

Application No: A.16-09-XXX
Exhibit No.: _____
Witness: H. Mejia

Application of Southern California Gas Company
(U 904 G) and San Diego Gas & Electric Company
(U 902 G) to Recover Costs Recorded in the Pipeline
Safety and Reliability Memorandum Accounts, the
Safety Enhancement Expense Balancing Accounts,
and the Safety Enhancement Capital Cost Balancing
Accounts

Application 16-09-XXX

CHAPTER V
DIRECT TESTIMONY OF
HUGO MEJIA
ON BEHALF OF
SOUTHERN CALIFORNIA GAS COMPANY
AND
SAN DIEGO GAS & ELECTRIC COMPANY

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

September 2, 2016

TABLE OF CONTENTS

| | <u>PAGE</u> |
|--|-------------|
| I. PURPOSE AND OVERVIEW OF TESTIMONY | 1 |
| II. VALVE PROJECTS | 2 |
| III. VALVE PROJECT COSTS | 2 |
| IV. VALVE PROJECT EXECUTION..... | 3 |
| V. VALVE PROJECT BUNDLES | 4 |
| A. Initial Bundles Combined for Bid..... | 5 |
| B. Valve Bundles completed with Performance Partners | 6 |
| C. Valve Bundle Combined with Pipeline Replacement project | 7 |
| VI. CONTRACTOR SELECTION | 7 |
| VII. CONCLUSION | 9 |
| VIII. WITNESS QUALIFICATIONS | 10 |

1 **I. PURPOSE AND OVERVIEW OF TESTIMONY**

2 The purpose of my testimony is to demonstrate Southern California Gas Company
3 (SoCalGas) and San Diego Gas & Electric Company’s (SDG&E) prudent execution of the
4 projects presented in this chapter and the reasonableness of the \$31.72 million in capital
5 expenditures for the 15 valve projects discussed in this chapter and included for cost recovery in
6 this application. These 15 valve projects were installed to support Southern California Gas
7 Company’s (SoCalGas) and San Diego Gas & Electric Company’s (SDG&E) Pipeline Safety
8 Enhancement Plan (PSEP) Valve Enhancement Plan (Valve Plan). As discussed in Chapter IV
9 (Bermel), SoCalGas and SDG&E’s Valve Plan works in concert with PSEP to enhance system
10 safety by installing and upgrading valve infrastructure to support the automatic and remote
11 isolation and depressurization of the transmission pipeline system in 30 minutes or less in the
12 event of a pipeline rupture.

13 The activity and costs incurred to successfully complete these valve projects and further
14 enhance the safety of our natural gas transmission system provide the basis for determining the
15 revenue requirements recorded in SoCalGas’ and SDG&E’s respective Pipeline Safety and
16 Reliability Memorandum Accounts (PSRMAs), Safety Enhancement Capital Cost Balancing
17 Accounts (SECCBAs), and Safety Enhancement Expense Balancing Accounts (SEEBAs). As
18 demonstrated in my testimony and the accompanying workpapers, SoCalGas and SDG&E
19 prudently executed these valve projects and incurred reasonable costs to do so. As such,
20 SoCalGas and SDG&E request that the Commission find that the Valve Plan costs were
21 reasonably incurred and the associated revenue requirements are justified for rate recovery.

22 **Please note:** For efficiency purposes and to facilitate the review process, detailed
23 information for each project is contained in the associated project workpapers. The information
24 contained in this chapter is designed to provide a summary of the projects and associated costs.

1 **II. VALVE PROJECTS**

2 The Valve Plan enhances the ability to isolate pipeline sections by installing Remote
3 Control Valves (RCVs) that can be opened or closed remotely by system operators from a central
4 control location or Automatic Shut-off Valves (ASVs) that are equipped with a control device
5 that automatically triggers the actuator and shuts off the flow of natural gas in the event of a
6 large pressure drop. Upgrading or retrofitting valves on the pipeline system with RCV and ASV
7 technologies provides natural gas control operators with greater flexibility and shorter response
8 times if it is necessary to close valve(s) quickly in the event of an emergency. In addition to
9 RCV and ASV installations or modifications, the Valve Plan also utilizes the installation of
10 Backflow Prevention equipment and/or Flowmeters to meet the objectives of the plan. Valve
11 projects will vary in complexity based on as-found conditions and required infrastructure
12 modifications to convert valves to ASV or RCV. These complexities may include complete
13 rotation of the valve and installation of a new vault to allow installation of actuators and all
14 associated communication and control equipment. In some cases, the installation of a new valve
15 assembly with all associated equipment may be required.

