Company: Southern California Gas Company (U 904 G)
Proceeding: 2024 General Rate Case – Track 3
Application: A.22-05-015
Exhibit: SCG-T3-PSEP-01

PREPARED DIRECT TESTIMONY OF

BILL G. KOSTELNIK

(PIPELINE SAFETY ENHANCEMENT PLAN)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

April 30, 2025

TABLE OF CONTENTS

APPENDICES

SUMMARY

PIPELINE SAFETY ENHANCEMENT PLAN Reasonableness Review Costs (in $000s)			
	O&M	**Capital**	**Total**
Non-Shared	45,243	453,860	499,103
Shared	-	-	-
Total	**45,243**	**453,860**	**499,103**

Summary of Requests

- Authorize associated revenue requirement of $132 million for SoCalGas's PSEP pipeline and valve enhancement projects completed from 2015-2020 and associated costs pertinent to the execution of the program. This revenue requirement has been calculated as net of the amounts already recovered in rates via the 50% interim rate recovery mechanism the Commission adopted in D.16-08-003.[1] This work complies with Cal. Pub. Util. Code §§ 957 and 958.
- Find reasonable the costs that form the basis of the requested revenue requirement: $426 million and $35 million respective capital expenditures and operations and maintenance (O&M) amounts presented for review comprising the execution of Phase 1A pipeline projects and valve enhancement projects; $25 million in expenditures for the purchase of Line 306; and $13 million in expenditures for other costs incurred to execute PSEP.

[1] D.16-08-003 at 15 (Ordering Paragraph (OP) 2).

PREPARED DIRECT TESTIMONY OF BILL KOSTELNIK (PIPELINE SAFETY ENHANCEMENT PLAN)

I. INTRODUCTION

A. Regulatory Background

In Decision (D.) 24-12-074, the California Public Utilities Commission (Commission) approved Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company's (SDG&E) 2024 General Rate Case. However, the Commission did not authorize the revenue requirement associated with SoCalGas's Pipeline Safety Enhancement Plan (PSEP) reasonableness review request presented in Application (A.) 22-05-015. In order to "more fully develop the record of this proceeding," the Commission directed SoCalGas to re-file for recovery under a separate track (Track 3), identifying specific supporting information that should be presented to aid in determining whether the costs were incurred reasonably.[2] The purpose of this supplemental testimony is to provide updated costs reflecting current amounts in associated balancing accounts, address the Commission's directive to provide additional detail, and provide the appropriate references to this and other testimonies that have been developed to support the revenue requirement request.

B. Affordability in D.24-12-074

SoCalGas understands the Commission's concerns with affordability, as shown throughout D.24-12-074.[3] My testimony will demonstrate that, in addition to providing the additional detail requested by the Commission to fully develop the record of this proceeding, the PSEP program meets the standard of "reasonable and justified investments" that the Commission considers in meeting its affordability-focused objectives. The below testimony reiterates SoCalGas's commitment to affordability through the PSEP program's longstanding practice of

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[2] D.24-12-074 at 231-233.

[3] *Id.* at 2 ("California ratepayers are facing an affordability crisis with record-high arrearages and utility bills. The decision carefully weighs ratepayer affordability with the critical task of maintaining safe and reliable electric and gas infrastructure and services."), *id.* at 40 ("…given the current rate levels, customer affordability is a critical factor to consider in this proceeding. The Commission will use the available policy, metrics, and records developed in this proceeding to evaluate each cost request through the lens of affordability, allowing only reasonable and justified investments and costs and disallowing those that provide minimal safety and reliability benefits.").

"maximizing the cost-effectiveness of safety investments" which has been one of the four primary objectives of PSEP since it was approved by the Commission in D.14-06-007. As stated in SoCalGas's original PSEP application: "Having been in the business of providing reliable natural gas service to our customers for over 100 years, we recognize the need to carefully invest in our system in a manner that complements previous investments in our system, avoids short-sighted or reactive actions that could result in unnecessary or duplicative expenditures, and enhances the long-term safety and reliability of our system."[4] Some of the specific steps SoCalGas has taken, expanded on in this testimony, include scope validation efforts, effective PSEP project sequencing, prudent procurement of materials, and use of the Performance Partnership Program to enhance contractor cost-effectiveness. Accordingly, SoCalGas and SDG&E developed the PSEP program in a manner that comports with the reasonable manager standard, exercises prudent program and project oversight, mitigates obstacles to maximize efficiencies and complete construction as soon as possible, and manages costs for the benefit of customers.

C. Updates to Testimony and Workpapers

Due to the amount of time that has passed since A.22-05-015 was filed (May 2022), certain costs have changed. They are updated herein to reflect the updated balances in associated regulatory accounts (for more information on the Safety Enhancement Expense Balancing Account (SEEBA) and Safety Enhancement Capital Cost Balancing Account (SECCBA) accounts in which PSEP costs are tracked, please refer to the testimony of Sakif Wasif, Exhibit (Ex.) SCG-T3-PSEP-02). The cost updates are relatively minor, amounting to approximately $319 thousand for PSEP projects and approximately $5 thousand for miscellaneous costs. The updates are primarily attributed to post-completion adjustments for projects previously presented in A.16-09-005 and A.18-11-010, post-completion adjustments for projects presented in A.22-05-015, and corrections to memorandum account costs and disallowances. These costs are partially offset by negative adjustments reflecting the transfer of descoped costs to base business and material reconciliation.

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[4] *See* R.11-02-019, Amended Testimony of SoCalGas and SDG&E in Support of Proposed Natural Gas Pipeline Safety Enhancement Plan at 3 (Introduction and Executive Summary, Witness Michael W. Allman) (December 2, 2011), *available at:* https://www.socalgas.com/regulatory/documents/r-11-02-019/Amended%20Testimony-12.2.11.pdf.

To respond to the Commission directives for providing additional information as specified in D.24-12-074, SoCalGas has revised the testimony and workpapers of Bill Kostelnik originally served with A.22-05-015 as Exhibits SCG-08 and SCG-08-WP-S Volumes II, III, and IV. Additionally, testimony supporting Revenue Requirement/AFUDC/Property Tax/Overheads (Sakif Wasif) has been developed to support the request. Additionally, since the rate impacts of PSEP cost recovery were included in the overall Rates testimony submitted in A.22-05-015, the testimony of Mike Foster contains the rate impacts of this request. Table BK-1 below presents the additional evidence needed, as identified in the Joint Case Management Statement of SoCalGas and SDG&E and participating intervenors, and where the associated evidence can be found in the exhibits that will be submitted in Track 3, in compliance with D.24-12-074:

Table BK-1
Additional Evidence Requested in D.24-12-074

Evidence to be Provided per Joint Case Management Statement	**Testimony/Workpaper Update**
Supporting documentation of Indirect Costs related to (1) "Overheads," (2) AFUDC (including the costs these rates applied to), (3) property taxes (including the property these rates applied to)	The testimony of Sakif Wasif addresses overheads and the calculation of AFUDC and property tax. The testimony also explains the rationale for the primary factors that drive actuals for these cost categories, as well as why actual AFUDC and/or property tax can vary from estimated amounts.

Evidence to be Provided per Joint Case Management Statement	Testimony/Workpaper Update
A breakdown of Direct Costs and estimates for: (1) Company Labor (including FTEs), (2) Materials, (3) Construction Contractor, (4) Construction Management & Support, (5) Environmental, Engineering & Design, (6) Project Management & Services, (7) Right of Way (ROW) & Permits, and (8) "GMA."	Full-time equivalents (FTEs) have been added to Section IV.C. of all project workpapers and the corresponding methodology has been described in my testimony in Section IV.B.1. below.[5] SoCalGas's project workpapers include a breakdown of the requested direct cost categories as well. SoCalGas has also added Section IV.D. – Cost Impacts to all project workpapers, which provides detailed information pertaining to notable variances for the specified direct cost categories.
An overall explanation of the variance between estimates and costs.	SoCalGas has added Section IV.D. – Cost Impacts to all project workpapers, which provides detailed information pertaining to notable variances for the specified direct cost categories. My testimony in Section IV.B.2. below addresses some examples of common drivers of cost variances.

D. Summary of Costs

This testimony presents for reasonableness review costs associated with completed PSEP projects and other miscellaneous costs primarily incurred from December 2015 to December 2020. The total capital and O&M costs presented for review are $453.860 million and $45.243 million, respectively. As discussed in detail in the testimony of Sakif Wasif, SoCalGas is requesting a revenue requirement amount of $132 million. This revenue requirement has been calculated as net of the amounts already recovered in rates via the 50% interim rate recovery mechanism the Commission adopted in D.16-08-003.[6] In other words, while SoCalGas seeks $453.860 million of capital expenditures and $45.243 million of O&M expenses to be found just and reasonable, SoCalGas is requesting to recover a revenue requirement of $132 million in rates.

[5] SoCalGas does not possess FTE data for construction contractors.

[6] D.16-08-003 at 15 (OP 2).

The PSEP program, mandated by the Commission in D.14-06-007, is governed by implementing four strategic objectives. These objectives have driven the execution of the PSEP program since its inception. They include (1) enhancing public safety, (2) complying with Commission directives, (3) minimizing customer impacts, and (4) maximizing the cost-effectiveness of safety investments. Hydrotesting and replacing pipelines and enhancing valve infrastructure, which comprise the costs presented for review here, comport with these objectives and support SoCalGas's mission to provide its customers with safe, reliable, and affordable energy. SoCalGas's efforts to maximize the cost-effectiveness of safety investments are particularly important in light of the Commission's focus on affordability in D.24-12-074. Section III: PSEP Framework below provides a detailed discussion of how the PSEP program achieves cost efficiencies consistent with the Commission's emphasis on affordability in D.24-12-074. The Commission should find the expenditures and associated revenue requirement for this Commission-mandated compliance work reasonable, as shown below and in the other testimony supporting this request. Table BK-2 summarizes my sponsored costs.

Table BK-2[7]
Summary of PSEP Reasonableness Review Project Costs
(in $000s)

Testimony Area	Capital	O&M	Total
PSEP Reasonableness Review Projects	426,303	35,146	461,448
Line 306 Purchase	25,040	-	25,040
Miscellaneous Costs	2,517	10,098	12,615
Total	**453,860**	**45,243**	**499,103**

Note: All PSEP Reasonableness Review costs are fully loaded, which includes overheads.

E. Support To and From Other Witnesses

This testimony also references the testimony and workpapers of several other witnesses, either in support of their testimony or as referential support for mine.

1. Ex. SCG-T3-PSEP-02 – Overheads/AFUDC/Property Tax/Revenue Requirement (Sakif Wasif)
2. Ex. SCG_SDG&E-T3-PSEP-03 – Rates (Mike Foster)

[7] Totals may not match due to rounding.

F. Organization of Testimony

This testimony is organized as follows:

- Introduction (Section I);
- PSEP Overview (Section II);
- PSEP Framework (Section III);
- PSEP Reasonableness Review Projects and Costs (Section IV);
- Conclusion (Section V);
- Witness Qualifications (Section VI).

II. PSEP OVERVIEW

The primary objectives of PSEP are to: (1) enhance public safety; (2) comply with Commission directives; (3) minimize customer impacts; and (4) maximize the cost-effectiveness of safety investments. As directed by the Commission, the SoCalGas and SDG&E (the "Companies") PSEP includes a risk-based prioritization methodology that prioritizes pipelines located in more populated areas ahead of pipelines located in less populated areas and further prioritizes pipelines operated at higher stress levels above those operated at lower stress levels. To implement this prioritization process, the PSEP is divided into two initial Phases, Phase 1 and Phase 2, with these two phases sub-divided into two parts, Phases 1A and 1B, and Phases 2A and 2B.[8] The scopes of these phases are described in greater detail in the following subsections.

