

Decision **PROPOSED DECISION OF ALJ LARSEN (Mailed 11/14/2025)**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California
Gas Company (U904G) for Authority,
Among Other Things, to Update its
Gas Revenue Requirement and Base
Rates Effective on January 1, 2024

Application 22-05-015

And Related Matter.

Application 22-05-016

**DECISION ADDRESSING SAN DIEGO GAS & ELECTRIC COMPANY'S
TRACK 2 REQUEST FOR RECOVERY OF WILDFIRE MITIGATION PLAN
MEMORANDUM ACCOUNT COSTS**

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Appendix A – Cost Reduction Summary

Appendix B - Authorized Results of Operation Model

**DECISION ADDRESSING SAN DIEGO GAS & ELECTRIC COMPANY'S
TRACK 2 REQUEST FOR RECOVERY OF WILDFIRE MITIGATION PLAN
MEMORANDUM ACCOUNT COSTS**

Summary

In this application, San Diego Gas & Electric Company (SDG&E) seeks recovery of costs recorded in its Electric and Gas Wildfire Mitigation Plan Memorandum Accounts (WMPMAs) from May 2019 through the end of 2022, above amounts not authorized by the Commission in SDG&E's 2019 Test Year General Rate Case (GRC) decision (Decision (D.) 19-05-051). The amount requested includes recovery of operations and maintenance (O&M) costs totaling \$284 million and capital expenditures placed in service during the 2019 to 2022 period of \$1,188 million.¹

SDG&E also seeks recovery of the undercollection of revenue requirement for depreciation, taxes, and the return on rate base for capital assets placed into service from 2019 to 2022 through the period from 2023 to 2027, totaling \$774.3 million.²

This decision finds unreasonable and disallows \$206.140 million in O&M costs and \$242.467 million in capital expenditures.³ These numbers include the cost of drone inspection and repair costs. The Commission defers the determination of the authorization of these costs until Track 3 of this proceeding. The Commission approves the balance requested of \$77.86 million in O&M

¹ SDG&E Opening Brief at p. 6.

² SDG&E Opening Brief at p. 6.

³ See Appendix B Cost Reduction Summary.

expenses and \$945.533 million in capital expenditures.⁴ The Commission finds these costs to be reasonable, critical investments in wildfire mitigation required by legislation to reduce wildfire risk.

Tables 1 and 2 below detail the costs approved and disallowed by initiative or program.

Table 1

Capital Requests, Reductions, and Authorizations (\$000)

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
Circuit Ownership	\$713	\$713	\$0	\$0	\$0
Detailed Inspections of Distribution Equipment.	\$6,383	\$0	\$31,000	\$0	\$37,382
Detailed Inspections of Distribution Underbuild	\$225	\$225	\$1,684	\$146	\$1,538
Drone Assessments of Dist. Infrastructure	\$80,809	\$80,809	\$9,150	\$9,150	\$0

⁴ See Appendix C Results of Operation Model (Total for Electric and Gas).

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
HFTD ⁵ Tier 3 Inspections	\$3,111	\$3,111	\$7,478	\$2,597	\$4,882
Infrared Inspections of Distribution Infrastructure	\$0	\$0	\$0	\$0	\$0
Intrusive Pole Inspections	\$2,064	\$0	\$4,250	\$0	\$6,314
Patrol Inspections of Distribution Equipment	\$927	\$927	\$3,364	\$774	\$2,591
<i>AM&I⁶ Total</i>	\$94,233	\$85,785	\$56,926	\$12,666	\$52,707
Centralized Repository for Data	\$35,742	\$35,742	\$3,453	\$3,453	\$0
Document. & Disclosure	\$8,714	\$8,714	\$505	\$505	\$0
<i>Data Governance (DG) Total</i>	\$44,456	\$44,456	\$3,958	\$3,958	\$0

⁵ High Fire Threat Districts (HFTDs).

⁶ Asset Management and Inspections (AM&I).

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
CO, PA, & Comm. Efforts ⁷	\$7,686	\$7,686	\$1,002	\$1,002	\$0
Emergency Management Operations	(\$5,237)	\$0	\$0	\$0	(\$5,237)
<i>Emergency Planning & Preparedness (EP&P) Total</i>	<i>\$2,449</i>	<i>\$7,686</i>	<i>\$1,002</i>	<i>\$1,002</i>	<i>(\$5,237)</i>
Advanced Protection	(\$7,267)	\$82	\$21,188	\$35	\$13,805
Avian Mitigation	(\$1,852)	\$0	\$2,219	\$0	\$368
Cleveland National Forest Fire Hardening	\$64,440	\$0	\$27,251	\$0	\$91,691
Covered Conductor	\$136,496	\$25,959	\$29,322	\$5,577	\$134,282
Distribution, Communication Reliability Improvements	\$42,622	\$0	\$21,686	\$0	\$64,307

⁷ Community Outreach (CO), Public Awareness (PA), and Communication Efforts (CE).

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
Distribution Overhead (OH) System Hardening	\$97,139	\$922	\$76,839	\$186	\$172,869
Expulsion Fuse Replacement	\$17,922	\$0	\$13,500	\$0	\$31,422
Generator Assistance Programs	\$0	\$0	\$0	\$0	\$0
Generator Grant Programs	\$0	\$0	\$0	\$0	\$0
Hotline Clamps	\$0	\$0	\$0	\$0	\$0
Lightning Arrestor Replacements	\$5,556	\$0	\$4,569	\$0	\$10,125
Microgrids	\$20,170	\$0	\$12,320	\$0	\$32,490
Public Safety Power Shutoff (PSPS) Sectionalizing Enhancements	\$11,135	\$0	\$8,275	\$0	\$19,410
SCADA ⁸ Capacitors	(\$1,946)	\$0	\$5,129	\$0	\$3,183

⁸ Supervisory Control and Data Acquisition (SCADA).

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
Standby Power Programs	\$0	\$0	\$0	\$0	\$0
Strategic Undergrounding	\$241,233	\$24	\$48,404	\$5	\$289,608
Transmission Overhead System Hardening - Dist. Underbuild	\$14,321	\$0	\$11,558	\$0	\$25,879
<i>Grid Design & System Hardening (GD&SH) Total</i>	\$639,968	\$26,987	\$282,260	\$5,803	\$889,437
Aviation Firefighting Program	\$32,601	\$32,601	\$4,564	\$4,564	\$0
Personnel Work Procedures	\$851	\$851	\$130	\$130	\$0
<i>GO&OP⁹ Total</i>	\$33,452	\$33,452	\$4,695	\$4,695	\$0
Summarized Risk Map	\$1,869	\$0	\$58	\$0	\$1,927

⁹ Grid Operations and Operations Protocols (GO&OP).

Initiative	Direct Costs (DC) Request ed	DC Reducti on	Indire ct Costs (IC)	IC Reducti on	Authoriz ed
<i>Risk Assessment & Mapping (RA&M) Total</i>	\$1,869	\$0	\$58	\$0	\$1,927
Allocation Methodology Development. & App.	\$0	\$0	\$41	\$0	\$41
<i>RAM Total</i>	\$0	\$0	\$41	\$0	\$41
Advanced Weather Monitoring & Stations	-\$229	\$0	\$582	\$0	\$352
Air Quality Index	\$0	\$0	\$55	\$0	\$55
Camera Network	\$9	\$0	\$0	\$0	\$9
Fire Potential Index	\$4,539	\$0	\$67	\$0	\$4,606
Fire Science & Climate Adaptation Department	\$0	\$0	\$0	\$0	\$0
High Performance Computing Infrastructure	\$5,240	\$0	\$102	\$0	\$5,342
Wireless Fault Indicators	(\$6,548)	\$0	\$2,517	\$0	(\$4,031)

Initiative	Direct Costs (DC) Request ed	DC Reducti on	Indire ct Costs (IC)	IC Reducti on	Authoriz ed
<i>Situational Awareness & Forecasting (SA&F) Total</i>	\$3,010	\$0	\$3,323	\$0	\$6,333
Community Engagement - Outreach & Public Awareness	\$0	\$0	\$0	\$0	\$0
PSPS Communicati on Practices	\$15,809	\$15,809	\$821	\$821	\$0
<i>SC&CE¹⁰ Total</i>	\$15,809	\$15,809	\$821	\$821	\$0
WILDFIRE MITIGATION PLAN MEMORAND UM ACCOUNT (WMPMA) Total	\$835,24 7	\$214,17 6	\$353,0 82	\$28,945	\$945,209

¹⁰ Stakeholder Cooperation & Community Engagement (SC&CE).