16 **III. VALVE PROJECT COSTS**

17 The costs presented in this chapter are those incurred through March 2016. Accounting
18 adjustments made between March 2016 and the date of this application are addressed in Chapter
19 XI (Austria). The project costs include costs incurred in direct support of an individual valve
20 project; project support costs not attributable to a specific project, but incurred to support PSEP
21 projects;¹ and indirect costs.²

¹ PSEP organizational costs not attributable to a specific project are allocated to projects as described Chapter VII (Mejia) and VIII (Tran).

² Certain company overhead costs are deemed incremental to PSEP and subject to recovery as they are associated with incremental PSEP activities. The applicable, incremental overheads are included in the costs presented for recovery in this application and further discussed in Chapter IX (Huleis).

1 **IV. VALVE PROJECT EXECUTION**

2 The valve project execution process was developed similarly to the execution of PSEP
3 pipeline projects. PSEP pipeline projects use the Seven Stage Review process discussed in
4 Chapter II (Phillips). For valves, a modified Seven Stage Review Process is utilized.³ For both
5 types of projects, the Seven Stage Review Process provides project execution consistency and
6 enables PSEP Leadership a structured approach to review and approve projects at strategic points
7 of the project life cycle. The Seven Stage Review Process (and key deliverables for valve
8 projects) is outlined below:

9 • **Stage 1 and 2: Project Initiation.**

10 During Stages 1 and 2 SoCalGas and SDG&E verify proposed valve modifications,
11 installations, and/or design changes based on field conditions.

12 • **Stage 3: Planning**

13 During Stage 3, preliminary design efforts are conducted and a Stage 3 cost estimate is
14 developed.

15 • **Stage 4: Detailed Design and Procurement**

16 During Stage 4, detailed drawings are developed, the material procurement process is
17 initiated, and permits to commence construction work are acquired.

18 • **Stage 5: Construction**

19 During Stage 5, construction activities are initiated to complete the project; this includes
20 coordination with Gas Operations to coordinate any required shut-ins and tie-in activities.

21 • **Stage 6: Commissioning**

22 During Stage 6, valve projects conduct a commissioning process that includes a Site
23 Acceptance Test. The Site Acceptance Test is necessary to obtain agreement from Gas

³ Additionally, as discussed in Chapter IV (Bermel) two additional stages (Stage 0 and 0.5) occur for valve projects.

1 Operations that the valve project is complete before turnover.

2 • **Stage 7: Close-out**

3 During Stage 7, project documentation is completed. This includes completion drawings
4 and material reconciliation for final records.

5 The project life cycle for all 15 Valve Bundles submitted for review in this application are
6 outlined in the workpapers to describe the information that was known at the time of project
7 execution and a description of decisions made for each stage. The workpapers also describe
8 conditions and parameters that changed from preliminary design that may have impacted project
9 scope, cost, and schedule.

10 **V. VALVE PROJECT BUNDLES**

11 In an effort to improve project efficiency and maximize the cost effectiveness of Valve
12 Plan safety investments, where practicable, SoCalGas and SDG&E grouped individual valve
13 projects into “bundles.” The bundling of projects allowed the management of several, close-in-
14 proximity valve projects as one larger project. As a result, PSEP was better able to manage and
15 coordinate design and construction activities.

