it becomes operational; the costs will then be embedded in SWG’s rate base and SWG will begin earning a return on the investment in its test year 2014 GRC.

²⁴ General Order 28, reissued December 22, 1947.

²⁵ SWG Plan, pp. 16-17.

²⁶ SWG Plan, p.19.

²⁷ CPSD Report, p.6.

²⁸ R.11-02-019 and A.11-11-002, Comments of the Division of Ratepayer Advocates Pursuant to January 5, 2012 Administrative Law Judge’s Ruling and December 21, 2011 Assigned Commissioner Ruling, Appendix A, Response of the Division of Ratepayer Advocates to the Technical Report of the Consumer Protection and Safety Division Regarding Southwest Gas Corporation’s Pipeline Safety Implementation Plan (DRA Response to CPSD Report), Jan. 13, 2012, p.3. DRA’s response to CPSD’s report referred to SWG’s response to a DRA data request, DRA-GIE-1. A copy of the data request response is appended to this brief as Attachment A.

C. SWG Does Not Need a Memorandum Account

DRA proposes no memorandum account treatment of any costs associated with SWG's implementation plan.²⁹ SWG seeks "a deferred regulatory asset (memorandum account) that would allow the Company to defer the costs associated with depreciation expense, carrying charges and property taxes related to the Implementation Plan work until the establishment of rates in its next general rate case proceeding."³⁰ SWG "also proposes to defer costs into the memorandum account for costs incurred beyond the general rate case test period ... [to] be recovered through a surcharge mechanism"³¹ in SWG's next GRC. DRA opposes this request. SWG does not need a memorandum account or assurance of cost recovery to make management decisions to meet its ongoing obligation to provide safe and reliable service. As the Commission has stated, utilities such as SWG are:

...obliged to exercise competent managerial discretion and make the necessary capital expenditures and capital repairs and maintenance even if those expenditures exceed test year forecasts. Test year ratemaking is not a guarantee of full recovery or of fully expending the amounts as forecast. The "regulatory compact," is that in exchange for a reasonable opportunity of earning a fair return, ratepayers pay the adopted rates and the utility does what is necessary to provide safe and reliable service.³²

As previously stated, SWG will file its next GRC in late 2012 for a Test Year 2014 and will be able to include the recovery of capital costs associated with shut-off valves in that filing. The rejection of a memorandum account would place no undue financial burden upon SWG, represents a very short regulatory lag and is risk for which SWG is generously compensated within its rate of return on equity.

²⁹ R.11-02-019, Response of the Division of Ratepayer Advocates to Request for Approval of Ratemaking Procedural Proposal of Southwest Gas Corporation, Jan. 24, 2012, p.2.

³⁰ Memo Account Motion, pp. 2-3.

³¹ Memo Account Motion, p.4.

³² D.09-03-025, Alternate Decision of President Peevey on Test Year 2009 General Rate Case for Southern California Edison Company, *mimeo.*, p.324.

D. Implementation Plan Costs Can Be Addressed in SWG's Upcoming GRC

As an alternative to ruling in this docket on the reasonableness of SWG's proposed costs and recovery mechanism, the Commission could address these issues on a prospective basis in SWG's next GRC, which is scheduled to be filed in late 2012 for a 2014 Test Year. Given that SWG "will likely not complete the activity contemplated in its Implementation Plan prior to the establishment of rates in its next [GRC],"³³ addressing the implementation plan and cost recovery issues in the GRC would be practical. While SWG "may incur costs ... beyond the [GRC] test period,"³⁴ as explained above, the potential financial impact on SWG would be minimal.

II. CONCLUSION

For the reasons discussed in this brief and in DRA's related filings in this docket, DRA respectfully requests that its recommendations regarding SWG's implementation plan be adopted.

Respectfully submitted,

/s/ MARION PELEO

MARION PELEO

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505 Van Ness Avenue
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June 15, 2012

³³ Memo Account Motion, p.4.