Table 2

O&M Requests, Reductions, and Authorizations (\$000)

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
Circuit Ownership	\$0	\$0	\$0	\$0	\$0
Detailed Inspections of Distribution Equipment	-\$45,998	\$0	\$1,700	\$0	-\$44,298
Detailed Inspections of Distribution Underbuild	\$0	-\$225	\$0	\$0	\$225
Drone Assessments of Distribution Infrastructure	\$137,446	\$137,446	\$4,800	\$4,800	\$0
HFTD Tier 3 Inspections	\$0	-\$3,111	\$0	\$0	\$3,111
Infrared Inspections of Distribution Infrastructure	\$577	\$577	\$300	\$300	\$0
Intrusive Pole Inspections	\$2,987	\$0	\$500	\$0	\$3,487
Patrol Inspections of Distribution Equipment	\$0	-\$927	\$0	\$0	\$927
<i>AM&I Total</i>	<i>\$95,013</i>	<i>\$133,761</i>	<i>\$7,300</i>	<i>\$5,100</i>	<i>-\$36,547</i>
Centralized Repository for Data	\$0	\$0	\$0	\$0	\$0
Document. & Disclosure	-\$692	\$0	\$500	\$0	-\$192

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
<i>Data Governance Total</i>	-\$692	\$0	\$500	\$0	-\$192
CO, PA, & Communications Efforts	\$0	-\$7,686	\$0	\$0	\$7,686
Emergency Management Operations	\$34,472	\$102	\$7,800	\$19	\$42,151
<i>EP&P Total</i>	\$34,472	-\$7,584	\$7,800	\$19	\$49,837
Advanced Protection	\$153	\$0	\$0	\$0	\$153
Avian Mitigation	\$17	\$0	\$0	\$0	\$17
Cleveland National Forest Fire Hardening	\$2,456	\$0	\$149	\$0	\$2,606
Covered Conductor	\$3,762	\$0	\$187	\$0	\$3,949
Distribution Communication Reliability Improvements	\$715	\$0	\$0	\$0	\$715
Distribution OH System Hardening	-\$10,586	\$671	\$693	\$43	-\$10,608
Expulsion Fuse Replacement	\$0	\$0	\$0	\$0	\$0
Generator Assistance Programs	\$2,250	\$0	\$174	\$0	\$2,424
Generator Grant Programs	\$17,117	\$0	\$392	\$0	\$17,509
Hotline Clamps	\$9,937	\$0	\$1,006	\$0	\$10,943

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
Lightning Arrestor Replacement	\$28	\$0	\$0	\$0	\$28
Microgrids	\$3,292	\$0	\$135	\$0	\$3,427
PSPS Sectionalizing Enhancements	\$0	\$0	\$0	\$0	\$0
SCADA Capacitors	\$0	\$0	\$0	\$0	\$0
Standby Power Programs	\$22,744	\$247	\$268	\$3	\$22,762
Strategic Undergrounding	\$176	\$0	\$0	\$0	\$176
TOSH - Dist. Underbuild	\$0	\$0	\$0	\$0	\$0
<i>GD&SH Total</i>	<i>\$52,060</i>	<i>\$918</i>	<i>\$3,005</i>	<i>\$46</i>	<i>\$54,100</i>
Aviation Firefighting Program	-\$1,675	\$0	\$0	\$0	-\$1,675
Personnel Work Procedures	\$878	\$0	\$52	\$0	\$930
<i>GO&OP Total</i>	<i>-\$797</i>	<i>\$0</i>	<i>\$52</i>	<i>\$0</i>	<i>-\$745</i>
Summarized Risk Map	\$1,824	\$0	\$619	\$0	\$2,443
<i>RA&M Total</i>	<i>\$1,824</i>	<i>\$0</i>	<i>\$619</i>	<i>\$0</i>	<i>\$2,443</i>
Allocation Method Development & App.	\$7,964	\$7,964	\$3,387	\$2,044	\$1,343
<i>RAM Total</i>	<i>\$7,964</i>	<i>\$7,964</i>	<i>\$3,387</i>	<i>\$2,044</i>	<i>\$1,343</i>
Advanced Weather Monitoring & Stations	\$0	\$0	\$0	\$0	\$0
Air Quality Index	\$0	\$0	\$0	\$0	\$0

Initiative	Direct Costs (DC) Requested	DC Reduction	Indirect Costs (IC)	IC Reduction	Authorized
Camera Network	\$0	\$0	\$0	\$0	\$0
Fire Potential Index	\$0	\$0	\$0	\$0	\$0
Fire Science & Climate Adaptation Department	\$1,854	\$175	\$2,518	\$39	\$4,158
High Performance Computing Infrastructure	\$0	\$0	\$0	\$0	\$0
Wireless Fault Indicators	\$0	\$0	\$0	\$0	\$0
<i>SA&F Total</i>	<i>\$1,854</i>	<i>\$175</i>	<i>\$2,518</i>	<i>\$39</i>	<i>\$4,158</i>
Community Engagement - Outreach & Public Awareness	\$1,614	\$1,614	\$307	\$307	\$0
PSPS Communication Practices	\$31,055	\$31,055	\$2,509	\$2,509	\$0
<i>SC&CE Total</i>	<i>\$32,669</i>	<i>\$32,669</i>	<i>\$2,816</i>	<i>\$2,816</i>	<i>\$0</i>
Fuels Management	\$22,442	\$22,442	\$1,526	\$1,526	\$0
LiDAR Inspections	\$4,152	\$4,152	\$28	\$28	\$0
Pole Brushing	\$3,139	\$0	\$915	\$0	\$4,055
Vegetation Restoration Initiative	\$1,265	\$1,265	\$53	\$53	\$0
<i>VM&I Total</i>	<i>\$30,998</i>	<i>\$27,859</i>	<i>\$2,523</i>	<i>\$1,608</i>	<i>\$4,055</i>
<i>WMPMA Total</i>	<i>\$255,366</i>	<i>\$195,763</i>	<i>\$30,519</i>	<i>\$11,671</i>	<i>\$78,451</i>

The Commission also disallows \$16.9 million in gas wildfire mitigation costs.

On October 27, 2023, SDG&E was granted interim relief to recover \$289.9 million in rates during 2024 and 2025 for the undercollected WMPMA, subject to refund.¹¹ This decision authorizes a total revenue requirement for 2019–2027 of \$706.475 million less the amount that SDG&E collected for interim rate relief of \$289.9 million in 2024–2025, resulting in a total revenue requirement of \$416.575 million.¹² To reduce the rate impact and to support rate stability for California Alternate Rates for Energy and Family Electric Rate Assistance program customers, the Commission authorizes SDG&E to amortize the balance of the undercollected revenue requirement owed through 2025 over a period of three years. As a result, the average non-CARE customer bill will increase by \$5.09 or 2.94%.¹³

This proceeding remains open.

1. Background

The service territory of San Diego Gas & Electric Company (SDG&E) is exposed to a range of wildfire risks, including those from Santa Ana winds, dry fuels, and extreme heat (each of which has been directly linked to large and destructive wildfires). These wildfires may in some cases be sparked by powerlines or other electrical infrastructure. The heat map in Figure 1 below illustrates the wildfire risk across SDG&E's territory that is increasing with

¹¹ D.24-02-010.

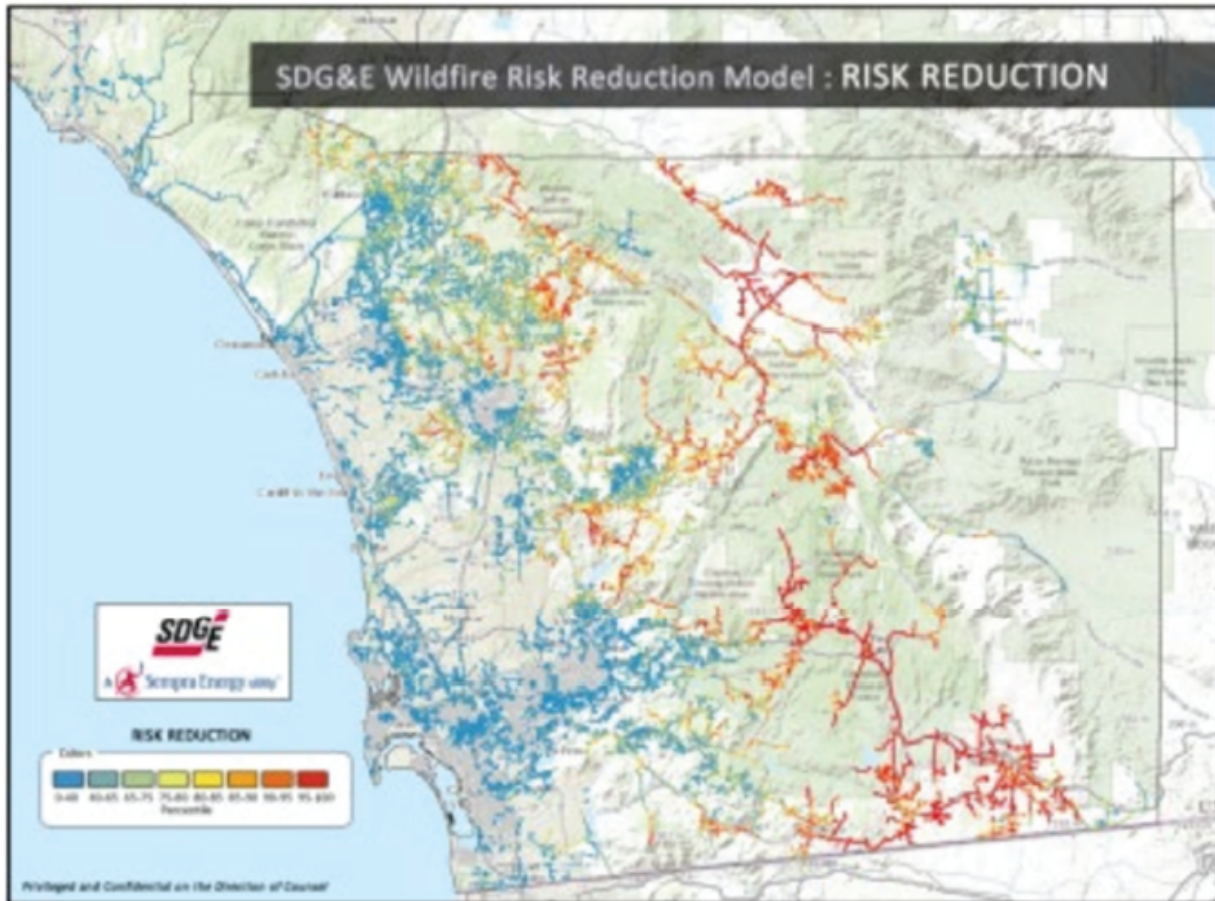
¹² See Appendix C; Section 14, Table C-1.

