

Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2024 General Rate Case
Application: A.22-05-_____
Exhibit: SDG&E-05

**PREPARED DIRECT TESTIMONY OF
WALLACE RAWLS
(GAS SYSTEM STAFF & TECHNOLOGY)**

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



May 2022

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SUMMARY

GAS SYSTEM STAFF & TECHNOLOGY (In 2021 \$)			
	2021 Adjusted-Recorded (000s)	TY2024 Estimated (000s)	Change (000s)
Total Non-Shared Services	95	901	806
Total Shared Services (Incurred)	0	0	0
Total O&M	95	901	806

Gas System Staff & Technology is responsible for a collection of key activities and programs that contribute to the ongoing vitality of San Diego Gas & Electric Company's (SDG&E or the Company) transmission pipeline operations and help SDG&E achieve the overarching objective to provide safe, clean, and reliable natural gas service at reasonable rates. Gas System Integrity works alongside Gas Transmission, Gas Distribution, and Storage operations by creating and issuing policies and standards that establish and validate compliance with applicable laws, regulations, internal policies, and best practices.

Southern California Gas Company (SoCalGas) and SDG&E take a shared-service approach to many natural gas pipeline operator responsibilities, especially in Gas System Staff & Technology. The shared-service approach benefits both utilities and their ratepayers by enabling the utilities to pool their collective knowledge, experience, engineering expertise, and intellectual property. The shared costs are presented in my SoCalGas testimony, Ex. SCG-05, and this testimony includes the non-shared SDG&E costs. The activities discussed in my testimony, either directly or indirectly, address potential safety and security risks while fostering continuous improvement. This testimony discusses activities in the Damage Prevention organization.

In preparing the Test Year (TY) 2024 General Rate Case (GRC) forecast for this testimony, I reviewed historical spending levels and developed an assessment of future needs. Because of the expected growth of the activities that I am sponsoring, most of my forecasts rely upon a BY 2021 methodology. Many activities have changed in recent years, and the base year is representative of SDG&E's expectations for TY 2024. The base year methodology was chosen in most cases because it best represents the future expenses and because it captures the growth that my witness area is expecting. Where appropriate, certain incremental upward or

downward adjustments have been identified and made to the forecasts. In total, SDG&E requests the California Public Utilities Commission (CPUC or Commission) adopt a Test Year 2024 forecast of \$901,000 for Gas System Staff & Technology operations and maintenance (O&M) expenses, which is composed of \$901,000 for non-shared service activities related to the expansion of the Damage Prevention Program, which will allow SDG&E to mature its damage prevention capabilities and work to reduce the potential for excavation damages.

**PREPARED DIRECT TESTIMONY OF
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I. INTRODUCTION

A. Summary of Gas System Staff & Technology Costs and Activities

My testimony supports the Test Year 2024 forecasts for O&M costs for non-shared services for the forecast years 2022, 2023, and 2024, associated with the Gas System Staff & Technology area for SDG&E. Table WR-1 summarizes my sponsored costs.

**TABLE WR-1
Test Year 2024 Summary of Total Costs**

GAS SYSTEM STAFF & TECHNOLOGY (In 2021 \$)	2021 Adjusted-Recorded (000s)	TY2024 Estimated (000s)	Change (000s)
Total Non-Shared Services	95	901	806
Total Shared Services (Incurred)	0	0	0
Total O&M	95	901	806

SDG&E’s philosophy is to provide safe, clean, and reliable delivery of natural gas to customers at reasonable rates. This commitment requires that SDG&E continue to invest in its employees, pipeline assets, and support services to mitigate risks associated with the safety of the public and employees, system reliability, and infrastructure integrity. Specifically, the activities discussed herein:

- Maintain and enhance safety;
- Reflect local, state, and federal regulatory and legislative requirements;
- Maintain overall system integrity and reliability;
- Respond to customer growth and continuous improvement;
- Comply with franchise obligations; and
- Maintain and strengthen a qualified workforce.

This testimony discusses non-shared expenses in support of O&M functions for the Damage Prevention organization. All costs in this testimony are shown in 2021 dollars unless otherwise noted. This testimony also includes a request for recovery of incurred costs through 2021 in the Natural Gas Leak Abatement Program Memorandum Account (NGLAPMA). In

1 addition to this testimony, please also refer to my workpapers, Exhibit SDG&E-05-WP (O&M),
2 for additional information about the activities described herein.

3 **B. Support To and From Other Witnesses**

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

6 Gas System Staff & Technology’s centralized staff organizations, including Operator
7 Qualification, Pipeline Policy, Gas Data Governance, and Damage Prevention, provide support
8 to Gas Distribution (Ex. SDG&E-04) and Gas Transmission Operations and Construction
9 (SDG&E-06).

10 **C. Organization of Testimony**

11 My testimony is organized as follows:

- 12 1. Introduction;
- 13 2. Risk Assessment Mitigation Phase (RAMP) Integration;
- 14 3. Sustainability and Safety Culture;
- 15 4. Non-Shared Costs;
- 16 5. Natural Gas Leak Abatement Program Memorandum Account (NGLAPMA)
17 Recovery; and
- 18 6. Conclusion.

19 **II. RISK ASSESSMENT MITIGATION PHASE (RAMP) INTEGRATION**

20 Certain costs supported in my testimony are driven by activities described in SoCalGas
21 and SDG&E’s respective 2021 Risk Assessment Mitigation Phase (RAMP) Reports (the 2021
22 RAMP Reports).¹ The 2021 RAMP Reports presented an assessment of the key safety risks for
23 SoCalGas and SDG&E and proposed plans for mitigating those risks. As discussed in the
24 testimony of the RAMP to GRC Integration witnesses R. Scott Pearson and Gregory S. Flores
25 (Ex. SCG-03/SDG&E-03, Chapter 2 - RAMP to GRC Integration), the costs of risk mitigation
26 projects and programs were translated from the 2021 RAMP Reports into the individual witness
27 areas.