A. Procedural History and Regulatory Framework

On September 9, 2010, a 30-inch diameter natural gas transmission pipeline ruptured and caught fire in the city of San Bruno, California. In response, the Commission promulgated new regulations in D.11-06-017 (later codified at Cal. Pub. Util. Code §§ 957 and 958), finding that "natural gas transmission pipelines in service in California must be brought into compliance with modern standards for safety" and ordering all California natural gas transmission pipeline

[8] In addition to these Phases, PSEP projects may also incorporate "incidental" mileage, which includes pipe segments that are not required to be addressed as part of PSEP but are included where it is determined that doing so improves cost and program efficiency, addresses implementation constraints, or facilitates continuity of testing. These segments may be included within the scope of PSEP projects to (1) minimize customer impacts, (2) respond to operational constraints, or (3) because of the cost and operational efficiencies gained by incorporating them into the project scope rather than circumventing them.

operators "to prepare and file a comprehensive Implementation Plan to replace or pressure test all natural gas transmission pipeline in California that has not been tested or for which reliable records are not available."[9] The Commission required that the plans provide for testing or replacing all such pipelines "as soon as practicable."[10] On August 26, 2011, SoCalGas and SDG&E filed their proposed PSEP. The PSEP included, amongst other things, a proposed Decision Tree to guide whether specific segments should be hydrotested, replaced, or abandoned, a proposed valve enhancement plan, a proposed technology plan, and preliminary cost forecasts.[11] In June 2014, the Commission issued D.14-06-007, which approved SoCalGas and SDG&E's proposed PSEP and "adopt[ed] the concepts embodied in the Decision Tree", "adopt[ed] the intended scope of work as summarized by the Decision Tree", and "adopt[ed] the Phase 1 analytical approach for Safety Enhancement…as embodied in the Decision Tree…and related descriptive testimony."[12] In the decision approving SoCalGas and SDG&E's proposed plan, the Commission acknowledged the broad scope of SoCalGas and SDG&E's PSEP, which also included modification and addition of valve infrastructure in order to isolate, limit the flow of gas to no more than 30 minutes, and thereby facilitate timely access of "first responders" into the area surrounding a substantial section of a ruptured pipe.[13]

The Commission adopted a process for reviewing and approving PSEP implementation costs after the fact.[14] To enable the after-the-fact review of PSEP costs, D.14-06-007 required SoCalGas and SDG&E to establish certain additional balancing accounts [the Safety

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[9] D.11-06-017 at 18.

[10] *Id*. at 19.

[11] On December 2, 2011, SoCalGas and SDG&E amended their PSEP to include supplemental testimony to address issues identified in R.11-02-019, *Amended Scoping Memo and Ruling of the Assigned Commissioner* (November 2, 2011).

[12] D.14-06-007 at 2, 22, 59 (OP 1).

[13] Beginning in February 2020, the Pipelines and Hazardous Materials Safety Administration (PHMSA) initiated the Valve Installation and Minimum Rupture Detection Standards rulemaking (Valve rule). Activities necessary to comply with the Valve Rule, which fully took effect in 2023, are forecasted in SoCalGas's Test Year 2024 General Rate Case. The Valve Rule will drive additional scope that is incremental to the existing PSEP Valve Enhancement Plan (VEP) as the Valve Rule requirements are applicable to a larger population of pipeline segments than the VEP.

[14] The Commission determined in D.14-06-007, however, that certain PSEP costs should be disallowed. *See* D.14-06-007 at 31-39 (Section 6: Ratemaking Principles to be Applied in Reasonableness Applications).

Enhancement Capital Cost Balancing Accounts (SECCBAs) and Safety Enhancement Expense Balancing Accounts (SEEBAs)] to record PSEP expenditures.[15] Additionally, to recover PSEP costs, SoCalGas and SDG&E were ordered to "file an application with testimony and work papers to demonstrate the reasonableness of the costs incurred which would justify rate recovery."[16] In December 2014, SoCalGas and SDG&E filed an application requesting the Commission find reasonable the costs incurred to implement PSEP projects, as well as the associated revenue requirement, recorded in the Pipeline Safety and Reliability Memorandum Accounts (PSRMAs) before June 12, 2014. The Commission found that SoCalGas and SDG&E's actions and expenses were reasonable and consistent with the reasonable manager standard, with one exception related to insurance coverage, and granted the application.[17]

The first of the two reasonableness review applications, A.16-09-005, was filed in September 2016, comprising 26 pipeline projects, 15 valve projects, and miscellaneous costs for SoCalGas, totaling $195 million. Excluding about $7 million in post-1955 disallowances[18] acknowledged in the filing, $188 million was reviewed by the Commission, of which $187 million was ultimately deemed reasonably incurred (>99%).[19] The second of SoCalGas and SDG&E's standalone reasonableness reviews was filed in November 2018 (A.18-11-010), comprising 44 pipeline projects and 39 bundled valve projects, and miscellaneous costs for SoCalGas totaling $941 million. The Commission's final decision in that proceeding deemed $935 million of $939 million in total costs reasonable (>99%, after accounting for acknowledged disallowances).[20] SoCalGas's forecast application A.17-03-021, which addressed forecasted costs associated with nine Phase 1B and three Phase 2A pipeline projects, was filed in March 2017. The Commission found that SoCalGas met the burden of proof regarding the forecasted

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[15] D.14-06-007 at 60 (OP 4).

[16] *Id*. at 39.

[17] *See* D.16-12-063, granting A.14-12-016. The decision declined to authorize recovery of costs for PSEP-specific insurance (without prejudice) after determining that SoCalGas and SDG&E did not make a sufficient factual showing in the Application to support the reasonableness of those costs. D.16-12-063 at 50.

[18] The Commission determined in D.14-06-007 and D.15-12-020 that certain PSEP costs should be disallowed, including costs of hydrotesting post-1955 vintage segments.

[19] D.19-02-004 at 104-108 (OP 1-47).

[20] D.20-08-034 at 31 (OP 4).

cost estimates for completing these projects and authorized recovery of the entirety of the $254.5 million forecast amount, subject to one-way balancing.[21] The Commission also approved SoCalGas's Phase 2A decision tree.[22]

B. Commission Directive to Transition PSEP into the GRC

In A.15-06-013 (Application of SoCalGas and SDG&E to Proceed with Phase 2 of their Pipeline Safety and Enhancement Plan and Establish Memorandum Accounts to Record Phase 2 Costs), the assigned Administrative Law Judge issued a ruling requesting the parties to meet and confer to develop a procedural plan focused on bringing PSEP work within the GRC regulatory process and to develop a comprehensive plan to address PSEP costs expected to be incurred prior to the next GRC test year. In resolving SoCalGas and SDG&E's application, D.16-08-003 provided for two additional standalone applications for after-the-fact review of the costs incurred to complete Phase 1A projects and one forecast application as described below. All Phase 1A projects completed after the filing of the two reasonableness reviews and remaining forecasted projects not included in the forecast application were to be submitted for approval in the Test Year 2019 (TY 2019) and subsequent GRCs.[23,24]

Pursuant to D.16-08-003, SoCalGas first integrated PSEP into a GRC with the filing of its TY 2019 GRC application (A.17-10-008) in October 2017.[25] A.17-10-008 included 22 SoCalGas Phase 2A and Phase 1B PSEP pipeline projects and 284 valve projects, as well as miscellaneous costs associated with the continuing prudent implementation of PSEP. The total costs presented for review (on a forecast basis) amounted to $901 million. The Commission's final decision (D.19-09-051) authorized the revenue requirement for all but three[26] of the 22

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[21] D.19-03-025 at 82-84 (OP 2-12).

[22] *Id.* at 82 (OP 1)

[23] D.16-08-003 at 16 (OP 5).

[24] The Test Year 2024 GRC is the first GRC to present PSEP Phase 1A projects for reasonableness review.

[25] SDG&E PSEP projects were not included in the 2019 GRC as no Phase 2A mileage exists within the scope of SDG&E's PSEP and the remaining Phase 1B mileage is associated with the Line 1600 Test and Replace Plan, which is being addressed outside of the GRC.

[26] Because of complications with the Line 235 West Sections 1 and 2 hydrotests, and Supply Line 44-1008 replacement, they were separately authorized to be tracked and recorded into a memorandum account for future review and cost recovery.

pipeline projects, the entirety of the submitted valve enhancement projects, and all of the requested miscellaneous costs. After accounting for the three projects (which were ordered to be tracked separately for later cost recovery), the amount authorized to be recovered in rates was $680 million out of $734 million. Separate treatment for PSEP in post-test years 2020 and 2021 was approved in D.19-09-051 because "PSEP capital-related costs [were] not fully reflected in the TY2019 revenue requirement."[27]

Subsequent to the 2019 GRC final decision, the Commission ordered in its Rate Case Plan Proceeding (D.20-01-002) that, in order to facilitate the transition to a four-year rate case cycle for all California investor-owned utilities, SoCalGas and SDG&E were to file a petition for modification (PFM) to revise their 2019 GRC decision to add two additional attrition years (resulting in a five-year GRC period (2019-2023)) and specifically addressing PSEP and other capital projects for 2022 and 2023. SoCalGas and SDG&E filed the PFM in April 2020. A Final Decision in the Rate Case Plan Proceeding was issued on May 6, 2021, approving a separate revenue requirement for PSEP capital additions in 2022 and 2023, based on fourth year projects presented in the 2019 GRC.

C. PSEP Scope

1. Phase 1A

Phase 1A encompasses pipelines located in Class 3 and 4 locations and Class 1 and 2 locations in high consequence areas (HCAs) that do not have sufficient documentation of a hydrotest to at least 1.25 times the MAOP.[28] As of February 28, 2025, SoCalGas has addressed approximately 98.1 miles (97%) of Phase 1A mileage.[29] Approximately 2.8 miles of Phase 1A mileage currently remain to be addressed for SoCalGas. In accordance with D.14-06-007, as amended by D.16-08-003, SoCalGas will request cost recovery for any future Phase 1A projects during the implementation of PSEP consistent with the previously established regulatory framework described above.

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[27] D.19-09-051 at 215-216.

[28] Class Locations as defined in 49 CFR § 192.5.

[29] Excludes incidental and accelerated mileage.

2. Phase 1B

The scope of Phase 1B, as outlined in SoCalGas's PSEP, is to replace non-piggable pipelines installed prior to 1946 with new pipe constructed using state-of-the-art methods and up to modern standards, including current hydrotest standards.[30] The Commission ordered this work to direct California pipeline operators to "address retrofitting pipeline to allow for in-line inspection tools" in D.11-06-017. "Non-piggable" pipelines cannot accommodate in-line inspection tools that assess pipeline integrity. Pre-1946 pipelines were built using non-state-of-the-art construction methods and materials (*i.e.*, pipe manufacturers used various non-state-of-the-art manufacturing processes), were not designed to accommodate a post-construction hydro test, and have an increased risk of developing leaks on girth welds. As of February 28, 2025, SoCalGas has addressed approximately 79.1 miles of Phase 1B mileage.[31] Approximately 114.4 miles of Phase 1B mileage remain to be addressed for SoCalGas.

3. Phase 2A

Whereas Phases 1A and 1B address pipelines located in more populated areas and pre-1946 non-piggable pipe, Phase 2A addresses the remaining transmission pipelines that do not have sufficient documentation of a hydrotest to at least 1.25 MAOP and are located in Class 1 and 2 non-high consequence areas. As of February 28, 2025, SoCalGas has addressed approximately 326.1 miles of Phase 2A mileage.[32] Approximately 348.3 miles of Phase 2A mileage remain to be addressed for SoCalGas, primarily consisting of large hydrotest projects located in the desert regions of our Service Territory. Consistent with the risk prioritization framework originally presented in R.11-02-019, this transition reflects the progression of the PSEP program from more populated to less populated areas.

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[30] The scope of Phase 1B in the SoCalGas and SDG&E's Amended PSEP (R.11-02-019) also included those pipeline segments that otherwise would be addressed in Phase 1A but cannot be addressed in the near term due to the need to construct new infrastructure to maintain service during hydrotesting. Phase 2 of the Pipeline Safety and Reliability Project, also known as Line 1600 (A.15-09-013), addresses this aspect of Phase 1B, as defined in the Amended PSEP.

