Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2028 General Rate Case
Application: A.26-06-___
Exhibit: SDGE-04

(PUBLIC)

PREPARED DIRECT TESTIMONY OF TASHONDA TAYLOR

(GAS DISTRIBUTION)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

June 2026

TABLE OF CONTENTS

APPENDICES

SUMMARY

GAS DISTRIBUTION (In 2025 $)			
Categories of Management	**2025 Adjusted-Recorded (000s)**	**TY 2028 Est. (000s)**	**Change (000s)**
Total Non-Shared Services	43,269	45,486	2,217
Total Shared Services (Incurred)	0	0	0
Total O&M	**43,269**	**45,486**	**2,217**

GAS DISTRIBUTION (In 2025 $)							
Categories of Management	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
Non-Collectible (NC)[1]	143,775	154,897	166,335	166,506	166,654	167,283	167,953
Collectible (CO)[2]	4,062	4,373	3,928	3,481	3,447	3,496	3,572
Total Capital	**147,837**	**159,270**	**170,263**	**169,987**	**170,101**	**170,779**	**171,525**

Summary of Requests

San Diego Gas & Electric Company (SDG&E or the Company) requests that the California Public Utilities Commission (CPUC or Commission) adopt its Test Year (TY) 2028 General Rate Case (GRC) forecast of $45,486,000 for Gas Distribution operations and maintenance (O&M) expenses. SDG&E further requests that the Commission adopt its forecast for capital expenditures as reflected in Appendix C.

These investments are reasonable, prudent, and fully justified, as well as being designed with a focus on customer affordability. The activities funded by these requests:

- Maintain and enhance the delivery of sustainable, safe, and reliable service to customers;

[1] Non-collectible costs are costs that are not expected to be collected from a third-party.

[2] Collectible costs are costs that SDG&E expects to collect from third parties (*i.e.*, not to be collected from ratepayers).

- Comply with operational laws, codes, and standards established by local, state, and federal authorities;
- Support SDG&E's commitment to mitigate risks associated with hazards to customer/public and employee/contractor safety, infrastructure integrity, and system reliability;
- Address operations, maintenance, and construction needs driven by projected customer and system growth and the obligations under franchise agreements with city, county, and state agencies; and
- Preserve and strengthen a diverse and qualified workforce.

In addition, my testimony establishes the reasonableness of $125,779,357 ($124,610,239 in capital expenditures and $1,169,117 in O&M expenditures) incurred from 2022 through 2025 in executing the ongoing Mobilehome Park Utility Conversion Program (MHP Program). As directed by the Commission in D.14-03-021, SDG&E submits the costs of the program annually in the MHP Program Report (Appendix D) and supports the reasonableness as part of its GRC. The reasonableness review of costs is limited to recorded costs and excludes program cost forecasts.

The activities described in my testimony are consistent with the operational laws, codes, and standards established by local, state, and federal authorities.[3] This work safeguards the system's safety and integrity and includes compliance and public safety measures such as system-wide leak surveys, facility inspections, corrosion detection through cathodic protection maintenance, pipeline and facility upkeep, as well as damage prevention (locate and mark) of underground electric, fiber, and gas piping, so customers and excavators know where they can safely excavate. These efforts are expected to grow as SDG&E manages aging infrastructure and responds to evolving regulatory and legislative requirements.

[3] *See, e.g.,* Transportation of Natural and Other Gas By Pipeline: Minimum Federal Safety Standards, 49 CFR § 192 et seq.; Cal. Gov't Code § 4216 et seq.; General Order (GO) 112-F; and GO 58-A.

Key work categories included in my request in support of this commitment to safety and gas and electric system integrity include:

- Infrastructure Patrol & Inspection: SDG&E proactively surveys its gas distribution system for leakage at frequencies determined based on the pipe material involved, the operating pressure, the cathodic protection of the pipe, and the proximity of the pipe to various population densities.
- Damage Prevention (Electric, Fiber Optic, and Gas): SDG&E will mark underground electric lines, fiber-optic cabling, and gas infrastructure to help excavators use safe digging practices and avoid damaging SDG&E facilities.
- Leak Repair & Restoration: Once a leak is identified, SDG&E will repair the gas infrastructure and restore the surface to meet municipal standards or to its original condition.
- Distribution Maintenance: Maintenance of valves, risers, and the mitigation of abnormal operating conditions (AOC), such as moving or lowering gas infrastructure due to infrastructure exposure or encroachments, and maintaining access to valves, and the subsequent surface restoration.
- Tools, Fittings, and Materials: Expenses necessary for small tools, small pipe fittings, miscellaneous pipeline materials, and miscellaneous installation materials used during construction and maintenance activities, and those held in inventory as vehicle truck stock.
- Electric Support: Expenses incurred by Gas Distribution crews that have been specially trained to provide street repair and traffic control support services for Electric Distribution crews performing Corrective Maintenance Program Inspections.
- Measurement and Regulation: Inspecting and maintaining large gas meters, regulators, and their Meter Set Assemblies (MSA), gas instruments, company Compressed Natural Gas (CNG) facilities, inspection and maintenance of gas regulator stations and other equipment used in measuring and regulating gas within the gas system.
- Cathodic Protection: Inspection and maintenance of the cathodic protection system on steel infrastructure to prevent corrosion and leaks. This includes

monitoring the CP system performance, installing anodes, troubleshooting system shorts and interference problems.

- Training: Maintaining a skilled, qualified, and dedicated workforce is critical to the safety and reliability of the Gas Distribution infrastructure. This includes evaluating new field technologies, development of field training materials and providing skills training both in classroom and simulation format.

To better understand the TY 2028 forecasts, the following factors should be considered:

- Safety Compliance Activities: Many of the activities discussed in my testimony are driven by compliance obligations, including 49 C.F.R. § 192 *et seq*.; Cal. Gov't Code § 4216 *et seq*.; CPUC General Order 112-F; and CPUC General Order 58-A.
- Mitigation of Aging Infrastructure for Reliability and Safety: With aging infrastructure, distribution pipelines and other capital assets require replacement for safety and reliability.
- Risk Evaluation and Mitigation Activities: Many of the activities discussed in my testimony are focused on reducing identified risks to the public, employees, and the distribution system.
- Obligation to Serve: SDG&E has an obligation to serve its customers under California Public Utilities Code Section 451, necessitating investment in, and the operation and maintenance of, a gas system capable of safely and reliably transporting, storing, and delivering essential gas services.

PREPARED DIRECT TESTIMONY OF TASHONDA TAYLOR
(GAS DISTRIBUTION)

I. INTRODUCTION

A. Summary of Gas Distribution Costs and Activities

My testimony supports the Test Year (TY) 2028 forecasts for operations and maintenance (O&M) costs for non-shared services, and capital costs associated with the Gas Distribution area for SDG&E. In total, SDG&E requests the Commission adopt its TY 2028 forecast of $45,486,000 for Gas Distribution O&M expenses. SDG&E further requests the Commission adopt its forecast of capital expenditures as reflected in Appendix C. Table TT-1 summarizes my sponsored costs.

In addition, my testimony establishes the reasonableness of $125,779,000 ($124,610,000 in capital expenditures and $1,169,000 in O&M expenditures) incurred from 2022 through 2025 in executing the ongoing Mobilehome Park Utility Conversion Program (MHP Program).

Certain forecasted activities and estimated costs were presented previously in SDG&E's 2025 RAMP Application (A.) 25-05-010/013 (consolidated) filed on May 15, 2025. Those activities and any changes since the RAMP filing are detailed in Section V below.

TABLE TT-1
Test Year 2028 Summary of Total Costs

GAS DISTRIBUTION (In 2025 $)			
Categories of Management	**2025 Adjusted-Recorded (000s)**	**TY 2028 Est. (000s)**	**Change (000s)**
Total Non-Shared Services	43,269	45,486	2,217
Total Shared Services (Incurred)	0	0	0
Total O&M	**43,269**	**45,486**	**2,217**

GAS DISTRIBUTION (In 2025 $)							
Categories of Management	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
Non-Collectible (NC)	143,775	154,897	166,335	166,506	166,654	167,283	167,953

GAS DISTRIBUTION (In 2025 $)							
Categories of Management	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
Collectible (CO)	4,062	4,373	3,928	3,481	3,447	3,496	3,572
Total Capital	**147,837**	**159,270**	**170,263**	**169,987**	**170,101**	**170,779**	**171,525**

SDG&E's Gas Distribution is responsible for operating and maintaining the safety and integrity of the gas system through rigorous compliance with Federal and State requirements and public safety measures, while supporting the construction of new facilities driven by customer demand and operational needs. These investments align with SDG&E's overarching commitment to delivering safe, reliable, and affordable energy. SDG&E prioritizes work that promotes compliance, system integrity, customer affordability, and reliability, in alignment with its longstanding commitment to safety:

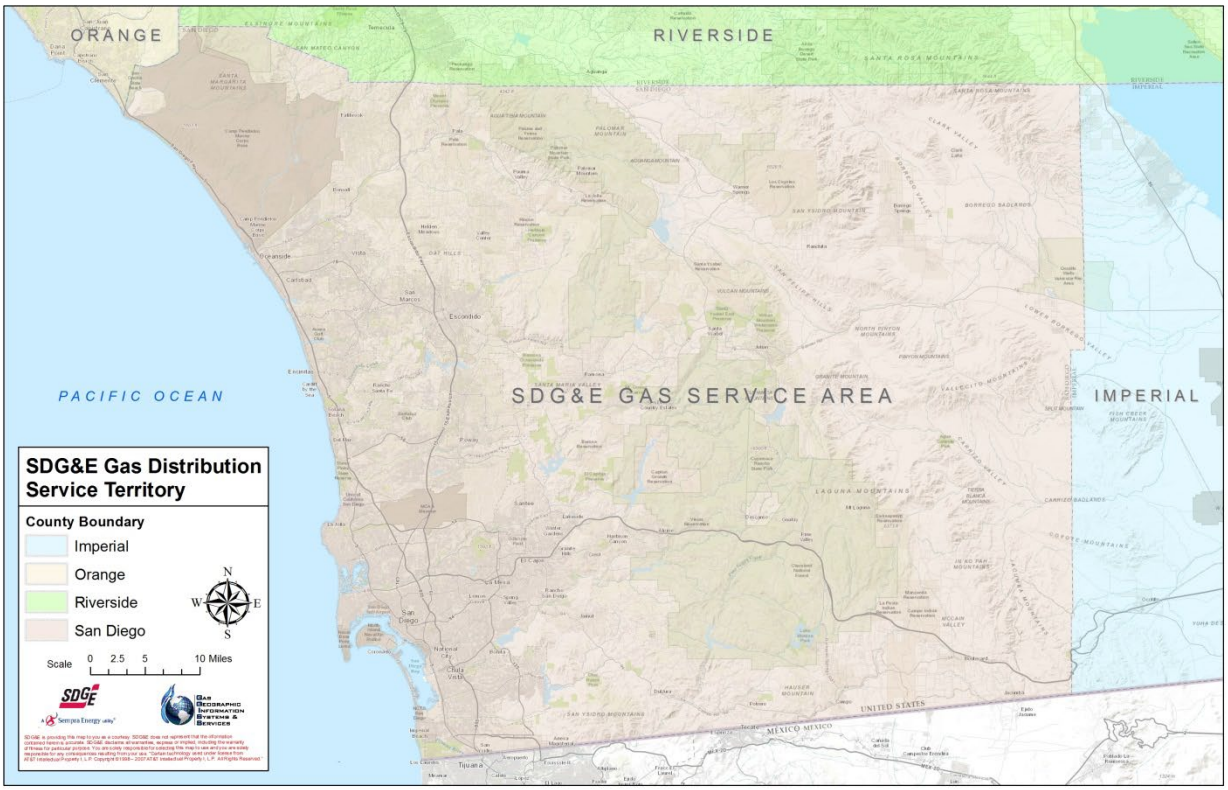
> SDG&E's longstanding commitment to safety focuses on three primary areas: employee/contractor safety, customer/public safety, and the safety of our gas and electric delivery systems. This safety focus is embedded in everything SDG&E does and is the foundation of who SDG&E is – from initial employee training to the installation, operation, and maintenance of our utility infrastructure, as well as our commitment to providing safe and reliable service to our customers.[4]

Costs associated with Gas Distribution activities are based on safety-related mitigations, compliance with evolving Federal and State Regulatory requirements, and reasonableness reviews to promote prudent investment decisions. Capital expenditures primarily support the installation, replacement, and relocation of distribution pipeline infrastructure, while O&M expenses support system-wide leak surveys, leak repairs and street restoration, facility inspections, corrosion detection via cathodic protection maintenance, distribution pipeline maintenance, and damage prevention by accurately locating and marking underground electric, fiber optics, and gas infrastructure to promote safe excavation for customers and contractors and the associated engineering, planning, and supervision support to perform these activities.

[4] SDG&E, *2026 Gas Safety Plan* (March 13, 2026) at 6, *available at:* https://www.sdge.com/node/24251.

SDG&E's gas distribution system consists of a network of approximately 15,500 miles[5] of interconnected gas mains, services, and associated pipeline facilities. Constructed from steel and plastic materials in varying diameters, these facilities are located throughout most streets in SDG&E's service territory. The distribution system's primary function is to deliver natural gas from SDG&E's transmission system to approximately 915,000 customers across more than 1,400 square miles, extending from Orange County in the north to the Mexico border in the south, as illustrated in Figure TT-1 below.

Figure TT-1
SDG&E Gas Distribution Service Territory



SDG&E's Distribution network includes approximately 8,395 miles of gas mains operating at high pressure (over 60 pounds per square inch (psi)) or medium pressure (60 psi and below)). This system is equipped with numerous valves to isolate sections for operational, construction, and emergency purposes. SDG&E operates regulator stations throughout the

[5] Total mileage from U.S. Department of Transportation Pipeline and Hazardous Material Safety Administration 2025 Annual Report for Calendar Year 2025 Gas Distribution System, OMB NO: 2137-0629 (8,395 miles of main & 702,408 services with average service length of 54ft).

system to maintain gas pressure, regulate the distribution system, and support sufficient capacity to meet customer demand for natural gas. In addition, SDG&E maintains approximately 7,184 miles of service lines. The gas service lines connect the high and medium-pressure mains to each customer meter set assembly (MSA) and the "house pipeline."

To support safe and reliable service, SDG&E's workforce routinely performs work to maintain the daily operation of the system, connect new customers, maintain the necessary infrastructure and capacity to serve all customers, replace damaged or deteriorating facilities, locate and mark underground electric, fiber, and gas infrastructures, and relocate infrastructure to meet customer and governmental agency needs. This workforce ranges from front-line construction crews, locators, and patrollers to technical planners and engineers. There are approximately 544 distribution employees located at five operating bases and two technical offices throughout SDG&E's service territory. These employees are responsible for maintaining the safe and reliable operation of the gas distribution system.

My cost forecasts support the Company's commitment to continuous improvement while delivering sustainable, safe, and reliable natural gas service at affordable rates. These investments mitigate risks to customer and public safety, employee and contractor safety, infrastructure integrity, and system reliability.

SDG&E is committed to investment in pipeline infrastructure which supports compliance with applicable local, state, and federal regulations while maintaining the reliability of the distribution system that customers rely on. The Company continuously evaluates pipeline conditions through comprehensive operations and maintenance programs and proactively replaces pipeline segments to uphold system safety and integrity.

With the forecasted funding and a focus on operational efficiencies and process improvements, SDG&E will continue to address business and operational challenges while delivering sustainable, safe, and reliable natural gas service at affordable rates.

B. Organization of Testimony

My testimony is organized as follows:

- Introduction
- Affordability and Efficiency
- Non-Shared O&M Cost
- Capital

- Risk Assessment Mitigation Phase (RAMP) Integration
- Mobilehome Park (MHP) Utility Conversion Program Reasonableness Review
- Conclusion

C. Support To and From Other Witnesses

My testimony references the testimony and workpapers of several other witnesses, either in support of their testimony or as referential support for mine. Those witnesses are:

- RDF Integration (Exhibit (Ex.) SCG-02B/SDGE-02B)
- Gas Engineering & System Integrity (GESI) (Ex. SDGE-03)
- SDG&E Gas Transmission (Ex. SDGE-05)
- Gas Major Projects (Ex. SDGE-06)
- Electric Distribution O&M (Ex. SDGE-09)
- SDG&E Customer Services (Ex. SDGE-12)
- Information Technology (Ex. SCG-10/SDGE-14)
- Sustainability & Environmental (Ex. SDGE-17)
- Escalation & Gas Customer Forecast (Ex. SCG-20/SDGE-24)
- SDG&E Regulatory Accounts (Ex. SDGE-26)
- Compliance (Ex. SCG-30/SDGE-36)

The descriptions below explain how several of the above witnesses support my testimony and how my testimony supports theirs.

1. Small Meter and Regulator Purchases

I sponsor the capital costs associated with the purchase of both Gas Distribution and Customer Services meters and regulators. The labor costs associated with replacing small meters and regulators, typically at residential and small commercial sites, are addressed by SDG&E Customer Services (Ex. SDGE-12). Additional information about these capital purchases may be found in Section IV.C. Gas Meters & Regulators (005020) of my testimony.

2. New Meter Set Forecast

Gas Distribution's New Customer & Gas System Upgrades to Support Gas Load construction capital costs, and related meter and regulator unit purchases, are driven by the number of new customer meter set installations. Details on the forecast of new meter set installations can be found in the workpapers of Escalation & Gas Customer Forecast (Ex. SCG-

20/SDGE-24). Additional information on the forecasts for new meter sets may be found in Section IV.A. New Customer & Gas System Upgrades to Support Gas Load (005000) of my testimony.

3. Electric Support

Labor and non-labor expenses are incurred by Gas Distribution crews that have been specially trained to provide street repair and traffic control support services for Electric Distribution crews performing Corrective Maintenance Program Inspections. Additional information about the electric Corrective Maintenance Program is addressed by Electric Distribution O&M (Ex. SDGE-09).

4. Gas Engineering & System Integrity (GESI)

Gas Distribution receives support from a centralized staff organization within GESI. The support activities provided by this organization are discussed in the GESI testimony (Ex. SDGE-03). These activities include programmatic support for the Aerial Leak Detection and Distribution Integrity Management Program, management of Public Awareness Programs, and research and implementation of tools and technologies.

5. Information Technology

Gas Distribution also receives support from centralized Information Technology organizations. The activities provided by this group are described in the Information Technology testimony (Ex. SCG-10/SDGE-14) and include support for enterprise systems which support Gas Distribution. For SDG&E, these systems include Work Management Foundation and Field Services and Field Technology Solutions. The SoCalGas systems which support SDG&E include Asset Spatial Products & Emergency Response, Construction Planning & Records Management Applications, and Asset Planning, Design, and Construction.

II. AFFORDABILITY & EFFICIENCY

SDG&E recognizes the importance of customer affordability and is continuously evaluating ways to increase efficiency. Discussed below are some examples in the Gas Distribution area where SDG&E has enacted measures that support affordability or increase efficiency.

A. Gas Emergency Department (GED)

Gas Distribution established the GED program to enhance gas emergency response times by implementing overlapping 24/7 shifts to support faster on-scene arrival and prompt control of

escaping gas for public safety. SDG&E originally staffed two "C" shift crews (8:00 p.m. to 6:00 a.m.) to cover the full-service territory each night. To reduce O&M expenses, Gas Distribution evaluated the operational efficiency of these crews and determined that the number of "C" shift crews could be reduced from two to one while still maintaining emergency response performance during late evening hours.

B. Pilot Implementation of 4x10s Work Shift

SDG&E typically runs a standard work week of five days a week for eight hours per day. At Gas Distribution's Beach Cities construction & operations center, with the agreement of the represented employees at this location, the team began piloting four-day workweeks with 10-hour shifts. Under this schedule, some crews start with Monday off, and others start with Friday off to maintain standard workweek coverage. With this change, the Gas Distribution team at Beach Cities has seen increased efficiency due to reduced travel for multi-day jobs. Also, overtime has decreased since crews are on 10-hour straight-time shifts. An additional important benefit is that crews are experiencing enhanced morale.

C. Cathodic Protection Design Optimization

Gas Distribution has traditionally used a standard design when building or replacing anode beds for cathodic protection stations. Over the past year, however, the team has begun optimizing designs based on station performance and total project cost. This includes evaluating opportunities to reuse existing anode beds and reducing expenses for trenching, restoration, traffic control, and soil disposal associated with boring. When feasible, this optimization has resulted in significant cost reductions on several projects.

D. Leak Repair & Restoration Optimization

Gas Distribution has historically focused on locating and repairing leaks as soon as possible, including Code 2, Code 3, and aboveground nonhazardous leaks, to minimize the leak repair backlog and reduce natural gas emissions. Over the past year, the team has shifted to a more holistic approach while maintaining compliance, continuing to focus on safety while emphasizing efficiency and cost savings. When a non-hazardous leak is identified, the team now evaluates its proximity to other leaks and determines whether they can be repaired together or incorporated into planned work within the compliance timeline window. This strategy has reduced overtime, contractor and restoration costs, and customer disruption.

E. Street Repair Restoration

In alignment with Municipal Code requirements for street repair and restoration, Gas Distribution continues to experience significant upward cost pressures due to expanded restoration scope, increased compaction requirements, and more restrictive permitted working hours from municipalities. To address these challenges, the team is implementing a two-pronged strategy:

1. Vendor Cost Optimization: Renegotiating with multiple street repair contractors to unbundle specific components of the restoration work, enabling more competitive pricing and improved cost efficiency.
2. Municipal Coordination: Collaborating with municipalities to schedule gas system work ahead of planned street improvement projects, thereby reducing the extent of pavement restoration required.

III. NON-SHARED O&M 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. Table TT-2 summarizes the total non-shared O&M forecasts for the listed cost categories.

Gas Distribution requests that the Commission adopt a TY 2028 forecast of O&M expense for non-shared services of $45,486,000. This is an increase of $2,217,000 over the 2025 adjusted-recorded base. This increase reflects: (1) the inclusion of Aerial Leak Detection activities, as well as required integration of the Leak Abatement Program into the TY 2028 GRC;[6] (2) the upward pressure seen from increasing damage prevention tickets to mark out electric, fiber optic, and gas infrastructure; and (3) incremental labor added for future SDG&E Field and Gas control support once Electronic Pressure Monitors (EPM) are integrated into Gas Control (*i.e.*, Control Center Modernization (CCM))[7] in 2028.

---

[6] Resolution (Res.) G-3606 at 17 ("SDG&E will still need to submit its biennial 2026 Compliance Plan to SPD, as required by D.17- 06-015 and D.19-08-020.").

[7] *See* Gas Major Projects testimony (Ex. SDGE-06).

TABLE TT-2
Non-Shared O&M Summary of Costs

GAS DISTRIBUTION (In 2025 $)			
Categories of Management	**2025 Adjusted-Recorded (000s)**	**TY 2028 Est. (000s)**	**Change (000s)**
A. Field Operations & Maintenance	31,763	33,817	2,054
B. Distribution Technical Services	2,541	2,575	34
C. Operations, Management, & Training	8,537	8,659	122
D. Gas Decarbonization	428	435	7
Total Non-Shared Services	**43,269**	**45,486**	**2,217**

The level of funding requested in this testimony is consistent with compliance with pipeline safety regulations and the continued safe and reliable operation of SDG&E's gas distribution pipeline system. O&M activities are routinely performed on over 15,500 miles of gas distribution main and service pipeline and associated facilities in response to mandated federal and state regulatory agency codes and standards,[8] customer and pipeline growth expectations, franchise obligations, and to sustain the safe and reliable operation of the pipeline system. This work includes leakage surveys, leak repairs, maintenance on mains and services, application of corrosion control measures, valve maintenance, regulator station maintenance, monitoring meter accuracy, gas odorant monitoring, supervision and training for these O&M activities, and locating and marking underground electric conductors, underground fiber optic cables, and buried gas pipelines to avoid damage caused by others. Additionally, various supporting tasks are required to complete the field O&M work. Examples of support work include maintaining pipeline maps and related gas system attribute information, administering and implementing city permitting and traffic control requirements, and maintaining engineering models of system flows and pressures. Investment in these activities supports SDG&E's commitment to mitigate risks to public and employee safety, infrastructure integrity, and system reliability.

In preparing projections of TY 2028 requirements, SDG&E Gas Distribution reviewed historical spending levels, including units of work, and developed an assessment of future requirements and associated risks. This analysis involved a review of historical spending from

[8] Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards, 49 CFR § 192 *et seq*.; Cal. Gov't Code § 4216 *et seq*.; GO 112-F; and GO 58-A.

2021 to 2025, along with consideration of the underlying cost drivers. Depending on future expectations for the underlying cost drivers, a primary forecast methodology was selected. Selected methods include forecasting based on Base Year (BY) 2025, three-year average, and zero-based methodology. Additionally, work requirements that are incremental to adjusted-recorded base year spending levels and necessary to maintain the safe and reliable operation of the distribution system and its supporting processes were identified. An analytical calculation was then performed to determine the funding requirement of these new or more extensive work elements. These identified elements were then combined with the base forecast methodology to produce the total forecast. The overall result is a forecast that is based on historical representation, with incremental expenses added where necessary.

A. Field Operations & Maintenance

TABLE TT-3
Non-Shared O&M – Field Operations and Maintenance

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations and Maintenance	**2025 Adjusted-Recorded (000s)**	**TY 2028 Est. (000s)**	**Change (000s)**
1. Infrastructure Patrol & Inspection	3,292	4,367	1,075
2. Damage Prevention (Electric, Fiber Optics, & Gas)	8,724	9,432	708
3. Leak Repair & Restoration	6,017	6,106	89
4. Distribution Maintenance	3,771	3,828	57
5. Tools Fittings and Materials	1,508	1,508	0
6. Electric Support	542	548	6
7. Measurement & Regulation	5,613	5,697	84
8. Cathodic Protection	2,297	2,332	35
Total	**31,763**	**33,817**	**2,054**

Included in this section of my testimony are activities and associated O&M expenses to address the physical condition of the gas distribution system. Gas Distribution Operations operate within a regional organizational structure. Similar activities are completed at five construction and operating centers and one technical operations center, located throughout the 1,400-square-mile service territory. The activities completed at these operation centers form the essence of this category, Field Operations and Maintenance. They can be described as preventive, corrective, or supportive. Preventative work is generally completed on a scheduled

basis. It includes the activities and associated costs shown within the workgroups of Infrastructure Patrols & Inspections, Damage Prevention (Electric, Fiber Optics, and Gas), and portions of Measurement & Regulation and Cathodic Protection. Corrective work is generally reactive to a situation or facility condition. This would include the activities and associated costs shown in the workgroups Leak Repair & Restoration and Distribution Maintenance, as well as in portions of Measurement & Regulation and Cathodic Protection. Finally, supportive elements are necessary to complete work assignments and include the activities and associated costs discussed in the Tools, Materials & Fittings and Electric Support workgroups.

1. Infrastructure Patrol & Inspection (1GD000.001)

TABLE TT-4
Non-Shared O&M – Infrastructure Patrol & Inspection

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations & Maintenance	**2025 Adjusted-Recorded (000s)**	**TY 2028 Est. (000s)**	**Change (000s)**
1. Infrastructure Patrol & Inspection	3,292	4,367	1,075

a. Description of Costs and Underlying Activities

Infrastructure Patrol and Inspection involve the labor and non-labor expenses associated with leak surveys. The Infrastructure Patrol and Inspection cost supports compliance with federal and state pipeline safety regulations that require SDG&E to survey and inspect its gas distribution and transmission systems for leaks.[9] It also supports the safety and reliability of SDG&E's system by performing the fundamental compliance and safety process of leak surveying pipelines to monitor for leaks in the pipeline system, and patrolling high-pressure gas lines to identify potential hazardous surface conditions. This activity supports SDG&E's commitment to mitigating risks associated with hazards that threaten public and employee safety, infrastructure integrity, and system reliability. Table TT-4 above summarizes Gas Distribution O&M costs related to Infrastructure Patrol & Inspection activities with incremental costs for Aerial Leak Detection.

SDG&E distribution pipelines are routinely surveyed for leaks at intervals of one, three, or five years. The frequency of this survey is determined by the pipe material (*i.e.,* plastic or

[9] 49 CFR § 192.723 (Distribution systems: Leakage surveys); General Order (GO) 112-F; 49 CFR § 192.481 (Atmospheric corrosion control: Monitoring)

steel), the operating pressure, whether the pipe is under cathodic protection, and the proximity of the pipe to various population densities. For example, annual surveys are conducted in business districts, which are defined as principal business areas in a community where large numbers of people regularly congregate to engage in business activities, and near public service establishments, such as schools, churches, and hospitals.[10] Annual surveys are also performed on pre-1986 plastic pipe (Aldyl-A) mains and services. Aldyl-A is a type of polyethylene plastic pipe material that was widely used in the U.S. natural gas industry from the late 1960s through the early 1980s. However, over the decades, Aldyl-A has shown vulnerabilities to brittle-like cracking as it ages, which increases the risk of leakage. Aldyl-A replacement program is discussed in Section IV.M. DIMP Execution.

Five-year survey cycles are typically used for plastic and cathodically-protected steel mains and services installed in residential areas. Additionally, service technicians issue follow-up leak investigation orders to leak survey personnel when they are unable to locate the source of a possible customer-reported leak. To close the leak investigation order, leak survey personnel must survey all underground gas facilities within 150 feet of the initial location where the leak or odor was reported. During these surveys, the field employee patrols above the identified location of SDG&E's distribution subsurface main and service pipelines with a leak detector to identify, classify, and generate an immediate repair work order, if necessary.

SDG&E currently has over 15,500 miles of main and service pipelines that require leak surveys. In addition to routine leak surveys, the Company conducts special gas distribution leak surveys, as needed, on more frequent cycles than those discussed above (*e.g.*, every two or three months). Special leak surveys occur for various reasons, including:

- Ahead of street improvements to strategically address pending leaks before street moratoriums take place;
- After the occurrence of any significant incident (*e.g.*, train derailment, explosion, earthquake, climate hazards like flooding or landslides, etc.) adjacent to high-pressure pipelines or related facilities;
- When increasing the maximum allowable operating pressure of a pipeline;

[10] 49 CFR § 192.723(b)(1)(2).

- When routine survey requirements are not considered adequate because of pipe condition or limited opportunity for gas to vent safely;
- When there is a need to monitor pipe condition for special situations, such as material evaluations; or
- For pipeline spans, pipelines crossing or over bridges, and areas of unstable earth.

In addition to the gas distribution leak survey, this workgroup also captures the costs associated with the Gas Transmission leak survey and pipeline patrol.[11] The DOT-defined transmission pipe (DOT-T) is surveyed at least four times each calendar year. Pipeline patrols and unstable earth inspections are conducted at intervals of two to four times a year, depending on the location of the Gas Transmission Class. These patrols also help detect terrain changes due to climate hazards like flooding or landslides that may impact gas asset stability. When a suspected hazardous condition or encroachment is identified, it is reported to the responsible operating supervisor for immediate attention or repair.

i. Aerial Leak Detection

Included in Infrastructure Patrols and Inspections is the incremental addition of Aerial Leak Detection (ALD), as outlined in SDG&E's 2024 Senate Bill (SB) 1371 Compliance Plan.[12] In 2023, SDG&E carried out a methane reduction program under Research, Development & Demonstration (RD&D). The project under the RD&D department was successful. SDG&E proposes to move this project into implementation under the name "Aerial Leak Detection."

On June 15, 2017, the CPUC issued D. 17-06-015, directing SDG&E to reduce methane emissions by implementing 26 Best Practices.[13] One of the programs proposed by SDG&E is the ALD program, which is the only SDG&E-proposed program addressing the CPUC's Best Practices 17 and 20a, making it essential for compliance with CPUC requirements.[14]

SoCalGas ran a successful ALD program from 2021 to 2025, called Aerial Methane Mapping (AMM). From 2022 to 2024, a pilot program was run at SDG&E to test whether

---

[11] 49 CFR § 192.705.

[12] SDG&E, *2024 SB 1371 Compliance Plan* (Amended April 4, 2024) at 53.

[13] Decision (D.) 17-06-015 at 2.

[14] *Id.* at 83 and 87.

SDG&E would see benefits similar to those of SoCalGas. Like SoCalGas, SDG&E's Non-State-of-the-Art lines were targeted to meet Best Practice 16.[15] SDG&E's pilot program scanned approximately 38 square miles of SDG&E territory, and there were multiple detections. Upon investigation, three leaks were successfully detected in the distribution systems, and 44 detections were found in customer systems. It is estimated that SDG&E's targeted service territory is approximately 354 square miles.

Beyond emissions, the program delivers measurable improvements in other critical areas:

- **Customer Affordability:** Enhanced leak detection and mitigation help lower energy costs, improving overall affordability for SDG&E customers.
- **Safety Enhancement:** By eliminating leaks more quickly, the program reduces potential hazards and strengthens public safety.
- **Energy Efficiency:** Addressing incomplete combustion improves equipment performance and supports long-term sustainability.

The CPUC's Safety Policy Division (SPD) has also recognized the benefits of the program. SPD's June 2025 report states, "SPD observes that the greenhouse gas reduction benefits that [ALD] will produce are in the spirit of SB 1371. Furthermore, detection of leaks that would otherwise not be included in the standard utility survey practice offers additional safety and cost-saving advantages for customers."[16] The report further states, "SPD approves adoption of [ALD]."[17] Notwithstanding, the CPUC's Energy Division denied funding for the program in Res. G-3606.[18] That denial does not prohibit SDG&E from seeking funding for this important program here.

Lastly, SoCalGas has found that through its active aerial methane-detection program, it can quickly divert assets for emergency response as needed. For example, in March 2023, when the San Bernardino Mountains experienced excessive snowfall, SoCalGas paused the ongoing methane detection program and redirected resources toward the San Bernardino emergency response. Having an active aerial monitoring program not only helps reduce system emissions

---

[15] *Id.*at 81.

[16] CPUC, *Safety Policy Division Evaluation of SDG&E's 2024 NGLA Compliance Plan* (June 30, 2025), Chapter 14 at 11.

[17] *Id.* at 12.

[18] Res. G-3606 (October 30, 2025) at 14.

and benefits customers, but it also plays a critical role in emergency response efforts. SDG&E can also benefit by having an ALD program. The ALD program will not only reduce emissions from SDG&E's infrastructure but will also proactively assist customers in identifying and addressing leaks, amplifying benefits across affordability, safety, and emissions reduction.

The activities associated with the ALD program include labor and non-labor expenses required to implement the program. Program costs are categorized as follows:

- **Project Management Support:** The SDG&E program is expected to operate for two months each year, as it is estimated that scanning all vintage mains and services (Aldyl-A and pre-1950 steel) will require approximately two months. An additional two months are needed for planning and coordination activities.
- **Flight Costs:** This activity includes expenses for helicopter operations, leasing or paying for LiDAR sensors, data acquisition, and data processing. Costs also include coordinating flights with vendors and complying with requirements from agencies such as the FAA, municipalities, state entities, and tribal authorities.
- **Field Support:** After potential emission source points are identified, they must be routed to the appropriate department - Gas Operations or Customer Operations. Two FTEs are assumed to assist field technicians in locating leaks, verifying data accuracy, and updating records.

ii. Description of RAMP Mitigations

Within this Infrastructure Patrol and Inspection cost category, there are non-shared O&M costs for risk control C134 (Pipeline Monitoring) that were presented in the 2025 RAMP Report[19] and are listed in the table below.

Pipeline Monitoring: SDG&E conducts pipeline monitoring and inspection in compliance with 49 CFR §192.723 (Distribution Systems: Leakage Surveys), General Order (GO) 112-F, and 49 CFR §192.481 (Atmospheric Corrosion Control: Monitoring), as these activities proactively target risk factors before operation and safety issues arise. These

[19] 2025 RAMP Report, Chapter SDG&E-Risk-3 Medium Pressure Gas System, *available at:* https://www.sdge.com/sites/default/files/regulatory/SDG%26E%20-Risk-3%20Medium%20Pressure%20Gas%20System_0.pdf.

monitoring activities include pipeline patrols, leak surveys, bridge and span inspections, and unstable earth inspections. These inspections are critical as they observe assets over time to determine if abnormal conditions exist prior to becoming a concern. For example, a span that is no longer coated appropriately due to recent weather conditions can be identified for re-coating before corrosion sets in that could lead to the potential for a leak. The leak survey monitoring identifies leaks that require repair.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-5
RAMP and GRC Risk Control/Mitigation Activities – O&M

Field Operations & Maintenance				
ID	**Control/Mitigation Name**	**2025 RAMP 2028 Estimate In 2024 $ (000s)**	**2028 GRC 2028 Forecast In 2025 $ (000s)**	**Change ($000s)**
C134	**Pipeline Monitoring**	4,173	3,346	(827)

iii. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The Enterprise Risk Management (ERM) process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section III.A.1.a. (Description of Costs and Underlying Activities), C134 is designed to comply with 49 CFR § 192.723 (Distribution Systems: Leakage Surveys), GO 112-F, and 49 CFR § 192.481 (Atmospheric Corrosion Control: Monitoring), as these activities proactively target risk factors before operation and safety issues arise. SDG&E has been able to bundle this RAMP activity to gain efficiency in performing leak survey and corrosion inspections while walking the same route. As described in Section III.A.3.a, when a leak is

identified either through C134 or through other means, SDG&E either remediates or monitors it based on its classification. Leaks posing a hazardous condition are remediated immediately, while non-hazardous leaks are monitored. Non-hazardous leaks are evaluated to perform repairs with cost effectiveness, customer impact, and safety in mind. In prioritizing this activity, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer, and recovery impacts associated with responding to realized incidents.

b. Forecast Method

The forecast method for Infrastructure Patrol and Inspection is based on BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. Alternative approaches, such as using a multi-year historical average or applying a linear trend, would not produce reliable results. These methods assume stable growth patterns or smooth year-over-year changes, which do not reflect the operational realities of leak surveys and inspections. These activities are driven primarily by compliance requirements and the condition of the underlying infrastructure, rather than by predictable annual increases. For this reason, the base year approach provides the most accurate reflection of current operational practices and regulatory obligations.