16 The 15 project bundles presented in this application account for 40 valves modified as
17 part of SoCalGas and SDG&E’s Valve Plan. As outlined in Chapter IV (Bermel), valve projects
18 are initiated by going through an Engineering Analysis process. The Engineering Analysis
19 process provides preliminary analysis that identifies the valves to be retrofitted and installed.
20 Once the valve is identified as in scope of the Valve Plan, the valve is assessed to determine if it
21 will be bundled with another valve project. The total costs for the valve projects presented in
22 this application are presented in Table 1:

Table 1 – List of Valve Bundles/Scope/Cost in \$000s)

| Bundle | Scope | Cost |
|--|---|-------------|
| Arrow & Haven | 1 valve | \$1,158 |
| Bain St | 2 valves | \$1,064 |
| Brea | 1 valve | \$295 |
| Chino | 5 valves | \$1,237 |
| Haskell | 2 valves | \$805 |
| Moreno - Large | 1 FM | \$616 |
| Moreno - Small | 1 valve/1 FM | \$861 |
| Pixley | 3 valves | \$1,549 |
| Prado | 5 valves | \$1,411 |
| Puente | 2 CV's | \$19 |
| Santa Fe Springs | 3 valves | \$813 |
| SGV Fern & Walnut | 3 valves | \$5,784 |
| Victoria | 3 valves/1 FM | \$1,735 |
| Whitewater | 3 valves | \$816 |
| 235 West/44-654 ⁴ / 235-335 Palmdale | 6 valves with Transmission and Distribution Piping | \$13,557 |
| Total | | \$31,720 |

2

A. Initial Bundles Combined for Bid

3

4

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The PSEP Valve projects that were initiated prior to instituting the Performance Partner Program (discussed below and in Chapter II (Phillips)) were combined into one bid package for the construction of nine bundles. This enabled the selected contractor and project teams the

⁴ Disallowances for this project bundle are discussed in the associated workpaper and Chapter III (Phillips).

1 ability and flexibility to manage workflow and navigate between worksites more seamlessly.
2 Combining these nine projects enabled the contractors to test piping for multiple sites at once,
3 versus separate tests at each site, and allowed flexibility of dedicated resources because
4 personnel could be spread across the nine sites – avoiding multiple mobilizations. These efforts
5 promoted “as soon as practicable” and cost effective execution. The nine bundles managed in
6 this manner were:

- 7 1. Arrow & Haven
- 8 2. Bain St
- 9 3. Chino
- 10 4. Haskell
- 11 5. Moreno - Large
- 12 6. Moreno - Small
- 13 7. Santa Fe Springs
- 14 8. Prado
- 15 9. Whitewater

16 **B. Valve Bundles completed with Performance Partners**

17 In this application, three valve bundles were completed under the Performance Partner
18 Program (*see* Chapter II (Phillips)) for a discussion of the Performance Partner Program). Target
19 prices between the Performance Partner and SoCalGas and SDG&E were negotiated prior to
20 initiating construction activities.⁵ The three valve bundles constructed under the Performance
21 Partner Program were:

- 22 1. Pixley

⁵ The construction contract negotiations were initially held with the assigned Performance Partner. If the bid from the first performance partner was deemed unacceptable, SoCalGas and SDG&E negotiated with another Performance Partner to reach an acceptable agreement.

1 2. SGV Fern & Walnut

2 3. Victoria

3 In addition to the three projects above, there one project only required an Alliance
4 Contractor for electrical work (Brea) and on project required a valve service company for valve
5 modification work (Puente). These two valve bundles were:

6 1. Brea

7 2. Puente

8 **C. Valve Bundle Combined with Pipeline Replacement project**

9 PSEP looks for opportunities to combine project for efficiency purposes. One such
10 occasion, was the combination of Supply Line 44-654, Line 235 West, and the 235-335 Palmdale
11 Valve Bundle. All three of these projects were located in the proximity of the Palmdale Station.
12 Because of their close proximity, SoCalGas and SDG&E were able to coordinate work and
13 minimize blowdowns of the system. The three projects each had their own design packages, but
14 were bid as one construction project. This enabled the three projects to be managed as one
15 construction project, and provided the opportunity to optimize operations personnel support and
16 use of one construction management team to coordinate construction activities. The costs for the
17 three projects were tracked separately to distinguish valve, transmission, and distribution costs.
18 The costs associated for all three projects are being presented as a single workpaper which
19 outlines the design efforts of each of the three projects and the construction management of all
20 three as one construction project.