¹³ Proposed Decision Appendix D Residential Monthly Bill Impact.

climate change.¹⁴

¹⁴ SDG&E Opening Brief at 33; SDG&E T2 Ex-01-R at 2; SDG&E T2 Ex-01-R-C at 98.

FIGURE 1
Illustrative Wildfire Risk Heat Map



In 2007, the risk in this territory produced the ninth most destructive fire in California history.¹⁵ In addition to the history of wildfires in SDG&E's service

¹⁵ The Commission proposes to take official notice of the California Department of Forestry list of the Top 20 Most Destructive California Wildfires available at https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/calfire-website/our-impact/fire-statistics/top20_destruction_072525. Grounds exist for taking official notice of the above pursuant to Rule 13.9 of the Commission's Rules of Practice and Procedure and California Evidence Code Section 452. If a party objects to the Commission taking official notice of this

Footnote continued on next page.

territory, the wildfire mitigation costs SDG&E seeks to recover here arise from recent legislation and Commission decisions requiring the evaluation of wildfire risks, and mitigation plans. Given the magnitude of these developments, their impact on SDG&E's request, and how the parties considered them, these developments are described in this background section to give necessary context for this decision. These developments and other matters are presented in the following sections: (1) Wildfire Mitigation Requirements, (2) Wildfire Risk Analysis, (3) Wildfire Mitigation Plans, (4) Denial of recommendation that SDG&E be required to refile this application to improve its cost-effectiveness showing, (5) SDG&E's 2019 Test Year General Rate Case, Wildfire Mitigation Plans (WMPs) and Wildfire Mitigation Plan Memorandum Account (WMPMA), and the SDG&E Track 2 Request, (6) Summary of Intervenor Positions, (7) Procedural Background, and (8) Submission Date.

1.1. Wildfire Mitigation Requirements

Beginning in late 2018, and in response to the growing risk of catastrophic wildfires throughout California, the California Legislature significantly expanded its wildfire mitigation statutory framework, enacting Senate Bill (SB) 901¹⁶ and Assembly Bill (AB) 1054¹⁷ (collectively, the "2019 Wildfire Legislation"). Together, these statutes: (i) created a wildfire insurance fund for utility-caused wildfires, (ii) declared that the state's utilities needed to invest in

information, the party shall file and serve a motion to object within 10 days of the service of this proposed decision.

¹⁶ Stats. 2018, Ch. 626, effective January 1, 2019.

¹⁷ Stats. 2019, Ch. 79, effective July 12, 2019.

both hardening the state's electrical infrastructure and improving vegetation management to reduce the risk of catastrophic wildfires, (iii) required shareholders of large electrical corporations to collectively fund \$5 billion in safety investments (without return on equity that would have otherwise been borne by ratepayers), and (iv) created a special process to focus on developing and implementing WMPs.

The 2019 Wildfire Legislation established the WMP as the primary mechanism for evaluating each electrical corporation's portfolio of wildfire risk reduction programs. Each utility is required to prepare a WMP to assess its level of wildfire risk and provide plans for reducing that risk. The 2019 Wildfire Legislation requires electric utilities to reexamine their wildfire mitigation initiatives and to "construct, maintain, and operate their electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment" in accordance with required WMPs,¹⁸ including "hardening of the state's electrical infrastructure, vegetation management, and reducing the scale and scope of PSPS events."¹⁹ Each utility submits its WMP to the Office of Energy Infrastructure Safety (OEIS) for review and approval and subsequent ratification by the Commission. Public Utilities Code Section 8386.4 states that upon approval of an electrical corporation's WMP, the Commission shall authorize the electrical corporation to establish a

¹⁸ Public Utilities (Pub. Util.) Code Section 8386(a).

¹⁹ AB 1054, Stats. 2019–2020, Ch. 79 at Sec. 2.

memorandum account to track costs incurred to implement the plan.²⁰ The Commission is later required to review the costs in the memorandum accounts and disallow recovery of costs the Commission deems unreasonable.²¹

State law, OEIS, and the Commission require an electrical corporation's WMP to:

- Describe the measures taken, or planned to be taken, to reduce the need for and impact of Public Safety Power Shutoff (PSPS) events, including replacing, hardening, or Strategic Undergrounding of any portion of the circuit or of upstream transmission or distribution lines.²²
- Describe the actions taken to ensure the electrical system will achieve the highest level of safety, reliability, and resiliency, and to ensure that its system is prepared for a major event, including hardening and modernizing its infrastructure with improved engineering, system design, standards, equipment, and facilities, such as undergrounding, insulating of distribution wires, and replacing poles."²³
- Describe where and how the electrical corporation considered undergrounding electrical distribution lines within those areas of its service territory identified to have the highest wildfire risk.²⁴
- Quantify the overall utility risk of PSPS events and the reduction of that risk on an annual basis, along with providing three- and

²⁰ Pub. Util. Code Section 8386.4(a). Throughout this Decision, citations are to statutes as were in effect when this application was filed, notwithstanding later changes effected by SB 254 (2025).

²¹ Pub. Util. Code Section 8386.4(b).

²² Pub. Util. Code Section 8386(c)(8).

²³ Pub. Util. Code Section 8386(c)(14).

²⁴ Pub. Util. Code Section 8386(c)(15).

ten-year plans to reduce the “scale, scope, and frequency of PSPS events.”²⁵

- Engage in additional efforts, including but not limited to system hardening, to reduce the need for and scope of de-energizations, and report on those efforts to the public.²⁶

Recognizing the danger of severe wind conditions contributing to the ignition of fires related to utility infrastructure,²⁷ the Commission ordered utilities to adopt enhanced procedures in “Extreme and Very High Fire Threat Zones” and adopted on an interim basis the then-current “Fire Threat Map” published by the California Department of Forestry and Fire Protection’s Fire Resources Assessment Program.²⁸ In 2017, the Commission refined the fire safety map by adopting a High Fire Threat District (HFTD), consisting of three areas: Tier 1, Tier 2, and Tier 3.²⁹

Tier 1 areas “are in direct proximity to communities, roads, and utility lines, and represent a direct threat to public safety.”³⁰ Approximately 64% of SDG&E’s service territory is within the Tier 2 and Tier 3 areas where there is an increased potential for wildfires:³¹

²⁵ Office of Energy Infrastructure Safety, 2023–2025 Wildfire Mitigation Plan Technical Guidelines (December 6, 2022) at 63-65, 199.

²⁶ Decision (D.) 20-05-051, Decision Adopting Phase 2 Updated and Additional Guidelines for De-Energization of Electric Facilities to Mitigate Wildfire Risk (issued June 5, 2020) at 71-72.

²⁷ D.09-08-029 at 11.

²⁸ SDG&E T2 Ex-01-R at 2.

²⁹ D.17-12-024 at 2.

³⁰ D.17-12-024 at 2.

³¹ SDG&E T2 Ex-01-R at 2.

- Tier 2, “elevated risk for destructive utility-associated wildfires;” and
- Tier 3, “extreme risk for destructive utility-associated wildfires.”

In D.17-12-024, the Commission prioritized corrective work timeframes in the HFTD, increased wire and vegetation clearance requirements, established inspection cycles for distribution facilities in the HFTD, and required electric Investor-Owned Utilities (IOUs) with power lines in the HFTD to prepare Fire Prevention Plans.³²

1.2. Wildfire Risk Analysis

To understand and quantify risk prior to the 2019 legislative requirements, SDG&E developed the Wildfire Risk Reduction Model (WRRM) in 2013. The WRRM provided the methodology to prioritize spans of high-risk wires for replacement and informed SDG&E’s early Covered Conductor and Strategic Undergrounding work. In addition, the company performed a wind study based on weather information available at the time to increase grid design standards from withstanding 56 mph winds to winds of 65 mph, 85 mph, and 111 mph. Combined with situational awareness, the WRRM prioritization, and the wind study, SDG&E’s initial grid hardening efforts reduced wildfire risk in the HFTD.³³

Initially, SDG&E reduced risk by hardening and replacing bare wire. However, since this work did not sufficiently reduce the risk of ignition by

³² SDG&E T2 Ex-01-R at 2-3; *see also* D.17-12-024, Appendix A at A-37.