[31] Excludes incidental and accelerated mileage.

[32] Excludes incidental and accelerated mileage.

4. Phase 2B

Phase 2B pipelines have documentation of a hydrotest that predates the adoption of federal hydrotesting regulations—Part 192, Subpart J of Title 49 of the Code of Federal Regulations (CFR)—on November 12, 1970. In the 2019 GRC application, SoCalGas sought clarification on State policy regarding whether Phase 2B is within the scope of PSEP. In its final decision, the Commission determined that its original order, as laid out in D.11-06-017, which required the California utilities to develop implementation plans to provide for the hydrotesting of "all in-service natural gas transmission pipeline … in accordance with 49 CFR 192.619" was inclusive of SoCalGas's proposed Phase 2B and ordered the development of a Phase 2B implementation plan with specific directives to be included.[33]

As Amy Kitson and Travis Sera discussed in the Gas Integrity Management Programs testimony (Ex. SCG-09) presented in A.22-05-015, PHMSA published the Safety of Gas Transmission Pipelines: Maximum Allowable Operating Pressure Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments final rule – also referred to as the Gas Transmission Safety Rule (GTSR) Part 1 – in the federal register on October 1, 2019. The final rule became effective on July 1, 2020, with some compliance obligations taking effect on July 1, 2021. Amongst other safety requirements for gas transmission pipeline operators, this rule requires operators to reconfirm the Maximum Allowable Operating Pressure (MAOP) of transmission pipelines in accordance with 49 CFR §192.624.

Given SoCalGas's obligations to comply with the Commission's order regarding PSEP Phase 2B pursuant to D.19-09-051 and the recent promulgation of the GTSR Part 1, SoCalGas is merging these efforts into an overarching Integrated Safety Enhancement Plan (ISEP). The ISEP includes, amongst other things, a proposal to address the six directives of the Phase 2B implementation plan ordered in D.19-09-051.

PSEP continues to address Phase 1A, 1B and 2A mileage which the Commission has previously approved in prior proceedings. Given SoCalGas's integrated plan to implement Phase 2B and GTSR Part 1, SoCalGas believes that defining PSEP to those phases previously approved by the Commission is reasonable.

[33] D.19-09-051 at 221-222.

5. Valve Enhancement Plan

In D.11-06-017, the Commission also directed pipeline operators to address the installation of "automated or remote controlled shut off valves" in their proposed implementation plans.[34] In response to this directive, SoCalGas submitted a Valve Enhancement Plan (VEP) as part of their PSEP in R.11-02-019. The VEP works in concert with PSEP's pipeline testing and replacement plan to enhance system safety by augmenting existing valve infrastructure to accelerate SoCalGas's ability to identify, isolate, and contain escaping gas in the event of a pipeline rupture.

As discussed above, SoCalGas submitted valve enhancement projects for review in its 2016 Reasonableness Review, 2018 Reasonableness Review, and TY 2019 GRC applications. Track 3 of this proceeding includes workpapers associated with 66 bundled valve projects comprising 116 valves for SoCalGas. As of December 31, 2024, SoCalGas has completed 413 out of 456 total valves scoped as part of the VEP.

D. Accelerated and Incidental Mileage

As discussed in Section II.A. above, the Commission directed the utilities to develop plans that "provide for testing or replacing all [segments of natural gas pipelines which were not pressure tested or lack sufficient details related to performance of any such test] as soon as practicable," while also "[o]btaining the greatest amount of safety value, i.e., reducing safety risk, for ratepayer expenditures." Including accelerated and incidental miles, defined below, is driven by efforts to achieve these goals while also adhering to the objective of minimizing customer impacts.

Accelerated miles are miles that would otherwise be addressed in a later phase of PSEP under the approved prioritization process but are advanced to Phase 1A to realize operating and cost efficiencies. The inclusion of accelerated miles in Phase 1A projects avoids costs by eliminating the need for separate construction mobilization, execution, and project management efforts that would otherwise be needed to complete a project later on. This optimizes the cost-effectiveness of PSEP in keeping with the Commission's affordability emphasis in D.24-12-074.

[34] D.11-06-017 at 21, 30 (Conclusion of Law (COL) 9), and 32 (OP 8).

Incidental miles are pipeline miles that do not fall within the scope of the Commission's directives in D.11-06-017 or Cal. Pub. Util. Code § 958 but are addressed as part of a PSEP project where their inclusion is determined to improve cost and program efficiency, address constructability, or facilitate continuity of testing. Both incidental and accelerated miles are included to minimize customer impacts in response to operational constraints or because of the cost and operational efficiencies gained by incorporating them into the project scope rather than circumventing them.

III. PSEP FRAMEWORK

This testimony section describes the prudent oversight, project execution, and proactive cost management measures SoCalGas took in the continuing implementation of SoCalGas's PSEP. I will first describe the Reasonable Manager Standard, which serves as a foundational basis for the actions taken by SoCalGas and the PSEP organization in its implementation of the program. Then, I will describe how:

- the PSEP organizational framework promotes prudent program and project oversight;
- the prudent execution of PSEP projects mitigates obstacles to maximize efficiencies and complete construction as soon as practicable; and
- SoCalGas considers the Commission's affordability goals as it prudently manages PSEP costs to benefit customers.

A. Reasonable Manager Standard

To comply with the Commission's directive in D.24-12-074, SoCalGas intends to demonstrate that the PSEP costs presented for review were incurred reasonably, through the application of the "reasonable manager standard." The reasonable manager standard was initially articulated in D.90-09-088, which set the basic standards of reasonableness review: "The act of the utility should comport with what a reasonable manager of sufficient education, training, experience and skills using the tools and knowledge at his disposal would do when faced with a need to make a decision and act. The action taken should logically be expected, at the time the decision is made, to accomplish the desired result at the lowest reasonable cost consistent with good utility practices."[35] Similarly, in D.05-01-054, the Commission recognized

[35] D.90-09-088 at 171 (Finding of Fact (FOF) 14).

that "[t]here's a range of outcomes that defines reasonableness, and it's based on what the manager knew or should have known **at the time that the decision was made**."[36]

SoCalGas has implemented PSEP according to the reasonable manager standard since its inception which the Commission has recognized in its findings that over 99% of the costs presented for recovery in prior PSEP Reasonableness Reviews have been deemed reasonable. Nevertheless, SoCalGas continues to look for ways to improve the cost effectiveness of PSEP in support of the Commission's affordability objectives. In D.14-06-007, which originally adopted the proposed PSEP analytical approach/decision tree and established balancing accounts to record costs for Phase 1 projects, the Commission further commented on the standard of review that would be undertaken consistent with its earlier rulings on the reasonable manager standard: "When SDG&E and SoCalGas file applications to demonstrate the reasonableness of Safety Enhancement they will bear the burden of proof that the companies used industry best practices and that their actions were prudent. This is not a 'perfection' standard: it is a standard of care that demonstrates all actions were well planned, properly supervised and all necessary records are retained."[37] D.14-06-007 builds upon a similar statement in D.90-09-088 where the Commission found that "the reasonable and prudent act is not limited to the optimum act, but includes a spectrum of possible acts consistent with the utility system need, the interest of the ratepayers, and the requirements of governmental agencies of competent jurisdiction."[38]

The Commission's use of the terms "perfection standard" and "optimum act" is important to consider in light of the uniqueness and complexity of the PSEP projects included in Track 3, which were subject to various outcomes during their respective project life cycles that influenced costs. In each situation, SoCalGas properly exercised its engineering and execution experience to achieve the most reasonable, cost-effective outcomes for ratepayers.

B. The PSEP Organizational Framework Promotes Prudent Program and Project Oversight

The following sections describe the processes employed by SoCalGas to optimize the cost-effectiveness of PSEP in keeping with the Commission's affordability emphasis in D.24-12-074. The scope of work scheduled to be completed under PSEP is extensive in terms of the

[36] D.05-01-054 at 14 (emphasis added).

[37] D.14-06-007 at 36.

[38] D.90-09-088 at 171 (FOF 14).

volume of projects, engineering and design complexity, and the time necessary to complete each project. When PSEP was initiated, an organization was created within SoCalGas to provide prudent oversight to manage this large and complex volume of work safely and cost-effectively, incorporate continuous improvement, and manage a large pool of both company and contracted employees.[39] This organization oversees PSEP project execution, provides project and process controls during the project life cycle, allows SoCalGas to assess each project's budget and schedule, and communicates PSEP progress to stakeholders.

The following is an overview of the primary ways SoCalGas promotes prudent program and project oversight in executing PSEP.

1. The Implementation of PSEP Is Subject to Prudent Governance by a Dedicated Program Management Office and Project Portfolio Teams

PSEP is a large and complex program that requires appropriate governance and management to achieve its goal of cost-effectively enhancing safety. The PSEP governance and management strategy is to comply with applicable regulatory requirements, continuously improve the program, and establish proper controls and management across PSEP functional areas to verify that each component of a PSEP project, including design, material procurement, construction, and closeout is performed correctly and consistently.

The PMO develops standards and procedures for PSEP that allow PSEP to be executed consistently across projects. Through the management and facilitation of the stage gate process, the PMO promotes adherence to applicable standards and procedures. It provides prudent oversight so that PSEP projects are consistently executed, and procedural discrepancies are documented. The Project Portfolio Teams (1) collaborate, coordinate, and provide functional guidance on project design and construction to cost-effectively meet or exceed compliance requirements, (2) follow, as appropriate, industry best practices, and (3) identify and incorporate process improvements.

2. The Stage Gate Review Process Promotes Efficient PSEP Project Oversight and Execution

The Stage Gate Review Process sequences and schedules PSEP project workflow deliverables at the project level. The workflow deliverables are detailed by stage in a PSEP

[39] In 2019, a Construction organization was created and has now absorbed all of the PSEP elements described in this section.

Work Process Map.[40] The Stage Gate Review Process consists of seven stages,[41] with specific objectives for each stage and an evaluation at the end of each stage by Construction leadership to verify that objectives have been met before proceeding to the next stage.[42] The following is a brief description of each of the seven stages.

- Stage 1 (Project Initiation): The project team initiates a Work Order Authorization (WOA) to track initial costs and validate the initial scope.
- Stage 2 (Test or Replace Analysis): SoCalGas analyzes data to determine whether a pipeline should be addressed through testing or replacement.
- Stage 3 (Begin Detailed Planning): The project execution plan is finalized, baseline schedules and funding estimates are developed, and project funding is obtained.
- Stage 4 (Detailed Design/Procurement): The project team finalizes design and construction documents, secures necessary permits, and completes procurement activities.
- Stage 5 (Construction): The project team monitors scope, cost, and schedule and construction contractors are mobilized.
- Stage 6 (Place into Service): Commissioning and operating activities are performed to achieve completion certification for the project.
- Stage 7 (Closeout): The project team finalized project closeout activities.

[40] The Work Process Map details the deliverables by stage and has been formally updated 13 times since the inception of PSEP.

[41] The seven-stage Stage Gate Review Process was implemented by the PSEP organization beginning in the First Quarter of 2013. It has since been reduced to five stages that still encompass all the deliverables of the seven stages, by combining Stages 1 and 2 and Stages 6 and 7. Most of the projects in this section were completed following the seven-stage Stage Gate Review Process with the exception of 13 projects which followed the five-stage Stage Gate Review Process.

[42] Evaluations are gate reviews or completion check lists. Certain stages are condensed or combined for valve and small pipeline projects.