21 **VI. CONTRACTOR SELECTION**

22 The majority of the valve projects utilized both mechanical and electrical contractors for
23 construction. Generally, the valve projects' mechanical work was included in the overall bid
24 process for Performance Partners activities within a certain region. Projects that had
25 construction start dates after the implementation of the Performance Partners were assigned to

1 the specific Performance Partner for mechanical contractor work.

2 The selection of electrical contractors for the valve project's controls, wiring,
3 communication and electrical construction activities was also required. SoCalGas and SDG&E
4 solicited competitive bids on rates from seven qualified electrical contractors for four geographic
5 regions, and selected three of these contractors to be the "Alliance" contractors for electrical
6 construction activities on valve projects. Alliance Contractors are assigned projects based on
7 workload and geographic considerations. Similar to the Performance Partner concept, the
8 implementation of Alliance Contractors allows the PSEP program to work with dedicated
9 construction crews assigned to PSEP valve projects for workflow management efficiencies.
10 Valve bundles in this application that utilized the Performance Partner/Alliance Contractor
11 model were Brea, Pixley, SGV Fern & Walnut, and Victoria bundles, which are described in
12 detail in the accompanying workpapers.

13 Prior to implementation of the Performance Partner contract, SoCalGas and SDG&E was
14 prepared to start construction on nine bundles and solicited bids from three qualified mechanical
15 and three qualified electrical contractors. SoCalGas and SDG&E conducted bid evaluations that
16 took into consideration, price, schedule, work experience and commercial factors to award the
17 nine bundles to one mechanical and one electrical contractor. The nine bundles that were
18 competitively bid were Bain St, Moreno - Large, Moreno - Small, Arrow & Haven, Whitewater,
19 Haskell, Santa Fe Springs, Prado, and Chino. These nine bundles are outlined in individual
20 workpapers for each bundle to detail the scope of work and description of costs associated with
21 the execution of these projects.

22 Another project that was initiated prior to Performance Partner implementation was a
23 complex project that included scope from a Transmission Line, Distribution Supply Line, and
24 Valve projects in the area of Palmdale. In order to achieve cost and schedule efficiencies, 235
25 West/44-654/235-335 Palmdale Valve projects were combined into a comprehensive bid

1 package, one for each the mechanical and electrical contractor. Five mechanical and five
2 electrical contractors competitively bid for these three projects, which were evaluated on price,
3 schedule, work experience and commercial factors. SoCalGas and SDG&E awarded one
4 mechanical contract and one electrical contract to perform all the work outlined for the three
5 projects. These three projects were managed as one large project and thus the workpaper for
6 these three projects was combined into one to provide a better overview of the project life cycle
7 for 235 West/44-654/235-335 Palmdale Valve Bundle.

8 **VII. CONCLUSION**

9 My testimony describes the valve projects and their costs presented for review in this
10 application. These costs were incurred to accomplish the Commission and SoCalGas and
11 SDG&E's safety enhancement objectives. Detail and supporting information documenting the
12 reasonableness of the costs incurred is contained in my workpapers. These workpapers serve to
13 demonstrate the prudent project execution and reasonableness of incurred costs. SoCalGas and
14 SDG&E request the Commission find that the valve projects were executed prudently, find the
15 associated costs reasonable, and approve rate recovery.

16 This concludes my prepared Direct Testimony.
17

1 **VIII. WITNESS QUALIFICATIONS**

2 My name is Hugo Mejia. I have been employed by Southern California Gas Company
3 since 1990. I have held various positions at SoCalGas in the Engineering, Environmental,
4 Transmission, Storage, and PSEP Organizations. These roles included working as the
5 Engineering Analysis Center Manager, Environmental Services Manager, Gas Transmission
6 Technical Services Manager, Senior Engineer in Storage Operations and PSEP Project and
7 Execution Manager.

8 I am currently employed as the Manager in Major Programs and Project Controls. My
9 principal responsibility is managing close out activities for all PSEP projects and Phase 2
10 Implementation.

11 I received a Bachelor’s Degree in Engineering from California State University,
12 Northridge and I am a Registered Mechanical Engineer in the State of California.

13
14 I have previously testified before the Commission.