An incremental adjustment was made to include ALD in Infrastructure Patrols and Inspections. Although the ALD program's predecessor, the Aerial Methane Mapping program, was executed under RD&D for a limited scenario to gather valuable information, there is no history of this program being fully implemented at SDG&E. As discussed above, SDG&E is targeting its vintage main and service lines in the ALD program since they are more prone to leaks. The location and aerial coverage of these lines are well-mapped and well-understood. Therefore, the program cost estimates can be estimated with reasonable accuracy. This cost category contains activities that are outlined in SDG&E's 2026 SB 1371 Compliance Plan with funding requested through this GRC request. There is no overlap in funding.

c. Cost Drivers

The cost drivers behind the Infrastructure Patrol and Inspection forecast are the federal and state pipeline safety compliance requirements[20] for the three-year atmospheric corrosion

[20] 49 CFR § 192.723 (Distribution Systems: Leakage Surveys), GO 112-F, and 49 CFR § 192.481 (Atmospheric Corrosion Control: Monitoring).

monitoring survey; the six-month, one-year, three-year, and five-year frequency leak surveys (distribution); the three-month frequency leak survey (High Pressure); special leak survey activities; and follow-up leak investigations.

The primary cost drivers for the incremental adjustment of the ALD program are the expenses and activities required to implement the ALD program, which addresses the CPUC's best practices outlined in D.17-06-015. Specifically, the program focuses on reducing natural gas emissions from SDG&E's facilities to the maximum extent feasible. At the same time, ALD supports affordability objectives by helping eliminate customer-side leaks and address incomplete combustion, thereby improving safety and efficiency.

Leak survey is also a risk prevention activity discussed in SDG&E's 2025 RAMP.[21] The activity supports basic code-mandated periodic leak surveys, atmospheric corrosion inspections, inspections of bridges and spans, unstable earth, and pipeline patrolling and leak repairs resulting from these inspections and patrols.

2. Damage Prevention (Electric, Fiber Optics, & Gas) (1GD000.002)

TABLE TT-6
Non- Shared O&M – Damage Prevention (Electric, Fiber Optics, & Gas)

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations & Maintenance	**2025 Adjusted-Recorded (000s)**	**TY 2028 Est. (000s)**	**Change (000s)**
2. Damage Prevention (Electric, Fiber Optics, & Gas)	8,724	9,432	708

a. Description of Costs and Underlying Activities

Damage Prevention involves the labor and non-labor expenses associated with preventing damage to underground infrastructure from third-party excavators working near underground electric, fiber-optic, and gas infrastructure. The Damage Prevention cost supports the process mandated by 49 C.F.R. § 192.614 and the California One Call Statute.[22] The process involves the Underground Service Alert (USA) One-Call Center notifying the owner of underground facilities (*e.g.,* SDG&E underground electric, underground fiber optic cabling, and underground gas infrastructure) of a planned excavation. The owner of the underground facilities must

[21] 2025 RAMP Report, Chapter SDG&E-Risk-3 Medium Pressure Gas System.

[22] Cal. Gov't Code § 4216, *et seq.*

respond within two working days and mark the locations of all underground facilities that conflict with the planned excavation. Table TT-6 above summarizes the O&M labor and non-labor costs recorded in this workpaper associated with these Damage Prevention activities.

The activities completed under this cost workgroup are all RAMP controls[23] and are preventative in nature. For the Damage Prevention group to comply with the locate-and-mark regulatory and legal requirements cited above, employees use an electronic locating device to identify the location of SDG&E's underground infrastructure (underground electric, fiber optic cabling, and gas pipelines) and utilize substructure maps and service history records to aid in verifying the location of the underground infrastructure.

Conducting standby observations of other entities excavating near SDG&E's pipelines is another important damage prevention activity included in this workgroup. Generally, this involves an employee inspecting construction sites to confirm that excavators are aware of the location of critical SDG&E gas facilities. The State of California enacted regulations in 2007 that mandate a preconstruction meeting with excavators requesting locate-and-mark support and require continuous monitoring of all excavations within ten feet of high-pressure pipelines.[24]

The Dig Safe Act of 2016 added enforcement to the digging law by establishing the California Underground Facilities Safe Excavation Board. The Board is authorized to take action against parties that violate the excavation law as outlined in California Code Section 4216.[25] The Act also includes the requirement to mark the presence of known abandoned lines and maintain records of abandoned lines. In addition, in 2021, the Wade Kilpatrick Gas Safety and Workforce Adequacy Act was enacted.[26] The act prescribes a civil penalty of up to $100,000 to be imposed on an operator or excavator who knowingly and willfully violates provisions relating to excavations and subsurface installations, and damages a gas or hazardous liquid pipeline subsurface installation in a way that results in the escape of any flammable, toxic, or corrosive gas or liquid. These pieces of legislation, as well as SDG&E's efforts to promote

---

[23] SDG&E's 2025 RAMP Report, SDG&E-Risk-1, Excavation Damage (C002) and SDG&E-Risk-5, Electric Infrastructure Integrity (C267).

[24] *See* Cal. Code Regs., tit. 8, § 1541(b)(1)(B) (2007) and Cal. Gov't Code §4216.2(c)

[25] Cal. Code Regs. Tit. 19, § 4256 - Payment of Penalty and Compliance with Order for Corrective Action.

[26] Cal. Gov't Code § 4216, (a) (3).

the use of the "one-call" system before digging, results in more excavators notifying USA, impacting the number of USA tickets called. SDG&E remains focused on increasing safety, reliability, and affordability for its customers by continuing to promote the "one-call" system and engaging in locate-and-mark activities. These preventative activities prevent further damage and costs down the line.

Damages resulting from excavation activities pose a significant safety threat to SDG&E's electric, underground fiber-optic, and gas pipeline infrastructure, with the potential to cause catastrophic consequences for public safety. SDG&E manages the risk of third-party dig-ins through mitigation actions developed and implemented over many years, including locate-and-mark activities.[27] Properly locating and marking SDG&E underground facilities, as well as performing job observations, are activities completed to avert damage by third-party excavators that can interrupt electric and/or gas service. Further, completing this work provides important information to safeguard those working around utility facilities and protects the integrity and reliability of utility infrastructure.

i. Description of RAMP Mitigations

Within this cost category, there are non-shared O&M costs for risk controls C002 (Damage Prevention Activities – Gas) and C267 (Damage Prevention Activities Electric Underground) that were presented in the 2025 RAMP Report[28] and are listed in the table below.

Damage Prevention Activities – Gas: The purpose of the Gas Damage Prevention Program is to prevent third-party excavation damage to gas distribution and transmission infrastructure. *See* the Gas Transmission testimony (Ex. SDGE-05) for more details about gas transmission damage prevention activities. C002 includes three primary activities:

1. Locate-and-mark activities for underground gas facilities prior to excavation;
2. Pipeline observation ("stand-by") during excavation near high-priority pipelines; and
3. Staff support for compliance and performance improvement.

---

[27] SDG&E's 2025 RAMP Report, SDG&E-Risk-1, Excavation Damage (C002) and SDG&E-Risk-5, Electric Infrastructure Integrity (C267).

[28] SDG&E's 2025 RAMP Report, SDG&E-Risk-1, Excavation Damage (C002) and SDG&E-Risk-5, Electric Infrastructure Integrity (C267).

Locate-and-mark activities involve physically identifying and marking underground gas facilities. In 2024, SDG&E responded to more than 210,000 natural gas locate-and-mark requests. These markings provide excavators with critical information to excavate safely.

Pipeline observation requires a qualified company representative to be present during excavation near high-priority pipelines to reduce the likelihood of damage and protect pipeline integrity.

Staff support activities include policy interpretation, compliance tracking, tool and technology evaluation, refresher training, and analysis of locate-and-mark data to identify improvement opportunities. Together, these activities enhance accuracy, timeliness, and effectiveness of damage prevention efforts and provide excavators with essential information to avoid damaging gas facilities.

Damage Prevention Activities – Electric Underground: The purpose of Electric Underground Damage Prevention Activities is to prevent damage to electric infrastructure caused by third-party excavation. These activities include two primary functions:

1. Locate-and-mark activities for underground electric facilities prior to excavation; and
2. Staff support for compliance and performance improvement.

Locate-and-mark activities involve physically identifying and marking underground electric facilities. In 2024, SDG&E responded to over 210,000 underground electric locate-and-mark requests. These markings provide excavators with critical information to excavate safely.

Staff support activities include policy interpretation, compliance tracking, tool and technology evaluation, refresher training, and analysis of locate-and-mark data to identify improvement opportunities. Together, these activities enhance accuracy, timeliness, and effectiveness of damage prevention efforts and provide excavators with essential information to avoid damaging underground electric facilities.

Activities that are compliance or mandated by CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-7
RAMP and GRC Risk Control/Mitigation Activities – O&M

Damage Prevention				
ID	**Control/Mitigation Name**	**2025 RAMP 2028 Estimate In 2024 $ (000s)**	**2028 GRC 2028 Forecast In 2025 $ (000s)**	**Change ($000s)**
C002	**Damage Prevention Activities – Gas**	7,513[29]	4,933	(2,580)
C267	**Damage Prevention Activities Electric Underground**	5,167	4,499	(668)
	TOTAL	**12,680**	**9,432**	**(3,248)**

ii. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section III.A.2.a. (Description of Costs and Underlying Activities), C002 and C267 are designed to comply with 49 CFR § 192.614 and the California One-Call Statute (California Government Code § 4216). These activities proactively identify the location of SDG&E's underground infrastructure including electric conductors, fiber optic cabling, and gas pipelines to promote worker safety and prevent damage to underground facilities during excavation activities. Excavation damage dig-in is one of the primary drivers of a potential Medium Pressure Gas System or Electric Infrastructure Integrity risk event, and Damage Prevention Activities are the primary mitigation to reduce the likelihood of that risk driver. SDG&E evaluates the volume of One-Call requests for underground utility identification and

[29] The total RAMP O&M forecast for C002 is $7.811 million. The cost shown on the table represents the estimated RAMP O&M forecast allocated to this workpaper, proportional to the GRC O&M forecast, representing 96% of the total activity. The other portion of costs for C002 can be found in the testimony of Gas Transmission (Ex. SDGE-05).

aligns staffing levels to meet compliance timelines in the most cost-effective manner. Examples of these efforts include proactive communication with excavators to schedule mark-outs in advance, which supports regulatory compliance, improves workload distribution, enables early morning starts, and reduces overtime and third-party traffic control costs. In prioritizing this proactive approach, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer, and recovery impacts associated with responding to realized incidents.

b. Forecast Method

The forecast for this cost category is developed using a zero-based approach that relies on the five-year average year-over-year (YoY) change in ticket volume (2021–2025) as the primary driver. *See* Table TT-8 below. A zero-based method is appropriate because ticket volume is the factor most directly correlated with both labor and non-labor resources needed to maintain compliance with the California One Call Statute (Cal. Gov't Code § 4216).

Historical data from 2021–2025 shows a consistent upward trend in expenses, driven by increased overtime, expanded traffic control needs to meet two-day response requirements for mark outs, higher standby request volume, and continued growth in customer Dig Alert tickets. As economic activity expands, this upward trend in ticket volume, and the corresponding labor and non-labor requirements, is expected to continue.

Relying solely on a single historical year or a base year forecast would not adequately capture the ongoing increase in activity drivers. Therefore, using a zero-based forecast anchored on the five-year average YoY ticket growth provides the most accurate and representative method for projecting future labor and non-labor requirements for this group. *See* supplemental workpaper, SDGE-04-WP-S-001.

TABLE TT-8

Gas Distribution USA Ticket Volume by Year

	2021	2022	2023	2024	2025
USA Ticket Volume by Year – MP	151,133	172,019	182,354	193,608	195,188
USA Ticket Volume by Year – Electric Underground	151,133	172,019	182,354	193,608	195,188
Total	**302,266**	**344,038**	**364,708**	**387,216**	**390,376**

c. Cost Drivers

The cost drivers behind the Damage Prevention forecast are compliance with federal, state, and local regulations and requirements, as well as the level of general construction and development activity in the public and private sectors. These construction activities include private projects (*e.g.,* commercial and industrial centers, strip malls, and residential remodeling) and public projects at the city, county, and state levels, such as freeway and street improvements, storm drain and sewer work, and strategic electric undergrounding by municipalities served by SDG&E. In particular, SDG&E has seen an increase in ticket volume due to cities' initiatives to install fiber-optic cabling to support increased internet usage. In addition, as SDG&E's electric, fiber-optic, and gas infrastructure expands into outlying areas to serve new residential developments, increased activity follows as developers move in to build schools, shops, restaurants, and other facilities to meet the needs of those new communities. The laws in this area, as well as SDG&E's efforts to promote the use of the "one-call" system before digging, has and will continue to have a significant impact on the number of USA tickets called-in. As a result, additional labor expense will be required to perform Damage Prevention activities, allowing the Company to meet the increasing demand for USA tickets and prevent locate and mark delays.

3. Leak Repair & Restoration (1GD000.003)

TABLE TT-9
Non- Shared O&M – Leak Repair & Restoration

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations & Maintenance	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
3. Leak Repair & Restoration	6,017	6,106	89

a. Description of Costs and Underlying Activities

The Leak Repair and Restoration cost covers labor and non-labor costs associated with investigating and repairing leaks in gas distribution mains and services. Designed to meet federal (49 CFR § 192) and state (GO 112-F) pipeline safety regulations, this cost category supports C131 (Leak Repair) and C005 (Gas Emergency Department[30] (GED)) activities, as well

[30] Renamed from "Gas Distribution Emergency Department" as identified in the 2025 RAMP Report.

as extends the life of distribution mains, service pipelines, and related infrastructure. Table TT-9 above summarizes Gas Distribution O&M costs associated with these activities.

The two activities in this workgroup are RAMP risk controls, Leak Repair[31] and GED,[32] and are discussed further below. SDG&E manages these two activities to drive sustainability, safety, reliability, and affordability.

Leak Repair: SDG&E's maintenance crews investigate leak indications and make repairs as needed. Leak repairs generally require excavating in paved streets and landscaped areas to determine the exact location of the leak. This work often involves cutting pavement, trenching, and repairing pipe facilities, followed by backfilling the excavation, compacting the soil, and making permanent repairs to pavement, sidewalks, and landscaping as needed. Main leak evaluation and repair work is generally completed to mitigate risks to public safety and to address infrastructure conditions and material degradation. SDG&E actively assesses ways to reduce costs and increase efficiency during this work. For example, gas district managers group non-hazardous leaks with nearby planned projects within the 15-month compliance window for repair. When multiple non-hazardous leaks are in close proximity, they are repaired simultaneously to reduce non-labor costs, such as saw cutting, excavation equipment, and traffic control.

GED: When SDG&E is notified of a gas emergency (hazardous leak or gas damage), it is critical to respond immediately and take measures to control escaping gas to support personnel and public safety. To improve gas emergency response time, SDG&E established the GED. The GED is organized as two-person crews dedicated to gas emergency response. The GED operates 24/7 in overlapping shifts to provide ample coverage during peak periods, allowing for rapid response to calls of events involving escaping gas. These dedicated "specialist" crews responding to gas emergencies to reduce the risk of injuries and property damage to both the public and the crews responding to the incident.

[31] 2025 RAMP Report, Chapter SDG&E-Risk-3 Medium Pressure Gas System (Control ID C131).

[32] *Id.,* (Control ID C005).

i. Description of RAMP Mitigations

Within this cost category, there are non-shared O&M costs for risk controls C005 (Gas Emergency Department) and C131 (Leak Repair) that were presented in the 2025 RAMP Report[33] and are listed in the table below.

GED: When SDG&E is notified of a gas emergency, immediate response is critical to control escaping gas and protect public and personnel safety. To improve response times, SDG&E established the GED, which consists of two-person crews dedicated exclusively to gas emergencies. GED operates 24/7 with overlapping shifts to expedite response at all times. These specialized crews help to quickly control gas releases, reducing the risk of injury and property damage.

Leak Repair: SDG&E proactively surveys its gas distribution system for leaks at intervals based on pipe material, operating pressure, cathodic protection, and proximity to population centers, in accordance with 49 CFR § 192.723. When a leak is identified, SDG&E either remediates or monitors it based on its classification. Leaks posing a hazardous condition are remediated immediately, while non-hazardous leaks are monitored.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

ABLE TT-10
RAMP and GRC Risk Control/Mitigation Activities – O&M

Leak Repair & Restoration				
ID	**Control/Mitigation Name**	**2025 RAMP 2028 Estimate In 2024 $ (000s)**	**2028 GRC 2028 Forecast In 2025 $ (000s)**	**Change ($000s)**
C005	Gas Emergency Department[34]	1,641	2,095	454
C131	**Leak Repair (O&M/Capital)**	3,313	4,011	698
	TOTAL	**4,954**	**6,106**	**1,152**

[33] 2025 RAMP Report, Chapter SDG&E-Risk-3 Medium Pressure Gas System (Control IDs C005 and C131).

[34] Renamed from "Gas Distribution Emergency Department" as identified in the 2025 RAMP Report.

ii. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section III.A.3.a. (Description of Costs and Underlying Activities), C131 is designed to comply with 49 CFR § 192.723 and GO 112-F. When a leak is identified either through C134 (Pipeline Monitoring) or through other means, SDG&E either remediates or monitors it based on its classification. Leaks posing a hazardous condition are remediated immediately, while non-hazardous leaks are monitored. Non-hazardous leaks are evaluated to perform repairs with cost effectiveness, customer impact, and safety in mind.

Leak Repair & Restoration also includes the GED. To support rapid response capabilities for gas emergencies, SDG&E established the GED. These dedicated two-person crews operate 24 hours a day, seven days a week, in overlapping shifts to quickly respond to gas emergencies and control the situation as efficiently as possible. Mitigating risks to public safety and property is the primary driver behind this program.

In prioritizing these activities, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer, and recovery impacts associated with responding to realized incidents.

b. Forecast Method

The forecast method developed for Leak Repair and Restoration is based on BY 2025. This method is most appropriate because it reflects the current conditions for Leak Repair and because labor and non-labor expenses increased collectively in 2025 due to higher material costs and municipality restoration requirements. In addition, this method is appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. In addition, SDG&E has achieved cost savings and efficiencies in 2025, associated with repairing non-hazardous leaks within planned projects and grouping non-hazardous leaks to reduce non-labor expenses. Due to these recent operational changes, a historical average would not reflect future business needs. This cost

category does not contain activities that were included as part of SDG&E's SB 1371 compliance plan and there is no overlap in funding. This forecast results in no change in expense over the 2025 adjusted-recorded base in TY 2028.

c. Cost Drivers

The Leak Repair & Restoration forecast is driven by federal and state pipeline safety requirements and SDG&E's integrity management efforts to extend pipeline life. These activities support SDG&E's commitment to public safety, infrastructure integrity, and system reliability. Annual leak repair spending varies based on the number of leaks evaluated and repaired, the extent of third-party damage, and municipal restoration requirements at repair locations.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation and Benefits testimony (Ex. SCG-16/SDGE-20).

4. Distribution Maintenance (1GD000.004)

TABLE TT-11
Non- Shared O&M – Distribution Maintenance

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations & Maintenance	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
4. Distribution Maintenance	3,771	3,828	57

a. Description of Costs and Underlying Activities

The Distribution Maintenance cost supports the labor and non-labor costs associated with moving, lowering, and raising short sections of gas distribution mains, services, vaults, related structures, and the repair of service risers. The distribution maintenance work in this workgroup is designed to meet federal (49 CFR § 192) and state (GO 112-F) pipeline safety regulations, as well as to extend the life of distribution main pipelines and related infrastructure. Table TT-11 summarizes Gas Distribution O&M costs associated with Distribution Maintenance activities.

The moving, lowering, and raising of gas mains are usually driven by improvements made by municipalities and other outside agencies, which trigger the need to perform maintenance or move gas mains and related equipment. This includes street widening, sewer and water line maintenance or replacement, and street resurfacing. In the case of street resurfacing, SDG&E's crews must locate buried gas facility vault lids that have been paved over, then uncover them or raise them so they are flush with the new street surface. Municipal and

local/state agency improvements are a function of determinations made by the local or state agency. The cost of distribution maintenance supports SDG&E's commitment to providing its customers with safe and reliable natural gas.

Distribution Maintenance also includes costs for moving, lowering, and raising shorter sections of distribution gas services, vaults, and related structures. Changing the location of an existing gas service may be required due to alterations in buildings or grounds, as well as municipal improvements, such as street widening or work on sewer or water systems. These activities typically involve excavation in paved or landscaped areas, for which a corresponding restoration effort is required to complete the work. The cost associated with Service Maintenance supports SDG&E's commitment to mitigate risks to public safety, infrastructure integrity, and system reliability.

Also included in this workgroup are the expenses associated with repairing gas service risers, the portion of the pipeline segment located aboveground, just below the meter, and connected to the service pipe. Repairs to the riser are often required due to atmospheric corrosion of the piping system.

b. Forecast Method

The forecast method developed for Distribution Maintenance is based on BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. In addition, it is appropriate because it reflects current Distribution Maintenance conditions and because labor and non-labor expenses are expected to remain flat, even with increased material costs and municipality restoration requirements, due to recent efficiencies in how gas crews are managed. An example of this is the implementation of the four days a week, 10 hour shift change as described in Section II above. This change has resulted in increased efficiency due to reduced travel for multi-day jobs. Also, overtime has decreased since crews are on 10-hour straight-time shifts. Due to these recent changes, a historical average would no longer accurately represent future business needs. Therefore, 2025 was chosen as the base year for future expenses. This forecast results in no change in expenses relative to the 2025 adjusted base in TY 2028.

c. Cost Drivers

The cost drivers behind the Distribution Maintenance forecast are federal and state pipeline safety regulatory requirements, improvements made by municipalities and other outside agencies, as well as SDG&E's efforts to protect the pipeline system's integrity through activities that extend its lifespan. These activities support SDG&E's commitment to mitigating risks to public safety, infrastructure integrity, and system reliability.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

5. Tools, Fitting, & Material (1GD000.005)

TABLE TT-12
Non- Shared O&M – Tools, Fitting, & Material

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations & Maintenance	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
5. Tools, Fitting, & Material	1,508	1,508	0

a. Description of Costs and Underlying Activities

The Tools, Fitting, and Material cost supports the purchase of small tools, small pipe fittings, miscellaneous pipeline materials, and miscellaneous installation materials used during construction and maintenance activities, as well as those held in inventory as vehicle truck stock. Table TT-12 above summarizes Gas Distribution O&M costs associated with Tools, Fittings, and Materials activities.

The tools, fittings, and materials purchased under this workgroup are essential for achieving complete and safe work results. Included within each category of materials are items, such as:

- Small tools, including screw drivers and wrenches;
- Pipe materials used in maintenance and construction activities, such as service alterations, service leak repairs, riser repairs and replacements, and maintenance of meter and regulator facilities on distribution services;

- Miscellaneous installation and pipeline materials, such as pipe wrap, gaskets, washers, bolts, stakes, and pipe straps used by field employees to complete pipeline maintenance and replacement activities;
- Pipe fittings, two-inch pipe size and smaller, commonly used during construction and maintenance work; and
- Personal Protective Equipment such as coveralls, uniforms, safety glasses and gloves.

b. Forecast Method

The forecast method developed for Tools, Fitting, and Material is based on BY 2025. This method is most effective because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. In addition, it is appropriate because labor and non-labor expenses increased from 2021 to 2024 but have leveled off in 2025. The funding level for Tools, Fitting, and Material is closely aligned with the overall O&M expense level they support. Therefore, a historical average would no longer accurately represent future business needs. Therefore, 2025 was chosen as the base year for future expenses. This forecast results in no change in expenses relative to the 2025 adjusted base in TY 2028.

c. Cost Drivers

The cost drivers behind the Tools, Fitting, and Material forecast include the rate of material consumption, which is primarily driven by construction and maintenance activities and often reflects current employee and inspection/patrol levels. Other drivers include the level of field workforce that requires tools and materials, as well as the cost at which SDG&E can obtain tools, fittings, technological improvements, and materials used by its employees. These cost pressures have leveled off in 2025, which is why the base year forecast was selected.

6. Electric Support (1GD000.006)

TABLE TT-13
Non- Shared O&M – Electric Support

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations & Maintenance	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
6. Electric Support	542	548	6

a. Description of Costs and Underlying Activities

The Electric Support cost covers the labor and non-labor expenses incurred by Gas Distribution crews, gas contract crews, and gas supervisory management to support Electric Distribution crews during inspections under the Corrective Maintenance Program and general construction activities. Table TT-13 above summarizes Gas Distribution O&M costs associated with Electric Support activities.

General Order (GO) 165 mandates specific inspection cycles for electric distribution facilities. Other inspections are covered by GO 95 (Overhead Electric Line Construction) and GO 128 (Underground Electric Supply Construction), which direct utilities to inspect electric distribution equipment frequently and thoroughly. These inspections are part of SDG&E's Electric Distribution Corrective Maintenance Program and require support from Gas Distribution crews (internal and external) and associated supervisory management for trenching, excavation, storm damage recovery activities, and surface (streets, sidewalk, etc.) restoration. The Corrective Maintenance Program and the electric crew inspection costs are further described in the Electric Distribution O&M testimony (Ex. SDGE-09). In addition, Gas Distribution field crews provide electric tooling and excavation support to the Electric Distribution organization.

b. Forecast Method

The forecast method developed for this cost category is BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. Labor and non-labor expenses increased from 2021 to 2024 but levelled off in 2025. The base year recorded represents the most current activity levels.

c. Cost Drivers

The cost drivers behind the Electric Support forecast are electric Corrective Maintenance Program activities that require the utilization of Gas Distribution resources for support, including small modifications or repairs to Electric Distribution facilities.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

7. Measurement & Regulations (1GD002.000)

TABLE TT-14
Non- Shared O&M – Measurement & Regulation

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations & Maintenance	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
7. Measurement & Regulation	5,613	5,697	84

a. Description of Costs and Underlying Activities

The Measurement and Regulation (M&R) cost supports the labor and non-labor expenses for inspection and maintenance of distribution regulator stations, gas system valves, large meter set assemblies (MSA), electronic instrumentation, the Company's Compressed Natural Gas (CNG) station, and gas meter removals for accuracy checks to maintain compliance with GO 58-A. Table TT-14 summarizes Gas Distribution O&M costs associated with M&R activities.

Included in this workgroup is SDG&E's request for the inspection and maintenance of regulator stations, critical valves, and large meter sets.[35] Regulator stations reduce the pressure of gas entering the distribution system from high-pressure supply pipelines to the lower pressures required for safe and reliable distribution operations. This core M&R activity includes Regulator Station, Valve, and Large Meter Set Inspections and is also identified in this workgroup as a RAMP mitigation.

Additionally, this workgroup includes RAMP mitigation efforts that support the Control Center Modernization (CCM) initiative, such as Distribution Field Asset Real-Time Monitoring and Control, Electronic Pressure Monitoring, Site Installations and Upgrades, and the deployment of new Control Room technologies. Further details on the RAMP risk control C115 (Regulator Station, Valve, and Large Meter Set Inspection) are provided in the section below, while CCM activities can be found in the Gas Major Projects testimony (Ex. SDGE-06).

Additional activities in the M&R workgroup are more service-based, including inspections and calibrations of gas volume correctors used to record gas consumption, as well as ten-year rotary meter changes or calibrations to comply with GO 58-A for large gas customers.

[35] 2025 RAMP Report, Chapter SDG&E-Risk-3 Medium Pressure Gas System (Control ID C115).

Overall, the activities covered in this workgroup support SDG&E's commitment to mitigate risks while providing resilient, safe, and reliable service.

i. Description of RAMP Mitigations

Within this cost category, there are non-shared O&M costs for risk control C115 (Regulator Station, Valve, and Large Meter Set Inspection) that were presented in the 2025 RAMP Report[36] and are listed in the table below.

Regulator Station, Valve, Large Meter Set Inspection: This project encompasses inspections and maintenance activities for regulator stations, critical valves, and large MSAs, all of which are essential components of the gas distribution system. Regulator stations reduce gas pressure from high-pressure transmission pipelines to levels suitable for distribution pipelines. A failure of a regulator station—whether due to mechanical malfunction, corrosion, contamination, or other causes—could result in over-pressurization of the distribution system. Such events may compromise the integrity of medium-pressure pipelines and pose a significant public safety risk, as demonstrated by recent industry over-pressure incidents.[37] As critical control elements, regulator stations play a vital role in supporting safe and reliable gas delivery.

Federal pipeline safety regulation 49 CFR § 192.739 requires that regulator stations be inspected and functionally tested annually, with no more than 15 months between inspections, to verify that they remain in good mechanical condition. These inspections include pressure checks to confirm that over- and under-pressure protection devices operate as designed. If a station does not perform properly, internal maintenance and inspections are conducted, including disassembly of regulator devices to inspect internal components for wear, damage, or corrosion. Regulators are cleaned, faulty parts are replaced, and pressure regulators and relief valves may be rebuilt as necessary. Activities also include repairs to regulator station vaults and enclosures damaged by deterioration or long-term exposure to traffic. SDG&E operates approximately 485 regulator stations, many of which are aging assets. More than 70% are 24 years or older, with an average age of 32 years. While SDG&E's O&M practices can extend the useful life of these facilities, proactive replacement prior to end of life is a prudent risk-reduction measure. Modern station

---

[36] *Id.*

[37] For example, the 2018 Merrimack Valley over-pressurization event (*see* National Transportation Safety Board (NTSB), *Overpressurization of Natural Gas Distribution System, Explosions, and Fires, in Merrimack Valley, Massachusetts* (September 13, 2018), available at: https://www.ntsb.gov/investigations/AccidentReports/Reports/PAR1902.pdf.).

designs, such as dual-run regulators and improved siting to reduce exposure to vehicular damage or vandalism, further enhance system safety.

Valve inspections and maintenance are another critical component of this cost category and are essential to maintaining control of gas pressure and flow throughout the system. Valve maintenance activities include flushing, lubricating, cleaning, replacing parts, and testing operability to support optimal performance. Valve criticality depends on location and function, including inlet valves at regulator stations which isolates high- and medium-pressure systems; emergency valves used to isolate pipeline segments in the event of damage or for operational needs; and isolation valves that segment the system during widespread emergencies such as earthquakes. Properly functioning valves enable rapid isolation of affected areas during seismic events or third-party damage incidents, thereby reducing the risk of further damage and allowing safe completion of repairs.

MSAs reduce gas pressure and measure the volume of natural gas delivered to customers. GO 58-A requires that meters, regulators, and associated components be periodically maintained, repaired, and tested to support accurate measurement, adequate delivery pressure, and the ability to meet customer demand. MSAs housed in vaults must also be inspected and repaired as needed to protect the equipment. Failure of an MSA regulator could expose customers and infrastructure, such as water heaters or other appliances, to higher-than-intended gas pressure, potentially resulting in an incident. Scheduled inspections of MSAs proactively address risks related to equipment failure, corrosion, and outside force damage before safety or operational issues arise.

In addition, as required by 49 CFR § 192.481, aboveground piping facilities are inspected for atmospheric corrosion at least once every three calendar years, with inspection intervals not exceeding 39 months. When severe corrosion is identified, the affected piping is replaced to reduce the risk of leakage and subsequent safety hazards. Together, these inspection and maintenance activities for regulator stations, valves, and meter sets support SDG&E's commitment to system integrity, regulatory compliance, and the protection of public safety.

Activities that are compliance related or mandated by CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-15
RAMP and GRC Risk Control/Mitigation Activities – O&M

Measurement & Regulations				
ID	**Control/Mitigation Name**	**2025 RAMP 2028 Estimate In 2024 $ (000s)**	**2028 GRC 2028 Forecast In 2025 $ (000s)**	**Change ($000s)**
C115	**Reg Station, Valve, and Large Meter Set Inspection**	3,436	4,558	1,122

ii. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section III.A.7.a (Description of Costs and Underlying Activities), C115 is designed to comply with GO 58-A, 49 CFR § 192.739 and 49 CFR § 192.481. These inspection and maintenance activities proactively address risk factors before operation and safety issues arise. Inspections of regulator stations, valves, and large meter sets are critical compliance priorities. Failure to properly inspect and maintain these assets could compromise system integrity and result in significant public safety risks.

In prioritizing these proactive activities, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer, and recovery impacts associated with responding to realized incidents.

b. Forecast Method

The forecast method developed for Measurement and Regulations is based on BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and current workload levels. It is also the correct choice because 2025 best represents the level of funding needed to support inspection and maintenance activities for this workgroup. In developing the TY 2028 forecast, SDG&E evaluated the historical expenditures for 2021 through 2025 for the M&R workgroup. Labor and non-labor expenses remained stable from

2021 to 2025, due to the broad range of activities encompassed in this group and the absence of significant changes to regulatory or compliance drivers during this timeframe. Incremental labor has been added for future SDG&E Measurement & Regulation support once EPM is integrated into Gas Control (*i.e.,* CCM) in 2028.[38] Once EPMs are integrated into Gas Control, technicians will be required to notify Gas Control each time an EPM is brought back online to confirm that communication has been established.

c. Cost Drivers

The M&R forecast is driven by regulatory requirements and the need to mitigate risks for public and employee safety while supporting system resilience and reliability. These cost drivers include:

- Number of Inspections and Follow-Up Maintenance That Must Be Completed at Each of the Facilities Maintained by the M&R Team: These facilities include regulation stations, valves, MSAs, pressure/volumetric correctors, and electronic pressure monitors.
- Volume of Recurring Routine, Scheduled Maintenance Work, and Unscheduled Maintenance Work: Unplanned work includes, for example, work driven because of the malfunction of a device.
- Emergency Support Requirements: This support includes responding to shutdowns caused by pipeline damage, pressure incidents, or major events (*e.g.,* earthquakes), as well as supporting general operational requirements, such as test shutdowns to assess system behavior under specific conditions.
- Age and Type of Equipment Installed: Generally, older or obsolete equipment requires more frequent and more extensive maintenance work.
- Other Cost Drivers: These other drivers include customer requests associated with measurement issues at MSAs and regulatory requirements for additional or stricter standards.

[38] *See* Gas Major Projects testimony (Ex. SDGE-06).

8. Cathodic Protection (1GD003.000)

TABLE TT-16
Non-Shared O&M – Cathodic Protection

GAS DISTRIBUTION (In 2025 $)			
A. Field Operations & Maintenance	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
8. Cathodic Protection	2,297	2,332	35

a. Description of Costs and Underlying Activities

The Cathodic Protection (CP) cost supports O&M labor and non-labor costs for CP activities. Expenses for activities recorded for this all-RAMP[39] workgroup are for the inspection, evaluation, and monitoring of the CP system on SDG&E's steel distribution pipelines to maintain and operate the system in accordance with state and federal regulations. Table TT-16 above summarizes Gas Distribution O&M costs associated with CP activities.

Corrosion is a natural process that can deteriorate steel assets and potentially lead to leaks or asset failure. If a leak migrates and accumulates in a confined space, and a potential ignition source is present or introduced, there is a risk of injury. Although SDG&E operations respond immediately to these leak situations, such conditions can lead to a pipeline incident. CP coating and monitoring can protect and extend the life of a steel pipeline asset by mitigating corrosion. The application of a CP-related low electric current is necessary to overcome local inductive corrosion currents along the pipeline, which, if left unabated, would result in localized corrosion. CP can be achieved by the installation of sacrificial anodes[40] or impressed current systems.[41]

---

[39] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C101).

[40] A sacrificial anode is designed to be more electronegative than the pipe it is protecting and will "sacrifice" itself to prevent corrosion on the carbon steel pipe.

[41] SDG&E utilizes both impressed current and magnesium anode (galvanic) systems to provide CP to existing pipelines. Impressed current systems utilize a rectifier to generate direct current. Both systems utilize sacrificial anodes (more electronegative than the pipe, causing the anode to corrode rather than the pipe) as a primary component in the system. Anodes are installed in wells drilled into the surrounding soil by third-party drilling contractors. Each protected pipe segment requires multiple anodes, collectively referred to as an "anode bed." The number of anodes needed to achieve the desired level of protection, and the average life of the anode bed, can vary based on pipeline length, coating effectiveness, soil conditions, and interference that may occur on the system.

The directives prescribed by state and federal pipeline corrosion control standards[42] include monitoring CP areas, remediation of out-of-tolerance CP areas, and preventive installations to prevent out-of-tolerance CP areas. The work in this CP workpaper encompasses the O&M activities that support compliance with these regulations, supports the safety and integrity of the gas system, and mitigates the risks defined in RAMP. It is for this reason that this entire workgroup was identified as a RAMP activity in SDG&E's 2025 RAMP Report.[43]

i. Description of RAMP Mitigations

Within this cost category, there are non-shared O&M costs for risk control C101 (Cathodic Protection Program – O&M) that were presented in the 2025 RAMP Report[44] and are listed in the table below.

Corrosion is a natural process that can deteriorate steel assets and potentially lead to leaks or asset failure. If a leak migrates to and accumulates in a confined space and a potential ignition source is present or introduced, there is the potential for injuries. Although SDG&E responds immediately to these leak situations, such conditions have the potential to lead to a pipeline incident. CP coating and monitoring can protect and extend the life of a steel pipeline asset by mitigating corrosion. The application of a CP-related low electric current is necessary to overcome local inductive corrosion currents along the pipeline, that left unabated would result in localized corrosion on the pipeline. Cathodic protection can be achieved by the installation of sacrificial anodes or impressed current systems.

The directives prescribed by state and federal pipeline corrosion control standards[45] include the monitoring of CP areas, remediation of CP areas that are out of tolerance,[46] and preventative installations to avoid out of tolerance areas. The work in this CP Program constitutes the O&M activities that provide compliance with these regulations, supports the safety and integrity of the gas system, and mitigates risks defined in this RAMP chapter.

---

42 49 CFR § 192, Subpart I–Requirements for Corrosion Control; GO 112-F.

43 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C101).

44 *Id.*

45 49 CFR § 192, Subpart I–Requirements for Corrosion Control; GO 112-F.

46 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C101).

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-17
RAMP and GRC Risk Control/Mitigation Activities – O&M

Cathodic Protection				
ID	**Control/Mitigation Name**	**2025 RAMP 2028 Estimate In 2024 $ (000s)**	**2028 GRC 2028 Forecast In 2025 $ (000s)**	**Change (000s)**
C101	**Cathodic Protection Program – O&M**	2,258	2,333	75

ii. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section III.A.8.a (Description of Costs and Underlying Activities), C101 is designed to comply with 49 CFR § 192, Subpart I–Requirements for Corrosion Control, and GO 112-F. This CP activity proactively targets risk factors before operation and safety issues arise. This includes monitoring CP areas, remediating out-of-tolerance CP areas, and preventing out-of-tolerance CP areas through preventive installations. Overall, this CP program supports employee and public safety while preserving the integrity and reliability of the gas system.