³⁴ Memo Account Motion, p.4.

ATTACHMENT A



SOUTHWEST GAS CORPORATION

October 14, 2011

Godson Ezekwo
California Public Utilities Commission
Division of Ratepayer Advocates
505 Van Ness Avenue
San Francisco, CA 94102

Subject: Southwest Gas Corporation
Docket No. R.11-02-019 – SWG's Natural Gas Transmission Pipeline
Replacement or Testing Implementation Plan
Data Request No. DRA-GIE-1 (1-8)

Dear Mr. Ezekwo:

Enclosed please find a copy of Southwest Gas Corporation's response to DRA's Data Request regarding the Pipeline Records Integration Program.

We appreciate DRA's consideration in allowing an extension of time to provide written responses which was necessary due to witness/respondent unavailability.

Should you have any questions, please do not hesitate to contact me. You may reach me directly at (702) 876-7163.

Respectfully,

Debra S. Gallo
Director/Government and State Regulatory Affairs

DSG:kt
Enclosures

c: Pearlie Sabino, DRA Project Coordinator (*hard copy and electronically*)
Marion Peleo, DRA Counsel (*electronically*)

**SOUTHWEST GAS CORPORATION
SWG's Natural Gas Transmission Pipeline Replacement or
Testing Implementation Plan
DOCKET NO. R.11-02-019**

* * *

**Division of Ratepayer Advocates
DATA REQUEST NO. DRA-GIE-1
(DRA1-1 THROUGH DRA1-8)**

DOCKET NO.: R.11-02-019
COMMISSION: CALIFORNIA PUBLIC UTILITIES COMMISSION
DATE OF REQUEST: SEPTEMBER 30, 2011

Request No. DRA-GIE-1-1:

On page 8 of Exhibit A of your testimony, you indicated that absent material specifications, the records may not be "traceable, verifiable and complete." Because of lack of records, you asserted that additional costs will be associated with material specifications of the pipeline through approximately 200 test coupons required to cut-out of the existing pipe. Please provide the estimated costs associated with determining the material specifications of the pipeline.

Respondent: Engineering Staff

Response:

The estimated cost for determining the material specifications (wall thickness and yield strength) of the pipeline is \$2,105,000. This cost includes engineering design, permits, excavation equipment and construction labor, shoring, pipe and materials, radiographic examinations, compaction testing, traffic control, pavement restoration and materials testing.

**SOUTHWEST GAS CORPORATION
SWG's Natural Gas Transmission Pipeline Replacement or
Testing Implementation Plan
DOCKET NO. R.11-02-019**

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**Division of Ratepayer Advocates
DATA REQUEST NO. DRA-GIE-1
(DRA1-1 THROUGH DRA1-8)**

DOCKET NO.: R.11-02-019
COMMISSION: CALIFORNIA PUBLIC UTILITIES COMMISSION
DATE OF REQUEST: SEPTEMBER 30, 2011

Request No. DRA-GIE-1-2:

On page 8 of Exhibit A, you indicated that there are an estimated 50 lateral pipelines in the system, stemming from oil regulator station and farm taps points that need to be replaced. Please provide the estimated cost of this replacement.

Respondent: Engineering Staff

Response:

The estimated cost for removing the 50 lateral pipelines in the system is \$285,000. This includes camera inspections to identify the lateral location, engineering design, permits, excavation equipment and construction labor, shoring, pipe and materials, radiographic examinations, compaction testing, traffic control and pavement restoration.

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Division of Ratepayer Advocates
DATA REQUEST NO. DRA-GIE-1
(DRA1-1 THROUGH DRA1-8)

DOCKET NO.: R.11-02-019
COMMISSION: CALIFORNIA PUBLIC UTILITIES COMMISSION
DATE OF REQUEST: SEPTEMBER 30, 2011

Request No. DRA-GIE-1-3:

On page 8 of Exhibit A, you asserted that certain segments of existing pipe would require modification to ensure areas of water accumulation (i.e. low points) are removed. Please provide information on the segments of existing pipe that require modification and associated costs of the modification.