¹ See Application (A.) 21-05-011/-014 (cons.) (RAMP Proceeding). Please refer to the RAMP to GRC Integration testimony of R. Scott Pearson and Gregory S. Flores (Ex. SCG-03/SDG&E-03, Chapter 2) for more details regarding the 2021 RAMP Reports.

In the course of preparing the Gas System Staff & Technology GRC forecasts, SDG&E continued to evaluate the scope, schedule, resource requirements, and synergies of RAMP-related projects and programs. Therefore, the final presentation of RAMP costs may differ from the ranges shown in the 2021 RAMP Reports. Table WR-2 provides a summary of the RAMP-related costs supported in my testimony.

**TABLE WR-2
Summary of RAMP O&M Costs (In 2021 \$)**

RAMP Risk Chapter	BY2021 Embedded Base Costs (000s)	TY2024 Estimated Total (000s)	TY2024 Estimated Incremental (000s)
SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System	95	399	304
Sub-total	95	399	304
RAMP Cross-Functional Factor (CFF) Chapter			
Sub-total	0	0	0
Total RAMP O&M Costs	95	399	304

A. RAMP Risk and Cross-Functional Factor Overview

As summarized in Table WR-2 above, my testimony includes costs to mitigate the risks included in the 2021 RAMP Report.² These risks and CFFs are further described in Table WR-3 below:

² Unless otherwise indicated, references to the 2021 RAMP Report refer to SDG&E’s respective RAMP Report.

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**TABLE WR-3
RAMP Risk Chapter Description**

SDG&E-Risk-7 Excavation Damage (Dig-In) on the Gas System	Excavation damage on the gas system, which includes both medium & high-pressure pipelines upstream of the gas meter, regardless of the party (1st, 2nd, 3rd) which results in significant consequences, including serious injuries and/or fatalities.
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In developing my request, priority was given to these key safety risks to assess which risk mitigation activities Gas System Staff & Technology currently performs and what incremental efforts are needed to further mitigate these risks. While developing the GRC forecasts, SDG&E evaluated the scope, schedule, resource requirement, and synergies of RAMP-related projects and programs to determine costs already covered in the base year and those that are incremental increases expected in the test year.

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11

Messrs. Pearson and Flores (Ex. SDG&E-03, Chapter 2) discuss all of the risks and CFFs included in the 2021 RAMP Reports and the RAMP to GRC integration process.

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B. GRC Risk and CFF Activities

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Table WR-4 below provides a narrative summary of the forecasted RAMP-related activities that I sponsor in my testimony.

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**TABLE WR-4
Summary of RAMP Risk Activities**

RAMP ID	Title	Description
SDGE-Risk-7-C15-T1 SDGE-Risk-7-C16-T1	Public Awareness - Affected Public	SDG&E continues to promote awareness of the Underground Service Alert (811, “call-before-you dig”) system to the affected public by reaching out to contractors and the general public so that pipelines are properly marked and located before excavation activities.
SDGE-Risk-7-C15-T2 SDGE-Risk-7-C16-T2	Public Awareness - Emergency Officials	SDG&E has the responsibility to train its employees in emergency procedures as well as establishing a liaison with first responders.

RAMP ID	Title	Description
SDGE-Risk-7-C15-T3 SDGE-Risk-7-C16-T3	Public Awareness - Local Public Officials	SDG&E works directly with city officials involved in construction activities within their jurisdiction to raise public awareness in an effort to prevent unsafe excavation damages that could result in damage to underground facilities.
SDGE-Risk-7-C15-T4 SDGE-Risk-7-C16-T4	Public Awareness – Excavators	SDG&E engages in excavator outreach so that contractors and excavators are informed of the potential safety issues that might arise when working around natural gas pipelines.
SDGE-Risk-7-C22 SDGE-Risk-7-C23	Gold Shovel Standard Program	The Gold Shovel Standard is a program designed to strengthen professional contractors’ commitment to safe excavation practices through incentives tied to obtaining contracts with the utility.
SDGE-Risk-7-C11 SDGE-Risk-7-C12	Outreach for Latent 3rd Party Damages	This mitigation encompasses the efforts to identify and communicate with excavators who may have damaged a SDG&E underground facility without complying with safe excavation laws and best practices.
SDGE-Risk-7-C11 SDGE-Risk-7-C12	Damage Prevention Analysts	The Damage Prevention Analyst Program works to reduce the number of third-party damages to gas facilities by identifying at-risk excavating contractors and educating them on proper Regional Notification Center notification and safe digging techniques.
SDGE-Risk-7-M03 SDGE-Risk-7-M04	Locate and Mark Photographs	Recording photographs for each locate and mark ticket visited by locators is planned for all SDG&E’s above and below ground facilities in the service territory. These pictures will help audit the quality of locates and provide an opportunity to improve future locate and mark ticket requests for previous locations.

1 These activities are discussed further in Section IV.A Damage Prevention below, as well
2 as in my workpapers. For additional information and a roadmap, please refer to Appendix B,
3 which contains a table identifying by workpaper the TY 2024 forecast dollars associated with
4 activities in the 2021 RAMP Report that are discussed in this testimony.

5 The RAMP risk mitigation efforts are associated with specific actions, such as programs,
6 projects, processes, and utilization of technology. For each of these mitigation efforts, an

1 evaluation was made to determine the portion, if any, that was already performed as part of
2 historical activities (*i.e.*, embedded base costs) and the portion, if any, that was incremental to
3 base year activities. Furthermore, for the incremental activities, a review was completed to
4 determine if any portion of incremental activity was part of the workgroup's base forecast
5 methodology. The result is what SDG&E considers to be a true representation of incremental
6 increases over the base year.

7 My incremental request supports the ongoing management of these risks that could pose
8 significant safety, reliability, and financial consequences.