In prioritizing this proactive approach, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer, and recovery impacts associated with responding to realized incidents.

b. Forecast Method

The forecast method developed for CP is based on BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. Labor and non-labor expenses have collectively remained level over the historical years 2021-2025. The

Company has seen a slight increase in maintenance work due to the average age of its CP stations and the increase in troubleshooting to maintain appropriate currents. SDG&E is still required to meet code compliance requirements even as the system ages. Gaps in the cathodic protection system are assessed through the Company's Geographic Information System (GIS). This increase in maintenance work will be offset by the installation of Realtime Monitoring Units (RMU). The RMU installation efforts from the previous rate cycle are continuing to help streamline monitoring and data capture of CP rectifier compliance activities without requiring additional labor support. A base-year forecast best represents the anticipated workload and future resource needs.

c. Cost Drivers

The cost drivers behind the CP forecast include the number of inspections and associated evaluations (*i.e.*, troubleshooting) that must be completed annually to meet compliance requirements for each CP area and isolated CP segment. Based on the results of these monitoring activities, follow-up maintenance action is often necessary. These maintenance activities may include replacing, upgrading, or altering components of the CP system, such as anode beds, rectifiers, bonds, test points, electric drops, anode wells, and insulators. Many of these activities are driven by the age of the system components, with older elements generally requiring more maintenance.

Further, the typical lifespan of anodes, a critical component of the CP system, can vary depending on several factors, including weather and soil conditions, the length of the protected pipeline, and the effectiveness of the pipe coating. Anode depletion is accelerated by drought conditions, as dry soil does not allow the current to travel as far and therefore protect as much pipe. In addition, some soils are more resistive than others, causing anodes to deplete at a higher rate.

CP maintenance work is often reactive to the activities of municipalities, other utilities, and construction firms as they complete projects such as street reconstruction, widening, or resurfacing, or sewer and water line maintenance and replacement, as these activities can damage CP components. Additionally, pipelines can come into contact with water lines or third-party grounding systems that can drain current from the pipeline, thereby reducing protection levels and depleting anodes. Customers placing metal objects against an MSA riser can have the same effect by shorting the CP current.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation and Benefits testimony (Ex. SCG-16/SDGE-20).

B. Distribution Technical Services

1. Distribution Technical Services (1GD001.000)

TABLE TT-18
Non-Share O&M – Distribution Technical Services

GAS DISTRIBUTION (In 2025 $)			
B. Distribution Technical Services	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
1. Distribution Technical Services	2,541	2,575	34

a. Description of Costs and Underlying Activities

The Distribution Technical Services cost supports the activities and associated O&M expenses incurred during the evaluation of the gas distribution system's condition. This includes maintaining asset records, identifying corrective maintenance solutions, and coordinating with field personnel on completion and recording of O&M activities. Table TT-18 above summarizes Gas Distribution O&M costs associated with Distribution Technical Services activities.

This workgroup includes labor and non-labor expenses for technical planning office personnel, regional engineering, pipeline mapping personnel, various analytical and administrative support positions, quality assurance, and associated supervision. SDG&E's Distribution Technical Services provides many of the technical and administrative services needed for the successful and timely completion of the O&M activities discussed in Section III.A.1-8 above. Activities performed by this planning office include items such as:

- Identifying construction design requirements;
- Evaluating pressure specifications;
- Coordinating pipeline planning;
- Providing project drawings;
- Identifying material selection;
- Preparing work order estimates;
- Acquiring third-party contract services (*e.g.*, paving, traffic control plans, and operated equipment);

- Obtaining permits for construction from city, county, state, and federal agencies; and
- Verifying that services provided by third parties meet Company standards.

The organizations in this workgroup also support the regions' emergency response efforts by managing the Department Operations Center – Gas (DOC-G). The DOC-G is activated during a significant event (*e.g.*, fire, earthquake, or significant pipeline damage or customer outage) to support field operations with engineering, pipeline planning, mapping, logistics, and office resources that are vital in returning SDG&E's facilities to normal operations.

This workgroup also includes expenses for mapping the pipeline facilities. As gas system construction projects are completed throughout SDG&E's service territory, accurate pipeline data must be captured and records must be kept for the life of the pipeline, consistent with GO112-F and 58-A. Projects requiring mapping and database records work include all new business activity, pipeline relocations, main extensions, system capacity projects, pipeline replacements, and various other operational activities that change the gas system configuration. The GIS mapping system adds the capability to capture pipeline attribute data, which is then added to the facilities during GIS mapping. GIS mapping personnel are responsible for updating all distribution infrastructure maps whenever facilities in the field are constructed, modified, or replaced. The timely maintenance of these Gas Distribution system records is a critical risk mitigation measure in preventing hazards to public and employee safety, infrastructure integrity, and the reliable delivery of natural gas to SDG&E's customers.

i. Description of RAMP Mitigations

Within this cost category, there are non-shared O&M costs for risk controls C001 (Damage Prevention Strategies), C004 (Damage Prevention Mapping), C144 (Human Factors Mitigation – Quality Assurance (QA)/Quality Control (QC) Program – Mandate Compliance Activities**)** that were presented in the 2025 RAMP Report and are listed in the table below. The RAMP activities in this workgroup are three-fold: (1) Damage Prevention Strategies,[47] (2) Damage Prevention Mapping,[48] which includes complete and accurate maps of the gas

[47] 2025 RAMP Report, Chapter SDG&E-Risk-1, Excavation Damage (May 15, 2025), (Control ID C001), *available at:* https://www.sdge.com/sites/default/files/regulatory/SDG%26E-Risk-1%20Excavation%20Damage_0.pdf.

[48] *Id.*, (Control ID C004).

infrastructure data, and (3) the Human Factors Mitigations QA-Program – Mandated Compliance Activities.[49]

Damage Prevention Strategies: SDG&E's QA Program, as required by federal code,[50] provides a variety of benefits to reduce the number of incidents and potential damage to the gas infrastructure caused by third parties. By evaluating locate-and-mark activities that have been completed or are in progress, SDG&E can address performance gaps through additional training, updating company documentation, or recording company assets. Human errors can result in a mismark or a ticket not being completed within the required timeframe. Additionally, the QA review can highlight errors in the timely and/or accurate documentation of utility assets.

Damage Prevention Mapping: The entirety of accurate and complete GIS records of the Gas Distribution system is a critical risk mitigation measure to prevent hazards to public and employee safety, as well as to support the reliable delivery of natural gas to SDG&E's customers. As gas system construction, maintenance, and repair projects are completed throughout SDG&E's service territory, accurate pipeline data is captured, and records are kept for the life of the pipeline, consistent with GO 112-F and 58-A. Projects requiring mapping and database records work include all new business activity, pipeline relocations, main extensions, system capacity projects, pipeline replacements, and various other operational activities that change the gas system configuration. The GIS-based mapping system includes the capability to capture pipeline attribute data, which is added to the facilities when they are mapped in GIS. GIS mapping personnel are responsible for updating all distribution infrastructure maps whenever facilities in the field are constructed, modified, or replaced. The timely maintenance of these Gas Distribution system records is a critical risk mitigation measure to prevent hazards to public and employee safety, promote infrastructure integrity, and support the reliable delivery of natural gas to SDG&E's customers.

Human Factors Mitigations QA Program – Mandated Compliance Activities: SDG&E performs quality control checks for various pipeline operational activities as mandated by 49 CFR §§ 192.605(b)(8) and (c)(4). During these quality control checks, internal assessors review the work performed by gas pipeline personnel to assess the effectiveness and adequacy of

[49] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C144).

[50] 49 CFR § 192.605(b)(8).

the procedures used. Additionally, assessors evaluate employees' compliance with policies and procedures. The assessors determine whether abnormal operating conditions (AOC) are present and document whether employees respond to them and take appropriate corrective actions. Adherence to proper company policies and procedures is intended to mitigate the risk of developing hazardous conditions and to increase overall awareness and response to unsafe activities.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-19
RAMP and GRC Risk Control/Mitigation Activities – O&M

Distribution Technical Services				
ID	**Control/Mitigation Name**	**2025 RAMP 2028 Estimate In 2024 $ (000s)**	**2028 GRC 2028 Forecast In 2025 $ (000s)**	**Change ($000s)**
C001	**Damage Prevention Strategies**	800	323	(477)
C004	**Damage Prevention Mapping**	686	494	(192)
C144	**Human Factors Mitigation – QA/QC Program – Mandate Compliance Activities**	142	242	100
	TOTAL	**1,628**	**1,059**	**(569)**

ii. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section III.B.1.a (Description of Costs and Underlying Activities), C001, C004, and C144 are designed to comply with GO 112-F, GO 58-A, and 49 CFR §§ 192.605(b)(8) and (c)(4), respectively.

The Damage Prevention Strategies program performs quality assurance/quality control (QA/QC) reviews and damage investigations associated with Damage Prevention mark-outs. This program was selected because it directly improves the ability of SDG&E locators to accurately identify the location of underground facilities. In addition, the Damage Prevention Strategies group proactively identifies excavation activities where no One-Call requests have been submitted. These efforts also increase excavator awareness of the One-Call system, enhance internal performance, and promote public safety and system reliability.

C004 (Damage Prevention Mapping) operates in close coordination with C002 (Damage Prevention Activities – Gas) and C001 (Damage Prevention Strategies). This risk control supports compliance with GO 112-F and GO 58-A by maintaining the accuracy and maintenance of SDG&E's gas system records. Without these records, Gas Distribution would be significantly hindered in its ability to perform accurate mark-outs of gas infrastructure and to effectively respond to and control escaping gas resulting from excavation damage.

C144 performs QA reviews of required activities associated with Infrastructure Patrols and Inspections, Distribution Maintenance, Measurement and Regulation, and Cathodic Protection. These QA efforts help maintain compliance with 49 CFR §§ 192.605(b)(8) and (c)(4) for personnel performing maintenance on the gas distribution system. Overall, this QA program supports employee and public safety while preserving the integrity and reliability of the gas system.

In prioritizing these proactive approaches, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents.

b. Forecast Method

The forecast method developed for Distribution Technical Services is based on BY 2025. This method is most appropriate because 2025 best represents the activity for years ahead. The base year reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. Labor and non-labor expenses increased steadily over the years due to incremental planning, engineering, and facility mapping activities, as the level of maintenance work, general construction activity, municipality work, construction permit turnaround time, and customer-generated activity increased. Planning, engineering, and facility mapping activities, along with their associated expenses, vary according

to the level of maintenance work, general construction activity, municipal work, customer-generated activity, and expense allocations. Alternative forecasts—such as using a multi-year historical average or applying a linear trend—would not produce reliable results, because these methods assume stable growth patterns or smooth year-over-year changes that do not reflect the operational realities and future business needs captured by the base year.

c. Cost Drivers

The cost driver behind the Distribution Technical Services forecast is the level of O&M activities. During the last GRC cycle, Field O&M planning experienced an increase in general construction and customer-generated activity, as well as an increase in work in the public right-of-way, which required the distribution technical services offices to perform more pipeline relocation planning work. SDG&E also experienced an increase in additional requirements to respond to regulatory agencies, including the National Transportation Safety Board (NTSB), Pipeline and Hazardous Materials Safety Administration (PHMSA), and the CPUC. These agencies require pipeline operators to provide and retain documentation for all aspects of gas pipeline design, construction, pressure test records, project close-out, inspection, and mapping. Operators of gas pipelines must also verify that the records are traceable, verifiable, and complete

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

C. Operations, Management, & Training

TABLE TT-20
Non-Shared O&M – Operations, Management, & Training

GAS DISTRIBUTION (In 2025 $)			
C. Operations, Management, & Training	**2025 Adjusted-Recorded (000s)**	**TY 2028 Est. (000s)**	**Change (000s)**
1. Operations & Management	5,605	5,688	83
2. Training	2,932	2,971	39
Total	**8,537**	**8,659**	**122**

1. Operations & Management (1GD004.000)

TABLE TT-21
Non-Shared O&M – Operations & Management

GAS DISTRIBUTION (In 2025 $)			
C. Operations Management & Training	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
1. Operations & Management	5,605	5,688	83

a. Description of Costs and Underlying Activities

The Operations & Management cost group supports the critical workforce in maintaining the integrity of the pipeline system, preventing and reducing risks, and delivering safe and reliable service to customers. This request advances SDG&E's ability to maintain compliance with the requirement set forth in SB 705 to "[e]nsure an adequately sized, qualified, and properly trained gas corporation workforce".[51] Table TT-21 above summarizes Gas Distribution O&M costs associated with Operations & Management.

The activities completed within this workgroup are categorized as Operations Leadership, Field Management, and Field Operations Supervisors.

- **Operations Leadership:** Company leaders play a critical role in shaping organizational and safety culture, setting the tone, and defining the strategic direction of the Company. They articulate a clear vision that supports SDG&E's objectives and guides the organization toward success.

[51] Pub. Util. Code § 961(d)(10).

Gas Distribution's mission is to continue delivering safe and reliable service to customers while maintaining a strong focus on affordability. To achieve this mission, the message must reach Gas Distribution employees across SDG&E's extensive and diverse service territory. Leadership must consistently communicate and reinforce these goals, inspiring a passion for success through regular engagement at all levels—such as ongoing discussions with managers, dialogue sessions with front-line supervisors and employees, participation in employee seminars, refresher training, and one-on-one meetings.

- **Field Management:** Field management is responsible for overseeing the workforce that plans and executes Gas Distribution pipeline maintenance and installation activities. These efforts are essential to maintain the safety and reliability of the SDG&E system and to provide the operational leadership and field oversight needed to support its mission. Field management includes such tasks as:
  - Implementing programs focused on enhancing SDG&E's comprehensive safety (employees, contractors, public, and system) and the customer experience;
  - Facilitating the acquisition and allocation of resources to complete work on time.
  - Supporting supervisors in the resolution of scheduling conflicts;
  - Reviewing compliance work for accuracy and completeness;
  - Providing guidance and consultation to pipeline contractors regarding job requirements and adherence to Company procedures; and
  - Providing overall leadership to support the achievement of Company goals and to guide individual performance improvement.
- **Field Operations Supervisors:** Field supervisory positions are critical to providing daily management of front-line employees, overseeing contractors that perform work on the distribution system, as well as interacting directly with customers, public agencies, and the general

public. In addition, supervisors are responsible for providing daily work directions and inspecting contractor work throughout the service territory. These employees also have off-hour (*i.e.*, On-Call) responsibilities, requiring them to respond to emergencies such as pipeline breaks, damaged gas facilities, and leak investigations. They hold leadership roles and provide training, coaching, and mentoring to SDG&E's front-line employees and third-party contractors. These supervisors encourage and coach employees to work safely, follow Company procedures, deliver a superior customer experience, and contribute to the building and maintenance of a safe and reliable natural gas delivery system.

b. Forecast Method

The forecast method developed for Operations & Management is based on BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. In addition, it is the best choice because it best represents the ongoing level of activity and associated costs expected in future years. Historical spending trends for this workgroup from 2021 to 2025 show that operational leadership, field management, and support costs generally fluctuate with workload, workforce levels, the implementation of new programs and technologies, and evolving regulatory or compliance requirements. Because of these recent work elements and associated expense level changes, a simple historical average would not accurately reflect future needs. For this reason, SDG&E selected 2025 as the base year for forecasting.

c. Cost Drivers

The cost drivers behind the Operations and Management forecast are identified in the categories below. These costs evolve as workload and workforce levels change, new programs and technologies are introduced, and regulatory compliance requirements expand. The 2025 base year reflects a work environment shaped by multiple key drivers:

- **Regulatory Compliance Requirements:** Requirements such as GO 112-F and federal regulations (*e.g.*, 49 CFR § 192.607) require costs related to emergency response, quality assurance oversight, and the need for additional compliance technical advisors to integrate these regulations into operational procedures and standards.

- **Integration of New Field Technologies:** The adoption of advanced field technologies drives costs for technical business support and system enhancements. GO 112-F mandates that training equipment closely replicate operational equipment, and investment in training facilities and tools.
- **Data Integrity and Reporting Requirements:** Enhanced data management capabilities are necessary to consolidate and analyze information for compliance reporting and operational performance monitoring. GO 112-F alone introduced 25 new reporting requirements, thereby requiring costs associated with systems, tools, and personnel to manage these obligations.
- **New Construction and Maintenance Methods:** Evolving construction and maintenance practices require updates to Gas Standards, training materials, refresher courses, and project management resources, all contributing to costs in this workgroup.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

2. Training (1GD005.000)

TABLE TT-22
Non-Shared O&M – Training

GAS DISTRIBUTION (In 2025 $)			
C. Operations Management & Training	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
2. Training	2,932	2,971	39

a. Description of Costs and Underlying Activities

The Training cost group supports labor and non-labor expenses associated with field training, training distribution welders, providing code-required welder testing, providing welding inspection, managing the Operator Qualification (OpQual) program, and managing the Welding School. Table TT-22 above summarizes Gas Distribution O&M costs associated with Gas Distribution Training.

i. Description of RAMP Mitigations

Within this cost category, there are non-shared O&M costs for risk control C169 (Human Factors Mitigation – Op Qual Training) that were presented in the 2025 RAMP Report[52] and are listed in the table below.

Gas construction employees attend training for various reasons, including new employee onboarding efforts, operator qualification requirements, refresher training needs, promotions to a position requiring additional technical skills, or adaptation to new equipment, technology, or regulatory requirements and changes. These field expenses include general training costs for SDG&E District Operating Centers and technical services personnel. In compliance with 49 CFR Subpart N – Qualification of Pipeline Personnel, all gas pipeline operators must establish and maintain a written OpQual program. Under this program, employees and contractors performing DOT-covered tasks are pre-qualified before working on pipelines or related facilities. The OpQual department reviews qualifications before work, and employees must be initially qualified and re-qualified every three to five years, depending on the task. SDG&E's training frequency aligns with these requirements, and evaluation results are documented to demonstrate employee's knowledge, skills, and ability to perform required tasks. Proper qualifications promote adherence to Company policies and procedures, mitigate the risk of hazardous conditions, and enhance overall awareness and response to unsafe activities.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-23
RAMP and GRC Risk Control/Mitigation Activities – O&M

Training				
ID	**Control/Mitigation Name**	**2025 RAMP 2028 Estimate In 2024 $ (000s)**	**2028 GRC 2028 Forecast In 2025 $ (000s)**	**Change ($000s)**
C169	**Human Factors Mitigation – Op Qual Training**	2,337	2,970	633

[52] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C169).

ii. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section III.C.2.a (Description of Costs and Underlying Activities), C169 is designed to comply with 49 CFR § 192, Subpart N—Qualification of Pipeline Personnel. This control was selected because it serves as an overarching qualification and competency framework applicable to all gas pipeline personnel. It establishes the training and qualification requirements necessary for employees to perform their duties accurately and safely, in accordance with applicable regulations and SDG&E standards. This training program supports employee and public safety while preserving the integrity and reliability of the gas system.

In prioritizing these proactive approaches, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents.

b. Forecast Method

The forecast method developed for Training is based on BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. In addition, it is the best choice because work levels and OpQual activity are expected to remain stable at 2025 levels. In projecting future expense requirements for these functions, SDG&E reviewed the historical spending from 2021 through 2025 for this entire workgroup. In general, training depends on the level of work and the workforce turnover rate, as new programs, processes, and technologies are implemented, and as regulatory or compliance requirements change. An increase in training and in the development and expansion of the OpQual program began in 2021 and continued into 2025. The level of work and OpQual activity is expected to remain stable with BY 2025. Due to these recent work elements and associated expense level changes, a historical average would not accurately represent future resource needs. For this reason, BY 2025 was selected as the most suitable for the forecast methodology.

c. Cost Drivers

The cost drivers behind the Training forecast are federal, state, and local regulatory requirements for pipeline field employees, the level of work, and the need to maintain a trained and qualified workforce to meet the requirements of 49 CFR § 192 and GO-112-F.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

D. Gas Decarbonization

1. Gas Decarbonization (1GD007.000)

TABLE TT-24
Non-Shared O&M – Gas Decarbonization Costs

GAS DISTRIBUTION (In 2025 $)			
D. Gas Decarbonization	**2025 Adjusted-Recorded (000s)**	**TY2028 Est. (000s)**	**Change (000s)**
1. Gas Decarbonization	428	435	7

a. Description of Costs and Underlying Activities

The Gas Decarbonization cost group supports SDG&E's gas decarbonization efforts, specifically the specialized team within the Advanced Clean Technology (ACT) department. Costs for the ACT department that do not include this specialized Gas Decarbonization team are being requested in the Sustainability & Environmental testimony (Ex. SDGE-17). The production, storage, transportation, and use of lower carbon or no carbon fuels, including hydrogen, biomethane, and other low-carbon fuel options, remain an area of interest for SDG&E, supporting the state's decarbonization goals while also promoting customer choice and affordability.

While electrification has been identified as a key strategy for reducing greenhouse gas (GHG) emissions in the residential and light-duty vehicle sectors, low-carbon fuels are necessary to meet the energy-intensive needs of sectors such as commercial, industrial, and heavy-duty transportation. With over 900,000 gas meters in SDG&E's service territory, providing a decarbonization pathway to those who cannot electrify – either because of technology limitations or choice – will better support SDG&E's customers and California's efforts to meet state carbon reduction targets.

Members of the specialized team actively engage in and contribute to various regulatory, technical, and engagement activities that support statewide objectives, company strategy, and promote customer value:

- **Compliance and Regulatory:** The regulatory team acts as a centralized group that supports compliance and regulatory obligations under multiple decisions/statutes (*i.e.,* Long Term Gas Planning OIR and SB 1221) and provides guidance to other departments across SDG&E. Responsibilities include reviewing and providing written comments for respective proceedings, responding to data requests, supporting internal business units, and organizing SDG&E's approach for external distribution.
- **Business Development and Stakeholder Engagement:** The team performs community outreach, actively engages with external stakeholders, supports technical questions, and receives feedback from community organizations to provide input and identify opportunities to develop new initiatives that support the regional integration of lower carbon or no carbon fuels within different economic sectors. Regional partners include the University of California San Diego, North Coast Transit District, Toyota, and the San Diego Port Authority.
- **Supporting Best Practices:** The Team supports ongoing safety considerations and improvements through training, studies, and collaboration with operation-focused teams within SDG&E. The team's focus is to leverage leading industry best practices and safety protocols to support new technology being demonstrated within the San Diego service territory. Cost drivers include non-labor O&M requests for partnerships, such as the HyBlend Department of Energy (DOE) Program under the National Laboratory of the Rockies.[53]

[53] HyBlend is a DOE initiative that brings industry leaders together with the goal of addressing technical barriers in the hydrogen industry. Key aspects of HyBlend include research & development, techno-economic analysis, and life cycle analysis that inform publicly available tools that characterize the opportunities, costs, and risks of blending.

b. Forecast Method

The forecast method developed for Gas Decarbonization is based on BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. This method provides appropriate levels of staffing while being mindful of costs.

c. Cost Drivers

The cost drivers behind the Gas Decarbonization forecast are the understanding, development, incorporation, and promotion of integrating low-carbon or no carbon fuel projects into the Company's electric, gas, and internal operations. The O&M expenses include labor costs for staff and the non-labor costs for related studies and safety trainings (*i.e.*, HyBlend). Labor activities to support low-carbon fuels are summarized in the following categories:

- **Compliance and Regulatory:** This category focuses on meeting obligations under active proceedings, policy advisement, and responding to requests from state agencies.
- **Business Development and Stakeholder Engagement:** This activity centers on outreach, technical support, and nurturing partnerships with external actors and community organizations, and fostering customer value through safety training, studies, and implementation of best practices within lower carbon and no carbon fuel infrastructure throughout the service territory.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

IV. CAPITAL

The driving philosophy behind SDG&E's capital investment plan is to provide safe and reliable natural gas delivery to customers at a reasonable cost. This commitment requires SDG&E to invest in its infrastructure and support services to mitigate risks associated with public and employee safety, service reliability, and gas system integrity. SDG&E installs new pipeline mains, service lines, and meter set assemblies to meet the needs of the growing population within its service territory.

To maintain system reliability and safety, SDG&E undertakes a variety of capital improvements, including system capacity projects that maintain reliability and provide service to customers; pipeline renewals to replace deteriorated pipelines or obsolete equipment; pipeline upsizing to meet customer load demands; installation of back ties to enhance reliability; installation and replacement of cathodic protection systems; and the acquisition of electronic pressure monitoring devices for pressure tracking and monitoring.

Capital improvements also proactively address risk mitigations identified in the 2025 RAMP report, as discussed in this testimony, including completing pipeline replacements and removals to reduce operational risks across the gas system. Additional improvements include pipeline relocations to accommodate public infrastructure enhancements, such as street and highway widening, as well as relocations necessitated by the construction of new water, sewer, and railway facilities.

To accomplish these activities, SDG&E continuously monitors the condition of approximately 15,500[54] miles of distribution main and service pipelines. By utilizing technology and the professional judgment of experienced, skilled, and well-trained employees, SDG&E manages capital in a prudent and responsible manner, consistent with local, state, and federal codes and regulations.

In preparing the forecast for capital expenditures, SDG&E Gas Distribution reviewed historical spending levels from 2021 to 2025, including work units, and developed an assessment of future requirements and associated risks. This analysis considered underlying cost drivers to determine whether historical spending patterns should be expected to continue, as well as the degree of impact of associated RAMP risk mitigations. Additionally, where a capital improvement project was new and lacked a prior history or a separate forecast calculation method, a zero-based methodology was employed. Forecasting was based on recent experience in construction, units of construction, or work activity, while adding recent experiences to modernize the gas infrastructure. Gas Distribution also evaluated future work requirements that were incremental to historical spending levels, yet necessary to maintain the safe and reliable operation of the distribution system.

[54] Total mileage from U.S. Department of Transportation PHMSA, *Annual Report for Calendar Year 2025 Gas Distribution System*, OMB NO: 2137-0629.

The forecasting methodologies vary depending on the type of activity being analyzed and expectations for future system needs. These methods include forecasts based on historical averages and growth rates, identified projects or materials, zero-based approaches, and combinations of project-specific justification and analysis. SDG&E's Gas Distribution capital expenditure forecasts are developed based on a historical review of spending and are adjusted, where appropriate, to reflect new customer load requirements, changes in operating conditions, and RAMP risk mitigations not captured in prior spending patterns. Accordingly, these forecasts incorporate the actions necessary to manage risks to public and employee safety, service reliability, and gas system integrity.

To continue to provide safe and reliable service, while mitigating associated risks, SDG&E requests the Commission adopt forecast capital costs as reflected in Appendix C. Table TT-25 summarizes the total capital forecasts for 2026 through 2031. The particular in-service date for the capital expenditures that underly these forecasts is provided in workpapers. Appendix C to this testimony provides a table that illustrates the capital expenditures that are estimated to have in-service dates between 2026 and TY 2028. Capital expenditures that are in-service between 2026-2028 will contribute to the TY 2028 revenue requirement request presented in the Summary of Earnings testimony (Ex. SDGE-32). Capital expenditures with in-service dates in the post-test years (i.e., 2029-2031) are also included in Appendix C. The post-test year revenue requirement request is included in the Post-Test Year Ratemaking testimony (Ex. SDGE-33).

TABLE TT-25
Capital Expenditures Summary of Costs

GAS DISTRIBUTION (In 2025 $)							
Categories of Management	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
A. New Customer & Gas System Upgrades to Support Load	11,150	13,076	11,326	9,573	9,439	9,631	9,931
B. System Minor	7,449	7,496	7,496	7,498	7,498	7,498	7,498

GAS DISTRIBUTION (In 2025 $)							
Categories of Management	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
Relocations & Retirements							
C. Gas Meters & Regulators	11,659	4,462	7,799	7,852	8,151	8,531	8,812
D. Franchise & Highway Relocation	6,731	9,422	9,422	9,424	9,424	9,424	9,424
E. Gas Tools & Equipment	273	822	822	822	822	822	822
F. Gas Code Compliance	3,533	3,561	3,562	3,563	3,563	3,563	3,563
G. Leak Repair & Restoration	14,033	15,242	15,244	15,255	15,255	15,254	15,253
H. Cathodic Protection	10,178	10,217	10,217	10,219	10,219	10,219	10,219
I. System Reliability & Safety	3,664	3,752	3,753	3,753	3,753	3,753	3,753
J. Underperforming Mains & Services	8,180	15,044	15,045	15,047	15,047	15,047	15,047
K. Curb Valve Replacements	2,414	3,512	3,512	3,513	3,513	3,513	3,513
L. Customer Meter Protection	2,470	8,000	8,000	8,000	8,000	8,000	8,000
M. DIMP Execution	28,003	16,000	25,673	28,025	28,025	28,025	28,025
N. Gas Distribution – Local Engineering Pool	20,597	26,352	26,205	25,691	25,663	25,721	25,811
O. Gas Distribution – Department Overhead Pool	13,235	16,895	16,800	16,471	16,453	16,490	16,548
P. Gas Distribution –	4,268	5,417	5,387	5,281	5,276	5,288	5,306

GAS DISTRIBUTION (In 2025 $)							
Categories of Management	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
Contract Administration							
Total	**147,837**	**159,270**	**170,263**	**169,987**	**170,101**	**170,779**	**171,525**
Non-Collectible (NC)	143,775	154,897	166,335	166,506	166,654	167,283	167,953
Collectible (CO)	4,062	4,373	3,928	3,481	3,447	3,496	3,572

A. New Customer & Gas System Upgrades to Support Gas Load (005000)

TABLE TT-26
Capital Expenditures – New Customer & Gas System Upgrades to Support Load

GAS DISTRIBUTION (In 2025 $)							
A. New Customer & Gas System Upgrades to Support Load	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. New Customer & Gas System Upgrades To Support Load (NC)	7,674	9,751	8,446	7,140	7,040	7,183	7,407
2. New Customer & Gas System Upgrades To Support Load (CO)	3,476	3,325	2,880	2,433	2,399	2,448	2,524
Total	**11,150**	**13,076**	**11,326**	**9,573**	**9,439**	**9,631**	**9,931**

1. Description

The forecasts for New Customer & Gas System Upgrades to Support Gas Load allow for changes and additions to the existing gas distribution system to connect new residential, commercial, and industrial customers, or to accommodate a change or increase in the requested load by an existing customer. This includes installing new gas mains and services, upsizing existing mains and services, installing meter sets, purging customer house lines, and the associated regulator stations and/or back ties necessary to provide reliable service to the customer. The material cost of meters and regulators is addressed under Section IV.C (Gas

Meters & Regulators (005020)). Further details regarding new customer and gas system upgrades are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005000).

These forecasted capital expenditures support the Company's goals of providing a safe and reliable gas distribution system and of meeting its obligation to serve the growing customer base, thereby mitigating the risk of reduced service reliability.

2. Forecast Method

The forecast method developed for New Customer & Gas System Upgrades to Support Gas Load is zero-based. This method is most appropriate because forecasted activity is best estimated by applying a historical percentage relationship between new housing development within SDG&E's service territory and the installation of new gas meters. The forecast was developed using the projected number of new gas meter sets added to the Gas Distribution system, which was computed by applying the average 2024–2025 percentage of new housing developments resulting in gas meter installations to the projected number of new housing builds for the forecast period. Projected housing growth for 2026 through 2031 is based on S&P Global housing forecast data shown in the Escalation & Gas Customer Forecast workpaper (Ex. SDGE-24-WP). Estimated costs were calculated by multiplying the projected new gas meter sets by the historical average cost per meter set, which reflects the anticipated mix of work required to construct new main extensions and associated service laterals. These activities include contractor services, third-party services, municipal permit fees, and the proportional use of plastic and steel materials. SDG&E selected the most recent years on record, 2024 and 2025, to establish the average cost per meter set used for forecasting purposes.

The gross forecast of expenditures was separated into two components: (1) the "non-collectible" construction cost for labor and non-labor necessary to install new customer additions, and (2) the "collectible cost," or Contributions In Aid of Construction (CIAC), portion that supports these installations. The collectible cost of a project (*i.e.,* collectible cost or CIAC) is the amount of money collected from the customer that covers the cost of construction for services rendered and facilities installed. Collectible costs vary from project to project. Therefore, to forecast this fluctuating portion of new customer expenditures, it is necessary to derive a factor that represents the average percentage of direct CIAC per direct construction cost.

Pursuant to D.22-09-026, gas line extension allowances, refunds, and discounts for new customers were eliminated effective July 1, 2023. Under this decision, new gas customers are

now responsible for the full, actual upfront cost to install any new gas main and/or service line. As a result, the collectible portion of the forecast has been expanded to include costs previously offset by line extension allowances. This collectible cost group captures the costs associated with new gas customer installations, including customer-funded mains and services, meters and meter sets, and service connections.

This CIAC factor (*i.e.,* the factor necessary to calculate the collectible portion) was developed by dividing the annual direct CIAC credits collected in a given year by the total direct construction costs for that year and averaging the resulting ratios over the 2024-2025 period to capture the change driven by D.22-09-026. This factor was applied to the 2026-2028 gross forecast of construction costs, yielding the New Customer Collectible component of the forecast.

Supporting details, including annual customer growth estimates targets, unit cost assumptions, CIAC, and calculations, are provided in the supplemental workpaper. *See* supplemental workpaper, Ex. SDGE-04-CWP-S-001 and Ex. SDGE-04-CWP-S-002, for calculation details.

3. Cost Drivers

The underlying cost drivers for New Customer and Gas System Upgrades relate to the volume and type of new construction required to provide service to new residential, commercial, and industrial customers, thus mitigating the risk of reduced service reliability and complying with the Company's obligation to serve. As described above, this includes installing new mains and services to bring gas to new developments, upsizing existing mains and services, installing meter sets, purging customer house lines, and the associated regulator stations and/or back ties necessary to provide reliable service to the customer. As previously discussed, it is sometimes necessary to build high-pressure supply lines and associated regulator stations to support the gas load requirements of customers in an area.

In SDG&E's experience, new gas construction increases as housing and business needs for gas increase. As referenced in the Escalation & Gas Customer Forecast testimony (Ex. SDGE-24), SDG&E forecasts an increase in new customer growth in the next several years, and it is therefore reasonably anticipated that demand for construction resources and materials will increase. The underlying cost drivers for this capital category include Company labor, contractor services, third-party services, paving services, and materials such as pipe and fittings.

All or a combination of these construction elements are necessary for performing New Customer facility installations.

B. System Minor Relocations & Retirement (005010)

TABLE TT-27
Capital Expenditures – System Minor Relocations & Retirements

GAS DISTRIBUTION (In 2025 $)							
B. System Minor Relocations & Retirements	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. System Minor Relocations & Retirements (NC)	6,863	6,448	6,448	6,450	6,450	6,450	6,450
2. System Minor Relocations & Retirements (CO)	586	1,048	1,048	1,048	1,048	1,048	1,048
Total	**7,449**	**7,496**	**7,496**	**7,498**	**7,498**	**7,498**	**7,498**

1. Description

The forecasts for System Minor Relocations & Retirement support expenditures not covered in other work categories that are required to maintain the continued integrity of SDG&E's Gas Distribution system. Examples of expenditures include gas distribution main and service additions, main and service abandonment, and main and service relocations due to customer requests or Company requirements. Further details regarding System Minor Relocations & Retirement are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005010).

The System Minor Relocations & Retirement work category encompasses construction projects not covered under franchise agreements, unrelated to highway work, and not included in other capital budget categories. Examples of these projects include, but are not limited to:

- Replacement, alteration, or abandonment of appurtenances to mains, due to conditions such as valves and vaults, drips, traps, roads, and fences (providing adequate security), in order to maintain the reliable operation of the distribution system;
- Raising, lowering, or relocating mains due to interference with external party construction;

- Changes to SDG&E facilities at customer request, which may include items such as alteration or relocation of mains or Meter Set Assemblies, installation of a customer's exclusively used main; and
- Changes to SDG&E facilities in accordance with right-of-way agreements, encroachment permits, and railroad crossing lease agreements.

This level of activity is generally unpredictable due to its nature, as the vast majority of costs are driven by property owners requesting that SDG&E relocate its facilities from their property. When projects do occur, SDG&E must promptly complete its portion of the work to minimize schedule delays for the landowner or agency.

a. Description of RAMP Mitigations

Within this cost category, there are capital costs for risk control C139 (Gas Distribution Safety Relocations) that were presented in the 2025 RAMP Report[55] and are listed in the table below.

C139 addresses the relocation of gas services and gas meters on gas distribution lines due to abnormal operating conditions, such as shallow/exposed services and out-of-compliance gas meter locations, such as gas meters that are enclosed and not vented. This activity also supports the management of encroachment violations related to gas distribution pipelines within the Company's pipeline rights-of-way, in compliance with GO 112-F, Section 143.5, and those otherwise affecting the operation and maintenance of the Company's pipeline facilities.

Additionally, this includes the relocation of gas distribution assets away from unstable slopes or known flood-prone areas, thereby mitigating risks to public safety, service reliability, and gas system integrity and reducing exposure to inland flooding and landslides.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

[55] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C139).

TABLE TT-28
RAMP and GRC Risk Control/Mitigation Activities – Capital

System Minor Relocations & Retirement				
ID	**Control/Mitigation Name**	**2025 RAMP 2028-2031 Estimate In 2024 $ (000s)**	**2028 GRC 2028-2031 Forecast In 2025 $ (000s)**	**Change ($000s)**
C139	**Gas Distribution Safety Relocations**	268	8,500	8,232

b. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section IV.B.1.a (Description of RAMP Mitigations), C139 is designed to comply with GO 112-F,Section 143.5. This risk control addresses AOCs identified through field inspections. Examples of AOCs mitigated under this program include shallow or exposed service lines and noncompliant gas meter locations, such as build-overs. If left uncorrected, these AOCs present a risk of unintentional gas release and the potential accumulation of gas within enclosed spaces. Relocation projects are prioritized and selected based on their potential to achieve the greatest risk reduction, thereby enhancing public and employee safety as well as overall system reliability.

In prioritizing these proactive approaches, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents.