³³ SDG&E Opening Brief at 23.

overhead wire in high-risk conditions, SDG&E's primary early wildfire mitigation efforts also relied heavily on de-energization of power lines.³⁴

As expanded use of PSPS throughout the state demonstrated, however, PSPS itself poses risks to customers. Those risks include human error in the selection of lines for de-energization and the re-energization process—which could start an ignition—in addition to the customer and financial risks associated with sustained loss of power. Because of these threats, SDG&E says that extensive use of PSPS is not a sustainable approach consistent with the mandates of Pub. Util. Code §8386(c)(8) to examine PSPS impacts and alternatives to mitigate negative effects. As a result of the need to reduce the scale, scope, and frequency of PSPS, SDG&E shifted to more permanent risk reduction efforts, including covering conductors, Strategic Undergrounding of lines, and other hardening of high-risk segments.³⁵

To evaluate the reduction of risk from grid hardening work, SDG&E developed its Wildfire Next Generation System Model (WiNGS). WiNGS enables risk assessment and further prioritization of distribution grid hardening based on both an assessment of SDG&E's overall system risk at the portfolio level, and the risk of the specific circuit segment under analysis.³⁶ SDG&E states that WiNGs is based on the risk spend efficiency (RSE) methodology adopted in

³⁴ SDG&E Opening Brief at 23.

³⁵ SDG&E Opening Brief at 23-24.

³⁶ SDG&E Opening Brief at 24.

SDG&E's Risk Assessment and Mitigation Phase (RAMP) proceeding to analyze wildfire risk and PSPS risk.

In 2021, SDG&E developed a more granular Probability of Ignition (PoI) model at the asset and ignition source level and gathered data on significant ignitions, ignition sources, and weather. This model captures the ignition risk associated with specific ignition drivers.³⁷

In D.19-05-039, the Commission also required SDG&E to measure the effectiveness of wildfire mitigations in reducing the risk of its electrical lines and equipment causing catastrophic wildfires and include them in its 2020 and future WMPs.³⁸

1.3. Wildfire Mitigation Plans

Following the 2007 wildfires in SDG&E's service territory and the 2019 Wildfire Legislation, SDG&E has been enhancing its wildfire prevention and mitigation measures across a wide spectrum of disciplines and activities. The scope of these activities includes Strategic Undergrounding, overhead system hardening (expanded use of Covered Conductors, bare conductor overhead hardening, additional sectionalizing or circuit reconfigurations, and falling conductor protection), enhanced vegetation management, fuels management, and providing backup generation either in the form of individual customer generators or microgrid solutions.³⁹

³⁷ SDG&E T2 Ex-01-R at 20.

³⁸ D.19-05-039, Ordering Paragraph 8.

³⁹ SDG&E 2020 WMP Section 5.3.8.4.2.

OEIS and the Commission have approved and ratified SDG&E's WMPs covering the period from 2019–2022 with conditions. OEIS's conditioned approval of SDG&E's WMPs and recommendations for continuing improvement are located on OEIS's website. As SDG&E's WMPs have progressed, the Commission has reviewed and approved or ratified SDG&E's WMPs⁴⁰ and issued decisions providing additional guidance.⁴¹ In addition, SDG&E's compliance with its WMP is subject to various OEIS actions to monitor compliance with its WMPs,⁴² subject to modification based on costs presented in General Rate Cases (GRCs) such as this.⁴³

OEIS's and the Commission's review and approval of Wildfire Mitigation Plans does not evaluate the reasonableness of WMP costs⁴⁴ or their cost-effectiveness. Rather, each utility must implement its approved WMP according to the prudent manager standard. This standard requires acts or decisions to result in the lowest reasonable cost consistent with good utility practices, which requires costs to be reasonable based on cost-effectiveness, reliability, safety, and expedition.⁴⁵ Utilities subsequently seek cost recovery for WMP implementation. It is then the Commission's responsibility to approve only cost recovery from

⁴⁰ D.19-05-039, Decision on San Diego Gas & Electric Company's 2019 Wildfire Mitigation Plan Pursuant to Senate Bill 901.

⁴¹ <https://www.cpuc.ca.gov/about-cpuc/divisions/safety-policy-division/wildfire-and-safety-performance-implementation-of-wildfire-mitigation-plans>.

⁴² SDG&E Opening Brief at 15-16.

⁴³ D.24-12-074 at 468.

⁴⁴ D.24-12-074 at 468.

⁴⁵ D.22-06-032 at 8; D.17-11-033 at 10 quoting D.87-06-021.

ratepayers of reasonably incurred costs and “disallow recovery of those costs the commission deems unreasonable” (Pub. Util. Code Section 8386.4(b)(1)).

SDG&E provided information to Commission staff and parties in response to deficiencies noted in WMPs. To provide a more complete record in this proceeding, the Administrative Law Judges (ALJs) issued a ruling ordering that this information be submitted as evidence. Other parties were also provided an opportunity to provide supplementary evidence.⁴⁶ SDG&E submitted this additional evidence, documenting how SDG&E responded to all deficiencies noted in resolutions approving its WMPs for the years 2019–2022.⁴⁷

1.4. Cost-Effectiveness and Denial of Recommendation to Require Refiling of This Application

TURN recommends that the Commission require SDG&E to refile this application given what TURN asserts is an inadequate showing by SDG&E of the cost-effectiveness supporting its requested cost recoveries.⁴⁸ We address this threshold issue in this background section. For the reasons stated below, the Commission denies TURN’s recommendation.

SDG&E states that it considered cost-effectiveness as one of many factors in determining the reasonableness of its wildfire mitigations, and that SDG&E’s approach to its WMP initiatives has been founded on continual efforts to maximize cost-effective mitigation strategies.⁴⁹ In addition to SDG&E’s wildfire

⁴⁶ Administrative Law Judge Ruling Requiring Additional Evidence dated February 18, 2025.

⁴⁷ SDG&E T2 Ex-09.

⁴⁸ TURN Opening Brief at 20.

⁴⁹ SDG&E Opening Brief at 22.

risk models, SDG&E's WMPs since 2020 have included the "quantitative risk assessment framework adopted in D.18-12-014 in the Safety Model Assessment Proceeding to evaluate and compare the cost-effectiveness of each of the mitigations that were under consideration in developing the WMP."⁵⁰ In the decision approving SDG&E's 2019 WMP,⁵¹ the Commission required SDG&E to use the quantitative risk assessment framework adopted in D.18-12-014 (in the Safety Model Assessment Proceeding) to evaluate and compare the cost-effectiveness of each of the mitigations that were under consideration in developing the Wildfire Mitigation Plan. In SDG&E's 2022 WMP Update, it presented each initiative or category of work, the risk the work mitigates, and in applicable cases, the estimated risk reduction, the initiative selected, the region prioritized, progress on the initiative, and planned updates. SDG&E states further that SDG&E's 2022 WMP Update contains a detailed assessment of the cost-effectiveness of Covered Conductor. This included a comparison of capital costs per circuit mile, and a detailed discussion of SDG&E's costs associated with Covered Conductor installation. SDG&E's 2020, 2021, and 2022 WMP submissions also included tables listing the RSE for each WMP initiative for which an RSE could be calculated, further broken down by location, including territory-wide, non-HFTD, Tier 2, and Tier 3.⁵² SDG&E states that the RSE analysis required for the 2022 WMPs was consistent with Resolution WSD-011,

⁵⁰ SDG&E Opening Brief at 25.

⁵¹ D.19-05-039.

⁵² See also SDG&E T2 Ex-06 at 8-11.

which defined an RSE as “[a]n estimate of the cost-effectiveness of initiatives, calculated by dividing the mitigation risk reduction benefit by the mitigation cost estimate based on the full set of risk reduction benefits estimated from the incurred costs.”⁵³

TURN argues that SDG&E’s direct testimony does not contain sufficient analysis of the costs of the specific initiatives underlying the utility’s request here, particularly regarding the amount spent and its cost-effectiveness during the period in question. In support, TURN states that for each of SDG&E’s WMP initiatives, the utility’s cost showing was limited to reporting the recorded costs, broken out between capital and operations and maintenance (O&M) costs, and a differential for categories with GRC-authorized costs. In further support, TURN states that SDG&E did not provide an explanation of the choices the utility made to verify the reasonableness of its wildfire mitigation expenditures, including whether they were cost-effective.⁵⁴

PCF largely agrees with TURN, arguing that SDG&E’s Track 2 application for cost recovery does not include information the Commission has previously found to be deficient in WMPs and other risk-related filings. For example, PCF points out that in Resolution WSD-005 the Commission found SDG&E’s 2020 WMP did not adequately address: 1) how SDG&E factors its modeling into decision-making, and whether and how it updates its models based on lessons

⁵³ SDG&E Opening Brief at 26.