9 **C. Changes from RAMP Report**

10 As discussed in more detail in the RAMP to GRC Integration testimony of Messrs.
11 Pearson and Flores (Ex. SDG&E-03, Chapter 2), in the RAMP Proceeding, the Commission's
12 Safety Policy Division (SPD) and intervenors provided feedback on the Companies' 2021
13 RAMP Reports. Appendix B in Ex. SCG-03/SDG&E-03, Chapter 2 provides a complete list of
14 the feedback and recommendations received and the Companies' responses.

15 General changes to risks scores or Risk Spend Efficiency (RSE) values are primarily due
16 to changes in the Multi-Attribute Value Framework (MAVF) and RSE methodology, as
17 discussed in the RAMP to GRC Integration testimony. Other than these changes, the RAMP-
18 related activities described in my GRC testimony are consistent with the activities presented in
19 the 2021 RAMP Report.

20 **III. SUSTAINABILITY AND SAFETY CULTURE**

21 Sustainability, safety, and reliability are the cornerstones of SDG&E's core business
22 operations and are central to SDG&E's GRC presentation. SDG&E is committed to not only
23 delivering clean, safe, and reliable electric and natural gas service, but to doing so in a manner
24 that supports California's climate policy, adaptation, and mitigation efforts. In support of the
25 legal and regulatory framework set by the state, SDG&E has set a goal to reach Net Zero
26 greenhouse gas (GHG) emissions by 2045, adopted a Sustainability Strategy to facilitate the
27 integration of GHG emission reduction strategies into SDG&E's day-to-day operations and long-
28 term planning, and published an economy-wide GHG Study that recommends a diverse approach
29 for California leveraging clean electricity, clean fuels, and carbon removal to achieve the 2045
30 goals through the lens of reliability, affordability, and equity. The Sustainability Strategy serves
31 as SDG&E's guide to enable a more just and equitable energy future in SDG&E's service

1 territory and beyond. As a “living” strategy, SDG&E will continue to update the goals and
2 objectives as technologies, policies, and stakeholder preferences change. See the Sustainability
3 Policy testimony of Estela de Llanos (Ex. SDG&E-02).

4 In this GRC, SDG&E focuses on three major categories that underpin the Sustainability
5 Strategy: mitigating climate change, adapting to climate change, and transforming the grid to be
6 the reliable and resilient catalyst for clean energy. SDG&E’s goal is to contribute to the
7 decarbonization of the economy by way of diversifying energy resources, collaborating with
8 regional partners, and providing customer choice that enables an affordable, flexible, and
9 resilient grid.

10 The activities described in further detail in this testimony advance the state’s climate
11 goals and align with SDG&E’s Sustainability Strategy. Specifically, reduction of potential
12 excavation damages through the Damage Prevention Program will drive progress in Climate
13 Mitigation.

14 Safety is a core value and SDG&E is committed to providing safe and reliable service to
15 all its stakeholders. This safety-first culture is embedded in every aspect of the Company’s
16 work. In 2020, SDG&E commenced development and deployment of a Safety Management
17 System (SMS), which better aligns and integrates safety, risk, asset, and emergency management
18 across the entire organization. The SMS takes a holistic and proactive approach to safety and
19 expands beyond “traditional” occupational safety principles to include asset safety, system
20 safety, cyber safety, and psychological safety for improved safety performance and culture.
21 SDG&E’s SMS is a systematic, enterprise-wide framework that utilizes data to collectively
22 manage and reduce risk and promote continuous learning and improvement in safety
23 performance through deliberate, routine, and intentional processes.

24 SDG&E remains focused on identifying and implementing the most cost-effective
25 solutions with the potential to make the greatest impact on reducing GHG emissions, while
26 maintaining a safe and reliable energy system. SDG&E believes that safety, reliability, and
27 sustainability are inextricably linked and fundamental to the Company’s ability to continue to
28 successfully operate. Please see the Sustainability Policy testimony of Estela de Llanos (Ex.
29 SDG&E-02) for additional detail on SDG&E’s Sustainability Strategy and the Safety, Risk and
30 Asset Management testimony of Kenneth Deremer (Ex. SDG&E-31) for additional detail of
31 SDG&E’s Safety Policy.

SDG&E continues to conduct damage prevention programs that address the nine damage prevention elements found within the PIPES Act listed in legislation, Title 49 U.S.C. (United States Code) §60134(b). Reduction of damages supports public safety, system integrity, and emission reductions. Damages resulting from excavation activity are a great threat to SDG&E’s pipeline infrastructure, with potential for catastrophic consequences to public safety. Within SDG&E’s Safety Management System (SMS), these risks and mitigation measures are assessed, measured, and collectively managed for continuous safety improvement. As stated in SDG&E’s 2022 Gas Safety Plan, “SDG&E has a number of plans and programs that identify and minimize hazards and systemic risks in the pipeline infrastructure and promote public safety and property protection. These plans and programs are an integral part of [SDG&E’s] SMS.”³ Although safety is the first priority of the Damage Prevention Programs, reduction in potential damages has a secondary sustainability benefit of reducing emissions released into the atmosphere.

IV. NON-SHARED COSTS

“Non-shared services” are activities that are performed by a utility solely for its own benefit. Corporate Center provides certain services to the utilities and to other subsidiaries. For purposes of this GRC, SDG&E treats costs for services received from Corporate Center as non-shared services costs, consistent with any other outside vendor costs incurred by the utility. Table WR-5 summarizes the total non-shared O&M forecasts for the listed cost categories.

**TABLE WR-5
Non-Shared O&M Summary of Costs**

GAS SYSTEM STAFF & TECHNOLOGY (In 2021 \$)			
Categories of Management	2021 Adjusted-Recorded (000s)	TY2024 Estimated (000s)	Change (000s)
A. Damage Prevention	95	901	806
Total Non-Shared Services	95	901	806

³ SDG&E 2022 Gas Safety Plan, Section IV. Safety Systems, as submitted to the CPUC on March 15, 2022.