Respondent: Engineering Staff

Response:

The estimated cost for replacing segments of existing pipe to avoid water accumulation in the system is \$885,000. Approximately 3,200 feet of pipe will be replaced in drop section areas. The cost to replace these sections includes engineering design, permits, excavation equipment and construction labor, shoring, pipe and materials, radiographic examinations, compaction testing, traffic control and pavement restoration.

SOUTHWEST GAS CORPORATION
SWG's Natural Gas Transmission Pipeline Replacement or
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DOCKET NO. R.11-02-019

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Division of Ratepayer Advocates
DATA REQUEST NO. DRA-GIE-1
(DRA1-1 THROUGH DRA1-8)

DOCKET NO.: R.11-02-019
COMMISSION: CALIFORNIA PUBLIC UTILITIES COMMISSION
DATE OF REQUEST: SEPTEMBER 30, 2011

Request No. DRA-GIE-1-4:

On page 9 of Exhibit A, you stated that the minimum cost estimate of pressure testing 7.1 miles of pipe in Victor Valley Transmission System is \$3.75 million. Please provide detailed derivation of the estimate.

Respondent: Engineering Staff

Response:

Pressure testing has four components; (1) material specification testing, (2) lateral pipeline removal, (3) low point replacement, and (4) actual pressure testing. Details of each component and related costs are provided below.

(1) Material specification testing (refer to GIE1-1). Estimated cost is \$2,105,000. Two hundred one-foot test sections will be cut-out of the pipe at specified locations to perform materials testing. The cost to obtain these samples includes engineering design, permits, excavation equipment and construction labor, shoring, pipe and materials, radiographic examinations, compaction testing, traffic control, pavement restoration and lab materials testing.

(2) Lateral pipeline removal (refer to GIE1-2). Estimated cost is \$285,000. Removal cost of the estimated 50 pipelines includes camera inspections to identify the lateral location, engineering design, permits, excavation equipment and construction labor, shoring, pipe and materials, radiographic examinations, compaction testing, traffic control and pavement restoration.

(3) Low point replacement. Estimated cost is \$885,000. Approximately 3,200 feet of pipe will be replaced in drop section areas. The cost to replace these sections includes engineering design, permits, excavation equipment and construction labor, shoring, pipe and materials, radiographic examination, compaction testing, traffic control and pavement repair.

(4) Hydrostatic testing. Estimated cost is \$475,000. The cost for hydrostatic testing pipe includes engineering design, permits (water filling and disposal), equipment and labor for performing the tests, and pavement restoration.

SOUTHWEST GAS CORPORATION
SWG's Natural Gas Transmission Pipeline Replacement or
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Division of Ratepayer Advocates
DATA REQUEST NO. DRA-GIE-1
(DRA1-1 THROUGH DRA1-8)

DOCKET NO.: R.11-02-019
COMMISSION: CALIFORNIA PUBLIC UTILITIES COMMISSION
DATE OF REQUEST: SEPTEMBER 30, 2011

Request No. DRA-GIE-1-5:

In a September 29, 2011 email from Christy Berger of SWG to Pearlle Sabino of DRA, SWG indicated that it "used a rule of thumb calculation" to determine the estimated replacement cost of \$7.15 for 7.1 miles of Victor Valley Transmission System and that SWG "did not rely upon any workpapers containing detailed calculations." Please provide the rule of thumb calculation used to determine the replacement cost of \$7.15 million.

Respondent: Engineering Staff

Response:

The cost to replace the system is based on historical replacement costs of similar pipe size/type and replacement area based on geographic location and population density. The cost includes engineering design, land survey work, permits, excavation equipment and construction labor, shoring, pipe and materials, radiographic examination, compaction testing, traffic control and pavement restoration.