3. Test Versus Replace Analysis Supports Prudent Selection of the Execution Option that Will Provide the Most Benefit to Customers

In Stage 2 of the State Gate Review Process, SoCalGas applies the Decision Tree and concepts approved by the Commission in D.14-06-007 to conduct a Test or Replace Analysis.[43] In undertaking this analysis, SoCalGas applies engineering judgment to determine a final execution scope to provide both short- and long-term customer benefits. To supplement its Decision Tree methodology and as a part of its scope validation efforts, SoCalGas evaluates alternatives to replacements through the deration or abandonment of lines containing PSEP mileage. Decisions to abandon or operate a line at a reduced pressure are only made after a thorough review to (1) check the ability of adjoining lines to meet current and future load requirements and (2) verify that there will be no customer impact or system constraints. Deration and abandonment projects are executed at less cost than replacements as they do not require as much capital investment to implement the project scope. As of February 28, 2025, SoCalGas has derated 47.1 miles and abandoned 65.5 miles of pipe across PSEP Phases 1A, 2A, and 1B.

In addition to evaluating options for testing or replacing the required segments, the project teams also review for potential accelerated or incidental mileage that can be included within the scope. Including this mileage supports affordability and other objectives by avoiding future costs and operational impacts that would otherwise be incurred if SoCalGas is required to return later to undertake a separate project on the same line. The analysis includes an evaluation of potential customer impacts and a preliminary assessment of the costs to provide alternate means of service during the time that each section would be out of service for construction. SoCalGas applies sound engineering judgment to weigh many factors, in addition to identifying a least-cost option, when determining the final scope of a project.

4. The PSEP Project Review Process Prudently Includes Collaboration with Relevant Stakeholders

To minimize impacts to customers and communities, it is important to assess how various PSEP project options and approaches may impact SoCalGas's transmission system and the customers and communities served. An integral part of the analysis that results in prudent

[43] Similarly, a detailed process is used to determine the scope of work of projects under the Valve Enhancement Plan.

decision-making is the collaboration by PSEP project teams with other knowledgeable groups within SoCalGas (*e.g.*, Region Operations, Gas Engineering, Gas Transmission Planning, Gas Control, Commercial Industrial Services, Regional Public Affairs, etc.) to route, design, and schedule pipeline and valve work to minimize costs and accommodate capacity impacts or restrictions. For example, these groups provide information to guide project-specific decisions, including (1) the feasibility of shut-ins and alternate feeds to regulator stations or customers, (2) customer and community impacts, (3) planned projects to coordinate with PSEP, and (4) environmental requirements, rights-of-way, and permitting needs. This information is used to help determine the scope and constructability of the project.

5. PSEP Projects Are Integrated with Other Company Projects to Achieve Cost and Resource Efficiencies and/or Minimize Customer and Community Impacts

Consistent with the Commission's affordability emphasis in D.24-12-074 and the overarching objectives of PSEP to maximize the cost-effectiveness of safety investments and to minimize customer and community impacts, SoCalGas coordinates the execution of PSEP projects with other projects planned throughout their service territories. For example, if an Operating District has plans to do work on the same or an adjacent pipeline, SoCalGas coordinates, as feasible, the PSEP project team's scope and schedule with the Operating District's scope and schedule to maximize cost and resource efficiencies. This coordination reduces the need for separate construction mobilization, execution, and project management efforts, reducing costs and minimizing customer and community impacts for PSEP and across SoCalGas's operating departments.

As mentioned above, a PSEP project may standardize the pipe diameter of a project to facilitate piggability, which may result in an upsizing or downsizing of the pipe diameter. Under such circumstances, where the standardization is to facilitate constructability of a PSEP project and/or the piggability of the pipeline, such costs are allocated to the PSEP project. On occasion, SoCalGas identifies circumstances where it would benefit customers to upsize or downsize the pipe diameter to address system capacity requirements or future planned construction projects as part of the PSEP project. Under such circumstances, SoCalGas will modify the project design to address the system capacity requirement or future planned construction projects to achieve efficiencies. To reduce overall costs for customers, the PSEP organization plans and executes

the project, and the Operating District funds the portion of the costs attributable to the upgraded materials and additional effort required for the upgrade.

6. PSEP Projects Are Designed and Constructed in Adherence to SoCalGas's Gas Standards to Achieve Compliance with State and Federal Laws and Regulations, Promote Safety, and Attain Operational Efficiency

PSEP adheres to SoCalGas Gas Standards and applicable laws and regulations to prudently implement compliant safety enhancement work. SoCalGas Gas Standards comprise the policies and procedures governing the transmission and distribution systems' design, construction, operation, and maintenance. Thus, in executing each project, the Gas Standards and other internal standards and practices govern the design analysis, materials purchased, and construction practices. The Gas Standards have dual objectives: to drive compliance with applicable laws and regulations and to promote safety and operational efficiency.

In addition to SoCalGas's own internal oversight efforts, the Commission's Safety Enforcement Division (SED) has closely collaborated with SoCalGas in the successful execution of PSEP projects. As ordered by D.14-06-007,[44] SED provides oversight on various aspects of PSEP implementation, with emphasis on construction activities and recordkeeping. SED personnel routinely are onsite at PSEP construction projects and monitor compliance with applicable regulations.

7. PSEP Aligns with California's climate and decarbonization goals and considers environmental and social justice (ESJ) issues when implementing projects

SoCalGas's sustainability objectives align with the State of California's climate and decarbonization goals. One of the many sustainability areas of focus for SoCalGas is the reduction of fugitive emissions. Through the pressure-testing of existing pipes, and the installation of new, state-of-the-art pipelines, the PSEP program contributes to this goal by enhancing the ability to reduce fugitive emissions associated with the day-to-day operation of these pipelines. The PSEP program helps mitigate the risk of an in-service pipeline rupture and associated emissions that would result from such an event. The PSEP program also installs

[44] D.14-06-007 at 29 ("Specific to SDG&E and SoCalGas's Safety Enhancement we delegate to Safety Div. the specific authority to directly observe and inspect the testing, maintenance and construction, and all other technical aspects of Safety Enhancement to ensure public safety both during the immediate maintenance or construction activity and to ensure that the pipeline system and related equipment will be able to operate safely and efficiently for their service lives.")

remote shut-off valves (RSVs), which detect drops in gas pressure (an indication of a leak or rupture) and remotely isolate that section of the pipeline, avoid leakage or release of fugitive emissions into the atmosphere and help contribute to ongoing emissions reduction efforts while also enhancing the safety of the system. PSEP has also contributed emissions reductions through gas capture technology, which has been employed extensively in recent years to reduce the burden of vented gas. Through this effort, PSEP has reduced emissions by as much as 160 million cubic feet of gas.[45] Additionally, SoCalGas plans to phase out the practice of venting gas during planned transmission pipeline work (excluding emergency repairs) by 2030. These efforts to reduce emissions comport with the Commission's ESJ Action Plan (Action Plan)[46] which includes improvements to local air quality.[47]

PSEP's construction activities also comport with the Commission's Action Plan in other ways. The Commission created the ESJ Action Plan to serve as a commitment to furthering ESJ principles and to provide an operating framework with which to integrate ESJ considerations throughout the Commission's work.[48] While SoCalGas supports the nine overarching goals included in the Action Plan, it is important to note that not all of these goals directly apply to investor-owned utility operations, programming or projects as the Action Plan goals were developed with the Commission's operating framework in mind. PSEP aligns with Action Plan Goal 5, "*Enhance Outreach and Public Participation Opportunities for ESJ Communities to Meaningfully Participate in the CPUC's Decision-Making Process and Benefit from CPUC Programs*." One of the key objectives under Goal 5 is to enhance engagement and address the needs of ESJ communities, which are foundational to the PSEP framework.[49] As stated below, PSEP's capital outreach team performs community engagement activities to promote awareness of current and upcoming PSEP construction activities. This outreach serves to better inform

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[45] As a point of reference, this amounts to more than half of SoCalGas's company-wide reductions through gas capture in 2020. SoCalGas's SB1371 compliance reports are available at: https://www.socalgas.com/regulatory/R1501008.

[46] CPUC, *Environmental & Social Justice Action Plan – Version 2.0* (April 7, 2022), *available at:* https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf.

[47] *Id.* at 23 (Goal number two, "Increase Investment in Clean Energy Resources to Benefit ESJ Communities, Especially to Improve Local Air Quality and Public Health").

[48] *Id.* at 2.

[49] See additional discussion in Section III.C.4.

members of the communities in which PSEP projects take place and educate them about the safety and reliability enhancements that will come to their community.

More broadly, the Action Plan's definition of an ESJ community highlights "disparate implementation of environmental regulations and socioeconomic investments in their communities." PSEP equitably manages impacts to the environment in the communities it serves by appropriately accounting for environmental concerns as an integral part of its project implementation efforts across all project locations—regardless of whether it is in an ESJ Community or not. SoCalGas has a dedicated environmental services team and environmental contractors that constitute a key stakeholder group within the PSEP framework. The environmental team is engaged throughout the project lifecycle to review proposed project activities and locations to determine potential impacts on environmental resources, monitor and implement appropriate mitigation measures during construction, and coordinate post-construction restoration to minimize or avoid PSEP's environmental footprint and align with permit authorizations received from environmental agencies. This environmental review process is a key element of SoCalGas's Stage Gate methodology, which requires that the same actions are taken to address environmental impacts on every PSEP project regardless of service territory location. The consistency SoCalGas achieves in the application of this approach is a central tenet of the PSEP framework that promotes equal consideration of environmental impacts across all communities. This approach prevents PSEP from leading to more disparate implementation of environmental regulations and socioeconomic investments, thereby furthering the Action Plan.

C. Prudent Execution of PSEP Projects Mitigates Obstacles to Maximize Efficiencies and Complete Construction as Soon as Practicable

Pipeline and valve projects are complex and require thoughtful orchestration. Despite the many actions SoCalGas takes and the preparations made during the planning stages of a project, SoCalGas's execution and management teams must balance competing risks when authorizing a project team to mobilize for construction. Some of the factors that determine when SoCalGas can begin construction are not in the direct control of SoCalGas and therefore must be appropriately accounted for to manage cost and schedule impacts.

For example, restrictions on when construction can begin must be determined and adhered to. Cities may have moratoriums during heavy traffic periods or their own renovation work; environmental restrictions may be imposed to prevent adverse impacts on protected wildlife species during the breeding season; PSEP may need to work in concert with a large

customer's planned outage or low usage period; Gas Control may have restrictions on when the pipeline can be taken out of service; or, the system may have seasonal pressure requirements. Permits, land rights, and materials must be acquired. Availability of construction contractors, inspectors, specialty equipment, construction oversight personnel, and regional operations personnel must be considered. As a result, it is not uncommon for project teams to be engaged in last-minute efforts to acquire a permit or land rights or materials, to reschedule the construction start date due to the planned construction crew being delayed from completing another project, or to sectionalize a project so that a portion of the work can be initiated.

Other factors can influence construction timing and scheduling, such as seasonal limitations during winter or summer conditions that may restrict when a line can be taken out of service. Also, although customer and capacity impacts are vetted during Stage Three (Detailed Planning) of the Seven Stage Review Process described above, unanticipated system or customer issues may be encountered that could delay a project. For example, if a project as planned requires a pipeline segment to be taken out of service for a period of time, and a different pipeline previously assumed to be available to serve customers is taken out of service, a project may be delayed, or a previously unplanned provision of an alternate supply (CNG/LNG) to serve customers may be required before proceeding. Alternatively, when most but not all obstacles have been addressed, the project team may decide to sectionalize the project and delay construction for only a portion of the project in order to execute the majority of the project as soon as practicable.

The following are examples of some common obstacles encountered when executing PSEP projects and proactive mitigation measures taken.

1. Permitting and Temporary Land Right Acquisition

With respect to utility construction projects, and more specifically, pipeline projects, there is a significant difference between projects that are completely or mostly performed on private land ("behind the fence") and those that are "linear projects," *i.e.*, located in public rights-of-way. In the latter, since SoCalGas does not own the land, various permits and rights must be obtained for construction to occur. PSEP pipeline and valve projects are primarily linear projects located in franchised rights-of-way (*i.e.*, streets) but are also located on private and federal land. These varying locations result in the need to acquire numerous permits and conduct negotiations with private landowners.