2. Forecast Method

The forecast method developed for System Minor Relocations & Retirement is a three-year average (2023-2025). This methodology is most appropriate because it is the best choice for forecasting future costs for this area. In developing the forecast for this cost category, labor and non-labor components were evaluated separately. The labor component contains the

historical Company labor charges associated with construction projects within this budget category.

Within non-labor, there are two distinct cost components: (1) construction materials and services, and (2) CIAC credits. The first non-labor component, construction materials and services, was forecasted using a three-year average (2023-2025). The second component, CIAC credits, was calculated based on a four-year average (2022-2025). As previously discussed in the New Customer cost category, the collectible cost portion of a project (or CIAC credits) is the amount collected from the customer that is applied toward the cost of construction for services rendered and/or facilities installed. Supporting detailing CIAC calculations, are provided in the supplemental workpaper. *See* supplemental workpaper, Ex. SDGE-04-CWP-S-003.

3. Cost Drivers

The underlying cost drivers for System Minor Relocations and Retirement are driven primarily by the volume (*i.e.*, number of projects) and type of construction required to accommodate property owner requests for relocation of SDG&E facilities, as well as the Company's need for minor additions, relocations, or abandonments to address conflicts, gas system integrity, and reliability concerns. Examples include the number of customer houselines or gas service lines to be relocated and/or abandoned, which is generally driven by economic conditions.

The underlying cost drivers for this capital work category also include Company labor, contractor services, third-party services, paving services, and materials such as pipe and fittings. All or a combination of these construction elements are necessary for performing gas pipeline installations or relocations for this budget category.

C. Gas Meters & Regulators (005020)

TABLE TT-29
Capital Expenditures – Gas Meters & Regulators

GAS DISTRIBUTION (In 2025 $)							
C. Gas Meters & Regulators	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Gas Meters & Regulators	11,659	4,462	7,799	7,852	8,151	8,531	8,812

1. Description

The forecasts for Gas Meters and Regulators include material expenses for purchasing new residential, commercial, and industrial gas meters and pressure regulators. Meters and regulators, installed or replaced, are grouped into three general categories: new customer installations, routine replacements, and planned replacements. Meters and regulators are purchased for installation at new customers' premises. Purchases in this category are consistent with forecasts discussed in Section IV.A. (New Customer & Gas System Upgrades to Support Gas Load (005000)) of this testimony. A routine replacement is a reactive replacement of the meter resulting from either a Company- or customer-identified problem with meter accuracy or operation, such as customer trouble calls, customer billing complaints, and replacements due to meter failures or damage. Routine meter changes have remained relatively constant from year to year. Planned meter and regulator replacements are proactive replacements based on the results of a statistical sampling of meter accuracy, age, and performance. These replacements are targeted as part of the Gas Meter Performance Control Program, designed to achieve gas measurement accuracy. General Order 58-A requires that gas meters employed by SDG&E measure gas volume to a certain level of accuracy or be removed from service for repair or replacement. Meters are removed consistently with the Gas Meter Performance Control Program. Small-meter routine replacement labor is addressed in the Customer Services testimony (Ex. SDGE-12). The expenditure included here is for the material costs only. The associated installation expense is covered in other applicable budget categories (*e.g.*, New Customer & Gas System Upgrades to Support Gas Load (005000), Code Compliance (005070), Measurement & Regulation (1GD002.000)), and the Customer Services testimony (Ex. SDGE-12)). Further details regarding Gas Meters and Regulators are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005020). These forecasted capital expenditures support accurate billing, reliability, and safe operation.

2. Forecast Method

The forecast method developed for Gas Meters and Regulators is zero-based. This method is most appropriate because meters and regulators are based on forecasted quantities for new customers, usage trends for routine replacements, and planned meter replacements. The forecasted usage is multiplied by the current meter and regulator contract prices to estimate future expenditures. The 2026 meter forecast reflects a reduction due to surplus inventory

resulting from lower-than-expected spending in 2025 on the Distribution Integrity Management Program (DIMP), Underperforming Mains & Services, and Mobilehome Park programs. The module forecast assumes 2024 GRC authorized levels for 2026 through June 2027, prior to deployment of Smart Meter 2.0. Post Smart Meter 2.0 deployment for this cost category will not contain module costs. Thus, there is no overlap in funding. Small meter routine replacements and planned meter replacements are based on the information provided in the Customer Services testimony (Ex. SDGE-12-WP). *See* supplemental workpaper, Ex. SDGE-04-CWP-S-04, for calculation details.

3. Cost Drivers

The underlying cost drivers for this capital work category relate to meeting projected new customer requirements, routine meter replacements, and planned meter replacements. New customer meter and regulator purchases in this category are consistent with installations discussed in Section IV.A. (New Customer & Gas System Upgrades to Support Gas Load 005000)). Meters purchased for routine replacements are in response to Company or customer identified issues due to meter accuracy, age, or operation. Planned meter replacements are meter families in the Gas Meter Performance Control Program that fail accuracy limits, as determined through meter statistical sampling.

D. Franchise & Highway Relocations (005050)

TABLE TT-30
Capital Expenditures – Franchise & Highway Relocation

GAS DISTRIBUTION (In 2025 $)							
D. Franchise & Highway Relocation	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Franchise & Highway Relocation	6,731	9,422	9,422	9,424	9,424	9,424	9,424

1. Description

The forecasts for Franchise & Highway Relocation provide funding for relocating existing gas facilities when necessitated by public improvements. Generally, the work involves changing the alignment or elevation of existing gas pipelines and associated facilities, driven by requirements from local and state agencies. At the local level, SDG&E has franchise agreements that require the relocation of its gas infrastructure if it conflicts with city and county projects.

These agreements obligate SDG&E to perform this work. Further details regarding Franchise and Highway Relocation are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005050).

These forecasted capital expenditures support compliance with the provisions of applicable third-party utility agreements. The City of San Diego has been a significant contributor to funding for this cost category. Excluding major, one-time, large-scale relocation projects, the level of typical relocation work driven by City projects has remained relatively stable during the 2021–2025 period. In addition to the City of San Diego's projects, SDG&E serves 17 additional cities and one county within its service territory, which also impacts this cost category through relocation projects. Future municipal improvement projects are expected to continue driving expenditures in this capital account.

2. Forecast Method

The forecast method developed for this cost category is a three-year average. In reviewing historical expenditures, this method is most appropriate because it historically best represents the most recent work performed under current standards, agency coordination practices, and construction methods. Outside agencies drive the frequency and amount of franchise and freeway pipeline relocation projects. When relocation work is requested, SDG&E must complete its scope in a manner that minimizes schedule impacts to the agencies involved. Regarding collectible and non-collectible costs, this cost category covers only non-collectible costs (*i.e.*, Company-funded expenditures for planning, design, construction, and relocation of medium- and high-pressure distribution facilities required to resolve agency- or third party-driven conflicts). Customer-funded (collectible) amounts are not included in this forecast.

3. Cost Drivers

The underlying cost drivers for Franchise & Highway Relocation are the volume (*i.e.*, number of projects) and type of construction required in response to requests from external agencies, such as the City and County of San Diego. These agencies submit requests to relocate pipe that, in their current locations, would interfere with the planned construction or reconstruction of large municipal projects. The work in this budget category includes expenditure associated with compliance with the provisions of the Company's utility franchise agreements. The complexity of each relocation request varies, and the outside agencies' construction schedules often change, which directly impacts SDG&E's costs.

The underlying cost driver for this capital work category also relates to company labor, contractor services, third-party services, paving services, and materials such as pipe and fittings. All or a combination of these construction elements are necessary for performing franchise and freeway relocation projects for mains, services, and associated facilities.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

E. Gas Tools & Equipment (005060)

TABLE TT-31
Capital Expenditures – Gas Tools & Equipment

GAS DISTRIBUTION (In 2025 $)							
E. Gas Tools & Equipment	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Gas Tools & Equipment	273	822	822	822	822	822	822

1. Description

The forecasts for Gas Tools and Equipment include new tools and equipment required by field personnel to construct, operate, and maintain the gas distribution system. New tools and equipment are replaced due to failure, age, and advances in technology. SDG&E is also required by GO 112-F, Section 143.4, to provide training and/or operational guidance for new tools in the exact model/type that will be used by employees in the field or in their job positions. This requires SDG&E to purchase copies of these new tools and install them for use in the Skills Training Facility. In addition, SDG&E invests in new tools that provide innovative ways to complete maintenance and repairs to its facilities, minimizing customer disruptions, improving pipeline facility documentation, enhancing gas system safety, and improving employee safety. Further details regarding Gas Tools and Equipment are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005060).

2. Forecast Method

The forecast method for Gas Tools and Equipment uses a three-year average. This method is most appropriate because it provides a balanced view of typical year-to-year variations in tool purchase requirements while avoiding distortion from atypical spending patterns in prior

years or the base year. Historical expenditures from 2021 through 2025 were analyzed to develop this forecast. Tool purchase needs fluctuate annually and are identified throughout the year as part of routine maintenance and construction activities. SDG&E anticipates continued tool purchases as existing equipment reaches the end of its useful life and construction and maintenance activity levels are sustained, requiring the outfitting of employees supporting this work. SDG&E evaluates tool purchases based on safety, functionality, cost, and quality, while managing costs by encouraging tool sharing among crews where feasible and repairing tools when it is safe and practical to do so. Using a three-year average supports a forecast that reflects typical purchasing patterns without being skewed by atypical spikes.

3. Cost Drivers

The underlying cost drivers for Gas Tools and Equipment relate to the need to continuously equip SDG&E's employees with safe and reliable tools and equipment. Tools and equipment are used by the distribution field personnel for the maintenance and repair of gas pipeline systems. As previously discussed, SDG&E's tools and equipment are exposed to rigorous environments, which impact their useful life. Many of the tools and equipment used in the field and training facilities contain sensitive components that are subject to shock, vibration, rain, and dusty conditions, which contribute to equipment deterioration.

Additional cost drivers for this capital work category include expenditures for purchasing capital tools to replace aging or failed equipment, improve safety and ergonomics, and provide employees with the tools necessary for training.

In addition, SDG&E invests in new tools that utilize innovative technology to enhance the maintenance and repair of its facilities. This approach minimizes customer disruptions, reduces natural gas emissions, enhances pipeline facility documentation, improves gas system safety, and promotes employee safety.

F. Code Compliance (005070)

TABLE TT-32
Capital Expenditures – Code Compliance

GAS DISTRIBUTION (In 2025 $)							
F. Gas Code Compliance	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Gas Code Compliance	3,533	3,561	3,562	3,563	3,563	3,563	3,563

1. Description

The forecasts for Code Compliance include upgrades or additions to facilities to support compliance with the minimum federal safety standards for gas pipelines, as outlined in 49 CFR § 192, and state safety standards under GO 112-F. Further details regarding Code Compliance are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005070).

There are three main areas that comprise the expenditure represented by the base portion of this cost category. These components include the following:

- Labor for the Regulator Replacement Program for pre-1982 American Meter Type K Regulators to be removed in compliance with 49 CFR § 192.197(b);
- Installation of isolation valves necessary for safe operation of the gas distribution system in compliance with 49 CFR § 192.747; and
- Installation of Electronic Pressure Monitors in compliance with 49 CFR § 192.741(a)-(b).

The main components of this cost category are described in more detail below:

- **K-Regulator Replacement Program:** Since 1983, SDG&E has been installing regulators that contain an overpressure protection feature. When the regulator senses pressure building in the customer's houseline (*i.e.,* if the pressure exiting the regulator increases beyond acceptable levels), this feature allows the regulator to release excess pressure through a vent while maintaining an acceptable level of houseline pressure. Regulators installed before 1983 (*i.e.,* Type K) did not generally have this feature. To

minimize inconvenience to customers, SDG&E currently replaces these regulators when an employee is on a customer's premises to change the gas meter or when gas service has been isolated for scheduled pest fumigation by the pest control company. The labor costs associated with these regulator replacements are accounted for in this cost category under historical expenditures. The cost of the regulator material is included in the Meter & Regulator Materials cost category (005020).

- **Isolation Valve Installations:** The distribution system continues to grow with the installation of gas mains to accommodate growth from the addition of new customers. This necessitates installing isolation valves for emergency response or for the safe operation of the system. Frequently, these valves are installed as a part of the New Customer main installation project process. However, due to the complexity of the network of interconnected gas mains, it is necessary to periodically evaluate the system to determine if an adequate number of valves are installed for proper system isolation. If a valve is identified through this process as necessary for the safe operation of the distribution system, the valve is installed and the associated expenditures are charged to this cost category.
- **Electronic Pressure Monitors and Electronic Pressure Correctors**: This cost category provides the labor and materials necessary for the installation/replacement of distribution system electronic pressure monitoring devices in compliance with 49 CFR § 192.741(a)-(b); and replacement of aging electronic pressure correctors for core and non-core high volume customers.

All activities within this workgroup are RAMP mitigation measures to address safety risks.

a. Description of RAMP Mitigations

Within this cost category, there are capital costs for risk control C150 (Code Compliance Mitigation) that were presented in the 2025 RAMP Report[56] and are listed in the table below.

[56] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C150).

This project consists of upgrades or additions to facilities to maintain compliance with minimum federal safety standards for gas pipelines under 49 CFR § 192 and state safety standards in GO 112-F. The primary components of this activity are the replacements of Type K Regulators, replacement of inoperable valves, and installation/replacement of EPMs. Type K Regulators lack relief valves, and downstream gas pressure can increase due to corrosion of the copper washer or the presence of small debris that interferes with proper regulator operation.

When a valve has been discovered inoperable through normal maintenance and inspections, it will be reported and then replaced with an operable valve. A valve that is operating properly can help mitigate safety risks. A second more frequently occurring example is when a gas pipeline incurs damage caused by a third-party contact, causing the uncontrolled escape of gas. Valves can be operated to allow for a safe environment, allowing completion of repairs to the pipeline, and minimizing the risk of furthering the incident.

Installations/replacements of EPMs are needed in order to provide warning if a particular gas area is being affected by low- or high-pressure events. EPMs work by sensing pressure in a gas main and logging that information. They then relay that information at a regular interval to an internal database giving SDG&E the ability to see the fluctuations in gas pressure throughout the seasons. EPMs also have the ability to send alarm messages to SDG&E's emergency and on call departments if a particularly high- or low-pressure threshold is met. This allows SDG&E response crews and on-call gas engineers to recognize when there are potential issues in the gas system and to initiate a timely response. As the gas system grows and changes, periodic reviews of existing EPM locations are evaluated to see if a particular EPM should be added, moved, or removed from the system.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-33
RAMP and GRC Risk Control/Mitigation Activities – Capital

Code Compliance				
ID	**Control/Mitigation Name**	**2025 RAMP 2028-2031 Estimate In 2024 $ (000s)**	**2028 GRC 2028-2031 Forecast In 2025 $ (000s)**	**Change ($000s)**
C150	**Code Compliance Mitigation**	15,734	14,252	(1,482)

b. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section IV.F.1 (Description), C150 is designed to comply with 49 CFR § 192 and GO 112-F. This activity is reactive in nature. This control addresses AOCs identified through field inspections. Examples of AOCs mitigated under this program include Type-K Regulator replacement, isolation valve installation and replacement, and installation and repair of EPMs and electronic pressure correctors. If left uncorrected, these AOCs present risks of over-pressurization of house lines, inability to control unintentional gas releases through critical valves, and insufficient means to identify or correct over-pressurization within the gas system, potentially resulting in a significant incident affecting both the public and the gas system.

In prioritizing this proactive approach, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents.

2. Forecast Method

The forecast method developed for this cost category is BY 2025. This method is most appropriate because it reflects current regulatory requirements, operational practices, and workload levels without being influenced by atypical events observed in prior years. Charges to this cost category also tend to fluctuate due to the unpredictability of the number of compliance-

related projects, curtailment zone optimization adjustments resulting from system growth, routine pre-1966 Type-K Regulator removal rates, and optimization of EPM coverage. A review of historical data revealed variability among the multiple types of work performed within this cost category, reflecting differences in labor rates, tools, and materials. However, costs are ultimately driven by current labor rates and the prevailing level of compliance project activity. Therefore, a base year adjusted-recorded forecast provides a more accurate representation of the level of funding needed after 2025.

3. Cost Drivers

The underlying cost drivers for Code Compliance relate to the principal work components. The primary drivers for EPMs are the number of installations that are needed to provide coverage at sites where system pressure is not monitored and the requirement to replace existing EPMs due to aging and malfunctions of electronic components. The primary drivers for electronic pressure correctors are the number of installations needed to correct volume variations for large customers to support accurate utility billing. The driver for replacing Type-K Regulators is the number found while employees perform other work at the Meter Set Assembly. The driver for isolation valves is the number needed for emergency response and for the safe operation of the system.

In addition, the underlying cost drivers for this capital work category relate to company labor, contractor services, third-party services, paving services, and materials such as pipe and fittings. All or a combination of these construction elements are necessary for performing upgrades or additions to facilities to maintain compliance with minimum federal and State safety standards for gas pipelines (49 CFR § 192 and CPUC GO 112-F).

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

G. Leak Repair & Restoration (005080)

TABLE TT-34
Capital Expenditures – Leak Repair & Restoration

GAS DISTRIBUTION (In 2025 $)							
G. Leak Repair & Restoration	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Leak Repair & Restoration	14,033	15,242	15,244	15,255	15,255	15,254	15,253

1. Description

The forecasts for Leak Repair & Restoration support the Company's goals of maintaining system integrity and reliability, thereby mitigating risks to public safety and providing reliable gas service to customers. Funding in this cost category is required to address compliance requirements for eliminating potentially hazardous conditions caused by leaking or deteriorating gas pipelines, as mandated under 49 CFR § 192.703. This cost category includes the replacement of deteriorated Gas Distribution system pipelines to maintain public and personnel safety and system reliability, as well as the permanent restoration of pavement, sidewalks, and landscaping, as necessary. Expenditures under this cost category range from minor pipe replacements to more complex projects. Most minor projects are completed in association with leak investigation and repair work. When pipe conditions are identified as hazardous or when pipelines exhibit conditions such as a history of leaks, field and/or technical staff assess and determine appropriate replacement options. Further details regarding Leak Repair and Restoration are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005080).

Following the discovery of a leak during a survey of the gas distribution system, SDG&E takes steps to remediate or monitor the situation, depending on the classification. Hazardous leaks are addressed immediately, while non-hazardous leaks are monitored and scheduled for remediation with safety and affordability in mind.

All activities within this workgroup are RAMP mitigation measures to address safety risks.

a. Change to Capitalization Policy for Gas Distribution Pipe

SDG&E is proposing a change to the capitalization threshold for gas distribution main replacement from 40 feet to one foot. The current policy states:

> Replacement of distribution mains 40 feet or greater in length using the same size and kind of pipe, or 10 feet or greater using a different size or kind of pipe, are to be capitalized.

The existing footage-based capitalization thresholds are fundamentally rooted in historical estimates of the total cost at the time these thresholds were established over 30 years ago. However, the estimated total cost of main replacement has increased over the years due to inflation, labor cost, material price, and enhanced construction requirements, and thus, the current footage thresholds no longer represent the same economic intent. Additionally, SDG&E's existing capitalization threshold is also inconsistent with other utilities per a 2021 Capitalization Survey conducted by the American Gas Association.

This proposal does not increase spending and investment decisions remain driven by safety, compliance, and risk. It corrects an outdated 40-foot threshold so that replaced long-lived infrastructure is treated consistently as a capital asset and is consistent with Generally Accepted Accounting Principles (GAAP). This aligns cost recovery with the asset's useful life by allocating costs over the period in which customers receive benefits, rather than disproportionately burdening current customers.

This change is intended to provide clarity, promote consistency across projects, align capitalization practices with operational needs and industry standards, and reduce administrative complexity in determining capital eligibility. This change will align SDG&E's distribution pipe replacement with SDG&E's threshold for gas transmission pipe replacement of one foot.

b. Description of RAMP Mitigations

Within this cost category, there are capital costs for risk control C131 (Leak Repair) that were presented in the 2025 RAMP Report[57] and are listed in the table below. SDG&E proactively surveys its gas distribution system for leakage at frequencies determined based on the pipe material involved, the operating pressure, whether the pipe is under cathodic protection, and the proximity of the pipe to various population densities, as prescribed within 49 CFR § 192.723. A routine leak survey includes surveys at intervals of one or three years for steel and plastic mains. The frequency of this survey is determined by the pipe material and date of installation involved. Annual surveys are conducted on pipeline infrastructure, including pre-1950 steel and pre-1986 plastic (Aldyl-A) pipelines, and in areas such as business districts and

[57] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C131).

locations near public service establishments, including schools, churches, and hospitals. Five-year survey cycles are typically used for plastic and cathodically protected steel mains and services installed in residential areas.

If a leak is found during a survey of the gas distribution system, SDG&E takes steps to either remediate or monitor the situation depending on the type of leak classification. A leak will be remediated immediately if the qualified technician conducting the survey determines there is a hazardous condition. If the leak does not create a hazardous situation, SDG&E will monitor and schedule for remediation.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-35
RAMP and GRC Risk Control/Mitigation Activities – Capital

Leak Repair & Restoration				
ID	**Control/Mitigation Name**	**2025 RAMP 2028-2031 Estimate In 2024 $ (000s)**	**2028 GRC 2028-2031 Forecast In 2025 $ (000s)**	**Change ($000s)**
C131	**Leak Repair**	57,808	61,017	3,209

c. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section IV.G.1 (Description), C131 is designed to comply with 49 CFR § 192.723 and GO 112-F. This activity is reactive in nature. When a leak is identified either through C134 (Pipeline Monitoring) or through other means, SDG&E either remediates or monitors it based on its classification. Leaks posing a hazardous condition are remediated immediately, while non-hazardous leaks are monitored. Non-hazardous leaks are evaluated and

prioritized for repair with safety, cost-effectiveness, and customer impact in mind. This approach includes bundling leaks in close proximity into a single, larger planned project or monitoring leak classification in support safety and compliance while incorporating it into a planned job in the near future. These practices improve efficiency and cost-effectiveness while minimizing disruption to customers.

In prioritizing these activities as mentioned above, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents.

2. Forecast Method

The forecast method developed for this cost category is a three-year average. This method is most appropriate because it best reflects current regulatory requirements, operational practices, workload levels, and accounts for proposed change to the capitalization rule described above. In developing the leak repair forecast, historical labor and non-labor expenditures for 2021 through 2025 were evaluated. Several factors influence the level of spending on leak repair in a given year. These factors include government regulations, aging infrastructure, public safety concerns, municipal requirements, restoration requirements, material failure, and economic conditions. Capital leak repair work is inherently reactive, safety-driven, and non-discretionary, making the prior years' actual costs the best indicator of future needs. In addition, this cost category does not contain activities that were included as part of SDG&E's SB 1371 compliance plan and there is no overlap in funding.

3. Cost Drivers

The underlying cost drivers for Leak Repairs & Restoration relate to the number of leak indications that can impact the integrity of the pipe, leading to pipeline repairs and replacements. The additional cost drivers for this capital work category include company labor, contractor services, third-party services, restoration and paving services, material costs, and survey cycles. All or a combination of these construction elements are necessary for performing pipeline installations for main replacement work.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

H. Cathodic Protection (005090)

TABLE TT-36
Capital Expenditures – Cathodic Protection

GAS DISTRIBUTION (In 2025 $)							
H. Cathodic Protection	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Cathodic Protection	10,178	10,217	10,217	10,219	10,219	10,219	10,219

1. Description

SDG&E maintains approximately 685 CP stations in support of its gas distribution system, consisting of approximately 554 impressed current stations and 131 galvanic stations. These CP assets provide corrosion protection for approximately 6,400 miles of steel mains and services. Of this total, approximately 6,329 miles of steel pipeline are protected using impressed current cathodic protection, while approximately 71 miles are protected using galvanic systems. Impressed current CP is the predominant method of protection due to its suitability for longer, contiguous pipeline segments and its ability to deliver adjustable current output. This flexibility allows SDG&E to monitor and modify protection levels in response to changing soil resistivity, coating condition, pipeline loading, and system configuration. In contrast, galvanic CP systems provide a fixed current output and are generally limited to shorter pipeline segments with lower current demand and localized protection requirements.

Buried steel pipelines that are not adequately protected will corrode and naturally revert to iron oxide, increasing the risk of leaks and reducing pipeline service life. In addition to coating and electrical isolation, cathodic protection is a critical method for mitigating external corrosion on steel pipelines. CP functions by imposing an electrical current that flows toward the pipeline surface, keeping it negatively charged relative to the surrounding soil and thereby reducing corrosion rates.

Each CP-protected steel pipeline segment is uniquely influenced by its surrounding environment, including moisture levels, soil composition and chemistry, ground movement, compaction, and contamination. These varying conditions create ongoing challenges in maintaining adequate current levels to comply with state and federal corrosion control standards. CP system shorts and current interference most commonly occur when SDG&E pipeline

components come into contact with foreign structures such as water lines or third-party grounding systems, which can divert protective current away from the pipeline. Additional sources of interference are frequently observed near customer meter sets and risers, often due to improperly grounded customer-owned electrical systems or external objects, such as dog chains or bicycle locks, wrapped around risers and meter assemblies. These conditions can reduce levels of cathodic protection and accelerate anode depletion.

To address these issues, CP personnel actively monitor system performance and respond to indications of CP failure by performing targeted troubleshooting to identify and correct deficiencies. SDG&E continues to implement necessary modifications to its CP systems, including installing insulating unions to electrically isolate pipelines, deploying new rectifiers and anode beds, adding test points to support accurate CP measurements and troubleshooting, establishing dedicated CP systems for high-pressure and medium-pressure pipelines, and remediating outdated cathodic protection equipment on steel pipe segments, risers, and valves. Collectively, these improvements enhance troubleshooting capability, maintain compliance with state and federal requirements, and help stabilize operations and maintenance expenses, even during unplanned failures, as discussed in my testimony above in Section III.A.8.

The CP capital forecasts include the installation of new and replacement CP systems and equipment in accordance with applicable corrosion control regulations, including 49 CFR § 192, Subpart I—Requirements for Corrosion Control, and GO 112-F. Examples of forecasted work include installing impressed current stations, deep well anode beds, magnesium anode systems, and procuring CP instrumentation and monitoring equipment. These forecasted capital expenditures support SDG&E's objective of preserving the integrity and reliability of its steel pipeline infrastructure, mitigating corrosion-related risks, and protecting public safety. All activities within this workgroup are RAMP mitigation measures addressing safety risks. Further details regarding cathodic protection are provided in my capital workpapers. *See* Ex. SDGE-04-CWP (005090).

a. Description of RAMP Mitigations

Within this cost category, there are capital costs for risk control C107 (Cathodic Protection Program – Capital) that were presented in the 2025 RAMP Report[58] and are listed in

[58] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C107).

the table below. This project represents the capital expenditures associated with the installation of new and replacement CP infrastructure systems and equipment in accordance with state and federal pipeline corrosion control standards.[59] Examples include the installation of impressed current stations, deep well anode beds, magnesium anode systems, installation of isolation joints between pressure districts, and the purchase, installation, and maintenance of CP instrumentation and monitoring equipment.

CP system shorts and current interference typically occur as SDG&E's pipeline components come into contact with water lines or third-party grounding systems that can drain electric current from the pipeline. Other instances of interference include instances near customer meter set assemblies and risers in which a customer may have improperly grounded their own electrical systems or may have wrapped a dog or bicycle chain around the riser and meter set. This has the potential to reduce the level of protection and increase depletion of anodes. SDG&E continues to identify necessary modifications to CP systems to eliminate shorts and current interference. Associated work includes the installation of insulating unions separating CP systems, new rectifiers, anode beds, and test points allowing the CP technician to take CP reads. This control also installs the isolation joints that provide the separation of the CP systems between pressure districts. CP isolation of high- and medium-pressure systems, as well as conducting specialty CP surveys, will reduce the risk of corrosion and subsequent corrosion caused leaks in the distribution pipeline system. Adding to or addressing the current CP infrastructure with work activities and expenses will reduce exposure of corrosion to the SDG&E steel pipeline system thus enhancing the integrity of the gas system and mitigating the risks defined in this RAMP chapter.

Activities that are compliance related or mandated by CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

[59] 49 CFR § 192, Subpart I–Requirements for Corrosion Control; GO 112-F.

TABLE TT-37
RAMP and GRC Risk Control/Mitigation Activities – Capital

Cathodic Protection				
ID	**Control/Mitigation Name**	**2025 RAMP 2028-2031 Estimate In 2024 $ (000s)**	**2028 GRC 2028-2031 Forecast In 2025 $ (000s)**	**Change ($000s)**
C107	**Cathodic Protection Program – Capital**	18,120	40,876	22,756

b. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section IV.H.1 (Description), C107 is designed to comply with 49 CFR § 192, Subpart I—Requirements for Corrosion Control, and GO 112-F. This activity is reactive in nature. When CP inspections, evaluations, and monitoring, as described in Risk Control C101 (Cathodic Protection Program – O&M), identify an AOC or indicate insufficient current levels to meet state and federal corrosion control standards, this mitigation supports capital expenditures to address CP system AOCs, including installation of impressed current stations, deep well anode beds, magnesium anode systems, isolation joints between pressure districts, and CP instrumentation and monitoring equipment. Adding to or addressing the current CP infrastructure with these work activities and expenses will reduce exposure of corrosion to the SDG&E steel pipeline system, thus enhancing the integrity of the gas system and mitigating the risks defined by this risk mitigation.

In prioritizing these activities, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents.

2. Forecast Method

The forecast method developed for this cost category is BY 2025. Forecasted capital expense requirements for CP systems are based on the existing population of CP stations, expected asset replacement cycles, and historical/current system performance**.** The frequency and scope of projects performed within this work category are driven by CP AOCs identified during inspections and CP reads. These AOCs are influenced by compliance requirements, the age and condition of CP systems, the health of surrounding CP stations, soil conditions, and the effectiveness of system short resolution efforts. A review of historical CP capital expenditures, CP system maintenance reads, CP continuity failures, and anticipated future compliance requirements indicates that BY 2025 most closely represents the expected future costs necessary to maintain CP system health and stabilize O&M troubleshooting expenses. This approach is appropriate because it reflects current regulatory and environmental requirements, established operational practices, and existing workload levels. Many CP stations currently in service were installed between approximately 1975 and 1995 and are approaching or have surpassed their expected useful lives. As a result, forecasted investments include station renewals, system augmentation, and, in some cases, station splitting to restore adequate current distribution and maintain compliance with protection criteria.

Forecast assumptions reflect key differences in operating characteristics between impressed current and galvanic CP systems. Impressed current systems generally result in lower forecasted O&M costs due to longer anode bed life, reduced excavation frequency, and enhanced monitoring, control, and adjustability. In contrast, galvanic systems rely on sacrificial anodes that deplete over time and therefore require more frequent replacement, leading to higher routine maintenance demands. Continued use and renewal of impressed current systems supports more cost-effective lifecycle management and directly informs forecasted O&M assumptions.

3. Cost Drivers

CP program costs are driven by a combination of regulatory compliance obligations, system age and performance, environmental conditions, and the scope of construction and maintenance activities required to support long-term pipeline integrity. The underlying cost drivers include municipal and environmental requirements, company labor, contractor and third-party services, restoration and paving services, and materials. Together, these factors

define the level and timing of investment necessary to maintain effective corrosion control across the pipeline system.

The primary driver for CP expenditures is compliance with applicable regulatory requirements, most notably U.S. Department of Transportation regulation 49 CFR § 192, Subpart I, and GO 112-F, which establish minimum standards for corrosion control. These regulations are designed to preserve pipeline integrity, reduce the likelihood of corrosion-related failures, and mitigate risks to public safety and infrastructure reliability. Compliance necessitates proactive monitoring, timely equipment replacement, and system modifications so that CP criteria are consistently met.

Another key driver of CP costs is the age and condition of system components. As rectifiers, anodes, wiring, and related hardware deteriorate, their performance declines, increasing the risk of inadequate corrosion protection. Many CP stations were installed between 1975 and 1995 and are now at or beyond their expected useful lives. As a result, the forecast includes investments for station renewals, system augmentation, and, where necessary, station splitting to restore adequate current distribution and maintain compliance with protection criteria.

Anode depletion rates also further influence work volume and cost. These rates vary based on soil moisture and resistivity, soil composition, the presence of stray or interfering electrical currents, and the quality and condition of pipeline coatings. Adverse soil and environmental conditions can accelerate anode consumption, requiring more frequent replacements or system upgrades to sustain adequate protection levels.

Expenditures within the CP program therefore reflect the anticipated need to install new CP stations, renew or replace aging equipment, and modify existing systems based on observed performance and changing operating conditions. Key cost drivers include the condition and age of existing CP stations, measured system performance, soil and environmental characteristics, identification and mitigation of electrical shorts or interference, and evolving pipeline integrity requirements. Collectively, these drivers inform the planning and prioritization of CP investments necessary to maintain continued protection of the steel pipeline system and ongoing regulatory compliance.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

I. System Reliability & Safety (005100)

TABLE TT-38
Capital Expenditures – System Reliability & Safety

GAS DISTRIBUTION (In 2025 $)							
I. System Reliability & Safety	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. System Reliability & Safety	3,664	3,752	3,753	3,753	3,753	3,753	3,753

1. Description

The System Reliability and Safety forecast provides funding for capital projects not addressed in other cost categories that enhance safety, support code compliance, and improve gas system performance and reliability through replacement of aging operating equipment. Typical projects include upgrades to distribution fittings and valves; public-access CNG fueling stations; regulator stations; relocation of regulator stations due to growth-related traffic impacts; system capacity projects (*i.e.,* pressure betterment projects); and other safety improvements to gas distribution facilities. Projects completed under this cost category are driven by mandated compliance with Federal and State safety codes, including GO 58-A, GO 112-F, numerous sections of DOT 49 CFR § 192, and OSHA 29 CFR § 1910, Subpart A. Further details regarding System Reliability and Safety are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005100).

Regulator Stations are critical components of control equipment on the SDG&E pipeline network that help mitigate risks to infrastructure integrity, system reliability, and public safety. Regulator stations consist of valves and regulators and reduce and control the pressure of the gas entering the distribution system from higher-pressure pipelines, which provides the lower pressures required on the distribution pipeline network. Failure of a regulator station could overpressure or shut down the gas distribution system, potentially impacting customer service and public safety. SDG&E currently operates and maintains approximately 485 regulator stations, installing or replacing approximately one to three stations annually. These forecasted capital expenditures support the Company's goals of maintaining the safety, integrity, and reliability of the gas distribution system.

In addition, this cost category records expenditures for Gas Distribution system capacity projects, which are performed on an ongoing basis to maintain system reliability and service to all customers. Gas system capacity projects are undertaken in areas where capacity or pressure is insufficient to meet load growth, and in areas where a strategic pipeline backtie would enhance system reliability. Gas system capacity projects are necessary to maintain reliable service to new and existing customers as new gas loads are added to the gas distribution system. Once a pipeline system is designed and installed, system capacity remains relatively fixed. However, as new customers are added or the demands of existing customers increase, system pressure can decline over time, reducing the volume of gas available to serve both new and existing loads. If declining pressure conditions are not addressed, gas service to customers may be degraded or interrupted, which can create safety concerns in a gas distribution system.

In low pressure conditions, pressure drops during peak demand can result in insufficient gas supply to customer equipment, increasing the risk of appliance malfunction, flame instability, or flame outages. Such conditions may lead to the potential for unburned gas accumulation if appliances fail to operate as intended. In addition, sustained low pressure can compromise the system's ability to maintain adequate margin for operational control, emergency response, and abnormal operating conditions. Addressing low pressure areas is therefore necessary to maintain reliable service, support safe appliance operation, and preserve the overall integrity of the distribution system.

To determine areas in need of system reinforcement, information on growth is gathered from customers, builders, city, county, and state agencies. In addition, SDG&E collects data from electronic pressure data recorders. This information is used to run model simulations on system flow and identify capacity constraints. Based on an analysis of these constraints, region engineering personnel identify specific system reinforcement projects and estimate the year in which each project must be constructed. The projects are constantly reprioritized as development timelines change and economic conditions fluctuate. These projects typically involve installing new mains and regulator stations, or upgrading existing mains and regulator stations, when necessary.

Capital expenditures to enhance the reliability of the gas system support the Company's goal of providing safe and reliable service to customers, thereby mitigating the risk of adverse impacts on system reliability. This work category addresses critical areas of the distribution

pipeline network that are most susceptible to pressure drops to alleviate the potential risk of loss of service to customers

This cost category also provides funds for upgrades or installations of the Company's public access CNG stations. SDG&E does not plan to install any new CNG stations, but intends to continue maintaining its existing public access CNG fill stations. Company-owned public access CNG stations serve the existing customer base of CNG vehicles throughout Southern California, including private, business, and industrial sectors. These stations are used by private vehicle owners, the City of San Diego refuse trucks, military base vehicles, University of California San Diego buses, and companies such as Red Bull, Republic Services, and several taxi companies.

a. Description of RAMP Mitigations

Within this cost category, there are capital costs for risk control C124 (Regulator Station Installation, Replacement, and Enhancement) that were presented in the 2025 RAMP Report[60] and are listed in the table below. Regulator stations reduce the pressure of gas entering the distribution system from high pressure supply pipelines to the lower pressures used in the distribution pipeline network. SDG&E has approximately 485 regulator stations. SDG&E's O&M practices help extend the useful lives of regulator stations through annual inspection and maintenance. However, it remains prudent to proactively replace regulator stations prior to the end of their useful life to reduce overall system risk. This risk reduction is achieved through enhanced replacement station design, including the incorporation of dual-run regulators that provide redundancy and reduce the risk of over-pressurization. In addition, the stations' location can be evaluated to reduce the risk of vehicular damage (*i.e.,* outside force), vandalism, and risk to employee safety during maintenance due to high traffic levels near the station. Regulator stations are critical control elements in the gas distribution system. Failure of a regulator station could result in under- or over-pressurization of the gas distribution system, resulting in reduced service to customers and/or jeopardizing public safety. Regulator stations are part of SDG&E's continually aging infrastructure. Presently, over 70% of the Company's operating regulator stations are 24 years or older. SDG&E prioritizes its older regulator stations for replacement

[60] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C124).

based on risk criteria as described above. Approximately one to three stations are replaced on an annual basis.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-39
RAMP and GRC Risk Control/Mitigation Activities – Capital

System Reliability & Safety				
ID	**Control/Mitigation Name**	**2025 RAMP 2028-2031 Estimate In 2024 $ (000s)**	**2028 GRC 2028-2031 Forecast In 2025 $ (000s)**	**Change ($000s)**
C124	**Regulator Station Installation, Replacement, and Enhancement**	8,945[61]	15,012	6,067

b. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section IV.I.1 (Description), C124 is designed to comply with GO 58-A, GO 112-F, numerous sections of DOT 49 CFR § 192, and OSHA 29 CFR § 1910, Subpart A. This control addresses AOCs identified through field inspections of regulator stations and CNG stations. Examples of AOCs mitigated under this program include valves, regulators, and piping associated with regulator stations and CNG stations, as well as drops in pressure during peak times. If left uncorrected, these AOCs pose risks of over-pressurization of medium-pressure distribution pipelines and house lines, an inability to control unintentional gas releases through

[61] The total RAMP Capital forecast (2028-2031) for C124 is $17.784 million. The cost shown on the table represents the estimated RAMP Capital forecast allocated to this workpaper, proportional to the GRC Capital forecast, representing 50.3% of the total activity. The other portion of costs for C124 can be found in the testimony of Gas Major Projects (Ex. SDGE-06).

system valves, and insufficient pressure to meet peak demand, potentially resulting in a significant incident affecting the public and the gas system.