1 educate the public, appropriate government organizations, and persons engaged in excavation-
2 related activities regarding (1) use of the One-Call notification system prior to excavation and
3 other damage prevention activities (known as 811 or USA ticket); (2) possible hazards associated
4 with unintended releases from a gas pipeline facilities; (3) physical indications that such a release
5 may have occurred; (4) steps that should be taken for public safety in the event of a gas pipeline
6 release; and (5) procedures for reporting such an event.⁵

7 “The program and media used must be as comprehensive as necessary to reach all areas
8 in which the operator transports gas” and “must include activities to advise affected
9 municipalities, school districts, businesses, and residents of pipeline facility locations.”⁶ The
10 program must be conducted not only in English, but also “in other languages commonly
11 understood by a significant number and concentration of the non-English speaking population in
12 the operator’s area.”⁷ The operator is required to track these communications and evaluate the
13 messages for resonance and impact and “[t]he operator’s program documentation and evaluation
14 results must be available for periodic review by appropriate regulatory agencies.”⁸

15 Annually, SDG&E Public Awareness Program reaches approximately:

- 16 • 3.6 million consumers;
- 17 • 27,679 excavators and land developers;
- 18 • 186 public officials; and
- 19 • 31 emergency management officials.

20 Every two years, the program reaches:

- 21 • 124,185 residents and businesses along pipeline rights-of-way within SDG&E
22 service territory;
- 23 • 314 residents and businesses near storage facilities and compressor stations; and
- 24 • 1,474 schools.

25 To implement the Public Awareness Program, the Public Awareness Administrator
26 (PAA) uses a matrix-managed approach relying upon multiple organizations within SDG&E for

⁵ 49 C.F.R. § 192.616(d).

⁶ 49 C.F.R. § 192.616(e)-(f).

⁷ 49 C.F.R. § 192.616(g).

⁸ 49 C.F.R. § 192.616(i).

1 plan element execution. The PAA is responsible for coordinating and managing the execution of
2 the activities to successful completion. The program requires that the PAA use various tools,
3 such as software, to track and document activities. There are five audience categories for
4 communications, and each has its own message, medium, and frequency. New audiences can be
5 developed, because certain audiences, for example farmers, may benefit from receiving specific
6 information suited to a particular context, or otherwise do not identify with the content of another
7 audience. SDG&E faces the additional challenge of identifying and reaching non-gas customers
8 who reside along pipeline rights-of-way. Developing mailing lists and messages that would be
9 recognizable as pertinent and not junk mail by this segment is complex, and SDG&E is required
10 to continuously make revisions to keep the messaging fresh and relevant.

11 Increased outreach and activities will also be necessary to address SDG&E's damage
12 reduction goals. Damage prevention data demonstrates that when additional public awareness
13 activities are performed, there is a decrease in damages and an increase in Underground Service
14 Alert (USA) tickets.

15 Damage Prevention Strategies

16 Damage Prevention Strategies manages the damage prevention program focusing on
17 preventing excavation damages to SDG&E's buried pipelines. Damages resulting from
18 excavation activity are the greatest threat to SDG&E's pipeline infrastructure, with potential for
19 catastrophic consequences to public safety.

20 SDG&E is dedicated to mitigating the risk and associated hazards of excavation damages
21 through the expansion of its Damage Prevention program by employing additional resources to
22 proactively identify specific threats to its pipelines. Incremental management employees are
23 needed to analyze the excavation reporting collection and data to identify trends and develop
24 continuous improvement action plans. The team will be specialized in targeting excavation
25 trends needing the most attention and will have a presence in the field to meet with excavators on
26 the job site and provide safe digging education. The team will also work with internal
27 stakeholders to improve internal locate and mark activities and provide incident investigation
28 support. Additionally, as part of the Company's efforts to continuously improve, SDG&E is
29 asking to create a position that focuses on Damage Prevention Continuous Improvement. This
30 position will lead technology and process change initiatives focused on continuing to grow and
31 improve SDG&E's damage prevention program. A review of the current state of SDG&E's

1 excavation damage prevention program substantiates the need to increase resources dedicated to
2 preventing damage to its natural gas pipelines and averting the potential for injuries and property
3 damage:

- 4 • Approximately fifty percent (50%) of excavation damages to the SDG&E natural
5 gas system result from contractors and property owners failing to call USA prior
6 to digging. It is important to enhance education of the public regarding the
7 requirement to notify SDG&E, through the Regional Notification Centers, of
8 planned excavations in the vicinity of its gas pipelines. SDG&E intends to assign
9 resources to patrol its service territory to proactively identify contractors or
10 property owners digging without USA tickets and educate them on the
11 requirements of California's excavation laws.
- 12 • Improve data collection for trend analysis and development of actions to address
13 the root causes and offenders driving excavation damages in the SDG&E service
14 territory. Resources in the field are needed to collect this data.
- 15 • Strengthen partnerships with local cities and municipalities to identify repeat
16 offenders and work collectively to require that excavation laws be followed as
17 part of the permitting process. Resources familiar with the state's excavation
18 laws are needed to effectively communicate to city officials their ability to take
19 action and sanction parties not adhering to the law.
- 20 • Expand coordination of contractor and public education in avoiding damage to
21 underground substructures when excavating.

22 The Gold Shovel Standard (GSS) Program utilizes an external organization that certifies
23 contractors' policies and procedures to protect underground facilities against an established GSS.
24 SDG&E requires all pipeline contractors to participate in the Gold Shovel Program. All third-
25 party damage caused by contractors working for SDG&E poses the same safety risk. The GSS
26 provides positive guidance to underground contractors, aligning their excavation practices
27 against established safe digging practices and procedures. It helps to educate contractors about
28 industry excavation standards and identify and address gaps in their processes. SDG&E requires
29 contractors who perform excavation on behalf of SDG&E to be GSS certified. GSS serves as an
30 additional quality check for its contractors. Actively supporting the GSS Program helps to

1 improve use of the USA one-call requirement and to improve safe digging techniques, such as
2 hand-digging when near gas pipelines.