Further, while some projects, such as those located within existing SoCalGas facilities, do not require extensive permitting, others, depending on the location, may require multiple additional permits ranging from those required by environmental agencies (*e.g.*, water, wildlife, cultural, etc.) to those required by agencies with impacted land rights, such as Caltrans. These permits/agreements have long lead times and can restrict projects to certain schedules. At a minimum, PSEP projects require a permit from the municipal agency where the replacement or hydrotest is being executed before a project can commence construction. Although SoCalGas factors in anticipated permit processing time based on their experience in the project planning process, unanticipated delays beyond the length of time anticipated to acquire a permit can and do occur. Further, projects located on private land require permission from the owner and temporary acquisition of land rights for construction to proceed.

2. Material Availability

Given the unprecedented level of pipeline work, not only at SoCalGas but at other California utilities, material availability has been an issue that has impacted cost and schedule. SoCalGas has purchased, when appropriate, bulk quantities of commonly used pipe fittings and pipe to have adequate material available for projects. Bulk purchases result in better pricing as opposed to purchasing material on a project-specific basis. However, certain materials are not purchased "off the shelf" and must be made-to-order or modified to fit conditions. Examples are valves with extensions, vaults to house equipment underground, and instrument cabinets. Manufacturing delays occur due to capacity limitations caused by increased demand for pipeline material at a regional and national level. Most items require inspection to determine whether ordered materials meet company specifications. When items do not meet specifications, they need to be modified, or new items need to be acquired. This may result in extra time that may delay the start of construction.

3. Unforeseen Factors Encountered During Construction

Despite due diligence in the planning and engineering design phase, unforeseen factors encountered during construction may increase the complexity of projects and cause projects to take longer than planned. Some unknown conditions can only be identified after construction begins and the pipe is exposed, such as actual pipe condition, unknown substructures, or unfavorable soil conditions. This is particularly true for older developed areas, such as the dense urban locations of many PSEP Phase 1 pipelines, because requirements for substructure recordation were not as stringent historically as they are today. Additionally, governmental records (originally in paper form) may have been lost over the years. Coordination with other utilities can sometimes delay project schedules. Unidentified substructures usually require pipeline routing changes. Unanticipated soil changes (*i.e.*, loose sandy soil rather than more cohesive soil or excessively rocky subsurface conditions that inhibit boring efforts) may require a change in excavation or shoring methods. SoCalGas conducts potholing and geologic investigations to ascertain the subsurface conditions of a project site, but despite reasonable efforts to locate them, they may not be discovered until major groundwork is initiated during the construction effort. In some cases, these types of challenges may even require demobilization from the project site to redesign certain project elements.

4. Proactive Community Outreach Efforts to Minimize Community and Customer Impacts

Phase 1A projects are located in more densely populated areas. As such, proactive community outreach efforts—to inform customers, elected officials, and government entities about PSEP projects taking place in their communities—are an integral part of SoCalGas's prudent execution of PSEP to minimize community and customer impacts, manage costs, and implement PSEP as soon as practicable. The Community Outreach team works closely with external stakeholders early in the planning stages to identify and help remove potential obstacles and roadblocks that could affect PSEP project execution and maintain a positive customer experience by mitigating the effects of construction with targeted communications and efforts to fully inform external stakeholders prior to PSEP construction activity. Numerous meetings have been held with elected officials and municipal agencies to provide advance notice and ongoing updates regarding PSEP projects. Additionally, SoCalGas established a PSEP webpage, which provides information about construction activities and project status to give customers and stakeholders easier access to information.

These various outreach efforts were instrumental in avoiding project delays and, in some instances, resulted in less onerous permitting conditions imposed on PSEP projects, which helped minimize costs and benefited customers.

D. SoCalGas Prudently Manages PSEP Costs for the Benefit of Customers

As previously explained, the scope of PSEP, as authorized in D.14-06-007 and D.16-08-003, is extensive, complex, and costly. The PSEP project teams look for ways to promote affordability by avoiding costs and exercising diligence through (1) scope validation efforts; (2) sequencing PSEP projects to maximize efficiency and productivity; (3) prudent procurement of materials to achieve reasonable market-based costs for customers; and (4) use of the Performance Partnership Program to further enhance construction contractor cost-effectiveness. SoCalGas has put in place controls and measures to manage costs and maximize customer value and execute projects cost effectively. This has been achieved through scope validation, competitive procurement efforts, coordination with internal and external groups, and other cost-avoidance actions.

1. Scope Validation Efforts Have Identified Cost Avoidance Opportunities

A key first step in project execution is the scope validation efforts conducted in Stage 1 (Project Initiation). SoCalGas does not proceed with PSEP projects without first performing due diligence to verify the project scope through diligent scope validation activities. From the initial phase of a PSEP project, the PSEP management team identifies the potential for cost avoidance when studying the proposed project. To do this, the project team reviews data from the initial PSEP application and internal databases to validate project mileage. Through this scope validation step, mileage reduction may be accomplished through the critical assessment of records, reduction in MAOP, or abandonment of lines that were no longer required from an overall gas operating system perspective.[50] To date, SoCalGas and SDG&E have utilized these methods to descope approximately 254 Phase 1A miles from the PSEP program, effectuating significant cost savings for customers.

[50] Lines are only abandoned after a thorough review of the ability of adjoining lines to meet current and future load requirements and to verify there will be no customer impact or system constraints.

2. Sequencing PSEP Projects to Maximize Efficiency and Productivity

SoCalGas strategically schedules construction projects to keep company and contractor workforces fully productive, thereby maximizing the cost-effectiveness of the PSEP workforce. Construction start dates are tentatively slated months in advance to maintain a steady flow of work to the construction teams. The various functional groups that support execution of a project are consulted prior to these dates being proposed. The expected construction completion dates of projects are monitored closely so that new projects can start soon afterward.

3. Through Prudent Procurement, SoCalGas Achieves Reasonable and Market-Based Costs for the Benefit of Customers

SoCalGas continues to minimize PSEP project execution costs through cost-avoidance efforts that focus on efficiencies identified in the engineering and design process through efficient procurement practices, coordination and scheduling effectiveness, and construction execution. To promote the reasonableness of these costs, PSEP relies heavily on proven supply management techniques and strategies to acquire materials and services. SoCalGas uses established selection processes, creates incentives for contractors, and imposes cost controls to provide safety enhancement to customers at reasonable and market-based costs. PSEP maintains guidelines for preparing, soliciting, evaluating, awarding, and administering contracts and subcontracts that supply PSEP with qualified and best-value contractors, subcontractors, and vendors.

SoCalGas's sourcing objective is to utilize competition to achieve market-based rates. As such, the majority of PSEP agreements entered for materials and services have been either competitively bid or were set at market-based rates stemming from previous competitive solicitations. In other words, in addition to individual bidding events, SoCalGas executes PSEP agreements as appropriate by leveraging terms and conditions and rates from existing agreements. This avoids administrative costs, uses previously negotiated rates, and furthers the goal of completing the work as soon as practicable.

Where possible, SoCalGas acquires materials for PSEP projects by aggregating material needs from multiple projects and making periodic buys for larger quantities of materials. These efforts better enable SoCalGas to obtain favorable pricing. Project-specific buys are also done to account for specific design parameters. Generally, project-specific buys are executed at each major design phase to address time constraints and reduce costs. For example, long-lead-time items are identified early for sourcing. As appropriate, items may be transferred between

projects to reduce last-minute buys and shipping costs. Regardless of the type of order, material bids are designed to obtain multiple quotes for the best pricing options, promote work with select firms for process efficiency, and encourage the development of local resources and sourcing.

4. The Performance Partnership Program Further Enhances Construction Contractor Cost-Effectiveness

The Performance Partnership Program allows PSEP Construction contractors to enter into competitive bidding for batches of projects as opposed to one at a time. A Performance Partner is a qualified alliance contractor that is willing to partner with SoCalGas by using their unique experience and expertise to seek more efficient ways of executing projects and share in the cost savings. This provides numerous benefits for customers, such as providing competitive market prices, avoiding administrative costs for successive individual bids, engaging construction contractors in longer-term agreements for numerous projects (which lowers costs by hiring a sustained workforce with less downtime and allowing contractors to work with the same internal engineering teams for a more collaborative effort),[51] and providing contractors an incentive to competitively bid for the work and agree to additional cost-control mechanisms (since the winning bidder is awarded more than just one project). Although SoCalGas had implemented the Performance Partnership Program to execute PSEP, the PSEP organization retains the discretion to conduct competitive solicitations or to single-source work to acquire contractors for any PSEP project where it is determined that it may be beneficial to customers to do so.[52]

Under the Performance Partnership Program, each project constructed by a Performance Partner is subject to a target price risk/reward mechanism. This mechanism is based on establishing a target price agreed to by SoCalGas and the Performance Partner. The target price provides the Performance Partner with a cost incentive to efficiently perform the project because it stands to share both reduced and excess costs. The Performance Partner is not, however, entitled to any profits when costs exceed 20% of the target price. By virtue of this sharing

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[51] These efforts also mitigate the risk of insufficient trade labor and supervisory resources (leading to direct cost savings through efficient dispersal and logistics of regional work) and better enable construction personnel to provide valuable engineering and design recommendations.

[52] For example: (1) in order to diversify the assignment of work (instead of limiting it to four construction partners), (2) as a separate tool to validate costs incurred by the performance partners (providing yet another rate by which to compare Performance Partner performance), and (3) to allow other construction contractors who were not selected as Performance Partners the opportunity to bid on projects, which helps sustain their viability in the SoCalGas service territory.

mechanism, SoCalGas realizes cost savings for the benefit of customers that would not exist under traditional competitively bid contracts.

IV. PSEP REASONABLENESS REVIEW PROJECTS AND COSTS

A. Introduction

The purpose of this section is to present for reasonableness review the activities associated with the PSEP projects completed primarily between December 2015 and December 2020, representing approximately 80 miles of transmission pipeline and 116 valves. Through the prudent execution of the 21 pipeline and 66 bundled valve projects, SoCalGas complied with the directives in D.11-06-017 and subsequent Commission decisions, as well as Cal. Pub. Util. Code §§ 957 and 958.

This section demonstrates SoCalGas's prudence in executing its PSEP and the reasonableness of the costs presented for review and recovery. Our actions have enhanced safety, complied with Commission and statutory directives, minimized impacts on customers and communities, and avoided and reduced costs for the benefit of customers. SoCalGas acted as a reasonable manager of PSEP by carefully considering information that was known at the time decisions were made and exercised experienced and professional judgment in its decision-making, and therefore, the total costs should be deemed reasonable and the requested revenue requirement should be approved.

B. Commission-identified Updates

To comply with D.24-12-074, SoCalGas has revised its supplemental workpapers supporting the revenue requirement request to include additional information. These Commission-identified updates include the inclusion of Full Time Equivalents (FTEs) and cost variance descriptions that have been added to workpapers for projects that exceeded estimated amounts. FTEs and cost variances are addressed in Sections IV.C. and IV.D., respectively, of all supplemental project workpapers.

1. Full-Time Equivalents (FTEs)

The Commission issued the following directive in D.24-12-074 regarding calculating FTEs: "The FTEs were not provided for company labor or the construction contractors. To the extent that any other direct cost components include labor, SoCalGas's supporting data lacks the

cost of labor and associated FTEs to describe them."[53] For a traditional GRC forecast, SoCalGas's General Rate Case Integrated Database (GRID) calculates the number of FTEs as a function of the labor cost forecast for specific forecasted expenditures. The FTEs provide context for the forecasted company labor dollars by representing a calculated number of employees needed to carry out the requested expenditures.[54] This information is displayed in the GRID-generated workpapers submitted with the GRC application. For PSEP reasonableness review projects, FTEs have not been provided historically because the focus of past applications has been on justifying the reasonableness of the expenditures by explaining how various projects were planned and executed rather than retroactively providing a basis for a forecast. To satisfy the requirements of D.24-12-074, SoCalGas has included FTEs[55] in the revised supplemental workpapers submission (provided as Ex. SCG-T3-PSEP-01-WP1).