In prioritizing this proactive approach, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents

2. Forecast Method

The forecast method developed for this cost category is a three-year average. Expenditures in this cost category largely vary depending on the number and nature of improvements, upgrades or remediations identified, as well as planning, permitting, and scheduling requirements. A three-year average forecast best captures these work elements within this cost category, as it incorporates more recent work volumes while smoothing fluctuations in higher and lower spending from prior years.

3. Cost Drivers

The underlying cost drivers for System Reliability and Safety include regulatory requirements, the need to safeguard the pipeline system's safety and integrity, and the need to mitigate risks associated with infrastructure integrity, system reliability, and employee and public safety. Additionally, this work supports the Company's need to mitigate system reliability risks and comply with its obligation to serve. After years of customer growth, portions of the gas system operate close to their maximum capacity, and additional gas load creates system constraints, increasing the need for system reinforcement to mitigate reliability risks and prevent customer outages.

The underlying cost drivers for this capital work category also relate to Company labor, contractor services, third-party services, paving services, and materials such as electronic controls, valves, pipe, and fittings. In addition, regulator stations are part of SDG&E's aging infrastructure. Presently, 70% of SDG&E's operating regulator stations are 24 years or older. The average age of a distribution regulator station is 32 years. This aging infrastructure will translate into increased replacement expenses over the coming years. All or a combination of these construction elements are necessary for performing regulator station improvements.

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

J. Underperforming Main & Services (005140)

TABLE TT-40
Capital Expenditures – Underperforming Main & Services

GAS DISTRIBUTION (In 2025 $)							
J. Underperforming Mains & Services	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Underperforming Mains & Services	8,180	15,044	15,045	15,047	15,047	15,047	15,047

1. Description

The forecasts for the Underperforming Main and Services program for pipelines and components—comprised entirely of RAMP activities—address a range of elements, including, but not limited to, threaded steel pipe, pipe wrap disbondment, cathodic protection performance, and component-related activities such as oil drip piping removal, Dresser mechanical coupling removal, removal of closed valves between high- and medium-pressure zones, and removal of pipe in vaults. Further details regarding Underperforming Mains and Services are found in my capital workpapers. *See* Ex. SDGE-04-CWP (005140).

SDG&E identifies the replacement of underperforming pipelines through a comprehensive, risk-based evaluation process. This process utilizes a quantitative risk assessment (QRA) model to estimate safety risk, defined as the probability of a serious incident occurring in a given year. The model considers multiple factors, including leakage history, pipe age, operating pressure, CP performance, known defects, discontinued installation practices, material type, population density, and other threat categories such as corrosion, excavation damage, construction defects, and material failure, as applicable by pipeline type. Pipeline segments evaluated under this methodology are ranked and prioritized for replacement, with emphasis on removing facilities with recurring leaks and higher relative safety risk. Although certain materials and construction practices were considered acceptable at the time of installation, experience has shown that some vintage pipe types are more prone to leakage and are therefore prioritized for replacement to reduce public safety risk. Some of these conditions are described below:

- Prior to 1934, certain gas distribution piping was joined using threaded couplings. These threaded pipes are more susceptible to leaks at joints and have a higher potential for failure during seismic events due to reduced wall thickness from thread cutting.
- Steel pipes installed prior to 1955 utilized coal tar asphaltic pipe wrap as the initial layer of corrosion protection. Over time, this early-generation pipe wrap degrades and disbonds from the pipe, resulting in CP current leaving the pipe around the disbonded coating, thus failing to provide adequate corrosion protection. This lack of protection ultimately leads to increased corrosion and leakage.
- Pipeline oil drip facilities are susceptible to excavation damage because their locations and configurations were historically not documented with sufficient detail on facility maps, increasing the risk of damage during adjacent construction activities.
- Dresser mechanical couplings are susceptible to damage caused by lateral movement, and over time, the rubber pressure-containing seal degrades. These couplings require lateral support and are less robust than modern mechanical couplings with rubber mechanical seals. In the event of land movement, pipe separation, or rupture, an incident may occur.
- Block valves between high- and medium-pressure systems pose an inherent risk if operated erroneously, in an act of sabotage, or if the valve leaks high-pressure gas downstream to the lower maximum allowable operating pressure (MAOP) system, potentially causing an overpressure condition in the downstream system.
- SDG&E has pipelines buried in vaults that may experience corrosion from excessive moisture since they are aboveground facilities in vaults, leading to the pitting of exposed piping. SDG&E assesses the coating and the condition of both aboveground and underground facilities within the vaults.

All activities within this workgroup are RAMP mitigation measures to address safety risks.

a. Description of RAMP Mitigations

Within this cost category, there are capital costs for risk control C007 (Underperforming Mains & Services) that were presented in the 2025 RAMP Report[62] and are listed in the table below. SDG&E's Underperforming Mains & Services program for pipelines and components encompasses and addresses the following elements, including but not limited to: threaded steel pipe, pipe wrap disbondment, CP performance and components to include oil drip piping removal, dresser mechanical coupling removal, removal of closed valves between high- and medium-pressure zones, and removal of pipe in vaults. The evaluation process for identifying underperforming pipelines requiring replacement is based on a risk-ranking system. This system considers the following, among other factors: leakage history, pipe age, pipe operating pressure, cathodic protection history and performance, discontinued installation practices, known defects, pipe location relative to population density, among others. Planned pipeline replacements processed under this methodology will culminate in a prioritized list of recommended pipeline replacements. Pipeline replacements are subsequently planned, with an emphasis on removing pipes with a history of recurring leaks, thereby reducing the highest risk to public safety from pipeline leakage. Although considered best practice at the time, some of the vintage materials and construction practices are known to be more prone to leakage today and are prioritized for replacement. Some of these conditions are described in the section above.

Activities that are compliance related or mandated by the CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-41
RAMP and GRC Risk Control/Mitigation Activities – Capital

Underperforming Main & Services				
ID	**Control/Mitigation Name**	**2025 RAMP 2028-2031 Estimate In 2024 $ (000s)**	**2028 GRC 2028-2031 Forecast In 2025 $ (000s)**	**Change ($000s)**
C007	**Underperforming Mains & Services**	36,984	60,188	23,204

[62] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C007).

b. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section IV.J.1 (Description) above, C007 is designed to reduce risk of distribution pipe failure by the proactive utilization a QRA model to estimate safety risk, defined as the probability of a serious incident occurring in a given year. The model considers multiple factors, including leakage history, pipe age, operating pressure, cathodic protection performance, known defects, discontinued installation practices, material type, population density, and other threat categories such as corrosion, excavation damage, construction defects, and material failure, as applicable by pipeline type.

In prioritizing this proactive approach, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents.

2. Forecast Method

The forecast for Underperforming Main & Services is developed using a zero-based, risk-informed methodology that incorporates currently available system data, industry-accepted risk indicators, and practical execution considerations. While the Company is actively enhancing its QRA capabilities, the present forecast reflects a transitional approach that prioritizes known higher-risk asset classes based on established risk drivers rather than historical spending patterns.

SDG&E plans to replace approximately five miles of early-vintage steel pipeline annually. Based on available risk information, this level of replacement represents a reasonable and effective means of addressing higher-risk pipeline populations while maintaining a stable and executable program. The selected pace enables consistent progress in reducing system risk as QRA tools continue to mature, while supporting efficient planning, constructability, and long-term affordability.

Forecast costs are developed by applying current unit costs to planned replacement footage, reflecting prevailing labor, material, and construction conditions. This zero-based

approach produces a transparent forecast aligned with anticipated work and current cost structures. Supporting calculations are provided in Supplemental Workpaper Ex. SDGE-04-CWP-S-005.

3. Cost Drivers

The underlying cost drivers for Underperforming Main & Services stem from the complexity of pipeline replacement projects and the multiple elements required to complete them safely and in compliance with regulatory standards. Increased municipal requirements for permitting, traffic control, and street restoration significantly increase costs, as do rising fees and the need to coordinate with other infrastructure projects. Company labor is essential for planning, oversight, and execution, while contractor services are often required for specialized tasks such as excavation, boring, and installation. Third-party services, including engineering support, environmental assessments, and inspections, incur additional costs to support compliance with applicable regulations, such as 49 CFR § 192 and GO 112-F. Paving and surface restoration following excavation represent another expense, driven by municipal standards and the extent of work performed. In some municipalities, the cost of removal is also another cost driver for increased expenses when replacing this pipe. Material costs, including valves, pipe, fittings, corrosion protection components, and asbestos abatement when encountering legacy materials, continue to rise due to market conditions and supply chain pressures. All or a combination of these factors contribute to the overall cost of pipeline replacement, making them critical drivers in this capital work category.

K. Curb Valve Replacements (215750)

TABLE TT-42
Capital Expenditures – Curb Valve Replacements

GAS DISTRIBUTION (In 2025 $)							
K. Curb Valve Replacements	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Curb Valve Replacements	2,414	3,512	3,512	3,513	3,513	3,513	3,513

1. Description

The forecast for Curb Valve Replacement covers costs associated with replacing curb valves. All newly installed or replaced service lines with installed meter capacity exceeding 1000 standard cubic feet per hour (SCFH) must have either a manual service line shut-off valve

(*i.e.*, a "curb" valve or other manually operated valve) or an excess flow valve installed.[63] This mitigation project will survey the gas system for installed curb valves, prioritize their replacement based on inaccessibility issues, and schedule replacement with excess flow valves. Further details regarding Curb Valve Replacements are found in my capital workpapers. *See* Ex. SDGE-04-CWP (215750).

In the past, if a curb valve was chosen, requirements for these manually-operated valves from 49 CFR § 192.385 included that they "be located near the service that is safely accessible to operator personnel or other personnel authorized to manually shut off gas flow to the service line, if needed." In addition, if a manual curb valve was chosen to comply with the service line shut-off requirement, 49 CFR § 192.385 also requires that it must be "installed in such a way to allow accessibility during emergencies" and that "...[they are]..subject to regular scheduled maintenance." When an excess flow valve is installed, it is installed as near to the service-to-main connection as is practically possible. The excess flow valve has an advantage over a curb valve, which requires periodic inspection and maintenance, in that it is designed to automatically shut off the service if a high flow is detected, such as an instance with a broken service line.

In the event of a broken service line, the excess flow valve with an automatic shutoff function provides upstream isolation and protects the majority of the service line between the distribution main and the customer meter. In contrast, a curb valve is a manually-operated isolation device typically installed closer to the customer property line, which limits protection to a smaller segment of the service line. Additionally, excess flow valves are not subject to the accessibility, surface condition, or operability constraints associated with manually-operated curb valves, enhancing system reliability and emergency response effectiveness and timeliness.

Prior to the mandate to install excess flow valves on service lines, manually operated curb valves were installed for various purposes to enable remote shutoff. Some of these valves, accessed through curb valve boxes, may be difficult to reach due to their location in parking strips—where they may be obstructed by parked vehicles—or in high-traffic areas. Further, these curb valve boxes, which historically were not inspected, may have become filled with sand or covered by paving or sidewalk construction, thereby limiting access.

[63] *See* 49 CFR § 192.385 – Manual service line shut-off valve installation.

Unlike curb valves, excess flow valves are automated and do not require manual operation, resulting in significantly faster response times. Excess flow valves also eliminate accessibility issues related to street or sidewalk obstructions. This improvement reduces the risk to the public and affected customers by enabling rapid shutdown of service lines in the event of damage from external forces.

In summary, the objective of this program is to identify and replace manually-operated curb valves with excess flow valves to improve safety and compliance with 49 C.F.R. § 192.385, which requires service line shut-off devices to be accessible during emergencies and subject to regular maintenance. Excess flow valves provide superior safety benefits because they automatically shut off gas flow during high-flow events and are not subject to accessibility issues that curb valves present in high-traffic areas or obstructed locations.

2. Forecast Method

The forecast method developed for Curb Valve Replacements is zero-based. This method is most appropriate because this cost category is new and designed for collecting expenses and forecasting costs associated with replacing curb meter valves. Due to the recent start of work activity, no adjusted-recorded expense history is available. Therefore, a zero-based forecast methodology was selected for forecasting labor and non-labor expenses anticipated in the forecast years.

The forecast is calculated by estimating the number of curb valves to be replaced annually and applying a cost-per-unit basis that reflects current labor rates, material costs, and construction practices. This requires a zero-based approach, which supports alignment of the forecast with anticipated work activities and current compliance requirements. Supporting details, including project counts, unit costs, and calculations, are provided in the supplemental workpaper. *See* supplemental workpaper, Ex. SDGE-04-CWP-S-005, for calculation details.

3. Cost Drivers

The underlying cost drivers for this work category are labor, materials, and services required to replace manually-operated curb valves with excess flow valves. Costs include company labor performing installations, including the excavation and restoration work. Material costs are driven by excess flow valve units, associated fittings, and other components necessary for installation. Additional expenses arise from paving and surface restoration following excavation, which are influenced by municipal standards and permitting requirements. Third-

party services, such as traffic control and environmental compliance, may also contribute to overall costs.

L. Customer Meter Protection (225740)

TABLE TT-43
Capital Expenditures – Customer Meter Protection

GAS DISTRIBUTION (In 2025 $)							
L. Customer Meter Protection	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Customer Meter Protection	2,470	8,000	8,000	8,000	8,000	8,000	8,000

1. Description

The forecasts for the Customer Meter Protection (CMP) address the prevention of potential vehicular damage associated with aboveground distribution facilities at residential properties in accordance with 49 CFR § 192.353(a) and GO 112-F. This all-RAMP control was renamed from Residential Meter Protection to CMP to better reflect the program's protection of all gas meters, not just residential meters. This control minimizes the potential for vehicular damage to aboveground gas equipment (*e.g.*, MSAs) by placing various physical devices or barriers to mitigate damage in the event of a potential collision. Barriers are intended to be visual, not structural, deterrents and are not intended or capable of stopping all vehicular traffic, especially large vehicles. Where adequate mitigation cannot be achieved, gas equipment can be relocated or removed. Additionally, CMP addresses the concerns PHMSA raised in its regulations, which require operators to address identified threats posed by low-frequency but potentially high-consequence events. Distribution staff anticipates that there are more than 19,000 additional locations where this mitigation is warranted. To address these 19,000 locations, CMP is expected to last as a project for approximately 20 years. Further details regarding Customer Meter Protection are found in my capital workpapers. *See* Ex. SDGE-04-CWP (225740).

All activities within this workgroup are RAMP mitigation measures to address safety risks.

a. Description of RAMP Mitigations

Within this cost category, there are capital costs for risk control C175 (Residential Meter Protection) that were presented in the 2025 RAMP Report[64] and are listed in the table below. Residential Meter Protection, renamed here as CMP,[65] addresses the prevention of potential vehicular damage associated with aboveground distribution facilities at residential properties in accordance with 49 CFR § 192.353(a) and GO 112-F. This risk control minimizes the potential for vehicular damage for aboveground gas equipment (*e.g.*, MSAs) by placing various forms of physical devices or barriers to mitigate damage in case of a potential collision. Barriers are intended to be visual, not structural, deterrents and are not intended or capable of stopping all vehicular traffic (especially large vehicles). Where adequate mitigation cannot be achieved, gas equipment can be relocated or removed. Additionally, CMP addresses the concerns PHMSA expressed under its regulations that require operators to address identified threats of low frequency but potentially high consequence events. SDG&E anticipates there are more than 19,000 additional locations where this mitigation is warranted. To address these 19,000 locations, CMP is expected to last as a project for approximately 20 years.

Activities that are compliance or mandated by CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

TABLE TT-44
RAMP and GRC Risk Control/Mitigation Activities – Capital

Customer Meter Protection				
ID	**Control/Mitigation Name**	**2025 RAMP 2028-2031 Estimate In 2024 $ (000s)**	**2028 GRC 2028-2031 Forecast In 2025 $ (000s)**	**Change ($000s)**
C175	**Customer Meter Protection[66]**	11,189	32,000	20,811

[64] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C175).

[65] Renamed from "Residential Meter Protection" as identified in the 2025 RAMP Report.

[66] Renamed from "Residential Meter Protection" as identified in the 2025 RAMP Report.

b. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

As described in Section IV.J.1 (Description) above, C175 is designed to comply with 49 CFR § 192.353(a) and GO 112-F. The locations requiring CMP are those that have the potential for vehicular damage with aboveground distribution facilities at residential and commercial locations. These locations are identified concurrently as SDG&E crews perform Risk Control C134 (Pipeline Monitoring).

In prioritizing this proactive approach, SDG&E seeks to reduce the likelihood of future risk events, and avoid significantly higher operational, customer and recovery impacts associated with responding to realized incidents.

2. Forecast Method

The forecast method developed for CMP is zero-based. This method is most appropriate because it is a newly created cost category that captures both labor and non-labor expenses and supports the forecasting of costs for installing barricades to protect customer meters from vehicular damage. In addition, it is the best choice because the work is driven by a defined mitigation program rather than historical spending patterns. Zero-based forecasting is superior to historical trend methods because it accounts for program-specific goals, regulatory requirements, and risk-based prioritization, all of which drive variability in this category. The CMP program addresses compliance with 49 CFR § 192.353(a) and GO 112-F, which require operators to protect aboveground gas facilities from vehicular damage. The program anticipates mitigation at approximately 19,000 locations over a 20-year period, based on identified threats of low-frequency but high-consequence events, as emphasized by PHMSA.

Under this methodology, the forecast is calculated by estimating the number of locations to be addressed annually and applying a cost-per-unit basis. The unit cost reflects current labor rates, material costs for barriers or relocation, paving and restoration expenses, and other construction-related activities. This approach aligns the forecast with actual anticipated work

and current compliance obligations. Zero-based forecasting is superior to historical trend methods for the CMP program because it accounts for program-specific goals, regulatory requirements, and risk-based prioritization, all of which drive variability in this category.

Supporting details, including annual mitigation targets, unit cost assumptions, and calculations, are provided in the supplemental workpaper. *See* supplemental workpaper, Ex. SDGE-04-CWP-S-005, for calculation details.

3. Cost Drivers

The underlying cost drivers for CMP are labor, materials, and restoration activities required to install physical barriers or relocate gas equipment to mitigate the risk of vehicular damage. Meter barricade installation work is driven by conditions surrounding the location of an existing MSA. Meter barricades are installed to protect the MSA when it is apparent that activity on the property creates a potentially hazardous environment to the MSA. Labor costs include site planning, excavation, installation of protective devices, and restoration work. Material costs are driven by the type of barriers installed, such as bollards or other visual deterrents, as well as any additional components required for relocation when barriers are not feasible. Paving and surface restoration following installation represent another significant expense, influenced by municipal standards and permitting requirements.

M. DIMP Execution (D95460)

TABLE TT-45
Capital Expenditures – DIMP Execution

GAS DISTRIBUTION (In 2025 $)							
M. DIMP Execution	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. DIMP Execution	28,003	16,000	25,673	28,025	28,025	28,025	28,025

1. Description

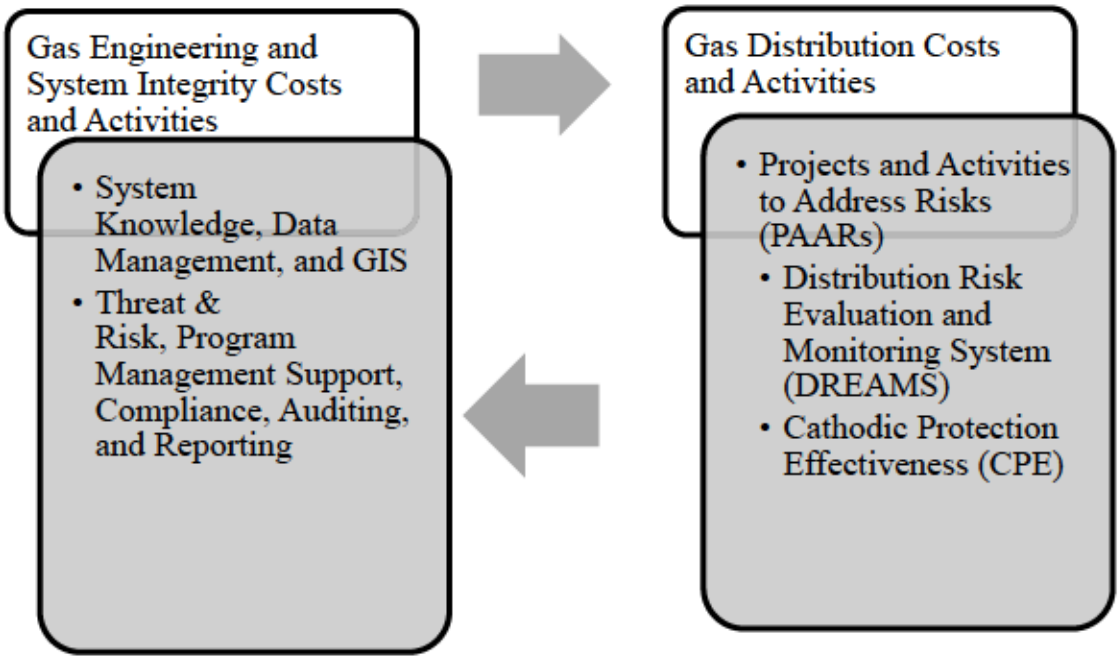
The forecasts for DIMP Execution capture capital costs related to DIMP that are incurred due to execution of Projects and Activities to Address Risk (PAAR). As described in the GESI testimony (Ex. SDGE-03), SDG&E's DIMP was designed to comply with the requirements of 49 CFR § 192, Subpart P – Gas Distribution Pipeline Integrity Management. Accordingly, the DIMP framework includes key elements such as system knowledge, threat identification, threat

evaluation and prioritization, and the implementation of programs and activities that enhance distribution integrity and safety.[67] SDG&E currently organizes its DIMP activities and costs into three distinct categories: (1) System Knowledge, Data Management, and GIS, (2) Threat & Risk, Program Management Support, Compliance, Auditing, and Reporting, and (3) PAARs. Further details regarding DIMP Execution are found in my capital workpapers. *See* Ex. SDGE-04-CWP (D95460).

SDG&E designs and administers various projects to address threats on its distribution system, which are referred to as PAARs. PAARs are intended to meet the requirements of 49 CFR § 192.1007(d) - Identify and Implement Measures to Address Risk - by implementing additional or accelerated actions to manage identified system risk and complementing current regulatory operations and maintenance requirements (federal and state), as intended by PHMSA. The forecasted DIMP labor and non-labor costs within this testimony and associated workpaper support SDGE's execution of PAARs which are required for compliance, system safety, and system reliability. The forecasted DIMP labor and non-labor costs necessary for the other categories of the DIMP (*i.e.*, Data Management, System Knowledge, and GIS, as well as Program Management Support, Reporting, etc.) are presented in the GESI testimony (Ex. SDGE-03). The GESI organization provides strategic oversight of these programs by defining the scope of activities, establishing program objectives, and monitoring the execution of the PAARs. Operational responsibility for the day-to-day implementation of the PAARs resides with dedicated teams embedded within SDG&E's Gas Distribution organization. This organizational structure enables the teams to leverage operational planning capabilities and field expertise that are central to Gas Distribution's core functions. Figure TT-2 below delineates the forecasted costs across each witness area.

[67] 49 CFR § 192, Subpart P – Gas Distribution Pipeline Integrity Management.

Figure TT-2
Delineation of DIMP Activities



Executing DIMP PAARs through Gas Distribution teams drives operational synergies, improves coordination, streamlines workflows, and capitalizes on centralized expertise. These include, but are not limited to, permitting requirements, familiarity with the location and historical installation practices of existing pipeline infrastructure, experience with public engagement, and environmental concerns, which are all factors that can vary widely across SDG&E's service territory. The ability to share institutional knowledge across teams enhances the efficiency and effectiveness of project planning and execution.

As noted above, PHMSA's stated purpose for the DIMP is to enhance pipeline safety by having operators identify and reduce pipeline integrity risks specifically for distribution pipelines. The safety and reliability of SDG&E's distribution system is paramount to the Company's ability to serve customer gas demand safely and reliably, and PAAR development is a foundational activity. While the scopes of the primary PAARs are described and estimated below, SDG&E continually evaluates and develops or adapts PAARs to manage distribution system risk.

The PAARs covered in this testimony and associated workpaper are comprised of Distribution Risk Evaluation and Monitoring System (DREAMS) and Cathodic Protection Effectiveness (CPE), which are described in more detail below.

DREAMS: The DREAMS was developed to manage the replacement of Non-State-of-the-Art (NSOTA) pipes with State-Of-The-Art (SOTA) pipes, which SDG&E has undertaken to comply with the DIMP requirements mandated by 49 CFR § 192, Subpart P, to reduce the risk of serious incidents and enhance the overall safety and reliability of the natural gas distribution system. The NSOTA pipe population consists of vintage Aldyl-A pipes, which have been recognized by federal and state regulators as high-risk pipes that require action by pipeline operators.[68] The slow crack growth associated with this Aldyl-A material fundamentally poses a higher level of risk due to the nature of leaks created by this mode of failure. Leak surveys do not completely mitigate the risk, as leaks can occur suddenly and result in risk events. These points are further emphasized in advisory bulletins issued by PHMSA.

TABLE TT-46
PHMSA Advisory Bulletins

Bulletin	Date	Description
ADB-99-01	March 11th, 1999	Potential Failure Due to Brittle-Like Cracking Certain Polyethylene Plastic Pipe Manufactured by Century Utility Products Inc
ADB-99-02	March 11th, 1999	Potential Failures Due to Brittle-Like Cracking of Older Plastic Pipe in Natural Gas Distribution Systems
ADB-02-07	November 26th, 2002	Notification of the Susceptibility to Premature Brittle-like Cracking of Older Plastic Pipe
ADB-07-01	September 6th, 2007	Updated Notification of the Susceptibility of Older Plastic Pipes to Premature Brittle-Like Cracking.
ADB-26-01	January 23rd, 2026	Distribution Integrity Management Program Considerations for Plastic Piping and Components

In 2007, PHMSA issued an Advisory Bulletin (ADB-07-01) stating that "the number and similarity of plastic pipe accident and non-accident failures indicate past standards used to rate the long-term strength of plastic pipe may have overrated the strength and resistance to brittle-like cracking for much of the plastic pipe manufactured and used for gas service from the 1960s through the early 1980s."[69] Additionally, the advisory highlights the importance of leak

[68] CPUC, *Hazard Analysis and Mitigation Report – Aldyl A Polyethylene Gas Pipelines* (June 11, 2014) (Hazard Analysis Report) at 11, *available at*: https://www.cpuc.ca.gov/regulatory-services/safety/gas-safety-and-reliability-branch/pipeline-documents.

[69] Pipeline Safety: Updated Notification of the Susceptibility to Premature Brittle-Like Cracking of Older Plastic Pipe, 72 Fed. Reg. 172, 51301 (September 6, 2007), *available at:* https://www.govinfo.gov/content/pkg/FR-2007-09-06/pdf/07-4309.pdf.

surveillance, robust data collection to improve failure analysis, and targeted laboratory testing. It identifies high localized stress intensification as a contributor to premature cracking.

On January 23, 2026, PHMSA issued an Advisory Bulletin (ADB-26-01) to owners and operators of natural gas distribution systems, reminding them to "consider accelerated degradation risks associated with elevated temperature environments" and encouraging them to "complete an inventory of plastic pipe and components that may be susceptible to such environments."[70] This advisory bulletin fulfills a National Transportation Safety Board (NTSB) recommendation following the March 2023 West Reading incident, which destroyed a building at the R.M. Palmer chocolate factory due to leak from an Aldyl-A service tee that migrated underground into the basement of the candy factory building, accumulated, and then ignited by an unknown source, causing an explosion.

Further, the CPUC released a report in 2014 emphasizing the importance of replacement rates that effectively reduce the risks associated with early vintage Aldyl-A.[71] There are numerous catastrophic consequences in California and across the nation that have underscored the safety risks of the aging Aldyl-A pipeline:

- Greater than 15 Aldyl-A failures have occurred in California alone, resulting in 15 ignitions, nine explosions, and six injuries since 1982. Of these incidents, SoCalGas has experienced eight, including two separate incidents that resulted in serious injuries, each of which occurred as recently as 2017-2018.
- On March 24, 2023, in West Reading, Pennsylvania, a leak from a retired Aldyl-A service tee installed in 1982 caused an explosion and fire that resulted in seven deaths and ten injuries.
- On November 6, 2024, in South Jordan, Utah, an explosion associated with a subsurface gas leak from an Aldyl-A gas main installed in 1976 destroyed a home and fatally injured a 15-year-old boy.

---

[70] Pipeline Safety: Distribution Integrity Management Program Considerations for Plastic Piping and Components, 91 Fed. Reg. 15, 2995 (January 23, 2026), *available at*: https://www.govinfo.gov/content/pkg/FR-2026-01-23/pdf/2026-01321.pdf.

[71] Hazard Analysis Report at 29.

In response to these advisory bulletins and other considerations described in the testimony of GESI (Ex. SDGE-03), SDG&E has implemented annual leak survey monitoring, enhanced failure reporting, improved failure sample management and laboratory testing, resolved gaps in pipeline attribution, and incorporated additional factors into its risk analytics to better identify and mitigate premature failures. SDG&E mitigates the risk associated with vintage Aldyl-A pipe through the execution of pipe replacement projects informed by the DREAMS QRA model, which is further described in the GESI testimony (Ex. SDGE-03).

The aggregation of these efforts illustrates that SDG&E has made and will continue to make considerable progress in the areas that PHMSA identified in the advisory bulletin, as well as others, in supporting decisions that are threat-based and risk-informed. In the 2028 GRC cycle, SDG&E plans to target 66 miles of mains and associated services for replacement in accordance with DIMP regulations, evaluating and prioritizing main replacement based on threat prioritization and risk results.

Cathodic Protection Effectiveness (CPE): Corrosion is a natural process that can deteriorate steel assets and potentially lead to leaks or failures. If gas released from a leak migrates and accumulates in a confined space where an ignition source is present or introduced, there is potential for injuries and/or fatalities. Although SDG&E operations groups strive to respond promptly to leaks once notified, such conditions can escalate into an incident within a short timeframe and result in costly repairs. To mitigate the risk of corrosion and associated leaks or failures, SDG&E employs CP, protective coatings, and continuous monitoring to safeguard and extend the life of steel assets. The application of a CP current is necessary to overcome local corrosion currents along the pipeline that, if left unaddressed, would result in localized corrosion at anodic sites. The directives prescribed by 49 CFR § 192, Subpart I and followed by SDG&E include monitoring CP areas, remediation of CP areas that are out of tolerance, and preventive measures to reduce the likelihood of future out-of-tolerance conditions.

The CPE project was initiated in mid-2020 to systematically identify and address cyclically out-of-tolerance CP areas. While Cathodic Protection program routine compliance activities described in Sections III.A.8 and IV.H focus on monitoring readings and taking corrective actions to return out-of-tolerance conditions back within required limits, CPE takes a proactive approach by selecting areas not currently being addressed by routine cathodic protection activities based on performance history and broader system indicators. It evaluates

those areas holistically and often redesigns CP systems to implement long-term improvements that strengthen and maintain overall cathodic protection performance. CPE capital activities and costs are primarily driven by the number of CP areas addressed. Remediation efforts include rectifier installations and upgrades, bond installations, service line replacements, short-segment main replacements, and anode installations. This project is designed to enhance system health analytics and support the development of a sustainable, long-term capital strategy to manage Distribution CP areas that are cyclically out of tolerance. By analyzing performance metrics and operational data, CPE can inform future asset planning and reduce reactive maintenance, ultimately improving system reliability and cost efficiency over time.

a. Description of RAMP Mitigations

Within this cost category, there are capital costs for risk control C182 (Distribution Risk Evaluation & Monitoring Systems (DREAMS)) that were presented in the 2025 RAMP Report[72] and are listed in the table below. The activities described in the section above are associated with this mitigation. DREAMS was developed to manage the replacement of NSOTA pipes with SOTA pipes, which SDG&E has undertaken to comply with the DIMP requirements mandated by 49 CFR § 192, Subpart P to reduce the risk of serious incidents and enhance the overall safety and reliability of the natural gas distribution system. The NSOTA pipe population consists of vintage Aldyl-A pipe, which has been recognized by federal and state regulators as high-risk pipes that necessitate action by pipeline operators.[73]

Activities that are compliance or mandated by CPUC or other agencies are listed in bold, and Appendix B attached to this testimony provides the details regarding these mandates for each control.

[72] 2025 RAMP Report, Chapter SDG&E-Risk-3, Medium Pressure Gas System (Control ID C182).

[73] Hazard Analysis Report at 11.

TABLE TT-47
RAMP and GRC Risk Control/Mitigation Activities – Capital

DIMP Execution				
ID	**Control/Mitigation Name**	**2025 RAMP 2028-2031 Estimate In 2024 $ (000s)**	**2028 GRC 2028-2031 Forecast In 2025 $ (000s)**	**Change (000s)**
C182	**Distribution Risk Evaluation & Monitoring Systems (DREAMS)**	257,344	112,100	(145,244)

b. Description of Selection and Prioritization of RAMP Risk Mitigations

The RAMP risk mitigation efforts are associated with specific actions, such as programs, projects, processes, and utilization of technology and are designed to address a specific safety and/or reliability risk. The Company's selection and prioritization of these RAMP mitigation activities considered many aspects when determining if these risk mitigation activities are an effective and worthwhile investment. The ERM process for identifying and assessing system risk is described in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B).

While the testimony of GESI (Ex. SDGE-03) addresses the program management portion of C182 costs and activities for the DIMP, this testimony addresses the corresponding execution portion. As described in Section IV.M.1. (Description), SDG&E's DIMP is designed to comply with 49 CFR § 192, Subpart P, which requires operators to understand system conditions, identify and evaluate threats, implement measures to address risk, monitor performance, and periodically evaluate and improve the program. Consistent with regulations, SDG&E correspondingly evaluates its distribution system for threats including corrosion, natural forces, other outside force damage, pipe, weld, or joint failure, equipment failure, and incorrect operations, and develops and implements PAARs to reduce the likelihood and consequences of failures that could result in leaks, service interruptions, injuries or fatalities, environmental impacts, or property damage. In particular, DREAMS implements a QRA model with a defined risk threshold that guides the prioritization of pipe replacement projects. This risk-based approach improves efficiency by allowing the Company to identify and prioritize projects that may result in higher costs if deferred due to their elevated risk levels.

As described in the GESI testimony (Ex. SDGE-03), SDG&E considers system knowledge, performance data, resourcing, and other information such as the results of ongoing

risk evaluation and program reviews, to determine where continued or additional risk reduction activities are needed under the DIMP. SDG&E plans to continue C182, aligning the scope of the DREAMS PAAR with updated QRA results to manage system risk at a sustainable pace.

2. Forecast Method

The forecast method developed for DIMP Execution is BY 2025 with adjustments. As described in the GESI testimony (Ex. SDGE-03), the DIMP is a continuously evolving, risk-driven program, and the base year most accurately reflects the activity level and cost to execute PAARs. The base year is particularly representative because it captures the most recent year in which updated, segment-specific QRA results were applied to inform DREAMS project selection and pacing. The DREAMS is the primary cost driver for DIMP Project Execution and is forecasted on an average cost-per-mile basis. The forecasts for 2026 and 2027 have been adjusted to reflect the planned pipeline replacement mileage for those years and to align with the pipeline replacement scope and funding levels adopted in the 2024 GRC.

As discussed in the GESI testimony (Ex. SDGE-03) and the Regulatory Accounts testimony (Ex. SDGE-26), SDG&E has a greater level of confidence in its ability to forecast DIMP activities and manage program execution within authorized funding levels and requests to close the DIMP one-way balancing account.

3. Cost Drivers

The underlying cost drivers for the capital DIMP Execution relate to company labor, contractor services, third-party services, and materials. All or a combination of these construction elements are necessary for performing projects for mains, services, and associated facilities. The capital costs are primarily driven by the miles of mains and the number of services targeted for replacement under DREAMS, as well as the number of CP areas addressed under CPE. Further documentation on these cost drivers is provided in this testimony's associated capital workpapers. *See* Ex. SDGE-04-CWP (D95460).

Additionally, changes in connection with the compensation modernization initiative have been made for the forecast period within this workgroup. Please refer to the Compensation & Benefits testimony (Ex. SCG-16/SDGE-20).

N. Gas Distribution – Local Engineering Pool (G09020)

TABLE TT-48
Capital Expenditures – Local Engineering Pool

GAS DISTRIBUTION (In 2025 $)							
N. Gas Distribution – Local Engineering Pool	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Gas Distribution – Local Engineering Pool	20,597	26,352	26,205	25,691	25,663	25,721	25,811

1. Description

The forecast for the Local Engineering Pool provides the labor and non-labor funding for a broad range of services to support Gas Distribution field capital asset construction. This cost category represents the forecasted costs associated with the Gas Distribution Local Engineering Pool. Certain costs are incurred by capital projects that originate from central activities and are subsequently distributed to those projects. These central activity costs are also referred to as "pooled" or "indirect" costs. The distribution of these costs is based on several factors, including Company labor, contracted services, and customer installations. Further details regarding Local Engineering are found in my capital workpapers. *See* Ex. SDGE-04-CWP (G09020).