3 **a. RAMP Activities**

4 RAMP-related costs for Damage Prevention include the costs for the following activities:
5 (1) Public Awareness, (2) Outreach for Latent 3rd Party Damages, (3) Damage Prevention
6 Analyst Program, (4) Gold Shovel Standard Program, (5) Automate Third Party Excavation
7 Incident Reporting, and (6) Locate and Mark Photographs.

8 As described in Table WR-4 above, SDG&E continues to promote awareness of the
9 Underground Service Alert (811, “call-before-you dig”) system to the affected public by
10 reaching out to contractors and the general public so that pipelines are properly marked and
11 located before excavation activities. When residents or contractors dial 811 or USA before any
12 project that involves digging, SDG&E marks the locations of underground lines to prevent
13 damage, which could cause injury or service outages. In addition, SDG&E has the responsibility
14 to train its employees in emergency procedures as well as establishing a liaison with first
15 responders. Through strong communication and coordination with first responders, SDG&E
16 promotes compliance with Title 49 Code of Federal Regulations (CFR), section 192.615 by
17 learning about the responsibility and resources available to each party in the event of a gas
18 pipeline emergency, and by educating each other on how to best respond to a gas system
19 emergency.

20 To comply with Title 49 CFR, section 192.616(d) subsections 1 through 5 and prevent
21 unsafe excavation practices that could result in damage to underground facilities, SDG&E works
22 directly with city officials involved in construction activities within their jurisdiction to raise
23 public awareness in an effort to (1) educate city personnel on the specific requirements of the
24 California safe excavation laws, (2) help officials understand their role in enforcing the laws by
25 promoting the use of 811 USA for excavation tickets (through their project review and
26 permitting activities and through field inspections their employees perform), (3) and by
27 explaining the city’s potential cost savings. Lastly, SDG&E engages in excavator outreach so
28 that contractors and excavators are informed of the potential safety issues that might arise when
29 working around natural gas pipelines. Hitting one of these pipelines while conducting routine
30 work such as digging, planting, or demolition work can cause serious injury, property damage,
31 and loss of utility service. The benefits of calling 811 USA are communicated through

1 awareness campaigns, such as in-person excavator outreach events, targeted mailings, and the
2 Big Shovel display. Excavator outreach is performed to be compliant with Title 49 CFR, section
3 192.616(d) subsections 1 through 5.

4 Outreach for Latent 3rd Party Damages encompasses the efforts to identify and
5 communicate with excavators who may have damaged a SoCalGas underground facility without
6 complying with safe excavation laws and best practices. Occasionally, during routine activities,
7 SoCalGas will expose a section of underground piping and upon visual inspection determine that
8 previously unknown damage has occurred. To identify excavators who may have conducted the
9 excavation, further investigations would be required to determine if any USA tickets or
10 excavation/construction permits had been valid in the area over a given time period.

11 The Damage Prevention Analyst Program works to reduce the number of third-party
12 damages to gas facilities by identifying at-risk excavating contractors and educating them on
13 proper Regional Notification Center notification and safe digging techniques. Damage
14 Prevention Analysts drive to and physically inspect excavation projects with Underground
15 Service Alert (USA) or “811”, “call-before-you dig,” ticket requests. The analysts stop at other
16 construction projects to investigate if the excavator notified USA 811 and if safe excavating
17 techniques are followed. As necessary, the analysts will stop the job and provide education to
18 the contractor about safe excavating practices and procedures. In addition, for Damage
19 Prevention Policy Activities, Gas System Staff & Technology supports a centralized staff
20 organization, which includes the management of the Damage Prevention and Public Awareness
21 Programs.

22 The Gold Shovel Standard is a program designed to strengthen professional contractors’
23 commitment to safe excavation practices through incentives tied to obtaining contracts with the
24 utility. All contractors who perform excavation activities when performing contractual work for
25 SoCalGas will be required to be Gold Shovel Standard certified, which includes development of
26 safe excavation policies and practices, process for acquiring employee feedback, and protection
27 against retaliation of whistleblowers. Gold Shovel Standard membership will improve
28 SoCalGas’s insight to the excavation safety practices of the contractors it hires by allowing the
29 utility access to information regarding damages caused by contractors working for other entities
30 anywhere in the United States.

1 Automating Third Party Excavation incident reporting into one system will centralize
2 reporting and data analysis. This will assist with meeting compliance reporting obligations,
3 develop a better understanding of the data collected in an investigation, simplify reporting, and
4 enhance data analysis processes. Title 49 Code of Federal Regulation, section 192.614 and
5 California Government Code, section 4216 require SDG&E to collect data on third-party
6 excavation incidents. Automating third-party excavation incident reporting is an effort to
7 consolidate and simplify the data collection process involved in investigating a gas incident.
8 Field supervisors complete the investigations of gas incidents. Currently, there are multiple
9 systems and processes used to capture and report data, internally and externally, for a gas
10 incident. All systems and processes might not be updated simultaneously, thereby creating
11 additional manual steps when using the data for internal analysis for process improvements or
12 generating reports for internal or external stakeholders. SDG&E is undertaking an initiative to
13 centralize these processes and systems into one record system to minimize data quality issues,
14 simplify reporting, and standardize data collection with field supervisors. Standardizing data
15 collection into one system will centralize reporting and data analysis, assist with meeting
16 compliance reporting obligations, develop a better understanding of data collected in an
17 investigation, simplify reporting, and enhance data analysis processes. This will facilitate
18 improvements in SDG&E's accuracy and timeliness in locating and marking its infrastructure.