The calculation of FTEs for completed projects was performed as follows:

- The total hours charged to a project by company employees were calculated for the years a project was active;
- The total workable hours were calculated for the same time period using the standard assumption of 8-hour working days, 5 days per week, and proportionally adjusted for the first year and last year in which the project was active;
- The total charged hours were divided by the total workable hours to derive the "Unadjusted FTE;"
- Vacation and Sick (V&S) factors for SoCalGas are consistent with those presented in 2024 GRC Track 1;
- The maximum V&S value was isolated for the time period in which the project was active;
- The Unadjusted FTE was multiplied by the maximum V&S factor to derive the average number of FTEs directly charging to a project throughout its lifecycle.[56]

[53] D.24-12-074 at 231.

[54] The calculation of FTEs includes overtime hours. Therefore, if one employee works 60 hours per week, he or she would be recorded as 1.5 FTEs.

[55] FTEs are not provided for construction contractors since SoCalGas does not possess this information.

[56] The FTE calculation excludes General Management and Administration (GMA) costs, which are non-project specific charges that are incurred to support the implementation of the PSEP program.

2. Cost Variances

In D.24-12-074, the Commission also directed SoCalGas to provide information on cost variances showing: "a sufficient breakdown of Direct Costs, such as Company Labor (including FTEs), Materials, Construction Contractor, Construction Management & Support, Environmental, Engineering & Design, Project Management & Services, Right of Way (ROW) & Permits, and GMA."[57] SoCalGas has included this additional information about the cost drivers which help to explain the variances between estimated amounts and actual costs in the supplemental workpapers submitted herewith (provided as Ex. SCG-T3-PSEP-01-WP1).

As explained in the workpaper introduction accompanying SoCalGas's supplemental workpapers, the workpapers contain estimated amounts for various cost categories compared to actual costs incurred. The estimated amounts are derived from a Total Installed Cost (TIC) estimate.[58] Consistent with industry-standard estimating practices established by the Advancement of Advance of Cost Engineering International (AACEi[59]), the TIC is classified within the Class 3 level, which is characterized by a maturity level of 10-40% (more typically 30%) and an estimate accuracy range of -20% on the low end to +30% on the high end.[60] According to AACEi, the Class 3 level end use is appropriate to form the basis for budget authorization, appropriation, and/or funding and "to support full project funding requests and become the first of the project phase control estimates against which all actual costs and resources will be monitored for variations to the budget."[61] AACEi also states: "[Class 3 estimates] are used as the project control budget until replaced by more detailed estimates. In many owner organizations, a Class 3 estimate is often the last estimate required and could very well form the only basis for cost/schedule control."[62] Once the TIC is finalized, SoCalGas

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[57] D.24-12-074 at 232-233.

[58] TIC estimate is synonymous with "Estimate at Completion", which is defined as: "an estimate of the total cost an activity or group of activities will accumulate upon final completion." AACEi Recommended Practice No. 10S-90, Cost Engineering Terminology, *available at:* https://library.aacei.org/terminology/welcome.shtml#E.

[59] AACEi is an industry-leading association of cost estimating professionals.

[60] AACEi, *Recommended Practice No. 97R-18 Cost Estimate Classification System - As Applied in Engineering, Procurement, and Construction for the Pipeline Transportation Infrastructure Industries* (AACEi RP 97R-18) (August 7, 2020) at 4,10.

[61] *Id*.

[62] *Id*. at 10.

moves forward with budget authorization through the Work Order Authorization (WOA) process. The TIC, which includes direct costs only, is supplemented with indirect costs, which are calculated subject to the process described in the testimony of Sakif Wasif (Ex. SCG-T3-PSEP-02); together the direct and indirect costs are combined into the Phase 2 WOA. The approval of the Phase 2 WOA by PSEP leadership is required to proceed with the execution of a project.[63]

In aggregate, the portfolio of the 21 SoCalGas pipeline projects presented for review was approximately $37 million or 10 percent below the estimated amount ($326 million actual versus $363 million estimated). The SoCalGas valve portfolio of 66 projects was approximately $16 million or 11 percent below the estimated amount ($135 million actual versus $152 million estimated). As would be expected, while the aggregated actual costs being less than estimated amounts, some pipeline and valve projects exceeded estimated amounts. As directed by the Commission in D.24-12-074, the revised workpapers provide explanations for variances on an individual project basis.

Variances from estimated amounts are expected for construction projects. As mentioned above, the accepted accuracy range for a TIC/Class 3 estimate is -20% to +30%. This range reflects that TIC estimates are generated when the project has yet to advance through detailed design. As such, the project scope can and will change during later stages, such as detailed design and construction. To develop TICs, SoCalGas's dedicated estimating department utilizes the expertise and professional judgment of subject matter experts in the various functional areas to provide input that informs a project's overall cost. Notwithstanding the level of rigor inherent to this process, estimates remain estimates, and each PSEP project is unique. As such, foreseeable and unforeseeable conditions may be encountered during construction, resulting in actual expenditures varying from estimates. Furthermore, several years may lapse between completing the detailed project cost estimates and the start of construction. During this time period, construction, contractor, and material costs may change, new environmental regulations may be enacted, and other external forces may come into play that may impact what is a

[63] Any significant project activities and costs subsequently added to the project scope after execution of the TIC—such as during detailed design or construction—would not be reflected in the estimated costs presented in the supplemental workpaper. These additional costs and activities are authorized and documented through the scope change process. If these additional costs exceed a certain threshold, a reviewed Work Order Authorization must be obtained.

reasonable project cost estimate. The recent COVID-19 global pandemic exemplifies how costs can be driven upward by added health and safety protocols.

Some of the projects included in Track 3 typify the various reasons for deviations from estimated amounts. The largest overspending variances are typically associated with prolonged construction durations that arise from challenges experienced in the field that were reasonably not anticipated at the time of the initial estimate. While SoCalGas makes every effort during the estimating and design process to account for risks to the construction schedule and associated costs, certain situations arise during the normal course of construction that cannot be predicted and which can cause major delays to the construction effort. For example, despite reasonable efforts to conduct potholing and geologic investigations to ascertain the subsurface conditions of a project site, unanticipated conditions may be encountered that cause deviations from planned trenching or boring methods under existing roads, railways, water crossings or other physical impediments to pipeline installation. In some cases, these challenges may even cause the need to demobilize from the project site to redesign certain project elements. In these situations, the increase in construction costs also increases costs in other areas tied to the construction effort. For example, a longer construction duration means that all the support staff, comprising both company labor and contractors, will also have increased costs due to the need to provide their specific services over a longer period of time. This is true for company labor, engineering support, construction management, environmental services, and project management services. A protracted construction effort also impacts indirect costs. As explained further in the testimony of Sakif Wasif, indirect costs, such as overheads, can increase the longer a project is active. AFUDC, which is interest that SoCalGas earns for funds used during construction for capital projects; and Property Tax for construction work in progress (CWIP) for capital projects, continues to compound and increase with the project timeline.

Please see the supplemental workpapers for project-specific variance explanations that address the unique nature of each project.

C. Reasonableness Review Projects and Costs

Presented in this testimony is the reasonableness of the $426 million in capital expenditures and $35 million in O&M expenditures incurred in executing the projects, the reasonableness of $25 million in expenditures for the purchase of Line 306, and the reasonableness of $13 million in expenditures for other costs incurred to execute PSEP. These

costs amount to a revenue requirement balance, net of costs already in rates, as of December 31, 2024 of $132 million, as discussed in the testimony of Sakif Wasif (Ex. SCG-T3-PSEP-02). The following section includes a discussion of the project cost components, summaries of project-related and miscellaneous costs, disallowed project costs, and a reconciliation of the "as filed" mileage compared to the actual mileage.

The costs in this chapter provide the basis for determining the revenue requirements recorded in SoCalGas's SECCBAs and SEEBAs, Pipeline Safety Enhancement Plan Memorandum Account (PSEPMA), and PSEP-P2MA. This testimony and workpapers demonstrate that these PSEP costs were reasonably incurred, and the associated revenue requirements are justified for rate recovery.

To facilitate the review process and ease of reference, detailed information for each project is included in the supporting project workpapers submitted with this application. The revised workpapers consist of over 1,700 pages of support that the amounts presented for cost recovery are reasonable. The information contained in this chapter is designed to provide a summary of the projects and associated costs.

1. Project Cost Components

The costs presented in this chapter are those incurred through December 2024. The revenue requirement balance as of December 31, 2024, associated with these costs is addressed in the testimony of Sakif Wasif (Ex. SCG-T3-PSEP-02). The project costs included in this chapter include costs incurred in direct support of individual hydrotest, replacement, derate, or abandonment projects and other miscellaneous costs. The testimony of Sakif Wasif addresses indirect cost categories such as AFUDC and property tax.

Project costs may include capital and O&M expenditures, depending on the project's specifics. For example, the majority of work associated with hydrotesting is considered O&M. As part of the normal hydrotesting process, however, a section of the existing pipeline is removed to accommodate the temporary test heads that are used to conduct the hydrotest. After the line is tested and the temporary test heads are removed, a new section of pipe is installed to "tie-in" the just-tested segment to the pipeline on either end of the segment. The tie-in pipe is new pipe and is capitalized in accordance with SoCalGas's accounting policy. Other capital costs typically associated with hydrotests are due to short replacements identified by SoCalGas's

Pipeline Integrity team that are necessary to address anomalies prior to the hydrotest or to allow for future inline assessment through the use of smart pigs.

The project costs included in the revenue requirement request are fully loaded. They include direct and indirect costs charged and/or allocated to projects. The cost categories that reflect the direct costs portion of the total costs, and which are displayed in the supplemental workpapers submitted with this testimony, include:

- Company Labor: Labor costs for SoCalGas employees charging directly to the project, such as project managers, engineers, land services personnel, environmental services personnel, communication and outreach managers, construction managers, and field support personnel.
- Materials: Costs for materials that SoCalGas purchased to complete the project, such as piping, valves, fittings, and other miscellaneous materials. Materials planned to be purchased by the construction contractor may be included in the construction contractor costs.
- Construction Contractor: Costs for Construction Contractor activity and materials or equipment acquired by the contractor. The actual Construction Contractor costs include authorized change order costs and risk-reward payments minus construction credits, when applicable.
- Construction Management and Support: Costs for construction inspection, contamination mitigation, environmental monitoring, hydrotesting services, and other miscellaneous activities that occur in the field.
- Environmental: Costs for environmental assessments, monitoring, asbestos abatement, water and waste management, and miscellaneous environmental permits and fees not reflected in other cost categories.
- Engineering and Design: Costs for planning and design services, engineering, environmental services, land use and permitting fees not included in other categories, and project support, such as survey, mapping, and miscellaneous expenses.
- Project Management Services: Contracted costs for project management services and general PSEP program support.
- General Administration Costs (GMA): Programmatic PSEP costs.

The supplemental workpapers also include indirect costs. Indirect costs are incremental overheads applied to PSEP projects. Indirect costs are for those activities and services associated with indirect costs – such as payroll taxes, pension, and benefits. Also included is interest that SoCalGas earns for funds used during construction for capital projects (AFUDC) and Property Tax for construction work in progress (CWIP) for capital projects. For additional information on

these cost categories, please refer to the testimony of Sakif Wasif (Overheads/AFUDC/Property Tax/Revenue Requirement).