The Local Engineering Pool comprises three cost categories: technical planning, project management, and engineering activities.

- **Technical Planning and Project Management:** Technical planning refers to all activities that take place in the region's technical and project management office in support of capital projects. These support work activities include, but are not limited to, the following:
  - **Planning the Project:** This includes conducting field visits to assess job site requirements; retrieving available drawings for the proposed site to determine construction options; coordinating with customers, municipalities, and government agencies; selecting materials, job specifications, and method of installation; developing traffic control procedures; and obtaining the required permits.

- **Producing Project Drawings:** This includes completing drawings required to obtain construction permits that are used by SDG&E and contractor field crews for asset installation and documenting the project in SDG&E records. It also includes updating drawing information after project completion, which is necessary to maintain accurate records in SDG&E's electronic and physical archives.
- **Acquiring and Managing Third-Party Services:** Construction oversight for acquiring third-party services such as paving, steel plates, and equipment. This is necessary to provide oversight of third-party services to maintain compliance with Company specifications.
- **Estimating Work Order Cost:** This includes providing work order cost estimates and cost analysis for each capital project.
- **Program Management Office (PMO):** Activities include program strategy development; project controls throughout the project lifecycle, including management of scope and schedule and driving successful project closeout; regulatory reporting; and Gas Distribution finance, budgeting, and accounting functions. These activities also encompass the analysis and implementation of operational continuous improvement initiatives. In addition, PMO activities include communicating progress and status to various stakeholders.

- **Engineering Activities:** Included in this pool's expenditures are the activities performed by local engineering personnel to support capital projects. Examples of these activities include, but are not limited to, gas network analysis, reviewing and developing construction designs, pressure control specifications, gas handling plans, identifying regulatory and code requirements, and conducting assessments of construction impacts on the reliability of the gas distribution system.

Adequate funding for personnel charging time to the Local Engineering cost category is critical to the execution of capital projects. To prepare a project for field construction, personnel in this work category initiate, plan, design, and schedule it. Once the job is in construction, field management oversees the crews and is responsible for making field decisions that are compliant with the Company's standards and policies. After the project has been constructed, the remaining task is to reconcile the construction as-built information, which also involves the personnel assigned to this work category. These forecasted capital expenditures support the Company's goals of promoting sustainability, safety, and reliability of the natural gas system.

2. Forecast Method

The forecast method developed for Local Engineering is zero-based. This method is most appropriate because Local Engineering support costs are directly correlated to the level of capital construction activity rather than historical spending patterns alone. As construction activity increases, the demand for engineering support increases proportionally. To develop this forecast, SDG&E analyzed the historical relationship between Local Engineering expenditures and total direct capital expenditures across all Gas Distribution capital cost categories, excluding Gas Meter & Regulators (005020) and Gas Tools & Equipment (005060). This analysis produced an annual ratio representing Local Engineering costs as a percentage of total direct capital expenditures.

The base year ratio (2025) was then applied to the forecasted total capital expenditure for the upcoming GRC period (excluding the two cost categories noted above) to determine the forecast for Local Engineering. This approach supports a forecast that reflects anticipated work levels and current cost structures rather than relying on historical averages that may not account for future changes in construction activity. Supporting details, including historical ratios, calculations, and forecasted expenditures, are provided in the supplemental workpaper. *See* supplemental workpaper, Ex. SDGE-04-CWP-S-006, for calculation details.

3. Cost Drivers

The underlying cost drivers for Local Engineering relate to the level of capital construction activity. Local Engineering provides essential support for planning, design, and coordination of gas distribution projects, and the volume of these support activities fluctuates with the overall construction workload. Generally, as construction volume increases, demand for engineering resources and associated costs rise proportionally. These costs are primarily driven

by labor required for project design, permitting, scheduling, and technical oversight to support compliance with regulatory standards and company specifications. Because Local Engineering supports multiple capital cost categories, the factors influencing construction activity in other Gas Distribution categories, including regulatory requirements, infrastructure renewal needs, and municipal coordination, similarly affect this cost category. This interdependency makes construction activity levels the most significant driver of Local Engineering costs.

O. Gas Distribution – Department Overhead Pool (G09050)

TABLE TT-49
Capital Expenditures – Department Overhead Pool

GAS DISTRIBUTION (In 2025 $)							
O. Gas Distribution – Department Overhead Pool	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Gas Distribution – Department Overhead Pool	13,235	16,895	16,800	16,471	16,453	16,490	16,548

1. Description

The forecasts for the Department Overhead Pool provide funding for Department Overheads. Costs included in this budget are for supervision and administration of crews in the SDG&E Construction and Operation (C&O) districts. Department Overhead is charged for expenses that are not attributable to a single project but benefit multiple projects or the C&O districts. Construction managers, construction supervisors, dispatchers, operations assistants, and other clerical C&O employees charge this account. Construction field employees charge this account when meeting on multiple projects. The non-labor portion consists of administrative expenses, including office supplies, telephone expenses, mileage, employee uniforms, and professional dues. This pool includes the costs that will be allocated to distribution gas capital activities. Typical activities included in this account include management and supervision of construction personnel, scheduling, material ordering, and dispatching for construction personnel. Further details regarding Gas Distribution Overhead Pools are found in my capital workpapers. *See* Ex. SDGE-04-CWP (G09050).

2. Forecast Method

The forecast method developed for the Department Overhead Pool is zero-based. This method is most appropriate because Department Overhead costs fluctuate with the level of

capital construction activity rather than following a predictable historical trend. As construction activity increases, the demand for overhead support increases proportionally. To develop this forecast, SDG&E analyzed the historical relationship between Department Overhead expenditure and total direct capital expenditures across all applicable Gas Distribution capital cost categories. This analysis produced an annual ratio representing Department Overhead costs as a percentage of total direct capital expenditure.

The base year ratio (2025) was then applied to the forecasted applicable capital expenditures for the upcoming GRC period to determine the forecast for Department Overheads. Supporting details, including historical ratios, calculations, and forecasted expenditures, are provided in the supplemental workpaper. *See* supplemental workpaper, Ex. SDGE-04-CWP-S-007, for calculation details.

3. Cost Drivers

The primary cost drivers for the Department Overhead Pool are directly linked to the level of capital construction activity. Department Overhead provides essential administrative and operational support for gas distribution projects, and the volume of these activities fluctuates in proportion to the overall construction workload. Generally, as construction activity increases, the demand for overhead resources and associated costs rises proportionally. These costs are primarily driven by labor required for project management, scheduling, compliance oversight, and administrative functions necessary to support capital work. Because Department Overhead supports multiple capital cost categories, the same factors influencing construction activity in other Gas Distribution categories, such as regulatory requirements, infrastructure renewal needs, and municipal coordination, also impact this cost category. This interdependence makes construction activity levels the most significant driver of Department Overhead costs.

P. Gas Distribution – Contract Administration (G09060)

TABLE TT-50
Capital Expenditures –Contract Administration

GAS DISTRIBUTION (In 2025 $)							
P. Gas Distribution – Contract Administration	**2025 Adjusted-Recorded (000s)**	**Est. 2026 (000s)**	**Est. 2027 (000s)**	**Est. 2028 (000s)**	**Est. 2029 (000s)**	**Est. 2030 (000s)**	**Est. 2031 (000s)**
1. Gas Distribution – Contract Administration	4,268	5,417	5,387	5,281	5,276	5,288	5,306

1. Description

The forecasts for Contract Administration provide funding for the Contract Administration (CA) Pool, which covers expenses necessary for administering projects performed by contractors on behalf of SDG&E. The expenses for this pool consist of labor for Management and Supervision, Contract Administrators (CAs), Field Construction Advisors, and support personnel, as well as associated non-labor support costs, such as office and field supplies. This pool includes the costs that will be allocated to contracted work. These capital overhead pool forecast values are referenced in SDG&E Regulatory Accounts testimony (Ex. SDGE-26). Further details regarding Gas Distribution Contract Administration Pools are found in my capital workpapers. *See* Ex. SDGE-04-CWP (G09020).

Typical activities included in this account are:

- Working with contractors to develop fixed price bids for construction projects;
- Overseeing the contractor work to remove obstacles and verify work is completed and complying with Company standards;
- Approving contractor invoices for completed work; and
- Developing and administering contract units for unit-priced contracts.

2. Forecast Method

The forecast method developed for Contract Administration is zero-based. This method is most appropriate because contractor administration overhead costs fluctuate with the level of capital construction activity rather than following a predictable historical trend. As construction activity increases, the demand for overhead support increases proportionally. To develop this forecast, SDG&E analyzed the historical relationship between contractor administration overhead expenditures and total direct capital expenditures across all applicable Gas Distribution capital cost categories. This analysis produced an annual ratio representing Department Overhead costs as a percentage of total direct capital expenditure.

The base year ratio (2025) was then applied to the forecasted applicable capital expenditures for the upcoming GRC period to determine the forecast for Department Overheads. Supporting details, including historical ratios, calculations, and forecasted expenditures, are provided in the supplemental workpaper. *See* supplemental workpaper, Ex. SDGE-04-CWP-S-008, for calculation details.

3. Cost Drivers

The primary cost drivers for the Contract Administration are directly linked to the level of capital construction activity. Contractor Administration Overhead provides essential administrative and operational support for gas distribution projects, with the volume of these activities fluctuating in line with the overall construction workload. Generally, as construction activity increases, the demand for overhead resources and associated costs increases proportionally. These costs are primarily driven by labor required for project management, scheduling, compliance oversight, and administrative functions necessary to support capital work. Because Contractor Administration Overhead supports multiple capital cost categories, the factors influencing construction activity in other Gas Distribution categories, including regulatory requirements, infrastructure renewal needs, and municipal coordination, similarly affect this cost category. This interdependence makes construction activity levels the most significant driver of Contractor Administration costs.

V. RISK ASSESSMENT MITIGATION PHASE (RAMP) INTEGRATION

A. GRC Risk Controls/Mitigations and Benefit Cost Ratios

As previously discussed, certain costs supported in this testimony are for Control/Mitigation activities described in SDG&E's May 15, 2025 RAMP Report[74] for activities designed to reduce risk. Specifically, the controls and mitigations in this testimony were included in: Chapter SDG&E-Risk-1 Excavation Damage, Chapter SDG&E-Risk-3 Medium Pressure Gas System, and Chapter SDG&E-Risk-5 Electric Infrastructure Integrity. As further reference, a roadmap matching controls and mitigations to both the 2025 RAMP and the TY 2028 GRC testimony is appended to Ex. SCG-02B/SDGE-02B. Table TT-51 below summarizes the Control/Mitigation BCRs based on the costs[75] in this testimony and estimated in the 2025 RAMP with the associated BCRs. Controls/Mitigations that are mandated by CPUC or other agencies are listed in bold in the table below and are listed in Appendix B, attached to this testimony, providing the details regarding the respective mandates for each Control/Mitigation. Appendix E provides a GRC workpaper breakdown for the RAMP controls and mitigations sponsored in this testimony.

---

[74] A.25-05-013, Application of SDG&E To Submit Its 2025 RAMP Report (May 15, 2025).

[75] Post-test year forecasts can be found in the detailed workpapers Ex. SDGE-33-WP and SDGE-33-CWP.

TABLE TT-51
Comparison of RAMP and GRC Risk Control/Mitigation Benefit Cost Ratios

GAS DISTRIBUTION							
ID	**Control/ Mitigation Name**	**2025 RAMP Direct, in 2024$ (000s) 2028-2031**			**2028 GRC Direct, in 2025 $ (000s) 2028-2031**		
		BCR Societal	**BCR Hybrid**	**BCR WACC**	**BCR Societal**	**BCR Hybrid**	**BCR WACC**
C001	**Damage Prevention Strategies (HP)**	0.68	0.72	0.68	2.26	2.34	2.26
C001	**Damage Prevention Strategies (MP)**	0.68	0.72	0.68	0.92	0.96	0.92
C002	**Damage Prevention Activities – Gas (HP)**	6.17	6.60	6.21	3.56	3.70	3.58
C002	**Damage Prevention Activities – Gas (MP)**	6.17	6.60	6.21	5.54	5.80	5.57
C004	**Damage Prevention Mapping (HP)**	4.31	1.47	1.17	0.20	0.21	0.21
C004	**Damage Prevention Mapping (MP)**	4.31	1.47	1.17	0.08	0.08	0.08
C005	**Gas Distribution Department**[76]	0.06	0.06	0.06	0.07	0.07	0.07
C007	**Underperforming Mains & Services**	0.37	0.04	0.04	0.42	0.04	0.04
C101	**Cathodic Protection Program – O&M**	11.36	11.38	11.32	11.80	11.81	11. 76
C107	**Cathodic Protection Program – Capital**	32.53	18.10	17.82	6.57	4.42	4.37
C115	**Reg Station, Valve, and Large Meter Set Inspection**	0.07	0.08	0.07	0.05	0.05	0.05

[76] Renamed from "Gas Distribution Emergency Department" as identified in the 2025 RAMP Report.

GAS DISTRIBUTION							
ID	Control/ Mitigation Name	2025 RAMP Direct, in 2024$ (000s) 2028-2031			2028 GRC Direct, in 2025 $ (000s) 2028-2031		
		BCR Societal	BCR Hybrid	BCR WACC	BCR Societal	BCR Hybrid	BCR WACC
C124	Regulator Station Installation, Replacement, and Enhancement	0.12	0.05	0.05	0.07	0.03	0.02
C131	Leak Repair	0.44	0.45	0.44	3.26	0.34	0.31
C134	Pipeline Monitoring	0.03	0.03	0.03	1.88	1.89	1.87
C139	Gas Distribution Safety Relocations	0.11	0.02	0.02	0.11	0.02	0.02
C144	Human Factors Mitigation – QA/QC Program – Mandate Compliance Activities	0.07	0.08	0.07	0.13	0.13	0.13
C150	Code Compliance Mitigation	0.01	~0.00	~0.00	0.01	0.00	0.00
C169	Human Factors Mitigation – Op Qual Training	~0.00	~0.00	~0.00	0.00	0.00	0.00
C175	Customer Meter Protection[77]	0.01	~0.00	~0.00	0.02	0.01	0.01
C182	Distribution Risk Evaluation & Monitoring Systems (DREAMS)	0.19	0.03	0.03	0.29	0.04	0.04
C267	Damage Prevention Activities Electric Underground	1.42	1.46	1.35	1.24	1.26	1.17

B. Justification For Proposed Mitigations With BCRs <1

The RDF prescribes a methodology for calculation of Benefit Cost Ratios under three discount rates as detailed in the table above. Certain of these calculations result in a BCR that is

[77] Renamed from "Residential Meter Protection" as identified in the 2025 RAMP Report.

less than one. SDG&E justifies the selection of these mitigations based on a thorough analysis of operational considerations. Details regarding the justification for each mitigation are provided in the table below and are compiled with all mitigations in the RDF Integration testimony (Ex. SCG-02B/SDGE-02B). A list of compliance drivers is attached to this testimony in Appendix B.

Table TT-52
Control/Mitigation Justification

ID	Control/Mitigation Name	Justification
C001	**Damage Prevention Strategies (MP)**	This is a compliance requirement under 49 CFR § 192.605(b)(8). SDG&E performs periodic review of the work done by operator personnel. By evaluating locate-and-mark activities that have been completed or are in progress, SDG&E can address performance gaps through additional training, updating company documentation, or recording company assets.
C004	**Damage Prevention Mapping**	This is a compliance requirement under GO 58-A and 112-F, which establishes mapping and records requirements for gas utilities pipeline infrastructure. This mitigation enables SDG&E to achieve real-time updates to its mapping system and improve the legacy records that do not always reflect modern field conditions. A recent PHMSA advisory bulletin[78] advised owners and operators of gas pipelines of the excavation-related safety threat associated with inaccurate locating and records management.
C005	Gas Distribution Emergency Department	This is a targeted control to more quickly respond to gas emergencies that could take place at any time of the day or week. This crew's focus is to help reduce the risk of injury and property damage to the public and company personnel by mitigating the gas emergency by arriving quickly on site to start control of escaping gas.
C007	**Underperforming Mains & Services**	SDG&E identifies underperforming pipelines for replacement using a comprehensive, risk-based process that applies a QRA model to estimate the annual probability of a serious incident, incorporating factors such as leak history, pipe age, pressure, materials, defects, population density, and other threat categories. Pipeline segments are ranked and prioritized for replacement, with emphasis on facilities

[78] Docket No. PHMSA–2026–1585, Pipeline Safety: Advisory Bulletin on Preventing Excavation Damage During National Safe Digging Month and Beyond, 91 Fed. Reg. 76,21368 (April 21, 2026), *available at:* https://www.govinfo.gov/content/pkg/FR-2026-04-21/pdf/2026-07752.pdf.

ID	Control/Mitigation Name	Justification
		with recurring leaks, higher relative risk, and certain vintage materials or construction practices that experience has shown to be more prone to leakage and therefore pose greater public safety risk. Replacements under this control exclude those performed through the RAMP Risk Control C182 (DREAMS) activity, which focuses on replacing Non-State-of-the-Art (NSOTA) Aldyl-A pipe.
C115	**Reg Station, Valve, and Large Meter Set Inspection**	This is a compliance requirement under 49 CFR § 192.739, which requires that regulator stations be inspected and functionally tested annually. It is also mandated by GO 112-F (Valve Maintenance necessary for safe operations), and GO 58-A, for meters & regulators maintenance, repair, testing to meet customer capacity requirements and accuracy of measured gas volume.
C124	**Regulator Station Installation, Replacement, and Enhancement**	This is a compliance requirement for GO 58-A, GO 112-F, and numerous sections of 49 CFR § 192. These activities are capital based to help maintain compliance in maintaining the safety and system capacity of the gas infrastructure to include properly functioning and maintained regulator stations, critical valves, and CNG & LNG facilities.
C131	**Leak Repair**	This is a compliance requirement for 49 CFR § 192.703 and GO 112-F, which require safe operations of pipeline segments and repair of hazardous leaks. This activity is fundamental to the safe and reliable operation of the natural gas infrastructure.
C139	**Gas Distribution Safety Relocations**	This is a compliance requirement for GO 112-F, which requires not allowing buildings or other encroachments that hinder maintenance activities or access to gas infrastructure during emergencies.
C144	**Human Factors Mitigation – QA/QC Program – Mandate Compliance Activities**	This is a compliance requirement under 49 CFR § 192.605(b)(8). SDG&E conducts periodic review of the work done by operator personnel to review that work is completed in accordance with gas standards, and to support ongoing training for these workers.
C150	**Code Compliance Mitigation**	This is a compliance requirement under 49 CFR § 192 and GO 112-F for items not covered under other cost categories, including inoperable valve replacements, isolation valve installation, Type K Regulator replacements, and electronic Pressure monitoring installations/replacements.

ID	Control/Mitigation Name	Justification
C169	**Human Factors Mitigation – Op Qual Training**	This is a compliance requirement under 49 CFR § 192, Subpart N – Qualification of Pipeline Personnel - and GO 112-F. SDG&E provides qualified personnel with the exact same equipment to perform OpQual work on gas pipelines.
C175	**Residential Meter Protection**	This is a compliance requirement under DOT 49 CFR § 192.353(a) and GO 112-F. SDG&E must minimize the potential for vehicular damage to aboveground gas equipment.
C182	**Distribution Risk Evaluation & Monitoring Systems (DREAMS)**	This control mitigates safety risk associated with Aldyl-A plastic pipe. Aldyl-A has shown a propensity for failure due to low resistance to brittle-like cracking. There have been more than 15 Aldyl-A failures in California alone, resulting in multiple explosions and injuries. More recently, an incident in South Jordan, UT resulted in a fatality.[79] The CPUC's 2014 Hazard Analysis and Mitigation Report on Aldyl-A underscored the importance of replacements rates that meaningfully reduce risks associated with Aldyl-A.[80] SDG&E employs quantitative risk analysis (QRA) to prioritize and target replacements and continues to enhance its data and tools. Replacement of pipe segments prior to exceeding the risk threshold supports both safety and cost efficiency.

C. Changes From 2025 RAMP Report

Since the timing of the filing of the 2025 RAMP Report in May 2025, some circumstances may have changed that impact the control scope – including units, costs, and other factors that influence the forecast. In addition, updates may have occurred that affect the underlying assumptions used to calculate the BCRs, as described in the Risk Integration testimony (Ex. SCG-02B/SDGE-02B). Key changes impacting the forecasts include:

- **C007 (Underperforming Mains & Services):** Changes from the 2025 RAMP Report are attributable to changes in municipal requirements, including requirements for street restoration and the removal of mains and

[79] National Transportation Safety Board, Pipeline Investigation Report PIR-26-02, *Enbridge Inc. Natural Gas–Fueled Home Explosion and Fatality, South Jordan, Utah, November 6, 2024* (March 31, 2026), at 1, 4-5, *available at:* https://www.ntsb.gov/investigations/AccidentReports/Reports/PIR2602.pdf.

[80] Hazard Analysis Report at 29.

services. This changed the costs but did not change the unit forecast, as seen in Section IV.J – Underperforming Main & Services (005140).

- **C107 (Cathodic Protection Program – Capital):** Changes from the 2025 RAMP Report are attributed to additional expense necessary to maintain the health of the CP system while minimizing the O&M expense for troubleshooting the CP system. This led to increases in capital cost and units for Cathodic Protection, as seen in Section IV.H – Cathodic Protection (005090).
- **C002 (Damage Prevention – Gas) & C267 (Damage Prevention – Electric Underground):** Changes from the 2025 RAMP Report are attributed to reduction in forecasted units which results in a subsequent reduction in costs (shown above in Section III.A.2 – Damage Prevention (Electric, Fiber & Gas) (1GD000.002)).
- **C124 (Regulator Station Installation, Replacement, and Enhancement):** Changes from the 2025 RAMP Report are attributed to two key assumptions used at the time of the filing of the RAMP Report regarding how costs would be allocated across the two project areas. The two project areas within C124 are: (1) SDG&E Gas Major Projects testimony (Ex. SDGE-06), which supports Control Center Modernization (CCM), and (2) System Reliability & Safety, as presented in Section IV.I – System Reliability & Safety (005100) of this testimony, which supports compliance with GO 58-A, GO 112-F, multiple provisions of DOT 49 CFR § 192, and OSHA § 1910, Subpart A. The assumptions were: (1) that System Reliability & Safety would be able to leverage CCM projects to achieve efficiencies, and (2) that CCM would proceed at a more moderate rate than forecast in the 2028 GRC. However, the projects identified for System Reliability & Safety compliance ultimately did not align with those identified for CCM enhancements. As a result, the System Reliability & Safety forecast, when compared to the C124 forecast in the RAMP Report, reflects a delta of $6.067 million over the 2028–

2031 period. There is no overlap in funding requests, as each testimony addresses separate and distinct project scopes.

- **C182 (Distribution Risk Evaluation & Monitoring System (DREAMS)):** Compared to the 2025 RAMP Report, the TY 2028 GRC forecast for C182 reflects lower units and lower costs. The decrease in units reflects updated planning for DREAMS replacement activity based on current QRA results, which informs the prioritization of higher-risk pipeline segments. Details on the method in which the QRA informs the DREAMS scoping and pacing can be found in the GESI testimony (Ex. SDGE-03). The decrease in costs reflects the update in scope from 164 miles included in the 2025 RAMP Report to 66 miles of planned replacement of main and associated services during the 2028 GRC cycle.

D. Feedback from Safety Policy Division and Parties

The Commission's Safety Policy Division (SPD) issued their assessment report on October 10, 2025 regarding the Companies' 2025 RAMP Reports. Parties subsequently served opening and reply comments on November 17, 2025 and December 1, 2025 respectively. Appendix B, 2025 RAMP Report Stakeholder Recommendations and Companies' Response, tothe RDF Integration testimony, Ex. SCG-02B/SDGE-02B, appends a summary of the feedback and recommendations received and the Companies' responses.

E. CAVA Integration

Pursuant to Commission decisions in the Climate Adaptation OIR (R.18-04-019), SDG&E performed a Climate Adaptation Vulnerability Assessment (CAVA) focused on years 2030, 2050, and 2070, with the aim of identifying asset and operational vulnerabilities to climate hazards across the SDG&E system. Some of the climate hazards that will have short- and long-term ramifications in the Southern California region include extreme temperatures, wildfire, inland flooding, coastal flooding and erosion, and landslides. Climate change is recognized as a factor that can drive, trigger, or exacerbate multiple RAMP risks. Implementing climate change adaptation measures and integrating climate vulnerability considerations into RAMP controls and mitigations can enhance system infrastructure longevity and reduce the severity of long-term negative climate impacts. The controls and mitigations described in further detail in this chapter,

as shown below, align with the goal of increasing SDG&E's physical and operational resilience to the increasing frequency and intensity of climate hazards.

TABLE TT-53
San Diego Gas & Electric
Controls and Mitigations that Align with Increasing Resilience to Climate Hazards

Potential Climate Hazard(s)	Relevant ID	Relevant Control/Mitigation	Risk Chapter
Inland Flooding; Landslides	C134	Pipeline Monitoring	Medium Pressure Gas System
Inland Flooding; Landslides	C139	Gas Distribution Safety Relocations	

VI. SDG&E MOBILEHOME PARK UTILITY CONVERSION PROGRAM – REASONABLENESS REVIEW

SUMMARY

Table TT-54
Capital and O&M Mobilehome Park (MHP) Utility Conversion Program
From 2022 through 2025

MHP Program (2022-2025)	Gas Costs Incurred for MHP Projects Completed from 2022 through 2025 ($000s)	Electric Costs Incurred for MHP Projects Completed from 2022 through 2025 ($000s)	Total (000s)
Capital	63,030	61,580	124,610
O&M	524	645	1,169
Total	**63,555**	**62,225**	**125,779**

SDG&E asserts the reasonableness of $125,779,000 ($124,610,00 in capital expenditures and $1,169,000 O&M expenditures) incurred in executing the ongoing MHP Utility Conversion Program (MHP Program). These costs were incurred for activities related to the conversion of MHP Program projects from 2022 through 2025 pursuant to the MHP Program Decision (*see* D.20-04-004 (MHP Decision)). Pursuant to D.20-04-004, these costs are presented in SDG&E's GRC for reasonableness. These costs are reasonable and justified in that:

- The activities are consistent with the Commission's approved MHP Decision and tariffs, applicable codes, and standards established by local, state, and federal authorities, and SDG&E's standards;
- The activities enhance the safety and reliability of MHP communities;

- The activities are conducted by qualified employees and contractors; and
- The activities support SDG&E's commitment to enhance public safety and system reliability.

Please also refer to the reasonableness review workpapers at Ex. SDGE-04-RRWP.

A. Introduction & Summary of the MHP Utility Conversion Program

The purpose of this section of my testimony is to establish the reasonableness of $125,779,000 ($124,610,000 in capital expenditures and $1,169,000 in O&M expenditures) incurred in executing the Mobilehome Park Utility Conversion Program (MHP Program). My testimony (1) describes the activities and reasonableness of costs recorded by SDG&E in executing the MHP Program, as directed by the Commission in the MHP Decision, and (2) in accordance with Ordering Paragraph (OP) 8 of the MHP Pilot Decision D.14-03-021, submits as reasonable the costs reported in SDG&E's 2026 MHP Utility Conversion Program Report.[81] Reasonableness review of costs is limited to recorded costs and excludes any program cost forecasts.

As of December 31, 2025, SDG&E has completed conversion of 98 MHPs, which is 31% of the eligible mobilehome spaces within SDG&E's service territory. The 98 MHPs represent a combined total of 10,674 permitted spaces.

B. Procedural Background

Rulemaking (R.) 11-02-018 was commenced by the CPUC to "examine what the Commission can and should do to encourage the replacement by direct utility service of the master-meter / submeter systems that supply electricity, natural gas, or both to mobile home parks and manufactured housing communities located within the franchise areas of electric and/or gas corporations."[82] The rulemaking "grapple[d] with issues that have proven intractable

[81] *See* SDG&E Mobilehome Utility Conversion Program, February 2, 2026 Report, appended herein as Appendix D.

[82] R.11-02-018, Decision Granting Petition in Part and Instituting Rulemaking Into Issues Concerning Transfer of Electric and Natural Gas Master-Metered Service at Mobilehome Parks and Manufactured Housing Communities to Direct Service by Electric And/Or Natural Gas Corporations (February 24, 2011) at 1.

for decades"[83] and, "[a]fter three years of review,"[84] the Commission ordered SDG&E and other utilities to execute the MHP Pilot Program.

The MHP Pilot Program was ordered to be a three-year program (2015-2017) to convert master-metered/sub-metered natural gas and/or electric services to direct utility services for approximately 10% of spaces in MHPs and manufactured housing communities (collectively, MHPs) in SDG&E's service territory. The focus of the conversions is primarily on safety and secondarily on system reliability/capacity.[85]

On September 28, 2017, Res. E-4878 authorized the investor-owned utilities (IOUs) to continue their MHP Pilot Programs through December 31, 2019 (Pilot Program Extension). SDG&E was authorized to complete the initial 10% scope of eligible spaces and convert up to an additional 5% of eligible spaces, bringing the total scope of the three-year Pilot Program and Pilot Program Extension to 15% of eligible MHP spaces.

On March 18, 2019, the Commission issued Res. E-4958, authorizing SDG&E to continue its Program for eligible MHPs until the earlier of either December 31, 2021 or the issuance of a Commission Decision for the continuation, expansion or modification of the program beyond December 31, 2021 in R.18-04-018. Eligible MHPs were defined as those where SDG&E and/or MHP owners had incurred "financial obligations" on or before November 1, 2018. Res. E-4958 further determined the number of spaces converted in each of years 2020 and 2021 may not exceed 3.33% of the total master-metered spaces in a utility's service territory, excluding MHPs that are already under conversion or scheduled for conversion. It further clarified that if a single MHP upgrade would result in the utility exceeding the 3.33% maximum requirement, the utility is authorized to proceed with that upgrade.

On April 16, 2020, the Commission issued D.20-04-004, approving a ten-year Mobilehome Park Utility Conversion Program beginning in 2021 through 2030. Following a new application period established by the Commission during the first quarter of 2020, the Commission will provide SDG&E, on an annual basis, with a list of MHPs comprising

---

[83] *See* D.14-03-021 at 3. The Commission also discussed efforts commenced in the 1990s to encourage California MHPs with master-metered service to convert to direct utility service, noting that over a period of 17 years little more than two dozen conversions occurred. *Id.* at 4-5.

[84] *Id*. at 2

[85] *Id.* at 2-3.

approximately 3.33% of eligible master-metered spaces within its service territory for a target 50% conversion by the end of 2030. This Decision also recommended a second evaluation of the MHP utility conversion program in 2025 following the first four-year application cycle (2021-2024) to decide whether to continue or modify the program.

The MHP Decision ordered that conversions must be completed on a "to the meter" (TTM) and "beyond the meter" (BTM) basis.[86]

On December 23, 2020, the Commission issued a Phase 2 Scoping Memo to further examine ways to protect residents of participating MHPs from unreasonable rent increase or eviction and determine whether the development of an electrification ready service standard for participating MHPs was feasible. On August 20, 2021, the Commission issued D.21-08-025, which adopted consumer protection requirements to keep residents of MHPs that participate in the Commission's MHP Program from experiencing unreasonable rent increases or evictions based on infrastructure improvements funded through the Program. Pursuant to D.21-08-025, SDG&E submitted Advice Letter (AL) 3859-E/3020-G on October 4, 2021, to: 1) update each utility's Sample Forms – Contracts, Mobilehome Park Utility Conversion Program (Program) Agreement (Form 189-1000) to include consumer protection measures for residents of mobilehome parks participating in the Program: and 2) include a description of the specific information that participating MHP owners are to provide to residents, as well as a discussion of methods the mobilehome park owners may use to communicate these protections to their residents. AL 3859-E/3020-G was approved by the Commission as of October 25, 2021.

On December 5, 2022, the Commission issued a proposed decision to extend the statutory deadline in the Mobilehome Park Pilot Program (R.18-04-018) proceeding to October 31, 2023, to allow additional time to evaluate an appropriate electric service standard for the program. Thereafter, on November 2, 2023, the Commission adopted D.23-11-013, further extending the statutory deadline in this proceeding to December 31, 2024.

On December 19, 2024, the Commission issued D.24-12-037, which adopts a 200-amp electric service standard for both TTM and BTM connections for MHPs participating in the existing Utility Conversion Program and established criteria for a mid-program evaluation. The Decision required utilities to implement the 200-amp standard within nine months of issuance,

[86] *Id.*, OP 2 at 75.

using the cost recovery mechanism previously authorized, and directs that an assessment of the standard's appropriateness be completed by 2030.

Regarding cost recovery for this Commission-mandated safety and reliability program, the Commission has stated:

> Utilities will be authorized to fully recover the reasonably incurred, actual costs of the conversion program in distribution rates. Reasonable incremental expenses for program development and administration, not otherwise recovered in rates, should be entered as incurred for annual recovery in the utility's pilot program balancing account. Reasonable expenditures for actual construction costs should be entered as incurred and recovered in the year following cut over to direct utility service. "To the meter" construction costs will be capitalized at the utility's then-current authorized rate of return on rate base, based on actual (not forecast) expenditures. "Beyond the meter" construction costs also will be capitalized based on actual (not forecast) expenditures but, consistent with their status as a regulatory asset, will be amortized over ten years at the utility's then-current authorized return on rate base.[87]

The Commission made provisions for program oversight: annual reports that include specific information are required to be filed in the first quarter of every year, and the reasonableness of program costs are to be reviewed by the Commission in an after-the-fact reasonableness review. Specifically, the Commission ordered:

> Each electric and/or gas corporation is authorized to fully recover in distribution rates the costs of the conversion program approved in Ordering Paragraph 2, subject to reasonableness review. The following ratemaking is approved: actual, prudently incurred program costs shall be entered in a balancing account for recovery in the first year following cut over of service; "to the meter" construction costs must be capitalized based on actual (not forecast) expenditures at the utility's then-current authorized return on rate base; "beyond the meter" construction costs must be capitalized based on actual (not forecast) expenditures and consistent with their status as a regulatory asset, these costs must be amortized over ten years at a rate equivalent to the utility's then-current authorized return on rate base. Review for reasonableness of "to the meter" costs will occur in the general rate case where those costs are put into rate base. Review for reasonableness of "beyond the meter" costs will occur in the first general rate case after service cut over.[88]

---

87 *Id.* at 3 (emphasis added).

88 *Id.*, OP 8 at 77.

On July 3, 2025, the Safety and Enforcement Division (SED) provided SDG&E with an updated Mobilehome Park Utility Conversion Program Priority List that reflected new applicants from the 2025 open application window, as well as revised rankings resulting from appeals, natural disasters, and updated risk assessments. The revised list was intended solely to inform future outreach and did not affect projects in planning, permitting, or construction.

The CPUC's decision in D.24-12-074 directed the Commission's Utility Audits Branch to conduct an audit of SDG&E's MHP costs from 2017 to 2021, which began in May of 2025 and remains ongoing. In light of D.24-12-074's findings regarding the reasonableness of SDG&E's MHP Program costs, and with the UAB audit ongoing, SDG&E program conversion activities remain on hold while it participates in the audit process and addresses the associated implications of D.24-12-074 with the CPUC. While SDG&E remains hopeful that the audit and subsequent refiling for recovery will be successfully concluded, there is presently no defined timeline for the duration of this pause.

C. Safety Culture

In D.14-03-021, the Commission states:

> This rulemaking grapples with issues that have proven intractable for decades. Central to them all is how to ensure the safe, reliable and fairly-priced delivery of electricity, natural gas, or both, to the residents of mobilehome parks and manufactured housing communities (collectively, MHPs) located within the franchise areas of electric and/or natural gas corporations, those Commission-regulated entities commonly referred to as public utilities.[89]

SDG&E's longstanding commitment to safety focuses on three primary areas: (1) employee/contractor safety, (2) customer/public safety, and (3) the safety of the gas delivery system.

Based on the results to date, the Commission-approved MHP Program has been successful in enhancing the safety and reliability of the delivery of natural gas and electricity to the residents of MHPs and manufactured housing communities that have participated in the MHP Program. The MHP Program has been an effective means for significantly increasing the number of conversions to direct utility service. Moreover, the program team established a safety

[89] *Id.* at 3-4.

policy that achieves the Program's safety objectives and is consistent with SDG&E's safety-first foundation.

D. Standard of Review and Other Commission Guidance

This section of my testimony summarizes the applicable standard of review and other applicable Commission guidance.

1. Preponderance of the Evidence Standard

The standard of proof to be applied by the Commission in an after-the-fact reasonableness review is preponderance of the evidence.[90] Preponderance of the evidence is defined "in terms of probability of truth, e.g., 'such evidence as, when weighed with that opposed to it, has more convincing force and the greater probability of truth.'"[91] In other words, SDG&E "must present more evidence that supports the requested result than would support an alternative outcome."[92]

2. Reasonable Manager Standard

To assess the reasonableness of incurred costs, the Commission applies the reasonable manager standard.[93] To meet this standard, "[t]he 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."[94] As explained by the Commission, "reasonable and prudent acts do not require perfect foresight or optimum outcomes, but may fall within a spectrum of possible acts consistent with utility needs, ratepayer interests, and regulatory requirements."[95] Under this standard, the Commission holds utilities to "a standard of reasonableness based upon the facts that are known or should be known at the time."[96] In so doing, the Commission looks to the decision-making process and

---

90 A.14-12-016, Assigned Commissioner and Administrative Law Judges' Scoping Memo and Ruling, (April 1, 2015), at 5-6; *see also* D.16-12-063 at 8-10; D.14-06-007 at 13.

91 D.14-06-007 at 13 (citing Witkin, Calif. Evidence, 4th Edition, Vol. 1, 184).

92 D.14-06-007 at 13

93 A.14-12-016, Assigned Commissioner and Administrative Law Judges' Scoping Memo and Ruling (April 1, 2015) at 5-6; *see also* D.16-12-063 at 8-10.

94 *Re Southern California Edison Company (D.90-09-088),* 1990 Cal. PUC LEXIS 847 at *23; 37 CPUC 2d 488 (1990).

95 *Re Pacific Gas and Electric Company*, D.97-08-055 at 109.