⁵⁴ TURN Opening Brief at 9-10.

learned;⁵⁵ 2) SDG&E's identification and description of the details of its more costly planned investments, or of its decision-making process with respect to its various planned initiatives; and 3) sufficient detail on Strategic Undergrounding pilots. With regard to the latter, the Commission conditioned ratification of SDG&E's 2020 WMP on 11 pages of deficiencies and conditions in Appendix A of Resolution WSD-005.⁵⁶ Lastly, in SDG&E's 2021 WMP Update, the Commission concluded that SDG&E continued to fail to provide information necessary to assess SDG&E's decision-making processes, cost-effectiveness, and prioritization of wildfire risk-reducing measures that the Commission had repeatedly demanded.⁵⁷

The Commission recognizes SDG&E's efforts to mitigate the risk of wildfires and to maximize the cost-effectiveness of those efforts. The Commission agrees with intervenors, however, who show that SDG&E continues to lag in specifically evaluating wildfire mitigation strategies for cost-effectiveness.

The Commission acknowledges that the evaluation of cost-effectiveness has evolved. Earlier in the 2019–2022 period, for example, SDG&E used the metric of ignitions avoided. Later, the Commission required the use of risk-based metrics, including RSEs, to propose wildfire mitigations. However, as with the

⁵⁵ Resolution WSD-005 at 11.

⁵⁶ The conditions included reporting on the findings of Strategic Undergrounding pilot initiatives, outlining what data it plans to collect and report for project scope, cost, and schedule of these projects, and explaining how it intends to track and measure the effectiveness of these projects in comparison to other WMP initiatives. Resolution WSD-005, SDG&E T2 Ex-4 at A-3.

⁵⁷ PCF Opening Brief at 13-15.

use of risk-based metrics in Track 1 of this proceeding, the reasonableness of any cost may be influenced by other factors.⁵⁸ Consequently, the analysis cannot necessarily stop if one factor is not provided, particularly if other factors are more significant. For example, as discussed below, some initiatives, such as patrol inspections, are mandated by regulation. Other initiatives are required based on functional or operational considerations, such as weather monitoring.

In considering the cost-effectiveness of an expenditure, the Commission must consider the general definition of cost-effectiveness in producing optimum results along with the nature of the cost, its context, and the availability of alternatives. The Commission considers all of the above factors in determining the reasonableness of SDG&E's requests in this proceeding.

For these reasons, the Commission denies TURN's request to require SDG&E to refile its application.⁵⁹ Instead, the Commission proceeds with evaluating this application as filed by SDG&E in the context described above. In future applications for cost recovery, the Commission requires that SDG&E provide and apply the required Cost Benefit Ratios.⁶⁰ This metric will facilitate a more thorough and effective analysis of costs and benefits of wildfire mitigation costs in future applications requesting cost recovery.

⁵⁸ D.24-12-074 at 53.

⁵⁹ TURN Opening Brief at 20.

⁶⁰ D.22-12-027.

1.5. SDG&E's Test Year 2019 General Rate Case, WMPs and WMPMA, and SDG&E's Track 2 Request

The decision for SDG&E's last GRC for Test Year 2019 (D.19-09-051) authorized \$751.062 million for wildfire mitigation activities for 2019–2022. D.19-09-051 was written prior to the passage of the 2019 Wildfire Legislation.⁶¹ Thus, SDG&E's 2019 GRC decision did not account for and fund the expedited wildfire risk reduction activities included in SDG&E's 2019–2022 WMPs that were the result of the 2019 Wildfire Legislation. The Test Year 2019 GRC was submitted in 2017 and litigated before the HFTD boundaries were established and without the new requirements that would result from the then-pending legislation.⁶² As a result, the 2019 GRC decision did not specify the authorized costs in categories used by SDG&E for cost recovery here. SDG&E sought to provide reasonable alignment by imputing authorized amounts, units of work, and work locations, and explained its calculations in its response to the ALJs' August 6, 2024 ruling.⁶³

Anticipating that wildfire mitigation activities may need to include initiatives and costs not forecast through the GRC process, the 2019 Wildfire Legislation required the Commission to authorize wildfire mitigation plan memorandum accounts (WMPMAs) to track costs incurred to implement WMPs.⁶⁴ The Commission authorized SDG&E's WMPMAs effective May 30,

⁶¹ SDG&E Opening Brief at 4, citing to D.19-09-051; SDG&E T2 Ex-01R at 7-8.

⁶² D.19-05-36 at 5.

⁶³ SDG&E T2 Ex-09 at 2.

⁶⁴ Pub. Util. Code § 8386.4(a). *See also* D.19-05-039 at Conclusion of Law (COL) 16.

2019⁶⁵ to record costs incurred to implement SDG&E's Commission-approved WMPs not otherwise recovered through revenues previously authorized in the prior GRC.⁶⁶

SDG&E began recording costs for wildfire mitigation work on January 16, 2019 by establishing a Fire Risk Mitigation Memorandum Account (FRMMA) via Advice Letter (AL) 3333-E. After the approval of its WMP, SDG&E transferred applicable costs recorded in the FRMMA to the WMPMA consistent with its approved advice letters.⁶⁷

SDG&E requests recovery of a total of \$284 million in O&M⁶⁸ and \$1,188 million in capital to its electric and gas WMPMAs,⁶⁹ resulting in a total undercollection of \$1,147 million.⁷⁰ The capital expenditures are recovered on an annual basis as depreciated capital over the life of each asset and included in the total revenue requirement. SDG&E's request for recovery of electric direct costs is summarized in the table below.

Table 1.5

SDG&E's Track 2 Request for 2019–2022 Direct Costs (\$000)⁷¹

⁶⁵ SDG&E WMPMA Preliminary Statement, Revised CPUC Sheet No. 32534-E, Oct. 31, 2019 at 1.

⁶⁶ SDG&E Opening Brief at 19-20.

⁶⁷ SDG&E Advice Letter (AL) 3454-E/2817-G; SDG&E AL 3453-E filed October 31, 2019.

⁶⁸ GRC T2 Wildfire Mitigation Workpaper – Revised 020924.xls; SDG&E T2 Ex-02-R at 7; SDG&E T2 Ex-09.

⁶⁹ SDG&E Opening Brief at 6.

⁷⁰ GRC T2 Wildfire Mitigation Workpaper – Revised 020924.xls; SDG&E T2 Ex-02-R at 7; SDG&E T2 Ex-09.2.

⁷¹ SDG&E Opening Brief, Table 1 at 29-30.

Category	Actual Capital	Actual O&M	Authorized Capital	Authorized O&M	Differential Requested Capital	Differential Requested O&M
Risk Assessment and Mapping	1,869	1,824	-	-	1,869	1,824
Situational Awareness and Forecasting	15,997	11,442	12,987	9,588	3,010	1,854
Grid Design and System Hardening	1,177,380	73,363	537,412	21,302	639,968	52,061
Asset Management and Inspections	139,338	145,641	45,105	50,628	94,233	95,013
Vegetation Management and Inspections	-	47,550	-	16,552	-	30,998
Grid Operations and Protocols	33,452	35,380	-	36,177	33,452	(797)
Data Governance	44,456	1,321	-	2,013	44,456	(692)
Resource Allocation Methodology	-	13,198	-	5,234	-	7,964
Emergency Planning and Preparedness	7,686	42,203	5,237	7,732	2,449	34,471
Stakeholder Cooperation and Community Engagement	15,809	33,765	-	1,096	15,809	32,669
Total	1,435,987	405,687	600,741	150,322	835,247	255,366

In addition to the depreciated capital for assets placed in service from May 30, 2019 to December 31, 2022, SDG&E also requests recovery of the undercollected taxes and return on rate base for the 2019–2022 period. SDG&E requests these costs as part of the additional total revenue requirement for the 2024–2027 period.⁷² These costs are reflected in the totals in Section 14 below. Sections 4 through 12 address SDG&E’s requests for recovery of direct costs. Section 13 addresses SDG&E’s requests for recovery of indirect costs.

⁷² SDG&E Opening Brief at 6.

1.6. Summary of Intervenor Arguments and Recommendations

Due to the number of intervenor arguments that apply across many of SDG&E's requests, each intervenor's primary arguments are summarized here.

1.6.1. TURN

The Utility Reform Network (TURN) argues that SDG&E fails to demonstrate that the utility meaningfully or sufficiently considered cost-effectiveness and other key indicia of reasonableness in developing and implementing the various initiatives. As a result, TURN recommends that SDG&E be required to re-file its Track 2 application with the accrual of interest suspended on its refiled application. Secondly, TURN recommends that the Commission provide guidance for any securitization application the utility chooses to present.