19 Locate and Mark Photographs for each locate and mark ticket visited by locators are
20 planned for all SDG&E's above and belowground facilities in the service territory. These
21 pictures will help audit the quality of locates and provide an opportunity to improve future locate
22 and mark ticket requests for previous locations. The purpose of recording photographs of each
23 locate and mark ticket is to improve the accuracy of the locating activity and to inform process
24 improvements based on investigations of gas incidents and quality assurance audits. By having a
25 record of the locate marks, SDG&E can perform root cause analyses of QA activities and
26 investigations of gas incidents. Photographs could show incorrect markings or GIS mapping,
27 which could be used to improve employee training and update GIS data. The benefits of this
28 mitigation are to improve locate and mark accuracy and mitigate gas infrastructure damage.

29 Table WR-7 below provides the RAMP activities, their respective cost forecasts, and the
30 RSEs for this workpaper. For additional details on these RAMP activities, please refer to my
31 workpapers SCG-05-WP 1SI001.

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**TABLE WR-7
RAMP Activity O&M Forecasts by Workpaper
In 2021 Dollars (\$000)**

Workpaper	RAMP ID	Description	BY2021 Embedded Base Costs (000s)	TY2024 Estimated Total (000s)	TY2024 Estimated Incremental (000s)	GRC RSE*
1SI001.000	SDG&E-Risk-7 - C15-T1 thru T4 (MP)	Public Awareness MP (T1 - T4)	62	155	93	61
1SI001.000	SDG&E-Risk-7 - C16-T1 thru T4 (HP)	Public Awareness HP (T1 - T4)	30	31	1	117
1SI001.000	SDG&E-Risk-7 - M10	Outreach for Latent 3rd Party Damages (HP)	0	1	1	0
1SI001.000	SDG&E-Risk-7 - M9	Outreach for Latent 3rd Party Damages (MP)	0	4	4	0
1SI001.001	SDG&E-Risk-7 - C11	Damage Prevention Analyst Program - (MP)	0	86	86	120
1SI001.001	SDG&E-Risk-7 - C12	Damage Prevention Analyst Program - (HP)	0	14	14	57
1SI001.001	SDG&E-Risk-7 - C21	Gold Shovel Standard Program (MP)	3	3	0	0

Workpaper	RAMP ID	Description	BY2021 Embedded Base Costs (000s)	TY2024 Estimated Total (000s)	TY2024 Estimated Incremental (000s)	GRC RSE*
1SI001.001	SDG&E-Risk-7 - M1	Automate Third Party Excavation Incident Reporting - (MP)	0	14	14	35
1SI001.001	SDG&E-Risk-7 - M2	Automate Third Party Excavation Incident Reporting - (HP)	0	2	2	47
1SI001.001	SDG&E-Risk-7 - M3	Locate and Mark Photographs - (MP)	0	76	76	0
1SI001.001	SDG&E-Risk-7 - M4	Locate and Mark Photographs (HP)	0	13	13	0
Total			95	399	304	437

1

* An RSE was not calculated for activities with zero listed for RSE.

1 **2. Forecast Method**

2 The base year 2021 forecast methodology, with incremental adjustments, was used to
3 forecast this cost category. This method is most appropriate because this activity has changed in
4 recent years and the base year is representative of SDG&E’s expectations for TY 2024. Over the
5 last five years (2017-2021), USA tickets have increased by 14% and SDG&E expects this trend
6 to continue over the next five years based on forecasted economic growth and planned
7 infrastructure investment. Incremental adjustments were made to the base year forecast to
8 account for additional resources needed to meet anticipated increased outreach and activities that
9 will be necessary to address the need for excavation damage reductions, as discussed below.

10 **3. Cost Drivers**

11 SDG&E Public Awareness

12 The cost drivers behind this forecast are: (1) the requirements of 49 C.F.R. § 192.616; (2)
13 the technical document, Public Awareness Programs for Pipeline Operators, API RP 1162, First
14 Edition, also referred to as simply RP 1162 or 1162, because 49 C.F.R. § 192.616 expressly
15 requires operators to follow the guidelines and recommendations set forth in API RP 1162; and
16 (3) program expansion recommendations by regulators.

17 Federal Public Awareness regulations specifically direct pipeline operators to continually
18 assess and improve the effectiveness of their Public Awareness Programs. A key to promoting
19 continuous improvement is for SDG&E to evaluate the impact of its Public Awareness program.
20 The impact from the Public Awareness Program lies within its communications both in content
21 and medium (delivery). It is therefore necessary for SDG&E to evaluate both the content of its
22 messages and message delivery systems.

23 An example would be to undertake an assessment of messaging to raise safety awareness.
24 This measurement requires surveys and focus groups of various groups to determine how and to
25 what extent the Public Awareness messages are reaching them. Not all messages or delivery
26 systems work for all stakeholders. In other words, a one-size-fits-all approach is not the most
27 effective way to communicate. Through formal measurements or surveys of the various
28 audiences, SDG&E assesses what is working and what is not.

29 The frequency of formal measurements or surveys, and how tailored those measurements
30 and surveys are, are key factors that impact the costs of implementing a successful Public
31 Awareness Program. More frequent and targeted assessments help SDG&E to develop more

1 succinct and relevant messages and deliver them in formats and mediums that meet the needs of
2 each particularly identified audience. The more frequent and targeted the surveys and focus
3 groups are, however, results in higher costs of conducting those activities.

4 Another cost driver is the recommendations from the Commission's Safety Enforcement
5 Division (SED) when it concluded its Public Awareness audit, in which it recommended
6 additional communication messages to existing audiences to further promote pipeline safety.
7 SDG&E is judiciously incorporating staff recommendations into the Public Awareness plan, but
8 the amount of information can become overwhelming to recipients. Therefore, caution must be
9 exercised and carefully-crafted messages must be developed to avoid having information
10 overlooked or discarded as "junk mail."