96 D.90-09-088 (*supra)* at *22 (citing D.88-03-036 at 5).

information available to the manager to assess whether the course of action was within the "bounds of reasonableness, even if it turns out not to have led to the best possible outcome."[97] As explained by the Commission, this is to "avoid the application of hindsight in reviewing the reasonableness of a utility decision."[98]

In the case of the MHP Pilot Program, the Commission recognized that "the physical conditions at MHP master-meter/submeter systems will vary greatly, depending upon age, type of materials used in prior construction, existing MHP design, terrain and other factors,"[99] and thus, "numerous uncertainties"[100] existed before the MHP Pilot Program commenced and will remain true for the duration of the MHP Program.

In D.20-04-004 the Commission "acknowledge[d] that each utility operates under different standards, policies, cost models, and MHP site factors so it is difficult to conduct a like-for-like evaluation among utilities" and rejected proposals to establish cost per space or cost cap limitations given the variable nature of these projects.[101] D.20-04-004 also states that factors influencing costs include: "varying geographical terrain; business models; MHP technical configurations; market conditions; such as terms of contractor bids, material costs, contractor availability, permit costs, and installation complexity"[102] and "high cost MHPs can be justified in some instances based on trench distances, MHP layouts, city/county requirements, location of the MHP, weather impacts, third-party subsurface conflicts, and safety and securing concerns for utility and equipment[.]"[103]

E. Program Organization and Governance Controls

1. Master Meter Balancing Account and Nature of Recorded Costs

The Master Meter Balancing Account (MMBA) was authorized through AL 2601-E/2292-G on June 25, 2014. SDG&E records to the MMBA TTM costs, which include costs for

---

97 *Re San Diego Gas and Electric Company* (*D.89-02-074*), 1989 Cal. PUC LEXIS 128 at *267 (Conclusions of Law 3); 31 CPUC 2d 236 (1989).

98 D.90-09-088 (*supra)* at 22.

99 D.14-03-021 at 49.

100 *Id*.

101 D.20-04-004 at 26.

102 *Id.* at 162 (Findings of Fact (FOF) 104).

103 *Id.* at 163 (FOF 111).

utility and contracted labor, purchased services and materials, and trenching and paving. Utility labor costs include civil construction, setting meters, gas and electric service turn-on, purging of gas legacy systems, removal of master meters, and the procurement and warehousing of materials. TTM costs also include MHP Program management costs, which are inclusive of: Program Outreach, such as primary customer contact and coordination before, during, and after construction activities in accordance with the Commission-reviewed statewide Outreach Plan; Program Construction Management, which includes construction management (CM) and planning; and Program Management Office (PMO) activities which include program strategy, project controls during the project life cycle, regulatory reporting, and the MHP Program's finance, budgeting, and accounting functions. PMO activities also include communicating progress to various stakeholders.

SDG&E also records to the MMBA BTM costs, which include work related to the connection of new utility services from the utility meter to the mobile home. BTM work is performed by contractors selected by the MHP owners/operators.[104] As such, BTM costs are not directly managed or under the control of SDG&E.

The regulatory accounting treatment of costs recorded to the MMBA is discussed in the Regulatory Accounts testimony (Ex. SDGE-26).

2. Program Management

SDG&E's MHP Pilot Program management team implemented a series of tools and controls to enable early identification of risks and issues that could negatively impact scope, schedule, or cost. These practices include the following.

a. Experienced Management Staff

To implement the MHP Pilot Program, SDG&E formed an organization led by management personnel experienced in each of the core competencies required by the MHP Pilot Program (*i.e.*, Program Outreach, Planning and Construction, PMO Governance, and Finance). In support of a lean organization that shared both costs and lessons learned, certain roles, including the Program Directors, PMO Manager, Governance Manager, and Finance Manager, were shared across SDG&E's and SoCalGas's MHP Pilot Programs.

[104] *Id.* at 115.

Following the MHP Final Decision in 2020 approving continuation of the program, staffing arrangements changed significantly. Personnel who had previously supported the program under a shared structure were divided between separate companies, and as a result, program-related costs are no longer jointly shared. SDG&E now assumes responsibility for its own staffing and associated expenses, marking a shift from the cost-sharing framework that existed prior to the final approval.

The responsibilities of each workstream within the current MHP Program organization are briefly described as follows:

- **Customer Outreach and MHP Account Management:** The SDG&E Outreach team is responsible for outreach and education to impacted communities, MHPs, and residents before, during, and after execution of the program and individual projects. To promote efficient and streamlined project execution, the Outreach team works closely with the Planning and Construction Management (CM) team to assess and resolve project risks and issues. Additionally, the Account Management executives work closely with MHP Owners/Operators to implement project-driven outreach and education plans compliant with the statewide MHP Utility Conversion Program Outreach and Education Plan.
- **Planning and CM:** The SDG&E Planning and Construction team manages the design through construction components of the MHP utility upgrades.
- **Planning:** The Planning team assesses each individual project and manages the design process for the new gas and electric distribution systems per SDG&E standards.
- **CM:** The CM team consists of project managers responsible for reviewing and assessing TTM work performed in the MHPs. The construction management team manages the schedule, scope, and budget of each individual project. While the construction management team does not manage the BTM construction work performed by MHP owner/operator selected contractors, assigned construction advisors reviews the scope and costs of BTM bids. These advisors also coordinate with the BTM

contractor to support that the interconnection with the SDG&E meters is consistent with utility standards.

- **PMO:** The PMO defines and maintains standards of project management and compliance within the MHP Pilot Program.
  - ***Governance:*** As part of the PMO, the Governance team is responsible for establishing and implementing program controls and processes needed to execute the MHP Pilot Program. This includes risk management, issue management, schedule management, change management, monitoring of key performance indicators (KPIs), project reporting, and business process design.
  - ***Finance:*** The Finance team, also part of the PMO, is responsible for establishing and implementing cost and budget controls to confirm accurate cost tracking. Activities include cost accounting and invoice processing, change management, budgeting, and financial reporting.

b. MHP Program's Ongoing Efforts to Minimize Project Execution Costs

The procurement of services (construction contractors, inspectors, etc.) is the largest individual category of MHP Program expenditures. Approximately 70% of MHP Program costs are for purchased services and materials. As such, an important aspect of the prudent execution of the MHP Program is sourcing and retaining capable contractors and vendors at reasonable rates. In an effort to control program costs through pre-negotiated rates, SDG&E conducts a competitive solicitation for to-the-meter construction activities within its service territory to identify and select qualified and licensed construction contractors. Contractors known to perform the type of work needed for MHP projects are selected by an experienced team of construction management and sourcing employees.

As part of its ongoing efforts to control program costs, SDG&E successfully broadened the pool of contractors that bid on MHP projects for the 2025 conversion cycle. This expanded participation resulted in more competitive pricing at lower cost levels than those seen in the prior two years.

- **Partnerships/Cost Saving/Trench Splitting:** When allowed due to service territory overlap, SDG&E works with SoCalGas or willing Communication Infrastructure Providers (CIPs) to share the costs for relevant MHP conversion costs, such as trenching costs, which enables utilities to share the civil construction costs.
- **Project Monitoring:** SDG&E's MHP Construction Services team oversees to-the-meter construction activities to confirm that work is safely performed in accordance with project scope, schedule, and budget. Each project is assigned a project manager responsible for reviewing and assessing the activities of the TTM contractor. At the onset of each project, the project manager and program advisor hold a pre-construction meeting with the selected TTM and BTM contractors to review project details, reporting, safety, and other deliverables. Frequent monitoring is performed by the contract administrator and changes, issues, or questions that arise are timely addressed.
- **Estimation:** SDG&E tracks the costs of construction for each project through internal Work Order Authorizations (WOAs) which are used to track actual costs against the original estimate of total project costs. Costs in excess of estimates require further review and approval through reauthorizations.
- **Invoice Validation:** Each invoice for TTM or BTM work is reviewed by the program's Finance group and Construction Project Managers to validate that work has been completed in accordance with contractual agreements at the negotiated rates and within authorized limits.
- **Project Close-Out/Quality Assurance:** SDG&E performs reconciliation and quality assurance following completion of every project to affirm that: (1) records in support of both program and project compliance are reviewed; (2) oversight was provided for project decisions and/or associated changes that occurred; (3) documents are stored in centralized repositories for proper records management; and (4) when final costs have

been recorded, total project financial records are reviewed for validity and compared against estimates.

- **Program Monitoring:** SDG&E produces periodic financial and schedule reporting for its management teams to allow continuous oversight over the program, to monitor project progress, and enable early identification of risks and issues impacting schedule and costs.
- **Clarity of Engagement Scope:** SDG&E strives to maintain clearly defined program goals with contributing and impacted program stakeholders by working closely with MHP owners/operators through focused outreach efforts to clarify MHP Program components and the commitments required to reduce the risk of ambiguity in covered and non-covered costs. Through outreach efforts, SDG&E works with MHP owners/operators to seek multiple bids for BTM activities, thereby promoting cost awareness and competition. SDG&E also provides workshops to BTM contractors to promote awareness of the program, including its components and goals, and engages BTM contractors throughout the planning processes, including inviting participation in MHP site walks to more accurately estimate scope, schedule, and budget.
- **Communication and Guidance:** SDG&E fosters open channels of communication with external program stakeholders, including the Commission's SED, the California Department of Housing and Community Development (HCD), and other local and state entities to promote awareness of the program, share observations and findings, seek guidance, and provide information to better coordinate activities such as inspections.
- **Safety Record:** Safety is a primary driver of the SDG&E MHP Program and one of its KPIs. The program team consulted with SDG&E's Construction Services team and Safety Advisor, as well as other Major Projects teams, to establish a safety policy that achieves the program's safety objectives and is consistent with SDG&Es' safety-first foundation. Additionally, SDG&E continues to work with SED to review projects, as

requested. To date, all MHP Program projects have been executed with a zero-incident safety record for internal employees with a total of five contractor crew incidents. SDG&E's annual safety statistics are summarized in Table TT-55 below.

Table TT-55
SDG&E MHP Utility Conversion Program Safety Statistics

Incident Type	2022	2023	2024	2025	2022
Lost Time Injury (LTI)	0	0	2	0	0
OSHA-Recordable	0	0	2	0	0
Controlled Motor Vehicle Incident	0	0	3	0	0

- **Continuous Improvement:** Consistent with SDG&E's ongoing commitment to continuous improvement, SDG&E continually evaluates and implements improvements to its MHP Program processes. Though not exhaustive, the following are examples of continuous improvements applied through program implementation:
  - Organizational changes to improve planning and estimation at the onset of individual projects; Organizational changes to support sufficient regional coverage and address workload and geographical spread;
  - Introduction and adaptation of change management and close-out processes;
  - Working closely with each MHP owner/operator to adapt the Outreach and Education Plan to best suit their needs and minimize project issues;
  - Regularly cadenced joint meetings with partner utilities to discuss project schedules, risks, and issues; and
  - Development of multiple MHP owner/operator funding options for BTM costs (*i.e.,* payment assignment) to further encourage participation.

SDG&E will continue pursuing cost efficiency opportunities throughout its operations, including evaluating emerging technologies, improving supply chain coordination, strengthening project management practices, and promoting robust competitive bidding. These efforts remain central to SDG&E's commitment to delivering reliable and affordable program outcomes while upholding high standards of quality and safety.

3. Preliminary Cost Summary

As directed by the MHP Decision, on February 2, 2026, SDG&E filed its 2026 Annual MHP Utility Conversion Program Report,[105] which summarizes the MHP Program's preliminary findings and includes: (1) a program timeline and progress towards that timeline, and (2) a preliminary quantification of construction costs recorded per space, with TTM and BTM costs of conversions incurred through December 31, 2025 identified separately. These costs are summarized in Table TT-56 below.

The costs are labeled preliminary because, consistent with SED instructions, costs are reported based on project financial closure rather than strictly by reporting year. While the majority of costs are recorded when a project is deemed financially complete, trailing charges may be incurred afterward and subsequently attributed back to the original closure year. As a result, prior-year totals may change in subsequent reports, and the amounts remain preliminary until all trailing costs are fully captured.

Table TT-56
SDG&E MHP Program Preliminary Costs
from 01/01/2022 through 12/31/2025

SDG&E MHP Program Preliminary Costs (In $)			
	Gas	**Electric**	**Total**
"To The Meter" (TTM)			
Contractor Costs			
Civil/Trenching	41,382,780	31,641,134	73,023,914
Gas/Electric System			
Labor	0	0	0
Materials/Structures	2,570,272	3,573,271	6,143,543
Program Management Costs (PMC)			
PMO	2,025,938	1,868,512	3,894,450
Outreach	2,550,054	1,861,873	4,411,927
CM	1,907,390	2,742,573	4,694,963
Other TTM Costs			
Labor	582,761	125,054	707,815
Non-Labor	3,358,474	4,482,081	7,840,555
Property Taxes	121,540	259,456	380,996
AFUDC	598,441	1,298,891	1,897,331
Subtotal TTM Costs	**55,097,650**	**47,852,844**	**102,950,494**

[105] *See* SDG&E MHP Utility Conversion Program Report (February 2, 2026) included herein as Appendix D.

SDG&E MHP Program Preliminary Costs (In $)			
	Gas	**Electric**	**Total**
"Beyond the Meter" (BTM)			
Contractor Costs			
Civil/Trenching	370,423	686,006	1,056,429
Gas/Electric System			
Labor	5,021,064	6,455,202	11,476,267
Materials/Structures	2,730,989	6,326,885	9,057,873
Other	334,527	903,767	1,238,294
Subtotal BTM Costs	**8,457,003**	**14,371,860**	**22,828,864**
Total Preliminary Costs	**63,554,653**	**62,224,704**	**125,779,357**

Notes:

1. The MHP initiative maintains a set of program support orders defined as CM (construction management), Outreach and Project Management Office (PMO). These orders were used for support activities required for the successful implementation of the MHP program in addition to the direct labor, services, transportation and material costs dedicated to each individual construction site. The allocation methodology applied for supporting costs was to apply these costs in proportion to the balance of direct costs charged to each construction order.
2. During the recent audit process, it was determined that a final true-up of these program support costs was required in order to accurately distribute them to the related construction activity charges. The methodology used for this true-up process was consistent with the project's original allocation methodology, which maintained the relationship of the cost categories of gas and electric project types and capital and O&M expenditure types. The remaining balances on each program support order was allocated proportionately to the related construction orders within its own cost category and expenditure type. Journal entries for the true-up were processed on December 30, 2025, and January 22, 2026, recording an amount of $427,271.09 to address balances from 2022 through 2025.
3. During the recent audit, it was identified that a journal entry had been processed incorrectly, resulting in gas costs being charged to a park that is electric-only. SDG&E will reconcile the $8,336.91 that was misreported as gas and correct it to electric.

Table TT-56 details preliminary costs for each of the following categories:

- TTM Contractor Costs, which include trenching and paving.
- Other TTM Costs – This includes the costs of Company labor in support of the program, including TTM work for selected MHPs, setting meters and turning on gas and electric service, purging the legacy system, removal of the master meter, and the procurement and warehousing of materials.
- Beyond-the-Meter Contractor Costs, which are costs reimbursed to the MHP owner/operator to perform BTM construction work. BTM contractors are selected by the MHP owner/operator.
- Program Management Costs (PMC), which are comprised of:
    - PMO Costs, which include overall Program Management (*e.g.*, Program strategy, risk management, change management, schedule management) and the Program's Finance functions;
    - CM Costs, which include construction project management; preliminary planning and full design activities; planners and designers who perform work for multiple parks; Project Managers, Construction Contractor Administration staff, and other support personnel who also perform work at multiple construction sites; and
    - Outreach activities, which include primary customer and stakeholder contact and coordination before, during and after construction, consistent with the Commission-approved statewide Outreach Plan.

PMC are tracked separately from TTM costs and BTM contractor costs and allocated to each MHP as part of the project close-out process based on the number of spaces converted.

The above costs are loaded and include Company Overheads consisting of Payroll Tax, Incentive Compensation Plan, Pension and Benefits, Worker's Compensation, Vacation and Sick, Personal Liability and Property Damage Overhead, Purchasing, Warehouse, Customer Field Services (CFS) Management, Contract Administration, Exempt Material, Union Contract, Shop Overhead, Small Tools, and Administrative and General capital. The overheads applied to

the Program are driven by incremental costs incurred as a result of implementing the MHP Pilot Program.

Please see Appendix D for additional information regarding recorded MHP Program costs.

The observed preliminary average per-space costs from January 1, 2022 through December 31, 2025 are summarized in Table TT-57.

Table TT-57
SDG&E MHP Program Preliminary Average Per-Space Cost
from January 1, 2022 through December 31, 2025

	Average Cost Per Space (Gas)	Average Cost Per Space (Electric)	Overall Average Cost Per Space	Spaces Converted Gas	Spaces Converted Electric
TTM	$13,981	$11,366	$25,347	3,941	4,210
BTM	$2,227	$3,545	$5,772	3,797	4,054
Total Average Cost Per Space	$16,208	$14,912	$31,119	N/A	N/A

SDG&E's average cost per space is reasonable and compares favorably with the Commission's findings in D.20-04-004.[106] In that decision, the Commission observed that mobilehome park conversion costs varied significantly among utilities, with per-space costs for utilities providing both gas and electric service ranging from $29,426 at the low end for SDG&E, to more than $37,000 at the high end for PG&E. Although the Commission did not establish a hard cost-per-space benchmark and cautioned against relying on soft cost targets as a definitive measure of reasonableness, SDG&E's current average cost per space remains within 6% of its 2020 soft cost target and is well below the upper bound identified in the Staff Evaluation.

F. Annual Report

See Appendix D for the February 2026 Annual Report.[107] The Annual Report includes cumulative costs from program inception, encompassing costs previously submitted for recovery, including in SDG&E's TY 2024 GRC, and trailing costs not included in the 2024 GRC due to

[106] D.20-04-004 at 162-163 (FOF 106).

[107] The Annual Report includes $2.26M in balanced pension & benefit and fleet-related costs from 2017-2025 that are not captured in the Master Meter Balancing Account for recovery; these costs are captured by SDG&E separately for recovery.

timing. Recovery of these trailing costs, as well as any cost adjustments resulting from the ongoing audit by the Commission's Utility Audit Branch, will be addressed in a future application.

VII. CONCLUSION

SDG&E requests the Commission adopt its TY 2028 forecast of $45,486,000 for Gas Distribution O&M expenses, which is a $2,217,000 increase over 2025 adjusted-recorded costs. This increase is primarily driven by inclusion of Aeriel Leak Detection in 2028 as well as a historical increase in ticket volume year over year in Damage Prevention.

SDG&E further requests the Commission adopt its capital forecast as reflected in Appendix C. The primary factors influencing the capital forecast are anticipated increases in Cathodic Protection, Customer Meter Protection, and pipeline system renewal work.

The forecast expenditures support SDG&E's overarching objective to maintain operational excellence, while providing safe and reliable delivery of natural gas at a reasonable cost to customers. The Commission should find this request reasonable. The activities funded by these requests include:

- Supporting the continued delivery of safe and reliable service that SDG&E has provided to customers for many years;
- Activities that are consistent with laws, operational codes, and standards established by local, state, and federal legislators and agencies;
- Addressing ongoing operations, maintenance, and construction needs required to maintain the gas system and to meet the obligations of cities, counties, and state agencies under the Company's franchise agreements; and
- Activities that are reasonable and appropriate when evaluated in the context of historical spending patterns and in consideration of customer affordability.

In addition, my testimony establishes the reasonableness of $125,779,000 ($124,610,000 in capital expenditures and $1,169,000 in O&M expenditures) incurred from 2022 through 2025 in executing the ongoing Mobilehome Park Utility Conversion Program (MHP Program). These costs directly support achievement of the Commission's stated objective to convert higher risk master-meter/submeter systems to MHP or manufactured housing communities to enhance the

safety and reliability of MHP communities.[108] In accordance with the reasonable manager standard, SDG&E designed and executed the MHP Program to enhance the safety and reliability of utility service to the many MHP communities that have participated in the Program while maintaining reasonable conversion costs through prudent planning and oversight.

SDG&E's TY 2028 forecast is a reasonable estimate of future requirements and should be adopted by the Commission.

This concludes my prepared direct testimony.

[108] D.14-03-021, OP 3 at 75.

VIII. WITNESS QUALIFICATIONS

My name is Tashonda Taylor. My business address is 8306 Century Park Ct., San Diego, CA 92123. I am employed by SDG&E as the Vice President of Gas Operations. I have been in my current position since June of 2022. I received a Bachelor of Science degree in Electrical & Electronics Engineering from California State University, Sacramento, in June of 2000. I also earned a Master of Business Administration from National University in 2014. From 1999 to the present, I have been employed by SDG&E, holding positions of increasing responsibility in various departments, including Electric Engineering, Electric Distribution Operations, Safety, Smart Grid, Electric Regional Operations, Human Resources, Design & Construction Management, Customer Operations, and Gas Operations. I have previously testified before the California Public Utilities Commission.

APPENDIX A
GLOSSARY OF TERMS

APPENDIX A

Glossary of Terms

ACRONYM	DEFINITION
ACT	Advanced Clean Technology
ALD	Aerial Leak Detection
AMM	Aerial Methane Mapping
AOC	Abnormal Operating Conditions
BCR	Benefit Cost Ratio
BTM	Beyond The Meter
CA	Contract Administration
CCM	Control Center Modernization
CIAC	Contributions In Aid of Construction
CMP	Customer Meter Protection
CNG	Compressed Natural Gas
C&O	Construction & Operation
CPUC	California Public Utilities Commission
DIMP	Distribution Integrity Management Program
DOC-G	Department Operations Center – Gas
DOE	Department of Energy
DREAMS	Distribution Risk Evaluation and Monitoring System
EFV	Excess Flow Valve
EPM	Electronic Pressure Monitors
GED	Gas Emergency Department
GESI	Gas Engineering & System Integrity
GHG	Greenhouse Gas
GIS	Geographic Information System
GRC	General Rate Case
MHP	Mobilehome Park
MHP Program	Mobilehome Park Utility Conversion Program
M&R	Measurement and Regulations
MSA	Meter Set Assembly
NSOTA	Non-State of the Art
NTSB	National Transportation Safety Board
O&M	Operations & Maintenance
PAAR	Projects and Activities to Address Risk
PHMSA	Pipeline and Hazardous Materials Safety Administration
PMC	Program Management Costs
psi	Pounds per square inch
QRA	Quantitative Risk Assessment
RAMP	Risk Assessment Mitigation Phase
RDF	Risk-Based Decision-Making Framework

ACRONYM	DEFINITION
RMP	Residential Meter Protection
RMU	Real-time Monitoring Units
RNG	Renewable Natural Gas
SCFH	Standard Cubic Feet per Hour
SDG&E	San Diego Gas & Electric
SED	Safety Energy Division
TTM	To The Meter
USA	Underground Service Alert
YoY	Year Over Year

APPENDIX B

CONTROLS AND MITIGATIONS COMPLIANCE DRIVER ROADMAP

APPENDIX B
Controls and Mitigations Compliance Driver Roadmap

The table below indicates the compliance drivers that underpin Risk Controls/Mitigations identified in testimony.

Control/ Mitigation ID	Control/Mitigation Name	Compliance Driver
C001	Damage Prevention Strategies	PHMSA, GO112-F, Cal. Gov't Code § 4216
C002	Damage Prevention Activities – Gas	49 CFR § 192, GO112-F, Cal. Gov't Code § 4216
C004	Damage Prevention Mapping	49 CFR § 192, Cal. Gov't Code § 4216
C007	Underperforming Main & Services	49 CFR § 192
C101	Cathodic Protection Program – O&M	49 CFR § 192, Subpart I
C107	Cathodic Protection Program – Capital	49 CFR § 192, Subpart I
C115	Reg Station, Valve, Large Meter Set Inspections	PHMSA, GO 58-A
C124	C124 Regulator Station Repair, Replace, Enhance	49 CFR § 192
C131	Leak Repair (O&M/Capital)	49 CFR § 192
C134	Pipeline Monitoring	49 CFR § 192
C139	Gas Distribution Safety Relocations	49 CFR § 192
C144	Human Factors Mitigation – QA Programs	49 CFR § 192
C150	Code Compliance	49 CFR § 192, GO 112-F
C169	Human Factors Mitigation – Op Qual	GO 112-F
C175	Residential Meter Protection	49 CFR § 192
C182	Distribution Risk Evaluation & Monitoring System (DREAMS)	49 CFR § 192, Subpart P
C267	Damage Prevention Activities – Electric Underground	Cal. Gov't Code § 4216, GO128

APPENDIX C

CAPITAL EXPENDITURES

San Diego Gas Electric Company
Capital Expenditures
(In Thousands of 2025 $)

Gas Distribution	2026	2027	2028	2029	2030	2031
Total Capital	**159,270**	**170,263**	**169,987**	**170,101**	**170,779**	**171,525**
2026 - 2028 Capital Request	159,270	170,263	169,987	-	-	-
Post-Test Year Capital Forecast	-	-	-	170,101	170,779	171,525

San Diego Gas Electric Company
Capital Expenditures
(In Thousands of 2025 $)

Gas Distribution
2026 - 2028 Capital Request

Category	Workpaper Sub	Workpaper Description	In-Service Date	2026	2027	2028
NEW CUSTOMER & GAS SYSTEM UPGRADES TO SUPPORT LOAD	005000.001	New Customer & Gas System Upgrades to Support Gas Load	Routine	9,751	8,446	7,140
	005000.002	New Customer & Gas System Upgrades to Support Gas Load	Routine	3,325	2,880	2,433
NEW CUSTOMER & GAS SYSTEM UPGRADES TO SUPPORT LOAD Total				**13,076**	**11,326**	**9,573**
SYSYSTEM MINOR RELOCATIONS & RETIREMENTS	005010.001	SYSYSTEM MINOR RELOCATIONS & RETIREMENTS	Routine	4,323	4,323	4,325
	005010.002	SYSYSTEM MINOR RELOCATIONS & RETIREMENTS	Routine	1,048	1,048	1,048
	005010.003	SYSYSTEM MINOR RELOCATIONS & RETIREMENTS	Routine	2,125	2,125	2,125
SYSYSTEM MINOR RELOCATIONS & RETIREMENTS Total				**7,496**	**7,496**	**7,498**
GAS METERS & REGULATORS	005020.001	GAS METERS & REGULATORS	Routine	4,462	7,799	7,852
GAS METERS & REGULATORS Total				**4,462**	**7,799**	**7,852**
FRANCHISE & HIGHWAY RELOCATION	005050.001	FRANCHISE & HIGHWAY RELOCATION	Routine	9,422	9,422	9,424
FRANCHISE & HIGHWAY RELOCATION Total				**9,422**	**9,422**	**9,424**
GAS TOOLS & EQUIPMENT	005060.001	GAS TOOLS & EQUIPMENT	Routine	822	822	822
GAS TOOLS & EQUIPMENT Total				**822**	**822**	**822**
GAS CODE COMPLIANCE	005070.001	GAS CODE COMPLIANCE	Routine	3,561	3,562	3,563
GAS CODE COMPLIANCE Total				**3,561**	**3,562**	**3,563**
LEAK REPAIR & RESTORATION	005080.001	LEAK REPAIR & RESTORATION	Routine	15,242	15,244	15,255
LEAK REPAIR & RESTORATION Total				**15,242**	**15,244**	**15,255**
CATHODIC PROTECTION	005090.001	Cathodic Protection	Routine	10,217	10,217	10,219
CATHODIC PROTECTION Total				**10,217**	**10,217**	**10,219**
SYSTEM RELIABILITY & SAFETY	005100.001	SYSTEM RELIABILITY & SAFETY	Routine	3,752	3,753	3,753
SYSTEM RELIABILITY & SAFETY Total				**3,752**	**3,753**	**3,753**
UNDERPERFORMING MAINS & SERVICES	005140.001	UNDERPERFORMING MAINS & SERVICES	Routine	15,044	15,045	15,047
UNDERPERFORMING MAINS & SERVICES Total				**15,044**	**15,045**	**15,047**
CURB VALVE REPLACEMENTS	215750.001	CURB VALVE REPLACEMENTS	Routine	3,512	3,512	3,513
CURB VALVE REPLACEMENTS Total				**3,512**	**3,512**	**3,513**
CUSTOMER METER PROTECTION	225740.001	CUSTOMER METER PROTECTION	Routine	8,000	8,000	8,000
CUSTOMER METER PROTECTION Total				**8,000**	**8,000**	**8,000**
DIMP EXECUTION	D95460.001	DIMP Execution	Routine	16,000	25,673	28,025
DIMP EXECUTION Total				**16,000**	**25,673**	**28,025**
GAS DISTRIBUTION - LOCAL ENGINEERING	G09020.001	Local Engineering Pool - GD Pool	Routine	26,352	26,205	25,691
GAS DISTRIBUTION - LOCAL ENGINEERING Total				**26,352**	**26,205**	**25,691**
GAS DISTRIBUTION - OVERHEAD	G09050.001	Department Overhead Pool - Gas	Routine	16,895	16,800	16,471
GAS DISTRIBUTION - OVERHEAD Total				**16,895**	**16,800**	**16,471**
GAS DISTRIBUTION - CONTRACT ADMINISTRATION	G09060.001	Contract Admin – Gas	Routine	5,417	5,387	5,281
GAS DISTRIBUTION - CONTRACT ADMINISTRATION Total				**5,417**	**5,387**	**5,281**
Grand Total				**159,270**	**170,263**	**169,987**

San Diego Gas Electric Company
Capital Expenditures
(In Thousands of 2025 $)

Gas Distribution
Post-Test Year Capital Forecast

Category	Workpaper Sub	Workpaper Description	In-Service Date	2026	2027	2028	2029	2030	2031
NEW CUSTOMER & GAS SYSTEM UPGRADES TO SUPPORT LOAD	005000.001	New Customer & Gas System Upgrades to Support Gas Load	Routine	-	-	-	7,040	7,183	7,407
	005000.002	New Customer & Gas System Upgrades to Support Gas Load	Routine	-	-	-	2,399	2,448	2,524
NEW CUSTOMER & GAS SYSTEM UPGRADES TO SUPPORT LOAD Total				**-**	**-**	**-**	**9,439**	**9,631**	**9,931**
SYSYSTEM MINOR RELOCATIONS & RETIREMENTS	005010.001	SYSYSTEM MINOR RELOCATIONS & RETIREMENTS	Routine	-	-	-	4,325	4,325	4,325
	005010.002	SYSYSTEM MINOR RELOCATIONS & RETIREMENTS	Routine	-	-	-	1,048	1,048	1,048
	005010.003	SYSYSTEM MINOR RELOCATIONS & RETIREMENTS	Routine	-	-	-	2,125	2,125	2,125
SYSYSTEM MINOR RELOCATIONS & RETIREMENTS Total				**-**	**-**	**-**	**7,498**	**7,498**	**7,498**
GAS METERS & REGULATORS	005020.001	GAS METERS & REGULATORS	Routine	-	-	-	8,151	8,531	8,812
GAS METERS & REGULATORS Total				**-**	**-**	**-**	**8,151**	**8,531**	**8,812**
FRANCHISE & HIGHWAY RELOCATION	005050.001	FRANCHISE & HIGHWAY RELOCATION	Routine	-	-	-	9,424	9,424	9,424
FRANCHISE & HIGHWAY RELOCATION Total				**-**	**-**	**-**	**9,424**	**9,424**	**9,424**
GAS TOOLS & EQUIPMENT	005060.001	GAS TOOLS & EQUIPMENT	Routine	-	-	-	822	822	822
GAS TOOLS & EQUIPMENT Total				**-**	**-**	**-**	**822**	**822**	**822**
GAS CODE COMPLIANCE	005070.001	GAS CODE COMPLIANCE	Routine	-	-	-	3,563	3,563	3,563
GAS CODE COMPLIANCE Total				**-**	**-**	**-**	**3,563**	**3,563**	**3,563**
LEAK REPAIR & RESTORATION	005080.001	LEAK REPAIR & RESTORATION	Routine	-	-	-	15,255	15,254	15,253
LEAK REPAIR & RESTORATION Total				**-**	**-**	**-**	**15,255**	**15,254**	**15,253**
CATHODIC PROTECTION	005090.001	Cathodic Protection	Routine	-	-	-	10,219	10,219	10,219
CATHODIC PROTECTION Total				**-**	**-**	**-**	**10,219**	**10,219**	**10,219**
SYSTEM RELIABILITY & SAFETY	005100.001	SYSTEM RELIABILITY & SAFETY	Routine	-	-	-	3,753	3,753	3,753
SYSTEM RELIABILITY & SAFETY Total				**-**	**-**	**-**	**3,753**	**3,753**	**3,753**
UNDERPERFORMING MAINS & SERVICES	005140.001	UNDERPERFORMING MAINS & SERVICES	Routine	-	-	-	15,047	15,047	15,047
UNDERPERFORMING MAINS & SERVICES Total				**-**	**-**	**-**	**15,047**	**15,047**	**15,047**
CURB VALVE REPLACEMENTS	215750.001	CURB VALVE REPLACEMENTS	Routine	-	-	-	3,513	3,513	3,513
CURB VALVE REPLACEMENTS Total				**-**	**-**	**-**	**3,513**	**3,513**	**3,513**
CUSTOMER METER PROTECTION	225740.001	CUSTOMER METER PROTECTION	Routine	-	-	-	8,000	8,000	8,000
CUSTOMER METER PROTECTION Total				**-**	**-**	**-**	**8,000**	**8,000**	**8,000**
DIMP EXECUTION	D95460.001	DIMP Execution	Routine	-	-	-	28,025	28,025	28,025
DIMP EXECUTION Total				**-**	**-**	**-**	**28,025**	**28,025**	**28,025**
GAS DISTRIBUTION - LOCAL ENGINEERING	G09020.001	Local Engineering Pool - GD Pool	Routine	-	-	-	25,663	25,721	25,811
GAS DISTRIBUTION - LOCAL ENGINEERING Total				**-**	**-**	**-**	**25,663**	**25,721**	**25,811**
GAS DISTRIBUTION - OVERHEAD	G09050.001	Department Overhead Pool - Gas	Routine	-	-	-	16,453	16,490	16,548
GAS DISTRIBUTION - OVERHEAD Total				**-**	**-**	**-**	**16,453**	**16,490**	**16,548**
GAS DISTRIBUTION - CONTRACT ADMINISTRATION	G09060.001	Contract Admin – Gas	Routine	-	-	-	5,276	5,288	5,306
GAS DISTRIBUTION - CONTRACT ADMINISTRATION Total				**-**	**-**	**-**	**5,276**	**5,288**	**5,306**
Grand Total				**-**	**-**	**-**	**170,101**	**170,779**	**171,525**

APPENDIX D

2026 MHP ANNUAL REPORT

(PUBLIC)

PUBLIC VERSION

Mobilehome Park Utility Conversion Program

Annual Report

February 2, 2026

SDG&E MOBILEHOME PARK UTILITY CONVERSION PROGRAM

FEBRUARY 2, 2026 ANNUAL REPORT

TABLE OF CONTENTS

SDG&E MOBILEHOME PARK UTILITY CONVERSION PROGRAM

FEBRUARY 2, 2026 ANNUAL REPORT

1. Executive Summary

As detailed in this Report, San Diego Gas and Electric Company ("SDG&E") continues its participation in the Mobilehome Park Utility Conversion Program ("Program"), despite the current pause in conversion activities due to the ongoing California Public Utilities Commission ("CPUC" or "Commission") audit. As of December 31, 2025, SDG&E has converted[1] 98 mobilehome parks (10,674 permitted spaces), which is 31% of the eligible mobilehome spaces within SDG&E's service territory.[2] On December 19, 2024, the CPUC issued its decision in the Test Year ("TY") 2024 General Rate Case ("GRC") for Southern California Gas Company ("SCG" or "SoCalGas") and SDG&E. The Commission found some of SDG&E's Mobilehome Park Program costs through 2021 unreasonable due to a comparison of gas-related costs between SDG&E and SCG, creating uncertainty about cost recovery. As a result, SDG&E temporarily halted program activities to facilitate audits, discussions, and address GRC impacts with the CPUC. The SDG&E audit was formally initiated on May 22, 2025, and as of the timing of this annual report, remains ongoing.

2. Procedural History

On March 13, 2014, the Commission approved and authorized SDG&E to execute the Program through Decision (D.) 14-03-021 ("Decision"). The Program was initiated as a three-year pilot (2015-2017) ("Pilot Program") to convert master-metered/sub-metered natural gas and/or electric services to direct utility services for qualified mobilehome parks and manufactured housing communities (collectively "MHPs"). On September 28, 2017, Resolution E-4878 authorized the investor-owned utilities ("IOUs") to continue their MHP Pilot Programs through December 31, 2019 ("Pilot Program Extension").[3] SDG&E was authorized to complete the initial 10% scope of eligible spaces and convert up to an additional 5% of eligible spaces, bringing the total scope of the three-year Pilot Program and Pilot Program Extension to 15% of eligible MHP spaces.

On March 18, 2019, the Commission issued Resolution E-4958, authorizing SDG&E to continue its Program for eligible MHPs until the earlier of either December 31, 2021 or the issuance of a Commission Decision for the continuation, expansion or modification of the program beyond December 31, 2021 in Rulemaking (R.) 18-04-018.[4] Eligible MHPs were defined as those where

[1] "Converted" MHPs are those where System Cutover has occurred.

[2] Eligible mobilehome spaces reflects the 34,597 total MHP spaces in territory, 2015 baseline, as identified in both the MHP Pilot and Permanent Decisions. The 2024 Annual Report reflected a higher conversion % than the current report because the 2024 report excluded MHPs that declined to participate in the Program and the corresponding space total was calculated from the MHP's permit-to-operate.

[3] Resolution E-4878, ordering paragraph (OP) 7.

[4] Resolution E-4958, OP 1.

SDG&E and/or MHP owners had incurred "financial obligations" on or before November 1, 2018. Resolution E-4958 further determined the number of spaces converted in each of years 2020 and 2021 may not exceed 3.33% of the total master-metered spaces in a utility's service territory, excluding MHPs that are already under conversion or scheduled for conversion. It further clarified that if a single MHP upgrade would result in the utility exceeding the 3.33% maximum requirement, the utility is authorized to proceed with that upgrade.

On April 16, 2020, the Commission issued Decision 20-04-004, approving a ten-year Mobilehome Park Utility Conversion Program from 2021 through 2030. Following a new application period established by the Commission during the 1st quarter of 2020, the Commission's Safety and Enforcement Division ("SED") provided utilities a list of eligible master-metered MHPs within their service territories to facilitate the conversion of the requisite spaces within their service territories to achieve a 50% cumulative conversion target by the end of 2030. This Decision also recommended a second evaluation of the MHP utility conversion program in 2025 following the first four-year application cycle (2021-2024) to decide whether to continue or modify the program.