More specifically, TURN argues that SDG&E's direct testimony does not contain sufficient analysis of the costs of the specific initiatives underlying the utility's request here, particularly with regard to establishing that the amount spent was cost-effective during the period in question. For each of the initiatives, the utility's cost showing was limited to reporting the recorded costs, broken out between capital and O&M. For the initiatives that had a GRC-authorized cost figure, SDG&E provided the authorized figures. And SDG&E calculated a "differential" figure that was either equal to the recorded cost figure (for initiatives that had not been included in the 2019 GRC) or a net cost reflecting the GRC-authorized amount subtracted from the recorded cost figure. SDG&E

provided such information for the 2019–2022 period for each category of initiatives, and broken out by annual amounts for each individual initiative.⁷³

1.6.2. Cal Advocates

The Public Advocates Office of the California Utilities Commission (Cal Advocates) recommends reductions to direct costs of \$398.822 million in capital expenditures and \$124.988 in O&M expenses because Cal Advocates claims they are unsupported or unreasonable, and an imprudent use of ratepayer funds, including \$97.092 million in capital expenditures and \$2.557 million in O&M expenses for Grid Design and System Hardening.⁷⁴

For indirect costs, Cal Advocates primarily recommends reductions in the following:

- \$27.684 million in expense overhead and \$268.589 million in capital overhead.
- \$1.810 million of WMP costs based on an extrapolation from Ernst & Young’s finding that certain costs are outside the scope of the WMPMA.⁷⁵

Cal Advocates recommends that SDG&E’s request for \$775.00 million in ongoing capital-related costs from 2023 through 2027 be reviewed in a separate proceeding.⁷⁶

⁷³ TURN Opening Brief at 1.

⁷⁴ Cal Advocates Opening Brief at 1-2.

⁷⁵ See Section 13.6 for background on the Ernst & Young report.

⁷⁶ Cal Advocates Opening Brief at 2-3.

1.6.3. PCF

The Protect our Communities Foundation argues that SDG&E failed to support the reasonableness of its application because: 1) SDG&E failed to demonstrate it implemented its wildfire mitigation programs cost-effectively and to demonstrate the cost-effectiveness of its application in many respects; 2) SDG&E's testimony regarding some 2019 and 2020 WMP cost figures conflict with SDG&E's prior attestations to the Commission about the amounts SDG&E spent on specific WMP programs in 2019 and 2020; 3) SDG&E chose not to include its 2019 WMP with its application;⁷⁷ 4) recovery of some costs should be denied based on a 2021 audit recommendation of the Commission and OEIS;⁷⁸ 5) SDG&E should have adopted a local solar-plus-storage (SPS) alternative;⁷⁹ 6) SDG&E should be held accountable for the substantial and unreasonable delays in filing its application for cost recovery for the 2019–2022 period;⁸⁰ 6) SDG&E's securitization proposal would unreasonably increase rates.⁸¹

1.6.4. UCAN

Utility Consumers Action Network (UCAN) makes three primary recommendations.⁸² First, the Commission should extrapolate from the amount that auditor Ernst & Young found from its sampling to be ineligible for recovery

⁷⁷ PCF Opening Brief at 2.

⁷⁸ PCF Opening Brief at 3-4, 35.

⁷⁹ PCF Opening Brief at 6.

⁸⁰ PCF Opening Brief at 18.

⁸¹ PCF Opening Brief at 6-7.

⁸² UCAN Opening Brief at 1-2.

from ratepayers to all of SDG&E's WMP spending under consideration in this proceeding, which would result in an additional adjustment of \$1,733,313 million. Second, the Commission should exercise heightened scrutiny in the form of audits over much of SDG&E's recorded expenditures for wildfire safety. Third, UCAN recommends adopting TURN's securitization proposal.

1.6.5. SBUA

Small Business Utility Advocates (SBUA) recommends denial of \$31 million for the Aviation Firefighting Program and SDG&E's request for approval of \$775 million for projected costs for the 2023–2027 period.⁸³

In relation to small businesses, SBUA requests that the Commission take the following actions:⁸⁴

- Require SDG&E to survey a representative sample of small commercial customers to obtain gross profit, income before taxes, and net income information to calculate rate burden estimates;
- Require SDG&E to convene a small business working group to provide direct input on the design of an affordability framework and related metrics for small commercial ratepayers within three months of the adoption of the final decision.
- In future applications, require SDG&E to:
 - Present rate impact information (i) in the context of average small commercial customer monthly bills (as is done for residential customers), (ii) by climate zone, and (iii) for each of the three prototypical small commercial

⁸³ SBUA Opening Brief at 2.

⁸⁴ The Commission finds these requests to be outside the scope of this cost recovery proceeding but potentially appropriate to the Rulemaking to Establish a Framework and Processes for Assessing the Affordability of Utility Service (proceeding R.18-07-006).

customer business types listed in the most recent Senate Bill 695 Report, and

- Present the amount and percent of rate impact of all other proposed and approved rate increases over the same period to understand the context of severity of the specific application.

1.7. Procedural Background

On May 16, 2022, SDG&E filed its general rate case application (GRC) Application (A.) A.22-05-016 for authority to increase its authorized revenues for gas and electric service in 2024, among other things, and to reflect that increase in rates. SDG&E's Application also included a request to recover 2019–2022 costs recorded in SDG&E's WMPMA.

The October 3, 2022 Assigned Commissioner's Scoping Memorandum defined the issues for Track 2 and determined the schedule that was modified on July 26, 2024.

On October 27, 2023, SDG&E submitted its Track 2 testimony supporting its request that the Commission find just and reasonable its incremental costs and expenses for its wildfire mitigation initiatives from May 30, 2019 through December 31, 2022, and authorize recovery of the undercollected costs and ongoing revenue requirement in rates.

Also on October 27, 2023, SDG&E filed a motion for interim rate relief requesting approval of interim rate recovery of 50% of SDG&E's electric WMPMA recorded balance as of December 31, 2022. D.24-02-010 granted in part SDG&E's requested interim rate relief, authorizing SDG&E to recover (subject to refund) \$289.9 million of the potentially undercollected WMPMA balance in rates in 2024 and 2025.

On February 9, 2024, SDG&E served the revised direct testimony of Jonathan Woldemariam and Craig Gentes. This testimony revised the categorization of wildfire costs to reflect their designations as of year-end 2022 without changing the actual revenues SDG&E requests in Track 2.

On June 17, 2024, Cal Advocates, UCAN, SBUA, PCF, and TURN served intervenor testimony in Track 2. On July 26, 2024, SDG&E and TURN served rebuttal testimony.

On August 6, 2024, the ALJs issued a ruling requiring the service of the following additional evidence: 1) information that maps how any work categories have changed since the 2019 GRC and describes whether WMP work categories include work categories used in the 2019 GRC; 2) units of work and unit costs for work categories authorized in D.19-09-051; 3) the work authorized in D.19-09-051 and the status of completion for the entire SDG&E service territory and for HFTD areas; and 4) consistent with Track 2 SDG&E Exhibit T2 Ex-06 Appendix 1, the variance between the work authorized in D.19-09-051 and SDG&E's request for work in A.22-05-016.

On August 12–13, 2024, the Commission held evidentiary hearings for the cross-examination of utility and intervenor witnesses and the admission of exhibits.

On September 26, 2024, SDG&E, Cal Advocates, TURN, UCAN, PCF, and SBUA filed opening briefs; and on October 10, 2024, the same parties filed reply briefs.

On February 18, 2025, the ALJs issued a ruling requiring the service of additional evidence to document how SDG&E responded to all deficiencies

noted in resolutions approving its WMPs for the years 2019–2022. SDG&E timely submitted such information as a Supplemental Exhibit.

On July 21, 2025, the ALJs issued a ruling admitting additional evidence over PCF’s objection, including documents of the Commission and OEIS describing deficiencies in SDG&E’s WMPs and SDG&E’s responses to them.

As requested by PCF in accordance with Commission Rules of Practice and Procedure (Rules) Rule 13.13, oral arguments were held on December 15, 2025.

1.7.1. Submission Date

This matter was submitted on July 29, 2025 with the filing of the ALJ’s last ruling admitting exhibits.

2. Issues to Be Decided and Standards of Review

2.1. Issues Before the Commission

The issues to be determined or otherwise considered are:

1. Whether the expenditures SDG&E recorded in its Wildfire Mitigation Plan Memorandum Account from its inception in May 2019 through December 31, 2022 are reasonable and prudent for cost recovery;
2. Whether programs align with California’s climate objectives, decarbonization goals, and whether the expenditures result in just and reasonable rates; and
3. Whether SDG&E’s Application aligns with the Commission’s Environmental and Social Justice Action Plan.⁸⁵

⁸⁵ See Environmental & Social Justice Action Plan Version 2.0, adopted by the Commission on April 7, 2022, at <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf>.

2.2. Burden of Proof and Standard of Proof

Pub. Util. Code Section 451 requires that “all charges demanded or received by any public utility ... shall be just and reasonable.”⁸⁶ As the applicant, SDG&E bears the burden of proving that its cost recovery request is reasonable. SDG&E has the burden of affirmatively establishing the reasonableness of all aspects of its application.⁸⁷ The Commission has held that the standard of proof the applicant must meet in rate cases is that of a preponderance of the evidence.⁸⁸ Preponderance of the evidence usually 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.’”⁸⁹

The Commission uses the established prudent manager standard to evaluate whether SDG&E’s requested costs are just and reasonable. The Commission has described this standard as follows:⁹⁰

⁸⁶ See also Pub. Util. Code Section 8386.4(b) for applications for recovery of the cost of implementing an electrical corporation’s wildfire mitigation plan.

⁸⁷ D.09-03-025 at 8; D.06-05-016 at 7.

⁸⁸ D.19-05-020 at 7; D.15-11-021 at 8-9; D.14-08-032 at 17.