2. Summary of Project Costs[64]

a. Pipeline Replacement Projects

Table BK-48[65]
Replacement Projects
Summary of Capital and O&M Costs (in $000's)

Project	Capital	O&M	Total
30-18 Section 2 Replacement	$ 10,906	$ -	$ 10,906
33-120 Section 1 Replacement Project	$ 12,484	$ -	$ 12,484
36-1032 Replacement Section 4	$ 6,106	$ -	$ 6,106
36-9-09 North Section 5B-02 and 5C Replacement	$ 13,742	$ -	$ 13,746
36-9-09 North 6B Replacement Project	$ 15,916	$ -	$ 15,916
36-9-21 Replacement	$ 6,797	$ 0	$ 6,797
37-18 K Replacement	$ 16,813	$ -	$ 16,813
38-101 Wheeler Ridge Replacement Project	$ 14,467	$ -	$ 14,467
41-6001-2 Replacement	$ 723	$ -	$ 723
43-121 North Replacement	$ 22,642	$ -	$ 22,642
45-120 Section 2 Replacement Project	$ 91,957	$ 25	$ 91,982
404 Section 4A Replacement Project	$ 18,677	$ -	$ 18,677
404-406 Replacement Project Somis Station	$ 9,388	$ -	$ 9,388
2006-P1A Replacement Project	$ 5,405	$ -	$ 5,405
Total	**$ 246,022**	$ **25**	$ **246,047**

a. Hydrotest Projects

Table BK-49[66]
Hydrotest Projects
Summary of Capital and O&M Costs (in $000's)

Project	Capital	O&M	Total
33-121 Hydrotest	$ -	$ 4,589	$ 4,589
2000-D Hydrotest Whitewater to Moreno	$ 2,665	$ 7,672	$ 10,337
2001 West-C Desert Hydrotest	$ 2,065	$ 11,126	$ 13,191
2001 West-D Whitewater Hydrotest	$ 1,294	$ 5,649	$ 6,943
Storage - Goleta	$ 1,597	$ 6,077	$ 7,674
Total	**$ 7,621**	**$ 35,114**	**$ 42,734**

[64] Note that "-" indicates a zero value, whereas "0" indicates a value less than $500 that is rounded down to zero.

[65] Totals may not match due to rounding.

[66] Totals may not match due to rounding.

b. Abandonment Projects

Table BK-50[67]
Derate and Abandonment Projects
Summary of Capital and O&M Costs (in $000's)

Project	Capital	O&M	Total
41-6000-2 Abandonment & Tie-Over	$ 35,971	$ -	$ 35,971
103-P1B-01 Derate Project	$ 1,490	$ -	$ 1,490
Total	**$ 37,461**	**$ -**	**$ 37,461**

c. Valve Bundle Projects

Table BK-51[68]
Valve Projects
Summary of Capital and O&M Costs (in $000's)

Project	Capital	O&M	Total
29 Palms Valve Enhancement Project Indian Canyon	$ 1,497	$ -	$ 1,497
29 Palms Valve Enhancement Project Mohawk Trail	$ 980	$ -	$ 980
29 Palms Valve Enhancement Project Sunburst Street	$ 1,438	$ -	$ 1,438
29 Palms Valve Enhancement Project Utah Trail	$ 1,287	$ -	$ 1,287
225 Valve Enhancement Project - Beartrap	$ 1,262	$ -	$ 1,262
225 Valve Enhancement Project - Quail Canal	$ 1,260	$ -	$ 1,260
404-406 Somis Yard Valve Enhancement Project	$ 1,279	$ -	$ 1,279
404-406 Valley Bundle Valve Enhancement Project	$ 11,354	$ -	$ 11,354
1014 Olympic Valve Enhancement Project	$ 8,375	$ -	$ 8,375
1018 Valve Enhancement Project - Alipaz Street	$ 1,871	$ -	$ 1,871
1018 Valve Enhancement Project - Avery Parkway	$ 1,257	$ -	$ 1,257
1018 Valve Enhancement Project - Burt Transmission	$ 2,824	$ -	$ 2,824
1018 Valve Enhancement Project - Camino Capistrano	$ 4,374	$ -	$ 4,374
1018 Valve Enhancement Project - El Toro Road	$ 2,411	$ -	$ 2,410
1018 Valve Enhancement Project - Harvard & Alton	$ 3,103	$ -	$ 3,103
2000 Beaumont Riverside 2016 Valve Enhancement Bundle	$ 5,944	$ -	$ 5,944
4000 Valve Enhancement Project - PowerRoad	$ 1,402	$ -	$ 1,402
4000-P1B Valve Enhancement Project - Camp Rock Road	$ 1,340	$ -	$ 1,340
4000-P1B Valve Enhancement Project - Desert View Road	$ 1,953	$ -	$ 1,953
4000-P1B Valve Enhancement Project - Devore Station	$ 1,548	$ -	$ 1,548
7000 Valve Enhancement Project - Road 68 & Avenue 232	$ 2,000	$ -	$ 2,000
7000 Valve Enhancement Project - Road 96 & Avenue 198	$ 2,225	$ -	$ 2,225
7000 Valve Enhancement Project - Beech & Highway 46	$ 3,560	$ -	$ 3,560
7000 Valve Enhancement Project - Melcher & Elmo	$ 3,831	$ -	$ 3,831
7000 Valve Enhancement Project - Visalia Station	$ 555	$ -	$ 555
Adelanto Valve Enhancement Project MLV 4	$ 735	$ -	$ 735
Apple Valley Valve Enhancement Project - MLV 13	$ 416	$ -	$ 416
Apple Valley Valve Enhancement Project - MLV 2	$ 1,397	$ -	$ 1,397

[67] Totals may not match due to rounding.

[68] Totals may not match due to rounding.

Project	Capital	O&M	Total
Aviation & 104th Valve Enhancement Project	$ 9,645	$ -	$ 9,645
Banning 2001 Valve Enhancement Project - MLV 14.3	$ 1,397	$ 0	$ 1,397
Banning 2001 Valve Enhancement Project - MLV 14A	$ 1,241	$ -	$ 1,241
Banning 2001 Valve Enhancement Project - MLV 16A	$ 1,432	$ -	$ 1,432
Banning 2001 Valve Enhancement Project - MLV 17A	$ 1,930	$ -	$ 1,930
Banning Airport Valve Enhancement Project	$ 2,103	$ 6	$ 2,109
Blythe Valve Enhancement Project - Cactus City	$ 1,838	$ -	$ 1,838
Brea Valve Enhancement Project - Atwood Station	$ 1,085	$ -	$ 1,085
Brea Valve Enhancement Project - Chino Hill & Carbon Canyon	$ 489	$ -	$ 489
Brea Valve Enhancement Project - Gale & Azusa	$ 454	$ -	$ 454
Brea Valve Enhancement Project - Sapphire & Brea Canyon	$ 1,361	$ -	$ 1,361
Burbank Valve Enhancement Project - Riverside & Agnes	$ 941	$ -	$ 941
Carpinteria Valve Enhancement Project - Oxy & Rincon	$ 1,237	$ -	$ 1,237
Del Amo Station Valve Enhancement Project	$ 1,542	$ -	$ 1,542
Fontana 4002 Valve Enhancement Project - Benson & Chino & Tronkeel	$ 1,566	$ -	$ 1,566
Fontana 4002 Valve Enhancement Project - Etiwanda & 4th	$ 1,266	$ -	$ 1,266
Glendale Valve Enhancement Project	$ 539	$ -	$ 539
Indio Valve Enhancement Project - MLV 9	$ 1,392	$ -	$ 1,392
Indio Valve Enhancement Project - MLVs 10, 10A, & 10B	$ 1,998	$ -	$ 1,998
Indio Valve Enhancement Project - MLVs 8, 8A, & 8B	$ 2,148	$ -	$ 2,148
Pallowalla Valve Enhancement Project	$ 2,192	$ -	$ 2,192
Rainbow 2017 Valve Enhancement Project - Martin & Ramona	$ 1,908	$ -	$ 1,908
Rainbow Valve Enhancement Project - MLV 5	$ 1,998	$ -	$ 1,998
Rainbow Valve Enhancement Project - Newport & Briggs	$ 514	$ -	$ 514
Rainbow Valve Enhancement Project - Ramona & Lakeview	$ 466	$ -	$ 466
Rainbow Valve Enhancement Project - Scott & El Centro	$ 515	$ -	$ 515
Rainbow-P1B Valve Enhancement Project - Rainbow Valley	$ 372	$ -	$ 372
Santa Barbara Valve Enhancement Project - Lions	$ 2,982	$ -	$ 2,982
Spence Station Valve Enhancement Project	$ 1,704	$ -	$ 1,704
Supply Line 45-120 Valve Enhancement Project	$ 1,091	$ -	$ 1,091
Taft Valve Enhancement Project - 7th Standard	$ 1,357	$ -	$ 1,357
Taft Valve Enhancement Project - Buttonwillow	$ 1,419	$ -	$ 1,419
Taft Valve Enhancement Project - Hageman & Renfro	$ 8,150	$ -	$ 8,150
Taft Valve Enhancement Project - Sycamore	$ 1,340	$ -	$ 1,340
Victorville Valve Enhancement Project - MLV 11	$ 309	$ -	$ 309
Victorville Valve Enhancement Project - MLV 12	$ 529	$ -	$ 529
Western Del Rey Valve Enhancement Project - Mississippi & Armacost	$ 495	$ -	$ 495
Wilmington Valve Enhancement Project - Eubank Station	$ 780	$ -	$ 780
Total	**$ 135,200**	**$ 6**	**$ 135,206**

d. L306 (Supply Line 44-306/307) Purchase in Lieu of Replacement

SoCalGas submitted a forecast for replacement of its Supply Line (SL) 44-1008 in the 2019 GRC (A.17-10-008). This 51-mile, 10-inch diameter pipeline was installed in 1937 and is

located within Kings, Kern, and San Luis Obispo Counties, extending from Atascadero in the south to Avenal in the north. The Commission did not authorize the proposed costs for this project ($153M in 2016 direct costs), stating that "the environmental permitting process relating to the project may preclude SoCalGas from even initiating construction during this rate case cycle." Instead, it determined that "authorization for Line 44-1008 should be requested in SoCalGas's next GRC application."

Prior to the GRC Decision in September 2019, SoCalGas had stated in the 2019 GRC direct testimony that an alternative to the replacement of SL44-1008 was being considered. This alternative materialized with the purchase and interconnection of PG&E's Line 306. Line 306 is a 70-mile, 20-inch diameter pipeline installed in 1962 that roughly parallels SL 44-1008 and continues further west to Morro Bay.

On April 30, 2021, SoCalGas finalized the purchase of Line 306 from PG&E. SoCalGas began considering the purchase because PG&E's Line 306 could be used to provide service to customers in the region without incurring the substantial costs and environmental impacts anticipated with the replacement of SL44-1008. As SoCalGas explained in the Commission proceeding related to the purchase of Line 306 (A.19-04-003), SoCalGas anticipated that the purchase ($25M) and refurbishments/improvements (estimated at the time to be ~$40M) would result in a significant cost savings for ratepayers compared to the estimated cost of replacing Supply Line 44-1008. The PSEP-related improvements to Line 306 include, but are not limited to, installing in-line inspection tools, replacing non-piggable valves and fittings, hydrotesting and/or replacing various pipeline sections, adding additional service extensions to existing customers, and improving cathodic protection capabilities on the pipeline.[69]

SoCalGas has included for Reasonableness Review in Track 3 of this GRC filing the $25M cost associated with purchasing Line 306 from PG&E. The acquisition cost is a necessary expenditure to achieve the cost savings for ratepayers described above.

As indicated in D. 20-03-018, the Commission authorized PG&E to sell its local gas transmission Line 306 to SoCalGas for $25 million and further concluded that the sale was "not adverse to the public interest pursuant to Public Utilities Code Section 851."[70] The acquisition of

[69] These improvements were included in the portfolio of capital pipeline projects SoCalGas described in testimony and workpapers supporting A.22-05-015.

[70] D.20-03-018 at 8.

L306 allows SoCalGas to use this property "for other productive purposes without interfering with the utility's operation or affecting service to utility customers."[71] The acquisition cost is currently booked to the PSEPMA.