On December 23, 2020, the Commission issued a Phase 2 Scoping Memo to further examine ways to protect residents of participating MHPs from unreasonable rent increase or eviction, based on program participation, and determine whether the development of an electrification ready service standard for participating MHPs was appropriate or feasible. On August 20, 2021, the Commission issued D.21-08-025, which adopted consumer protection requirements to keep residents of MHPs that participate in the Commission's MHP Program from experiencing unreasonable rent increases or evictions based on infrastructure improvements funded through the Program. Pursuant to D.21-08-025, SDG&E submitted Advice Letter (AL) 3859-E/3020-G on October 4, 2021, to: 1) update each utility's Sample Forms - Contracts, Mobilehome Park Utility Conversion Program (Program) Agreement (Form 189-1000) to include consumer protection measures for residents of mobilehome parks participating in the Program; and 2) include a description of the specific information that participating MHP owners are to provide to residents, as well as a discussion of methods the mobilehome park owners may use to communicate these protections to their residents. AL 3859-E/3020-G was approved by the Commission as of October 25, 2021.

On December 24, 2024, the Commission issued D.24-12-037, adopting a 200-amp electrical service standard and establishing program evaluation criteria for the Mobilehome Park Utility Conversion Program. The Decision establishes a 200-amp standard for both "to-the-meter" ("TTM") and "behind-the-meter" ("BTM") components of the MHP Utility Conversion Program. Utilities are given nine months to comply with this standard and must use the cost recovery method established in D.14-03-021 to cover any additional implementation costs. By the end of the MHP Utility Conversion Program in 2030, utilities are required to collaborate with Energy Division Staff to create a report evaluating the 200-amp standard and consider any technological advancements that might necessitate a change in the electric service standard for

future iterations of the program. Additionally, the Decision included mid-program evaluation criteria for Commission staff to use in their review.

On November 20, 2025, the CPUC's Final Decision (D.25-11-009) established a limited-term Mobilehome Park ("MHP") Electrification Initiative designed to fully electrify selected parks while gathering technical, financial, and policy insights to inform potential future modifications to the existing Mobilehome Park Utility Conversion Program ("MHP UCP"). The Commission authorized investor owned electric and gas utilities to collaborate with the California Energy Commission's Equitable Building Decarbonization ("EBD") Program to implement full electrification, replacing natural gas appliances with efficient electric technologies and upgrading both to-the-meter and behind-the-meter systems. The EBD Program will fund and deliver in-home electrification retrofits, while IOUs will continue delivering electric infrastructure upgrades under the MHP UCP. The Decision dictated that participating parks must agree to eliminate natural gas use, record a restrictive covenant limiting new gas infrastructure for at least twenty years, and allow the decommissioning of their existing gas systems.

The decision emphasized that this pilot is not accompanied by new ratepayer funding; rather, it relies primarily on the EBD Program and other incentive sources to avoid rate impacts. To ensure effective implementation, the ruling assigns responsibilities for outreach, tenant protections, infrastructure coordination, and data collection between the CPUC, IOUs, and CEC. The decision requires enriched annual reporting by the IOUs, including details about selected parks, conversion and decommissioning costs, and implementation challenges.

Although SDG&E's MHP UCP conversion activities remain paused while the CPUC audit and subsequent cost recovery refiling proceed, SDG&E will continue its active support for all electrification pilot activities.

D.25-11-009 also provided updated guidance regarding the MHP UCP program evaluation, modifying the timing of the previously required midcycle review of the MHP UCP. Under earlier decisions, a midcycle evaluation was due in 2025; however, the Commission determined that evaluating the UCP separately from the Electrification Initiative would no longer provide meaningful insight. Instead, the decision delays and consolidates the evaluation requirements by mandating a single, comprehensive, independent assessment of both the existing MHP UCP and the new Electrification Initiative, to be completed no later than December 31, 2029. This consolidated evaluation will review program costs, bill impacts, barriers to electrification, resident outcomes, and the effectiveness of the 200amp electric service standard. Rescheduling and merging the review could help future policy adjustments—particularly those concerning long term continuation or redesign of the MHP UCP—be informed by empirical results from actual electrification deployments rather than premature or incomplete data.

In response to the Electrification Pilot Initiative Decision, D.25-11-009, SoCalGas filed an application for rehearing ("AFR"). The AFR argues that D.25-11-009 contains both substantive

and procedural errors related especially to the requirement that MHP owners must record a 20-year restrictive covenant prohibiting new gas infrastructure as a condition of participating in the electrification pilot. SCG identifies legal problems with the decision's treatment of gas service obligations, and maintains that aspects of the decision are inconsistent with law, improperly adopted, or exceed the Commission's authority. In response, SDG&E stated that it concurs with SoCalGas's legal reasoning in the rehearing application and agrees that the Commission should modify D.25-11-009 to correct the identified flaws.

This report is submitted in the format requested by the Commission's SED.[5] Previous reports were submitted in accordance with D.14-03-021 OP 10, which directs each electric and/or gas utility to prepare a status report for the Program on February 1 of each year. SDG&E filed status reports on February 1 of 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, and 2025. In SDG&E's February 1, 2016 report, SDG&E provided a timeline for implementation of the three-year Pilot Program, its status on the timeline, the number of initial applications received, information on the MHPs that would be converted, and the number of spaces to be converted. SDG&E also provided an update on progress made against the timeline for implementation, as well as a preliminary cost assessment and/or cost accounting of to-the-meter and beyond-the-meter construction costs in its February 1, 2017, February 1, 2018, February 1, 2019, February 1, 2020, February 1, 2021, February 1, 2022, February 1, 2023, February 1,2024, and February 1, 2025 reports. This report includes information on the following: (1) a cost accounting for both TTM and BTM construction, and (2) an optional narrative assessment of the Program.

[5] The request was made in a December 21, 2018 e-mail from Fred Hanes of the CPUC's SED to the official service list for R.18-04-018.

3. Cost Accounting

Table 1 below ("Annual Report Template") reflects the space counts, costs, revenue requirements, and rate impacts of projects through December 31, 2025 for which final costs have been recorded.[6] Classification of costs within each category are defined within the table, which was provided by SED to the IOUs. These costs should be considered final, with the notation that there may be additional trailing costs.[7] Table 2 below shows the associated revenue requirements and rate impacts.

TABLE 1: ANNUAL REPORT TEMPLATE

- Bolded words in "Descriptor" column were added by SDG&E to clarify the reported data.
- All dollar amounts in Table 1 are rounded to the nearest dollar.
- Per the SED instructions accompanying the template, Table 1 costs have been grouped by project and included in the year in which financial closure for each project was completed, with financial closure defined as when all costs have been recorded for a project. Any trailing charges for a given park are added to the total costs for the year in which that park was initially deemed financially complete. Using this methodology has resulted in a revision in costs for certain years from prior reports. All Table 1 data has been updated to reflect the most current information.

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Program Participation		**Per Space Results (Not Cumulative)**								
CARE/FERA enrollment	Number of individuals enrolled in CARE/FERA after the conversion; **the data provided is not final as a process for capturing all CARE**	255	1,374	689	455	544	986	916	2825	872

[6] Per SED's instructions, as well as the instructions applicable to the Supplemental Cost Data template sent on November 13, 2018, the template captures projects for which final costs have been recorded. Trailing costs may follow, but they are not expected to exceed approximately 5% of a project's total cost.

[7] "Trailing costs" may include, but are not limited to, final contractor invoices or internal cost allocations that have not been recorded; such costs are not expected to be more than approximately 5% of the total project cost.

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Program Participation		**Per Space Results (Not Cumulative)**								
	enrollments is still in development									
Medical Baseline	Number of individuals enrolled in Medical Baseline after the conversion; **the data provided is not final as a process for capturing all MB enrollments is still in development**	20	129	116	64	43	62	87	156	34
Disadvantaged Community	Number of converted spaces **(i.e., Permit-To-Operate (PTO) count, not directly corresponding with the costs below)** within geographic zones defined by SB 535 map.	-	-	-	-	-	-	-	-	-
Rural Community	Number of converted spaces **(i.e., PTO count, not directly corresponding with the costs below)** within rural community	-	-	-	-	-	-	-	-	-
Urban Community	Number of converted spaces **(i.e., PTO count, not directly corresponding with the costs below)** within urban community	2,582	721	811	1,431	1,033	943	826	1,678	429
Leak Survey (Optional)	Number of Leaks identified during preconstruction activity (if known)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Program Participation		**Per Space Results (Not Cumulative)**								
Completed Spaces	Spaces converted that correspond to the project costs reported below (TTM includes common areas). If a project incurs costs over multiple years, report all project costs and spaces converted in the year the project closes.	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Number of TTM MH and Covered Common Area Locations Converted (Gas)		183	-	2,845	750	2,345	883	561	2,061	436
Number of TTM MH and Covered Common Area Locations Converted (Electric)		187	-	2,893	986	2,176	1,371	717	1,685	437
Number of BTM MH Converted Register Spaces (Gas)		180	-	2605	734	2,225	857	608	1,918	414
Number of BTM MH Converted Register Spaces (Electric)		180	-	2801	946	2,100	1,313	672	1,641	428
Cost Information										
To The Meter - Capital Costs	**Descriptor**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Construction Direct Costs										

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Program Participation		**Per Space Results (Not Cumulative)**								
Civil/Trenching	To the Meter Construction costs for civil related activities **(e.g., trench/cut excavation & backfill [joint trench], paving [temp & final], and distribution system installation - including contractor labor and materials)**									
Electric		812,350		13,796,084	5,618,111	16,321,479	6,000,552	6,993,935	14,598,007	4,026,062
Gas		1,153,053		20,541,134	5,581,843	21,791,876	2,608,263	8,408,234	24,030,646	6,335,636
Gas System	**Descriptor**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Labor	Cost for installation of distribution Gas assets, pre-inspection testing, decommissioning of legacy system (Gas Design cost was previously incorporated here) **(Specific to SDG&E, no gas design costs were previously incorporated in this line item)**									
Material / Structures	Pipes, fittings and other necessary materials required for gas construction	56,502		1,087,792	289,745	987,793	161,083	391,767	1,250,591	283,516
Electric System	**Descriptor**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Program Participation		**Per Space Results (Not Cumulative)**								
Labor	Cost for installation of distribution Electric assets, pre-inspection testing, decommissioning of legacy system (Electric Design cost was previously incorporated here) **(Specific to SDG&E, no gas design costs were previously incorporated in this line item)**									
Material / Structures	Cables, conduits, poles, transformers and other necessary materials for electrical construction	120,753		1,381,437	424,020	1,203,267	241,761	468,872	916,960	272,584
Design/Construction Management	Cost for engineering, design and construction inspection cost	595,034		9,359,496	3,033,849	8,469,527	1,283,666	940,757	4,561,740	1,591,850
Other	**Descriptor**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Labor (Internal)	Meter installation, gas relights, easements, environmental desktop reviews and other support organizations, **including legacy system deco-mmissioning internal labor**	3,453		80,885	14,880	241,225	74,353	152,958	349,398	112,500
Other Labor (Internal)										
Non-Labor	Permits, **vehicle utilization, consultant support (e.g., environmental monitoring)**	58,665		1,304,619	126,556	663,743	391,763	117,873	1,466,979	292,466
Materials	meters, modules and regulators	695,588		948,094	557,164	1,577	715,260	798,234	483,240	157,270

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Program Participation		**Per Space Results (Not Cumulative)**								
Program - Capital Costs	Costs that are inconsistent among the other IOUs, driven by utility specific business models or cost accounting practices. These costs should be separated out so that others do not compare costs that are not comparable with others.									
Project Management Costs	**Descriptor**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Project Management Office (PMO)	Program management office costs (Project Management, Program Management, schedulers, cost analysts and field engineers)	233,323		4,187,082	1,323,454	3,421,672	707,956	439,576	1,817,022	538,791
Outreach										
Other	**Descriptor**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Property Tax	Property tax on capital spending not yet put into service	13,438		359,016	110,158	392,778	40,626	104,315	198,389	37,666
AFUDC	AFUDC is a mechanism in which the utility is allowed to recover the financing cost of its construction activities. AFUDC starts when the first dollar is recorded on the project and ends when HCD complete the first inspection so that the new assets are in use by the residents	32,754		1,082,953	243,024	1,579,174	206,833	519,895	987,198	183,406
Labor (Internal)										

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Program Participation		**Per Space Results (Not Cumulative)**								
Non-Labor	Utility specific overhead driven by corporate cost model	574,833		7,374,106	3,548,304	6,527,490	816,385	939,275	2,860,608	904,660
Sub-Total Capital Cost		**4,349,746**	-	**61,502,700**	**20,871,106**	**61,601,600**	**13,248,501**	**20,275,690**	**53,520,778**	**14,736,407**
To The Meter - Expense Costs	**Descriptor**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Project Management Costs										
Project Management Office (PMO)	Program startup cost, **program management activities associated with Outreach or other non-capital activities**	17,969		281,490	133,384	444,058	57,212	36,769	232,281	64,843
Outreach	Outreach efforts to educate MHP Owners, residents, government and local agencies about the program	64,041		992,989	226,028	672,443	193,499	150,862	307,816	15,651
Other										
Labor (Internal)	Program startup cost for supporting organizations, **meter removal**			32,438	3,677	21,964	1,177	3,347	7,015	7,066
Other Labor (Internal)	**Construction management expenses costs (e.g., training, supplies)**	5,225		76,905	13,723	13,474	3	16,044	2	
Non-Labor	Cancelled Project Costs from MHPs that have failed to complete the MHP agreement or have cancelled the project,	12,731		373,140	54,154	63,636	28,411	5,368	32,071	9,681

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	2017	2018	2019	2020	2021	2022	2023	2024	2025
Program Participation		Per Space Results (Not Cumulative)								
	vehicle utilization, and overheads associated with meter removal									
Sub-Total To The Meter		4,449,712	-	63,259,661	21,302,073	62,817,174	13,528,803	20,488,079	54,099,963	14,833,649
Beyond The Meter - Capital	Pass through cost where the MHP Owner is responsible for overseeing the vendor's work and IOU to reimburse per D.14-02-021									
Civil/Trenching	All civil labor for BTM construction, such as landscaping (does not include trenching work)	34,810		1,081,236	35,996	94,405	22,095	42,467	54,902	13,320
Electric System	Descriptor	2017	2018	2019	2020	2021	2022	2023	2024	2025
Labor	Labor and material for installing BTM Electric infrastructure (e.g. Pedestal, foundation, meter protection, grounding rods, conduit)	463,588		5,137,733	2,514,492	6,158,131	1,097,712	1,290,407	3,520,687	816,062
Material / Structures		245,442		4,205,085	1,820,504	5,088,927	1,041,865	1,345,420	3,404,279	836,917
Gas System	Descriptor	2017	2018	2019	2020	2021	2022	2023	2024	2025
Labor	Labor and material for installing BTM Gas infrastructure (e.g. houselines, meter protection, foundation)	324,953		4,713,546	1,554,274	5,214,112	376,732	895,945	3,219,999	707,659

Annual Report Template		Per-year costs; (not cumulative)								
	Descriptor	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Program Participation		**Per Space Results (Not Cumulative)**								
Material / Structures		83,822		1,575,335	694,480	2,203,121	150,185	497,742	1,760,674	413,214
Other	**Descriptor**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Other Labor (Internal)										
Other Non Labor	BTM Permits, including HCD fees	135,988		3,751,509	321,522	1,240,097	137,090	223,729	763,940	195,825
Sub-Total Beyond The Meter		**1,288,602**	**-**	**20,464,443**	**6,941,267**	**19,998,791**	**2,825,679**	**4,295,708**	**12,724,481**	**2,982,995**
Total TTM & BTM		**5,738,315**	**-**	**83,724,105**	**28,243,340**	**82,815,965**	**16,354,482**	**24,783,788**	**66,824,444**	**17,816,644**

The variances compared to prior annual reports stem from several factors, including previously unallocated administrative cost allocations, credits for faulty materials received in 2021, and orders or costs that were omitted or not fully captured in earlier filings. In addition, costs related to meters, regulators, and transformers were previously estimated using average values and have now been updated to reflect actual incurred costs. The variances also include park-related costs associated with the 2024 period that were received and recorded in 2025.

TABLE 2: RATE IMPACT AND REVENUE REQUIREMENT

- Rate impact and revenue requirements are reported based on actual revenue requirement filings for 2015-2025 (i.e., not based on year of financial closure); 2026-2031 revenue requirements and rate impacts are forecasted based on actual filings (i.e., not forecasted program costs).
- Regulatory interest is applicable to the entire Master Meter Balancing Account ("MMBA") balance which includes both TTM and BTM costs. Since the MMBA does not include subaccounts to separate the TTM and BTM balances, regulatory interest for these components of the MMBA is not available. For purposes of this response, regulatory interest is included in the "Gas Revenue Requirement – TTM" line in this table.

- The Present Value Revenue Requirement was calculated as the sum of 1) actual revenue requirements from 2015-2025 and 2) the Present Value of revenue requirements for 2026-2031 discounted to 2025 nominal dollars using SDG&E's rate of return (7.41%). SDG&E does not typically calculate present value of total revenue requirements for rate-making purposes. Although amortization amounts will be collected in rates over a 12-month period, this exercise assumed simplified collection at year-end.
- Revenue requirements are in millions of dollars.
- Gas rate impact dollar amounts are rounded to the nearest hundred thousandths of a dollar to illustrate a visible rate change.

Rate Impact and Revenue Requirement																		
Rate Impact	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	
Gas																		
Average Rate w/o MMBA recovery - Core	N/A	$0.75407	$0.77261	$0.65949	$0.66627	$1.04484	$1.08594	$1.08664	$1.21280	$1.20316	$1.20316	$1.20316	$1.20316	$1.20316	$1.20316			
Average Rate w/ MMBA recovery - Core	N/A	$0.75490	$0.72707	$0.66139	$0.67733	$1.05978	$1.09673	$1.10564	$1.23474	$1.23243	$1.24057	$1.26052	$1.26685	$1.27209	$1.27754			
Rate Change - Core	N/A	$0.00083	$0.00093	$0.00190	$0.01106	$0.01494	$0.01079	$0.01900	$0.02194	$0.02927	$0.03741	$0.05736	$0.06369	$0.06893	$0.07438			
% Rate Change - Core	N/A	0.11%	0.13%	0.29%	1.66%	1.43%	1.00%	1.75%	1.81%	2.43%	3.11%	4.77%	5.29%	5.73%	6.18%			
Average Rate w/o MMBA recovery - Non-Core	N/A	$0.02262	$0.02427	$0.02992	$0.03122	$0.05073	$0.05263	$0.05409	$0.07909	$0.12141	$0.12141	$0.12141	$0.12141	$0.12141	$0.12141			
Average Rate w/ MMBA recovery - Non-Core	N/A	$0.02263	$0.02429	$0.02998	$0.03144	$0.05096	$0.05290	$0.05442	$0.07957	$0.12199	$0.12433	$0.12451	$0.12461	$0.12466	$0.12471			
Rate Change - Non-Core	N/A	$0.00001	$0.00001	$0.00006	$0.00021	$0.00023	$0.00027	$0.00033	$0.00049	$0.00058	$0.00292	$0.00311	$0.00320	$0.00325	$0.00330			
% Rate Change - Non-Core	N/A	0.06%	0.05%	0.19%	0.69%	0.45%	0.50%	0.60%	0.61%	0.48%	2.41%	2.56%	2.64%	2.68%	2.72%			
Electric																		
Average Rate w/o MMBA recovery - Total System (cents/kWh)	N/A	20.364	21.781	23.991	23.735	24.596	23.993	31.059	38.471	31.526	33.310	39.323	39.323	39.323	39.323	39.323	39.323	
Average Rate w/ MMBA recovery - Total System (cents/kWh)	N/A	20.366	21.783	23.997	23.761	24.614	24.031	31.132	38.578	31.624	33.435	39.427	39.404	39.395	39.399	39.406	39.411	
Rate Change - Total System (cents/kWh)	N/A	0.002	0.002	0.006	0.026	0.018	0.038	0.073	0.107	0.098	0.125	0.104	0.081	0.072	0.076	0.083	0.088	
% Rate Change - Total System	N/A	0.01%	0.01%	0.03%	0.11%	0.07%	0.16%	0.24%	0.28%	0.31%	0.37%	0.26%	0.20%	0.18%	0.19%	0.21%	0.22%	
Revenue Requirement (In Millions)	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**Present Value Revenue Requirement**
Gas Revenue Requirement-TTM	$0.000	$0.424	$0.192	$0.124	$3.952	$5.593	$3.900	$6.160	$8.397	$11.652	$15.365	$12.668	$20.790	$24.861	$28.344	$33.178	$38.034	$174.903
Electric Revenue Requirement-TTM	$0.000	$0.243	$0.185	$0.170	$2.924	$4.979	$4.120	$6.496	$10.703	$11.174	$8.584	$11.735	$7.385	$6.523	$7.375	$8.385	$9.410	$89.698
Gas Revenue Requirement-BTM	$0.000	$0.000	$0.299	$0.863	$1.827	$2.207	$1.781	$3.921	$3.244	$3.922	$3.376	$3.218	$3.241	$3.510	$4.217	$5.133	$5.947	$40.705
Electric Revenue Requirement-BTM	$0.000	$0.000	$0.231	$0.925	$2.076	$2.921	$2.771	$5.995	$6.838	$6.128	$6.257	$5.621	$6.106	$5.488	$5.296	$5.426	$5.311	$60.325

4. Program Assessment and Challenges

As previously reported, as part of its ongoing efforts to control program costs, SDG&E successfully broadened the pool of contractors that bid on MHP projects for the 2025 conversion cycle. This expanded participation resulted in more competitive pricing at lower cost levels than those seen in the prior two years. SDG&E will continue pursuing cost-efficiency opportunities throughout its operations, including evaluating emerging technologies, improving supply-chain coordination, strengthening project management practices, and promoting robust competitive bidding. These efforts remain central to SDG&E's commitment to delivering reliable and affordable program outcomes while upholding high standards of quality and safety.

As previously described, the CPUC's December 19, 2024 approval of the TY 2024 GRC resulted in a determination that certain MHP Program costs recorded through 2021 were unreasonable, prompting the Commission to direct the Utility Audits Branch to conduct an audit, which began in May of 2025 and remains ongoing. In light of the GRC Decision's findings regarding the reasonableness of SDG&E's MHP Program costs, and with the UAB audit ongoing, SDG&E program conversion activities remain on hold while it participates in the audit process and addresses the associated GRC implications with the CPUC. While SDG&E remains hopeful that the audit and subsequent refiling for recovery will be successfully concluded, there is presently no defined timeline for the duration of this pause.

Program Penetration

As previously stated, SDG&E has successfully partnered with MHP Owners/Operators and, as of December 31, 2025, completed nearly 31% of the eligible mobilehome spaces in SDG&E's service territory.

Safety Performance

From 2014 through 2019, SDG&E maintained a high safety standard with no reportable incidents over approximately 430,000 hours of labor logged between contractors and MHP program employees combined. In 2020, SDG&E continued to maintain a high safety standard with one reportable contractor first-aid incident over approximately 89,000 hours. SDG&E was incident free in 2021 over approximately 70,000 hours of labor for contractors and MHP program employees combined. Over the course of 2022, there were no incidents over approximately 99,000 hours. In 2023, there were three reportable contractor first-aid incidents over approximately 169,000 hours of combined contractors' and MHP program employees' labor. In 2024, contractors experienced three Controlled Motor Vehicle Incidents (CMVI), two first-aid, and two Lost Time incidents over approximately 86,000 hours. Notably, there were no reportable incidents among MHP program employees' over approximately 22,000 hours.

Conversion activities in 2025 to complete ongoing park conversion from 2024 was also incident free. In total, nearly 100 MHPs with systems older than 40 years have received new utility-owned and maintained distribution systems that meet current SDG&E standards.

5. Conclusion

This concludes the annual filing in accordance with SED's instructions. Additional Program information can be found online on SDG&E's website at https://www.sdge.com/mobilehome-conversion.

This annual report may be accessed at: https://www.sdge.com/regulatory-filing/21081/mobilehome-park-utility-upgrade-program.[8]

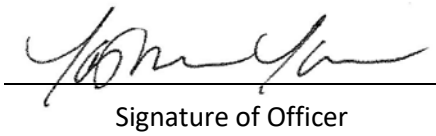
[8] D.20-04-004, OP 10 requires the utilities to post copies of their Annual Report on their respective websites.

Mobilehome Park Utility Upgrade Program
Management Certification

California Public Utilities Commission (CPUC) Decision (D.) 14-03-021 Ordering Paragraph 11 requires that all reports be verified by an officer of the utility.

As an officer of San Diego Gas & Electric Company (SDG&E), I hereby certify that the Mobilehome Park Utility Upgrade Program Annual Report generated in compliance with D.14-03-021 is accurate.

Reporting Period: 01/01/2025 (Start Date) to 12/31/2025 (End Date)



Signature of Officer

Executed on: Janruary 29, 2026

Month, Day, Year

Tashonda Taylor

Print Name

Vice President - Gas Operations

Title

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

DECLARATION OF ROBERT PISANESCHI REGARDING CONFIDENTIALITY OF CERTAIN DOCUMENTS PURSUANT TO D.17-09-023

I, Robert Pisaneschi, do declare as follows:

1. I am the Mobilehome Park and Capital Gas Construction Manager for San Diego Gas & Electric Company ("SDG&E"). I have been delegated authority to sign this declaration by Tashonda Taylor, Vice President of Gas Operations for SDG&E. I have reviewed the confidential information included within SDG&E's Mobilehome Park Utility Conversion Program Annual Report ("Annual Report"). I am personally familiar with the facts and representations in this Declaration and, if called upon to testify, I could and would testify to the following based upon my personal knowledge and/or belief.

2. I hereby provide this Declaration in accordance with Decision ("D.") 17-09-023 and its subsequent decisions and General Order ("GO") 66-D to demonstrate that the confidential information ("Protected Information") provided in the Annual Report is within the scope of data protected as confidential under applicable law.

3. In accordance with the legal authority described herein, the Protected Information should be protected from public disclosure.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge.

Executed this 29th day of January 2026 at San Diego, California.

Robert B Pisaneschi

Robert Pisaneschi
MHP & Capital Gas Construction Manager

ATTACHMENT A

SDG&E Request for Confidentiality on the following Protected Information in its Mobilehome Park Utility Conversion Program Annual Report

Description and Location of Data	Legal Citations	Narrative Justification
Information highlighted in yellow in the accompanying List of Active Parks to SDG&E's Mobilehome Park (MHP) Utility Conversion Program Annual Report contains customer information (i.e., California Department of Housing and Community Identification (HCD ID), MHP names, city, and Permit to Operate (PTO) count).	California Public Records Act (CPRA) Exemption, Gov't Code § 7927.705 ("Records, the disclosure of which is exempted or prohibited pursuant to federal or state law"): • Cal. Civil Code § 1798.21 (requiring agencies to "ensure the security and confidentiality of" personal data) • Cal. Civil Code § 1798.24 (limiting disclosure of personal information) • Cal. Civil Code §§ 1798.80 *et seq.* (process for protecting customer records) CPRA Exemption, Gov't Code § 7927.700 ("disclosure of which would constitute an unwarranted invasion of personal privacy").	The yellow-highlighted cells contain customer information that is market-sensitive and, if revealed, could put the MHP at an unfair business disadvantage because it provides nonpublic information regarding MHP program participation. Unfair business disadvantages include but are not limited to: (1) a competitive disadvantage in which other MHP owners who have not participated in a similar program may use this information to their advantage, potentially attracting residents away from the disclosed park. (2) Difficulty in attracting investors. Prospective investors or partners may be hesitant to get involved with a MHP park whose owner has participated in a program, fearing potential financial risks or challenges tied to easements and their ability to develop the property. (3) Impact on property values. Knowledge of the owner's participation in a program could raise concerns among current and potential residents about the financial health of the MHP park. This, in turn, could impact property values within the MHP park. Further, such personal information, if disclosed, could pose a risk of fraud, identity theft, or other personal, commercial, or financial damage to the customers. Disclosure may also constitute an "unwarranted invasion of personal privacy."

Confidential and Protected Materials Provided Pursuant to PUC Section 583, GO 66-D Revision 2, and D.21-09-020

SDG&E 2025 Annual Report List of Active Parks

*Financial Completion: project costs have been recorded and any remaining costs not recorded are estimated to fall within 5% of total project costs

**Construction Completion: cutover completed and master meter removed; final costs have not been recorded

***PTO (Permit to Operate) counts may not represent actual spaces in scope for conversion

HCD ID	NAME	STATUS	CITY	COUNTY	PTO COUNT***	GAS IOU	ELECTRIC IOU
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	ORANGE	[redacted]	SoCalGas	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SoCalGas	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SoCalGas	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E
[redacted]	[redacted]	Financially complete*	[redacted]	SAN DIEGO	[redacted]	SDG&E	SDG&E

[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	inancially complete*	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	progress	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	progress	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	progress	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	progress	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	progress	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	progress	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E
[redacted]	progress	[redacted]	AN DIEGO	[redacted]	DG&E	SDG&E

APPENDIX E

GRC-RAMP INTEGRATION

Area: GAS DISTRIBUTION

Witness: TaShonda Taylor

GRC - RAMP Integration

GRC Workpaper	GRC Wkp Description	RAMP WKP	RAMP Wkp Description	RAMP Unit Measure	TOTAL (in 000s)							UNITS						
					2025	2026	2027	2028	2029	2030	2031	2025	2026	2027	2028	2029	2030	2031
005010.003	Non-collectible RAMP C139 portion of 005010 - Gas Distribution Safety Relocations	1CR03 C139	SDG&E-Risk-3 Medium Pressure Gas System GD Safety Relocations	Projects	4,687	2,125	2,125	2,125	2,125	2,125	2,125	57	35	35	35	35	35	35
005070.001	Code Compliance - Base Capital	1CR03 C150	SDG&E-Risk-3 Medium Pressure Gas System Code Compliance Mitigation	Projects	3,533	3,561	3,562	3,563	3,563	3,563	3,563	1,380	1,380	1,380	1,380	1,380	1,380	1,380
005080.001	Leak Repair & Restoration	1CR03 C131	SDG&E-Risk-3 Medium Pressure Gas System Leak Repair	Leaks Repaired	14,033	15,242	15,244	15,255	15,255	15,254	15,253	342	439	439	439	439	439	439
005090.001	Cathodic Protection - Base Capital	1CR03 C107	SDG&E-Risk-3 Medium Pressure Gas System Cathodic Protection Program - Capital	Projects	10,178	10,217	10,217	10,219	10,219	10,219	10,219	105	105	105	105	105	105	105
005100.001	System Reliability & Safety	1CR03 C124	SDG&E-Risk-3 Medium Pressure Gas System Regulator Station Installation Replacement & Enhancement	Projects	3,664	3,752	3,753	3,753	3,753	3,753	3,753	5	9	9	9	9	9	9

Note: Totals may include rounding differences. Total amounts preceded by a double asterisk (**) are in millions ($MM). Unit values preceded by a single asterisk (*) are displayed in thousands (000s).

Area: GAS DISTRIBUTION

Witness: TaShonda Taylor

GRC - RAMP Integration

GRC Workpaper	GRC Wkp Description	RAMP WKP	RAMP Wkp Description	RAMP Unit Measure	TOTAL (in 000s)							UNITS						
					2025	2026	2027	2028	2029	2030	2031	2025	2026	2027	2028	2029	2030	2031
005140.001	Base Capital for Underperforming Mains and Services	1CR03 C007	SDG&E-Risk-3 Medium Pressure Gas System Underperforming Mains and Services	Feet Replaced	8,180	15,044	15,045	15,047	15,047	15,047	15,047	10,560	27,778	27,778	27,778	27,778	27,778	27,778
225740.001	Base Capital for Meter Protection	1CR03 C175	SDG&E-Risk-3 Medium Pressure Gas System Residential Meter Protection	Locations protected	2,470	8,000	8,000	8,000	8,000	8,000	8,000	2,500	7,283	7,283	7,283	7,283	7,283	7,283
D95460.001	DIMP Execution	1CR03 C182	SDG&E-Risk-3 Medium Pressure Gas System Distribution Risk Evaluation & Monitoring System (DREAMS)	Miles	28,002	16,000	25,673	28,025	28,025	28,025	28,025	11	8	16	17	17	17	17

Note: Totals may include rounding differences. Total amounts preceded by a double asterisk (**) are in millions ($MM). Unit values preceded by a single asterisk (*) are displayed in thousands (000s).

Area: GAS DISTRIBUTION

Witness: TaShonda Taylor

GRC - RAMP Integration

GRC Workpaper	GRC Wkp Description	RAMP WKP	RAMP Wkp Description	RAMP Unit Measure	TOTAL (in 000s)							UNITS						
					2025	2026	2027	2028	2029	2030	2031	2025	2026	2027	2028	2029	2030	2031
1GD000.001	Field O&M - Infrastructure Patrol & Inspection	1OR03 C134	SDG&E-Risk-3 Medium Pressure Gas System Pipeline Monitoring	Inspections & Surveys	3,291	3,346	3,346	3,346	3,346	3,346	3,346	891	891	891	891	891	891	891
1GD000.002	Field O&M - Damage Prevention (Electric Fiber Optic & Gas)	1OR02 C002	SDG&E-Risk-2 High Pressure Gas System Damage Prevention Activities - Gas	Tickets	94	98	100	102	104	106	108	4,030	4,114	4,199	4,286	4,375	4,465	4,557
1GD000.002	Field O&M - Damage Prevention (Electric Fiber Optic & Gas)	1OR03 C002	SDG&E-Risk-3 Medium Pressure Gas System Damage Prevention Activities - Gas	Tickets	4,468	4,639	4,734	4,831	4,931	5,033	5,136	*191	*195	*199	*203	*207	*211	*216
1GD000.002	Field O&M - Damage Prevention (Electric Fiber Optic & Gas)	1OR05 C267	SDG&E-Risk-5 Electric Infrastructure Integrity Damage Prevention Activities Electric Underground	Tickets	4,161	4,319	4,408	4,499	4,592	4,686	4,783	*195	*199	*203	*207	*211	*216	*220
1GD000.003	Field O&M - Leak Repair & Restoration	1OR03 C005	SDG&E-Risk-3 Medium Pressure Gas System Gas Distribution Emergency Department	Responses	2,055	2,095	2,095	2,095	2,094	2,094	2,094	1,334	1,334	1,334	1,334	1,334	1,334	1,334

Note: Totals may include rounding differences. Total amounts preceded by a double asterisk (**) are in millions ($MM). Unit values preceded by a single asterisk (*) are displayed in thousands (000s).

Area: GAS DISTRIBUTION

Witness: TaShonda Taylor

GRC - RAMP Integration

GRC Workpaper	GRC Wkp Description	RAMP WKP	RAMP Wkp Description	RAMP Unit Measure	TOTAL (in 000s)							UNITS						
					2025	2026	2027	2028	2029	2030	2031	2025	2026	2027	2028	2029	2030	2031
1GD000.003	Field O&M - Leak Repair & Restoration	1OR03 C131	SDG&E-Risk-3 Medium Pressure Gas System Leak Repair	Leaks Repaired	3,962	4,012	4,011	4,011	4,011	4,011	4,010	731	731	731	731	731	731	731
1GD001.000	Distribution Technical Services	1OR02 C001	SDG&E-Risk-2 High Pressure Gas System Damage Prevention Strategies	Employees	7	7	7	7	7	7	7	0	0	0	0	0	0	0
1GD001.000	Distribution Technical Services	1OR02 C004	SDG&E-Risk-2 High Pressure Gas System Damage Prevention Mapping	Reconciled work orders	10	10	10	10	10	10	10	63	63	63	63	63	63	63
1GD001.000	Distribution Technical Services	1OR03 C001	SDG&E-Risk-3 Medium Pressure Gas System Damage Prevention Strategies	Employees	316	316	316	316	316	316	316	6	6	6	6	6	6	6
1GD001.000	Distribution Technical Services	1OR03 C004	SDG&E-Risk-3 Medium Pressure Gas System Damage Prevention Mapping	Reconciled work orders	484	484	484	484	484	484	484	2,984	2,984	2,984	2,984	2,984	2,984	2,984

Note: Totals may include rounding differences. Total amounts preceded by a double asterisk (**) are in millions ($MM). Unit values preceded by a single asterisk (*) are displayed in thousands (000s).

Area: GAS DISTRIBUTION

Witness: TaShonda Taylor

GRC - RAMP Integration

GRC Workpaper	GRC Wkp Description	RAMP WKP	RAMP Wkp Description	RAMP Unit Measure	TOTAL (in 000s)							UNITS						
					2025	2026	2027	2028	2029	2030	2031	2025	2026	2027	2028	2029	2030	2031
1GD001.000	Distribution Technical Services	1OR03 C144	SDG&E-Risk-3 Medium Pressure Gas System Human Factors Mitigation – QA/QC Program – Mandate Compl Act	Employees	242	242	242	242	242	242	242	4	4	4	4	4	4	4
1GD002.000	Measurement & Regulation	1OR03 C115	SDG&E-Risk-3 Medium Pressure Gas System Regulator Station Valve and Large Meter Set Inspection	Inspections	4,558	4,558	4,558	4,558	4,558	4,558	4,558	5,439	5,439	5,439	5,439	5,439	5,439	5,439
1GD003.000	Cathodic Protection	1OR03 C101	SDG&E-Risk-3 Medium Pressure Gas System Cathodic Protection Program - O&M	CP and follow up reads	2,298	2,333	2,333	2,333	2,333	2,333	2,332	29,120	29,120	29,120	29,120	29,120	29,120	29,120
1GD005.000	Training	1OR03 C169	SDG&E-Risk-3 Medium Pressure Gas System Human Factors Mitigations - Op. Qual. Training	OpQuals Trained	2,931	2,971	2,971	2,970	2,970	2,970	2,970	3,179	3,179	3,179	3,179	3,179	3,179	3,179

Note: Totals may include rounding differences. Total amounts preceded by a double asterisk (**) are in millions ($MM). Unit values preceded by a single asterisk (*) are displayed in thousands (000s).