⁸⁹ D.08-12-058 at 19, citing Witkin, Calif. Evidence, 4th Edition, Vol. 1 at 184.

⁹⁰ More succinctly, the prudent manager considers:

- 1) the practices, methods, and acts a utility is engaged in at a particular time;
- 2) the facts known or which should have been known at the time;
- 3) good utility practices, including cost-effectiveness (the lowest reasonable cost), reliability, safety, and expedition; and
- 4) a spectrum of possible practices, methods, or acts consistent with the utility system needs and the interest of the ratepayers in an imperfect, not necessarily optimum way.⁹⁰

D.22-06-032 at 8, quoting D.02-08-064 at 6, quoting D.87-06-021.

The term “reasonable and prudent” means that at a particular time any of the practices, methods, and acts engaged in by a utility follows the exercise of reasonable judgment in light of facts known or which should have been known at the time the decision was made. The act or decision is expected by the utility to accomplish the desired result at the lowest reasonable cost consistent with good utility practices. Good utility practices are based upon cost-effectiveness, reliability, safety, and expedition.⁹¹

The prudent manager standard is not a standard of perfection.⁹² The Commission has explained that a reasonable and prudent act is not limited to the optimum practice, method, or act to the exclusion of all others, but rather encompasses a spectrum of possible practices, methods, or acts consistent with the utility system needs, the interest of the ratepayers and the requirements of governmental agencies of competent jurisdiction.⁹³

Although the utility bears the ultimate burden to prove the reasonableness of the relief it seeks and the costs it seeks to recover, the Commission has held that when other parties propose a different result, they too have a “burden of going forward.” That is, the other parties must produce evidence to support their position and raise a reasonable doubt as to the utility’s request.⁹⁴

⁹¹ D.22-06-032 at 8; D.17-11-033 at 10 quoting D.87-06-021.

⁹² D.14-06-007 at 36.

⁹³ *Sempra* Opening Brief at 9-10; D.22-06-032 at 7-8; D.02-08-064 at 6 quoting D.87-06-021.

⁹⁴ D.20-07-038 at 3-4; D.87-12-067 at 25-26; 1987 Cal. PUC LEXIS 424, *37.

2.3. Evidentiary Standards and Factors Considered in Assessing What is Just and Reasonable

Evidentiary standards require consideration of a variety of factors in determining whether an incurred cost is just and reasonable.⁹⁵ Besides safety and reliability, the Commission must also generally consider affordability, cost-effectiveness, ratepayer benefits, and assumptions and rationales required by the Rate Case Plan.⁹⁶ The Commission has also recognized numerous other more specific factors to be considered in determining whether a utility's wildfire related costs are just and reasonable, such as a utility's use of competitive bidding, use of mutual assistance crews, the involvement of senior management in oversight and quick reestablishment of service, and wise selection of vendors.⁹⁷

2.4. Incrementality Standard

A critical standard for reviewing WMPMA cost recovery is whether the cost is incremental. That is, SDG&E is required to demonstrate that its Track 2 costs are incremental to costs already approved in other Commission proceedings, including the \$751 million authorized and included in rates pursuant to its 2019 GRC.⁹⁸ Costs are incremental if incurred "in addition to

⁹⁵ *People v. Boulter*, 199 Cal.App.4th 761, 768 (2011).

⁹⁶ D.07-07-004, Appendix A at 30.

⁹⁷ D.24-05-037 at 15-16; D.21-08-024 at 16; D.05-08-037 at Finding of Fact (FOF) 3; D.05-08-037 at FOF 4; D.05-08-037 at FOF 6; D.05-08-037 at FOF 8; D.05-08-037 at FOF 11; D.05-08-037 at 18-19; D.24-05-037 at 21.

⁹⁸ Application (A.) 17-10-007, Application of San Diego Gas & Electric Company for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019 (October 6, 2017) resulting in D.19-09-051.

amounts previously authorized to be recovered in rates,”⁹⁹ with that previous authorization usually in a GRC.¹⁰⁰ Incremental costs may be categorized as labor, equipment, material, contract, and other support costs associated with work that is not included in the utility’s GRC authorized revenue requirements or other recovery mechanisms for which double collection is strictly prohibited.¹⁰¹ Finally, incrementality is determined on an activity-by-activity basis, not utility-wide expenses, consistent with established prospective ratemaking principles and Commission-approved guidelines for determining incrementality.¹⁰²

All the costs reviewed for reasonableness below were evaluated for their incrementality.

3. Risk Assessment and Mapping

SDG&E’s Risk Assessment and Mapping Program (RA&M) aims to quantify wildfire risks and the impacts of PSPS events. The goal is to identify optimal risk reduction solutions that target both wildfire and PSPS across the system. This work includes the development and use of the following three models: the Wildfire Risk Reduction Model (WRRM), the Wildfire Next Generation System (WiNGS) planning and operational model, and the Probability of Ignition (PoI) model.

⁹⁹ D.21-08-024 at 12, citing Resolution (Res.) E-3238 at 2-3.

¹⁰⁰ D.23-02-017 did not make findings on incrementality as it just approved the settlement and therefore is not precedential.

¹⁰¹ Res. ESRB-4 at Ordering Paragraph 4.

¹⁰² D.22-06-032 at 9.

SDG&E represents that the Commission did not authorize funding for RA&M during the 2019–2022 period because it was unforeseen during SDG&E’s last GRC. SDG&E now requests direct cost recovery of \$1.869 million in capital expenditures and \$1.824 million in O&M expenses based on SDG&E’s actual recorded costs for RA&M in the WMPMA.¹⁰³ The Commission finds direct cost recovery in these amounts to be reasonable and approves them based on SDG&E’s imputed authorizations, methodology, and identified costs drivers as an initial authorization subject to direct cost reductions in Section 13.

4. Grid Design and System Hardening

SDG&E’s Grid Design & System Hardening (GD&SH) budget category is aimed at both reducing the risk of wildfires caused by utility equipment and minimizing customer impacts from PSPS. A range of programs addresses these two items.

Utility equipment issues are addressed by Strategic Undergrounding and Covered Conductor programs. These programs prevent risk events from occurring across several drivers, such as fallen energized wires and contact with foreign objects. Strategic Undergrounding reduces the need for mitigations such as PSPS while also reducing the risk of utility-caused wildfires.¹⁰⁴ Other protection and equipment programs include Advanced Protection, the Expulsion Fuse Replacement Program, and the Lightning Arrestor Program. While these later programs do not prevent risk events from occurring, they do reduce the

¹⁰³ SDG&E T2 Ex-01-R at 18.

¹⁰⁴ SDG&E T2 Ex-01-R at 34.

chance that a risk event will result in an ignition. They do so by utilizing protection settings and/or equipment that address a specific failure mode known to lead to the ignition.

PSPS mitigates the risk of debris contacting energized electric infrastructure.¹⁰⁵ Programs that reduce PSPS impacts to customers include the PSPS Sectionalizing Program, installation of microgrids, and generator programs.

4.1. SDG&E's Track 2 Request

SDG&E's GD&SH cost category includes 17 subcategories of work and their associated costs. The amount SDG&E requests for this work in cost recovery for the 2019–2022 period is \$639.968 million in capital expenditures and \$52.060 million in O&M (direct costs only).¹⁰⁶ The Commission initially authorizes \$614.376 million (direct costs only) in capital and \$51.813 million (direct costs only) in O&M subject to direct cost reductions in Section 13.

The amounts authorized for capital expenditures and O&M expenses in the last GRC and spent by SDG&E during the 2019–2022 period by each subcategory are shown in the table below.

Table 4.1

Grid Design & System Hardening

Authorizations and SDG&E's Requested 2019–2022 Costs (\$000)¹⁰⁷

¹⁰⁵ SDG&E 2020 WMP Section 5.3.8.4.2.

¹⁰⁶ SDG&E Opening Brief, Table 1 at p. 29.

¹⁰⁷ SDG&E T2 Ex-01-R at 33.

Initiative	Authorized (Auth.) Capital	Actual Capital	Differential (Diff.) Capital	Auth. O&M	Actual O&M	Diff. O&M
SCADA Capacitors	\$8,914	\$6,967	(\$1,946)	-	-	-
Covered Conductor	-	\$136,496	\$136,496	-	\$3,762	\$3,762
Expulsion Fuse Replacement	-	\$17,922	\$17,922	-	-	-
PSPS Sectionalizing Enhancements	-	\$11,135	\$11,135	-	-	-
Microgrids	-	\$20,170	\$20,170	-	\$3,292	\$3,292
Advanced Protection	\$56,197	\$48,931	(\$7,267)	-	\$153	\$153
Hotline Clamps	-	-	-	-	\$9,937	\$9,937
Generator Grant Programs	-	-	-	-	\$17,117	\$17,117
Generator Assistance Programs	-	-	-	-	\$2,250	\$2,250
Standby Power Programs	-	-	-	-	\$22,744	\$22,744
Strategic Undergrounding	-	\$241,233	\$241,233	-	\$176	\$176
Distribution Overhead System Hardening	\$283,660	\$380,799	\$97,139	\$21,302	\$10,716	(\$10,586)
Distribution Underbuild	\$3,530	\$17,851	\$14,321	-	-	-
Cleveland National Forest Fire Hardening	\$83,281	\$147,721	\$64,440	-	\$2,456	\$2,456

Initiative	Authorized (Auth.) Capital	Actual Capital	Differential (Diff.) Capital	Auth. O&M	Actual O&M	Diff. O&M
Distribution Comm. Reliability Improvements	\$97,789	\$140,411	\$42,622	-	\$715	\$715
Lightning Arrestor Replacements	-	\$5,556	\$5,556	-	\$28	\$28
Avian Mitigation	\$4,041	\$2,189	(\$1,852)	-	\$17	\$17
<i>Total</i>	<i>\$537,412</i>	<i>\$1,177,380</i>	<i>\$639,969</i>	<i>\$21,302</i>	<i>\$73,363</i>	<i>\$52,060</i>

Other than the cost categories authorized in SDG&E's TY 2019 GRC, the Commission finds that the remaining requested costs incurred to implement SDG&E's WMP were not previously recovered in the last GRC, have not otherwise been authorized for cost recovery, and are incremental and just and reasonable per this proceeding's record.