During the due diligence conducted by SoCalGas to assess the viability and reasonableness of a potential purchase of Line 306, SoCalGas conducted on-site visits at PG&E to review pipeline records. A team of nine SoCalGas subject matter experts reviewed extensive documentation and record information pertaining to Line 306. The purpose of the review was to evaluate the line's current condition, identify potential retrofits required, and recommend whether to have further discussions to purchase the line. By the close of escrow, approximately 2,500 files of information related to Line 306 had been reviewed.

The review consisted of the following main areas of focus:

- Cathodic protection records indicating miles/stationing to determine how many miles are under cathodic protection, the location and output of rectifiers, the location and output of anodes, and associated supporting records.
- Geographic Information System (GIS) data to determine piggability through the total number and location of ells, bends, other fittings, valves (by type), pig launchers/receivers, pipe diameter changes/specifications, regulator/pressure limiting stations, and taps.
- Review of the past five years of maintenance records, including leaks (including grade, location, disposition, cause, repair methodology, and leak repair order), transmission integrity information, records of any other pipeline digs, planned integrity assessments, known asbestos or other environmental hazards, contract delivery pressure, and volume, facilities descriptions, and any potential compliance items.

At the conclusion of the review, the SoCalGas subject matter experts concluded that Line 306 was in good condition for a vintage pipeline and could be considered for purchase. Prior to executing the purchase agreement, SoCalGas obtained internal review and approval to proceed with the purchase.

In conclusion, the purchase of Line 306 was a prudent acquisition by SoCalGas because the purchase and retrofits provide a more cost-effective alternative to customers than replacing Supply Line 44-1008. The Commission should find the purchase of Line 306 by SoCalGas reasonable for the same reasons outlined in D.20-03-18, discussing the sale of the line by PG&E.

[71] *Id.* at 7.

3. Miscellaneous Costs

SoCalGas has also incurred various miscellaneous costs that were necessary to execute PSEP. Table BK-52 includes a summary of these costs:

Table BK-52[72]
Miscellaneous Costs
Summary of Costs (in $000's)

Cost Type	Capital	O&M	Total
Phase 2 Memorandum Account	$ -	$ 4,542	$ 4,542
Post-Completion Construction	$ 2,517	$ 1,283	$ 3,801
Facilities Lease	$ -	$ 2,470	$ 2,470
Descoped Projects	$ -	$ 694	$ 694
Delcon Migration Project	$ -	$ 1,110	$ 1,110
Total	**$ 2,517**	**$ 10,098**	**$ 12,615**

a. Phase 2 Memorandum Account

D.16-08-003 authorized the creation of the PSEP-P2MA (Phase 2 Memorandum account) to record planning and engineering design costs associated with Phase 2A projects included in the TY 2019 GRC (A.17-10-008). The PSEP-P2MA was necessary to record these costs as Phase 2 had yet to be approved by the Commission. SoCalGas indicated in A.17-10-008 that amortization of these costs would be included in a future proceeding as authorized under D.16-08-003.[73,74] Costs recorded in the PSEP-2MA were not included in the PSEP revenue requirement request in A.17-10-008. SoCalGas includes these costs for recovery in this filing and the memorandum account will be closed.[75]

b. Post Completion Construction

Post-completion cost adjustments in the amount of $3,800,531 associated with lines presented for review (including descoped projects) in A.16-09-005 and A.18-11-010 are included for recovery in this section. Post-completion adjustments occur when invoices or accounting adjustments are processed after filing an application for an after-the-fact reasonableness review. Despite the best efforts of SoCalGas to capture all items during the close-out process, post-

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[72] Totals may not match due to rounding.

[73] A.17-10-008, 2019 GRC Direct Testimony of Rick Phillips, Pipeline Safety Enhancement Plan (Ex. SCG-15-R) at RDP-A-21.

[74] D.16-08-003 at 14-15 (OP 1).

[75] Refer to the Regulatory Accounts Prepared Direct Testimony of R. M. Yu (Ex. SCG-38-R-E).

completion adjustments may result in increased or decreased costs. For the costs presented herein, the primary categories of post-completion adjustments are contractor invoices, accrual reversals, company labor, and journal entry adjustments.

c. Facilities Lease

The costs included in the Facilities Lease Expense consist of the remaining lease expenses associated with the 22nd and 23rd floors at the Gas Company Tower in Los Angeles. PSEP was responsible for these floors prior to the Facilities organization incorporating these floors into the overall Gas Company Tower lease, effective with the TY 2019 GRC. These costs are for the time period between May 2018 and March 2019.

d. Descoped Projects

During the course of Phase 1A, planning work began on a number of projects that were later descoped or canceled through either scope validation activities or the reduction of the MAOP to a level sufficient to bring the line outside the scope of PSEP. SoCalGas seeks recovery of $693,706 for the cost of descoped projects. The amount included for recovery is associated with pipelines installed prior to 1956.

e. Delcon Migration Project

Delcon was the document management system that SoCalGas used to track and manage the process and documents necessary for PSEP's construction activities. In May 2019, the new document system, Open Text, was established. The costs of $1,109,580 are associated with migrating projects subject to cost recovery via Reasonableness Review to the new system. Some examples of these migration costs are the costs of developing and configuring the Delcon application to prevent the loss of functionality when moving to a new system and the costs of developing scripts to ingest data from Delcon.

4. Disallowed Costs

In D.14-06-007, the Commission approved SoCalGas's proposed PSEP, with some limited exceptions. D.14-06-007 (as modified by D.15-12-020) ordered that certain specified costs discussed below would be disallowed from recovery in rates. Table BK-53 summarizes the disallowed costs relevant to the projects presented for review in this section.

Table BK-53
Disallowed Costs
Summary of Costs (in $000's)

Disallowance Type	Total
Post-1955 PSEP Costs	$ 1,584
Undepreciated Book Balances	$ -
Executive Incentive Compensation	$ 1
Records Search	$ -
Total	$ 1,584

5. PSEP Mileage Reconciliation

As required by D.14-06-007, a reconciliation of the "as filed" mileage with the actual mileage that was hydrotested, replaced, or abandoned is included in Table BK-54 below for the projects presented in the reasonableness review.[76]

[76] The "as filed" mileage is consistent with that contained in the workpapers included with the SoCalGas and SDG&E Amended PSEP (R.11-02-019) filed December 2, 2011. The original mileages from R.11-02-019/A.11-11-002 are inclusive of the entire PSEP mileage on a particular line, whereas the individual project mileages included herein may represent smaller portions due to the sectionalization of PSEP projects to support constructability and meet the overarching objectives of the PSEP program.

Table BK-54
Pipeline Projects
Mileage Summary

Line	As Filed (Miles)	Included in this Filing	
		(Miles)	(Feet)
L103-P1B-01	8.530	9.303	49,120
L2006-P1A	N/A	0.094	497
Line 2000-D Whitewater to Moreno	117.601	3.184	16,814
Line 2001 West-C Desert Hydrotest	64.100	16.803	88,719
Line 2001 West-D Whitewater Hydrotest	64.100	4.360	23,018
Line 30-18 Section 2	2.584	0.619	3,266
Line 33-120 Section 1	1.252	0.240	1,267
Line 33-121	0.610	0.478	2,522
Line 36-1032 Section 4	1.555	0.307	1,620
Line 36-9-09 North Section 5B-02 & 5C	16.016	0.894	4,723
Line 36-9-09 North Section 6B	16.016	1.732	9,145
Line 36-9-21 (REPL)	0.389	0.464	2,451
Line 37-18-K	2.850	1.928	10,179
Line 404 Section 4A	37.800	0.831	4,387
Line 404-406 Somis Station	58.499	0.136	716
Line 41-6000-2 Abandonment & Tie-Over	35.950	29.371	155,081
Line 41-6001-2	0.005	0.005	26
Line 43-121	4.411	1.054	5,565
Line 45-120 Section 2	4.301	3.588	18,943
SL38-101-P1B (Wheeler Ridge)	7.320	4.525	23,893
Storage - Goleta	0.913	0.286	1,515
Total	**444.80**	**80.20**	**423,467**

V. CONCLUSION

This testimony supports SoCalGas's request to recover in rates a revenue requirement of $132 million associated with approximately $499 million in total capital and O&M costs incurred in the prudent execution of PSEP projects from 2015-2020 in compliance with Cal. Pub. Util. Code §§ 957 and 958. SoCalGas has acted as a reasonable manager while incurring these costs in furtherance of the Commission's mandate to execute PSEP "as soon as practicable" as laid out in D.11-06-017. SoCalGas's execution and management of the PSEP program during this timeframe is consistent with the Commission's statements on affordability in D.24-12-074 and the four over-arching objectives of PSEP: (1) enhance public safety, (2) comply with Commission directives, (3) minimize customer impacts, and (4) maximize the cost-effectiveness of safety investments while being cognizant of the Commission's affordability objectives.

In Track 3 of this proceeding, the Commission, as it has in several other prior PSEP-related proceedings, should find that SoCalGas has continued to execute PSEP prudently,

consistent with the requirements of D.14-06-007. Further, the Commission should find that the costs presented for review and recovery in this Application are reasonable, and the associated revenue requirements submitted for recovery should be recovered in rates.

This concludes my prepared direct supplemental testimony.

VI. WITNESS QUALIFICATIONS

My name is Bill G. Kostelnik. I am employed by Southern California Gas Company (SoCalGas) as the PMO Performance and Strategy Manager. My business address is 555 West Fifth St, Los Angeles, California 90013.

I joined SoCalGas in 1983 as an Accountant and have worked in several diversified areas of the utility business with increasing leadership responsibility. I have held various positions in Accounting and Finance, Administrative Services, Regulatory Affairs, Procurement and Logistics, Supply Management, Gas Distribution Operations, Pipeline Safety Enhancement Plan, Major Program and Project Controls, and Construction.

In my current position, I am responsible for the planning, development, and implementation of regulatory proceedings within the Construction organization.

In 1982, I earned a Bachelor of Science Degree in Accounting from California State University, Northridge. In 1987, I earned a Master of Business Administration from Loyola Marymount University.

I have previously testified before the California Public Utilities Commission.

APPENDIX A

GLOSSARY OF TERMS

Acronym	Definition
AACE	Association for the Advancement of Cost Engineering
AFUDC	Allowance for Funds Used During Construction
BY	Base Year
CDM	Capital Delivery Model
CFR	Code of Federal Regulations
CNG	Compressed Natural Gas
CPUC	California Public Utilities Commission
DBPMA	Dairy Biomethane Project Memorandum Account
EAC	Estimated Cost at Completion
FEED	Front-end Engineering Design
GHG	Green House Gas
GIS	Geographic Information System
GRC	General Rate Case
GTSR	Gas Transmission Safety Rule
HCA	High Consequence Area
HDD	Horizontal Directional Drill
ISEP	Integrated Safety Enhancement Plan
LNG	Liquid Natural Gas
MAOP	Maximum Allowable Operating Pressure
MLV	Mainline Valve
NDE	Non-Destructive Examination
O&M	Operations & Maintenance
PFM	Petition for Modification
PG&E	Pacific Gas & Electric Company
PHSMA	Pipeline and Hazardous Materials Safety Administration
PSEP	Pipeline Safety Enhancement Plan
PSEPMA	Pipeline Safety Enhancement Plan Memorandum Account
PSEP-P2MA	Pipeline Safety Enhancement Plan Phase 2 Memorandum Account
PSRMA	Pipeline Safety and Reliability Memorandum Accounts
RSV	Remote Shut-off Valve
ROW	Right of Way
SB	Senate Bill
SDG&E	San Diego Gas & Electric Company
SECCBA	Safety Enhancement Capital Cost Balancing Accounts
SEEBA	Safety Enhancement Expense Balancing Accounts
SED	CPUC's Safety Enforcement Division
SEEBA	Safety Enhancement Expense Balancing Accounts
SL	Supply Line
SoCalGas	Southern California Gas Company
TIC	Total Installed Cost Estimate
TIMP	Transmission Integrity Management Program

Acronym	Definition
TY	Test Year
VEP	Valve Enhancement Plan