SOUTHWEST GAS CORPORATION
SWG's Natural Gas Transmission Pipeline Replacement or
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* * *

Division of Ratepayer Advocates
DATA REQUEST NO. DRA-GIE-1
(DRA1-1 THROUGH DRA1-8)

DOCKET NO.: R.11-02-019
COMMISSION: CALIFORNIA PUBLIC UTILITIES COMMISSION
DATE OF REQUEST: SEPTEMBER 30, 2011

Request No. DRA-GIE-1-6:

Please provide the documentation that explains in detail and demonstrates specifically what the industry standards were in effect regarding best practice for gas transmission pipeline maintenance and testing between 1955 and prior to 1970.

Respondent: Engineering Staff

Response:

From July 1961 and prior to 1970, California General Order 112 (GO-112) was in place and established the requirements for natural gas transmission pipeline maintenance and testing. General Order 112 primarily referenced the 1958 edition of the American Standard Association's Code for Gas Transmission and Distribution Piping Systems (referred to as ASA B31.8). The ASA B31.8 standard was first published in 1941 as the American Standards Association standard B31.1 for Air and Gas Piping Specifications (referred to as ASA B31.1) and in subsequent years, evolved to ASA B31.8. Between 1941 and 1961, the use of the ASA B31.1 and B31.8 standards was voluntary.

**SOUTHWEST GAS CORPORATION
SWG's Natural Gas Transmission Pipeline Replacement or
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DOCKET NO. R.11-02-019**

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**Division of Ratepayer Advocates
DATA REQUEST NO. DRA-GIE-1
(DRA1-1 THROUGH DRA1-8)**

DOCKET NO.: R.11-02-019
COMMISSION: CALIFORNIA PUBLIC UTILITIES COMMISSION
DATE OF REQUEST: SEPTEMBER 30, 2011

Request No. DRA-GIE-1-7:

Please provide the documentation that explains in detail if SWG has easily accessible, accurate, complete and detailed records demonstrating that it properly maintained and tested its entire gas transmission pipeline utilizing the testing methods that were in effect which followed the industry standards for testing its gas transmission pipelines between 1955 and prior to the changes in 1970.

Respondent: Engineering Staff

Response:

Please refer to the Company's Implementation Plan. As indicated in Ms. Lynn Malloy's testimony, 7.1 miles of the 15.4 miles of pipeline classified as transmission in California under the CPUC jurisdiction does not meet the record requirements including pressure testing currently required by the Rulemaking. Furthermore, the testimony summarizes the Company's analysis, prioritization, and decision making to replace the entire 7.1 miles of transmission to address the record requirements in the Rulemaking.

**SOUTHWEST GAS CORPORATION
SWG's Natural Gas Transmission Pipeline Replacement or
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DOCKET NO. R.11-02-019**

* * *

**Division of Ratepayer Advocates
DATA REQUEST NO. DRA-GIE-1
(DRA1-1 THROUGH DRA1-8)**

DOCKET NO.: R.11-02-019
COMMISSION: CALIFORNIA PUBLIC UTILITIES COMMISSION
DATE OF REQUEST: SEPTEMBER 30, 2011

Request No. DRA-GIE-1-8:

On page 16 of Exhibit A, you stated that using manual shut off valves in the new Victor Valley System, compared to remote shut off valves, will reduce overall pipeline replacement costs. Please provide detailed calculation showing comparison of manual and remote shut off valves installation.

Respondent: Engineering Staff

Response:

The new Victor Valley System, which will operate at 240 psig and 6% SMYS, will be classified as a high-pressure distribution system. It was determined that manual shut off valves are more cost effective than remote control shut-off valves for this type of system. The parts/labor for installing each 8-inch manual valve is estimated at \$8,200 versus an estimated cost of \$250,000 for each remote control shut-off valve. Southwest Gas reviewed general industry costs, consulted with other operators compiling similar estimates, and reviewed company costs of similar project types to estimate the cost of installing a remote control shut-off valve.