11 An additional cost driver is making the necessary additions to SDG&E's program when
12 changes to the API RP 1162, Third Edition become final.

13 Additional resources are needed to meet these cost drivers and to allow for an expansion
14 of the Public Awareness program to identify communication opportunities and expand beyond
15 regulatory requirements. Increased outreach and activities will be necessary to address the need
16 for excavation damage reductions. Damage prevention data demonstrates that when additional
17 public awareness activities are performed, there is a decrease in damages and an increase in
18 Underground Service Alert tickets. An enhanced Public Awareness program would include an
19 increase in media campaigns, collaborations with external organizations, participation in
20 outreach events, and support of employees to be public awareness advocates and provide damage
21 prevention messaging.

22 Damage Prevention Strategies

23 The major cost drivers for damage prevention activities are the level of general
24 construction and development activity in the public and private sectors, including private
25 construction projects, such as commercial and industrial centers, strip malls, residential
26 remodeling projects, and city, county, and state projects, such as freeway and street
27 improvements, and storm drain and sewer work. In addition, as SDG&E's infrastructure
28 expands into outlying areas to provide service to new residential developments, increased
29 activity follows, as developers move in to construct schools, shops, restaurants, etc., to meet the
30 needs of those new communities. Local and state agencies continue to impose new, and often
31 more stringent, operating conditions that can result in increased cost pressures to maintain the

1 gas distribution system. Increasing permit costs and construction requirements, such as
2 engineered traffic control plans, additional paving requirements, and a growing trend toward
3 restricted working hours, will increase SDG&E's expenses when excavating for depth to identify
4 elevation data of SDG&E's facilities in public rights-of-way in advance of construction projects.

5 Over the last five years (2017-2021), USA tickets have increased by 14% at SDG&E.
6 This growth is forecast to continue as the current California excavation law gains additional
7 enforcement and existing public awareness efforts increase excavators' awareness of digging
8 laws. The California Underground Facilities Safe Excavation Board has been established to act
9 against those parties who violate the excavation law. In addition, in October 2021, the Governor
10 signed Senate Bill 297 into law, which enacted the Wade Kilpatrick Gas Safety and Workforce
11 Adequacy Act of 2021. The bill makes any contractor that causes damage to a subsurface
12 installation as a result of failing to provide notice of the need for a gas corporation to locate and
13 mark its subsurface installations or commencing excavation before a gas corporation marks its
14 subsurface installations subject to a civil penalty in an amount not to exceed \$100,000 and
15 possible suspension or revocation of the contractor's license if specified conditions are met. The
16 State's added enforcement and SB 297's amendments increasing the maximum penalties are
17 expected to compel more excavators to call USA, which will add upward pressure to an already
18 increasing ticket volume in the State. Thus, the increased ticket volume will directly increase the
19 need for more damage prevention program support.

20 **V. NATURAL GAS LEAK ABATEMENT PROGRAM MEMORANDUM ACCOUNT**
21 **(NGLAPMA) RECOVERY**

22 As part of my testimony, I am providing the business justification for the costs incurred
23 for the program administration activities from July 17, 2017 through December 31, 2021, that
24 have been posted to the NGLAPMA. The NGLAPMA records the incremental costs associated
25 with program administration as part of the Natural Gas Leak Abatement Program (NGLAP)
26 authorized by the Commission in D.17-06-015.

27 On January 22, 2015, the CPUC issued Rulemaking (R.) 15-01-008 to implement
28 provisions of Senate Bill (SB) 1371, which set forth targets for natural gas leak abatement.
29 Phase I of R.15-01-008 was established to specifically address the overall policies and guidelines
30 for a natural gas leak abatement program consistent with SB 1371. On June 15, 2017, the CPUC
31 issued D.17-06-015 outlining the NGLA Program for the Utilities, pursuant to Pub. Util. Code

1 §§ 975, 977, 978. The Decision directed the Utilities to submit a Tier 3 Advice Letters to
2 establish 2018 and 2019 revenue requirement forecasts and caps for the NGLA Program. On July
3 17, 2017, SoCalGas and SDG&E submitted the requisite Tier 3 ALs (AL 5166 and 2593-G
4 respectively) per R.15-01-008 to implement provisions of SB 1371.

5 On March 12, 2020, SDG&E submitted AL 2852-G to provide forecasted costs for its
6 2020 Compliance Plan, including its forecast of costs and emissions reductions for the years
7 2021 and 2022 and revenue requirements for the life of the capital projects. Pursuant to Energy
8 Division’s request, dated April 16, 2020, SDG&E was directed to supplement AL 2852-G. On
9 June 12, 2020, SDG&E submitted AL 2852-G-A, which replaced AL 2852-G in its entirety and
10 provided updated cost forecasts and included a discussion about the emission reduction forecast.
11 On June 25, 2020, Energy Division directed SDG&E to supplement AL 2852-G-A. Therefore,
12 SDG&E submitted AL 2852-G-B on June 29, 2020, to replace AL 2852-G-A in its entirety. On
13 October 2, 2020, SDG&E submitted AL 2852-G-C to replace AL 2852-G-B in its entirety and
14 correct rate impact figures. On December 17, 2020, the CPUC approved the Utilities’ ALs and
15 Compliance Plans through Resolution G-3576.

16 Details of costs related to the NGLAPMA are determined in a separate Tier 3 advice
17 letter in compliance with D.17-06-015. Based on D. 17-06-015, Ordering Paragraph 12, SDG&E
18 will seek cost recovery in an appropriate ratemaking proceeding, therefore SDG&E respectfully
19 requests NGLAPMA recovery in this GRC. Based on the foregoing, the administrative costs
20 recorded by SDG&E are in compliance with D.17-06-015, are reasonable, and should be
21 approved by the Commission. Additional information regarding regulatory accounts is provided
22 in the Regulatory Accounts testimony of Mr. Jason Kupfersmid (Exhibit SDGE-43). Table WR-
23 8 below shows the activity in this memorandum account.

24 **Table WR-8**
25 **Natural Gas Leak Abatement Program Memo Account**

Year	Expenses (\$)
2018	696
2019	2,249
2020	510,409
2021	184,343

26

1 **VI. CONCLUSION**

2 The SDG&E forecast of the O&M expenses represented in my testimony balances
3 compliance obligations, risk, as well as the cost to deliver safe, clean, and reliable natural gas
4 service. Thus, SDG&E requests the Commission adopt SDG&E's TY 2024 forecast of \$901,000
5 for Gas System Integrity O&M expenses, which is composed of \$901,000 for non-shared service
6 activities.

7 In summary, these forecasts reflect sound judgment and represent the impact from higher
8 regulatory expectations to continuously enhance the safety of the SDG&E natural gas system and
9 provide safe, clean, and reliable natural gas service at reasonable rates. The Commission should
10 adopt the forecasted expenditures discussed in this testimony because they are prudent and
11 reasonable.

12 This concludes my prepared direct testimony.

1 **VII. WITNESS QUALIFICATIONS**

2 My name is Wallace Rawls. My business address is 555 West Fifth Street, Los Angeles,
3 California 90013. I am employed by SoCalGas as the Director of Gas System Integrity Staff &
4 Programs. In this position, I am responsible for providing strategic direction and management of
5 policies, procedures, training, operator qualification, and programs to comply with safety and
6 other codes in an efficient and repeatable manner. SoCalGas's Safety Management System
7 continuous improvement value is embedded in the Company's processes to optimize and
8 standardize activities and enhance safety. Performance metrics are established to monitor and
9 adjust as needed with Operations.

10 I have been employed at SoCalGas since 1989 and have held a variety of positions with
11 increasing responsibility within Operations. I've held leadership roles in Gas Distribution, Area
12 Resource Scheduling, Safety & Wellness, and Gas Engineering Staff & Programs. I have
13 worked in various areas responsible for planning, installing, performing maintenance, and
14 replacing gas infrastructure. My team provides leadership and oversight implementing Gas
15 Standards, business process enhancements, and damage prevention policy development and
16 support. I have held my current position as Director of Gas System Integrity Staff & Programs
17 since May 2020.

18 I hold a bachelor's degree in Business Administration from the University of Laverne and
19 a Master of Business Administration degree from Azusa Pacific University. I have not
20 previously testified before the Commission.

APPENENDIX A
Glossary of Terms

APPENDIX A
Glossary of Terms

Acronym	Definition
811	National Call-Before-You-Dig Phone Number
49 CFR 192	Transportation of Natural Gas By Pipeline: Minimum Federal Safety Standards
AIP	Asset Investment Planning
AIPM	Asset Investment Planning & Management
API	American Petroleum Institute
BY	Base Year
CalGEM	California Geologic Energy Management Division
CDM	Capital Delivery Model
CFR	Code of Federal Regulations
CPUC	California Public Utilities Commission
CSLB	California State Licensing Board
DCM	Digital Content Management
DELTA	Distribution Engineering Lifecycle Tracking Application
DIMP	Distribution Integrity Management Program
DMS	Document Management System
EAM	Enterprise Asset Management
ELS	Electronic Leak Survey
ERM	Enterprise Risk Management
FSD	Field Service Delivery
GARP	Generally Accepted Records Keeping Principles
GIS	Geographic Information System
GSS	Gold Shovel Standard Program
GTSR	Gas Transmission Safety Rule
HP	High Pressure
HPPR	High Pressure Project Record
IG	Information Governance
ISO	International Standards Organization
IT	Information Technology
KPIs	Key Performance Indicators
MM	Material Management
MP	Medium Pressure
NGLA	Natural Gas Leak Abatement

Acronym	Definition
NGLAPMA	Natural Gas Leak Abatement Program Memorandum Account
O&M	Operations & Maintenance
OJT	On-The-Job-Training
OQ	Operator Qualification
PAA	Public Awareness Administrator
PDMS	Pipeline Data Management System
PHMSA	Pipeline and Hazardous Materials Safety Administration
PI	Process Information
PPMS	Project and Portfolio Management System
psi	Pounds per square inch
RAMP	Risk Assessment Mitigation Phase
RIM	Records and Information Management
SMS	Safety Management Systems
SPD	Safety Policy Division
TY	Test Year
WIMS	Well Integrity Management Solution
WM	Work Management
WMS	Work Management System

APPENDIX B
RAMP Activities Sorted By Workpaper

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RAMP Activities Sorted By Workpaper

GAS SYSTEM STAFF & TECHNOLOGY						
RAMP Activity O&M Forecasts by Workpaper (In 2021 \$)						
Workpaper	RAMP ID	Description	BY2021 Embedded Base Costs (000s)	TY2024 Estimated Total (000s)	TY2024 Estimated Incremental (000s)	GRC RSE*
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1SI001.001	SDG&E-Risk-7 - C21	Gold Shovel Standard Program (MP)	3	3	0	0
1SI001.001	SDG&E-Risk-7 - M1	Automate Third Party Excavation	0	14	14	35

GAS SYSTEM STAFF & TECHNOLOGY						
RAMP Activity O&M Forecasts by Workpaper (In 2021 \$)						
Workpaper	RAMP ID	Description	BY2021 Embedded Base Costs (000s)	TY2024 Estimated Total (000s)	TY2024 Estimated Incremental (000s)	GRC RSE*
		Incident Reporting - (MP)				
1SI001.001	SDG&E-Risk-7 - M2	Automate Third Party Excavation Incident Reporting - (HP)	0	2	2	47
1SI001.001	SDG&E-Risk-7 - M3	Locate and Mark Photographs - (MP)	0	76	76	0
1SI001.001	SDG&E-Risk-7 - M4	Locate and Mark Photographs (HP)	0	13	13	0
Total			95	399	304	437

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