Together, the Distribution Overhead System Hardening (DOSH), Covered Conductor, and Strategic Undergrounding work account for 68% of SDG&E's combined GD&SH cost recovery request for the 2019–2022 period. As a result, cost recovery for these three requests is addressed first.

As background, the number of miles forecasted, installed, and cost for capital and some O&M for DOSH, Covered Conductor, and Strategic Undergrounding for 2019 to 2022 in SDG&E WMPs approved by OEIS and the Commission are shown below, where available.

In 2019:

- DOSH: 83 miles hardened.¹⁰⁸
- Covered Conductor: zero miles installed.
- Strategic Undergrounding: an unknown number of miles forecasted for up to \$1.8 million;¹⁰⁹ 2.6 miles¹¹⁰ installed for \$0.198 million¹¹¹ (at 82% of the forecasted unit cost).

In 2020:

- DOSH: 99.5 miles hardened.¹¹²
- Covered Conductor: 1.2 miles forecasted for \$1.285 million, for a unit cost of \$1.071 million per mile.¹¹³ 1.9 miles installed for \$2.134 million, for a unit cost of \$1.123 million per mile¹¹⁴ (58% more miles undergrounded for 66% more money at a unit cost of 105%)
- Strategic Undergrounding: 8 to 25 miles forecasted;¹¹⁵ 15.5 miles installed for \$39.293 million, for a unit cost of \$2.535 million per mile.¹¹⁶

¹⁰⁸ SDG&E 2020 WMP, Appendix A at 8.

¹⁰⁹ SDG&E 2019 WMP Appendix A at A-20; D.19-05-039 approving 2019 WMP.

¹¹⁰ SDG&E 2020 WMP (Feb. 7, 2020), Appendix A, Table 23, Row 77.

¹¹¹ There is a discrepancy between A.22-05-016 Ex. SDG&E-T2-01-R p. JW-48 and SDG&E 2020 WMP (Feb. 7, 2020) Appendix A Table 23 Row 77. While both documents show 2.6 (or 3) miles installed, the former shows a cost of \$0.198 million while the latter shows a cost of \$4.727 million. This discrepancy is why there is no unit cost shown for 2019 Strategic Undergrounding.

¹¹² SDG&E 2021 WMP, Attachment B, Table 12.

¹¹³ SDG&E 2020 WMP (Feb. 7, 2020 or Mar. 3, 2020).

¹¹⁴ SDG&E T2 Ex-01-R at 36.

¹¹⁵ SDG&E forecasted different numbers in different WMPs: SDG&E forecasted 25 miles in its 2020 WMP filed February 7, 2020 at 85 and in Appendix A, Table 23, Row 78; SDG&E's 2020 WMP filed March 2, 2020 at 86 forecasted 25 miles; whereas, Appendix A, Table 23, Row 78 forecasted 8 to 12 miles for \$24.800 million to \$37.200 million, at a unit cost of \$3.100 million per mile.

¹¹⁶ SDG&E T2 Ex-01-R at 48.

In 2021:

- DOSH: 123 miles hardened.¹¹⁷
- Covered Conductor: 20 miles forecasted for \$56.500 million, at a unit cost of \$2.825 million per mile; 20 miles installed for \$40.155 million, at a unit cost of \$2.008 million per mile (100% of forecast installed at 71% of its forecasted cost, and at 71% of the forecasted unit cost).
- Strategic Undergrounding: 25 miles forecasted for \$123.383 million, at a unit cost of \$4.935 million per mile;¹¹⁸ 26 miles undergrounded for \$70.534 million, at a unit cost of \$2.713 million per mile¹¹⁹ (104% undergrounded for 57% of the forecasted cost, and at 55% of the forecasted unit cost).

In 2022:

- DOSH: 60 miles hardened.¹²⁰
- Covered Conductor: 60 miles forecasted for \$125.237 million, at a unit cost of \$2.087 million per mile;¹²¹ 61.2 miles of Covered Conductor installed for \$96.482 million, at a unit cost of \$1.577 million per mile¹²² (102% of forecasted miles installed for 23% less money at 76% of the forecasted unit cost).
- Strategic Undergrounding: 65 miles forecasted for \$189.894 million, at a unit cost of \$2.921 million per mile;¹²³ 65 miles undergrounded for \$131.384 million, at a unit cost of \$2.021

¹¹⁷ SDG&E 2022 WMP, Attachment B, Table 12.

¹¹⁸ SDG&E 2021 WMP, Attachment B, Table 12 Row 41, dated either Feb. 5, 2021 or Mar. 4, 2021.

¹¹⁹ SDG&E 2021 WMP, Attachment B, Table 12 Row 41, dated either Feb. 5, 2021 or Mar. 4, 2021.

¹²⁰ SDG&E 2022 WMP, Attachment B, Table 12.

¹²¹ SDG&E 2022 WMP, Attachment B, Table 12, Row 27.

¹²² SDG&E T2 Ex-01-R at 36.

¹²³ SDG&E 2022 WMP, Attachment B, Table 12, Row 43.

million per mile¹²⁴ (100% of forecasted miles undergrounded at 69% of its forecasted cost, and at 69% of the forecasted unit cost).

4.2. Distribution Overhead System Hardening Capital

SDG&E seeks recovery of \$97.139 million (in capital) for DOSH recorded in WMPMA as incremental to already approved funds.¹²⁵ For the reasons stated below we find SDG&E's request to be just, reasonable, and incremental and initially authorize SDG&E's request of \$97.139 million in capital, subject to direct cost reductions in Section 13.

SDG&E's DOSH program combines SDG&E's overhead hardening programs based on specific wire, or at-risk poles, with execution of projects based on a circuit-by-circuit approach that weighed risk inputs alongside the need to reduce PSPS impacts. SDG&E estimates that this program reduced ignitions in HFTDs by 0.69 ignitions over the 2019–2022 period.¹²⁶

The traditional overhead hardening of distribution lines focuses on replacing older bare conductor with a new, stronger bare conductor consisting of Aluminum Core Steel Reinforced or Aluminum Wire Aluminum Core. Other activities are performed simultaneously and may include: replacing wood poles with steel; replacing wood crossarms with fiberglass; replacing insulators with new polymer insulators; replacing guys and anchors; replacing aged or open wire secondary; replacing aged switches, transformers, regulators, and fuses;

¹²⁴ SDG&E T2 Ex-01-R at 48.

¹²⁵ SDG&E T2 Ex-01-R at 33.

¹²⁶ SDG&E T2 Ex-01-R at 54.

replacing a small section of underground related to riser poles; and, in some cases, permanent removal of poles, wires, equipment, guys, and anchors. Additionally, SDG&E has implemented breakaway technology when overhead service wire is required for a customer. This allows the service wire to disconnect from power when struck by debris and the span of overhead wire to break free and deenergize. This technology is a useful alternative when customers raise concerns about Strategic Undergrounding or SDG&E encounters difficulties physically pursuing Strategic Undergrounding for some routes.¹²⁷

In SDG&E's 2019 Test Year GRC, the Commission authorized \$283.660 million for capital expenditures and \$21.302 million for O&M for DOSH. Based on SDG&E's actual costs for 346.1 miles of DOSH, SDG&E requests recovery of \$97.139 million in capital expenditures. No recovery is requested for O&M expenses due to underspending in this category, which will offset cost recovery for other O&M expenses.¹²⁸

PCF argues against authorizing cost recovery for SDG&E's DOSH program, including replacing wood poles with steel poles, because PCF argues that the program provided an insufficient benefit. More specifically, PCF argues that an estimated amount of \$567 million per ignition reduced or avoided in 2019–2022 is not cost-effective and that SDG&E provided insufficient support for replacing wood poles with steel.¹²⁹ In addition, PCF argues that it would have

¹²⁷ SDG&E T2 Ex-01-R at 49-50.

¹²⁸ SDG&E T2 Ex-01-R at 54.

¹²⁹ PCF Opening Brief at 56.

been more cost-effective to equip customers with Behind-the-Meter Solar Plus Storage systems to enable shutdown of the existing grid as needed without impacting customer electricity supply reliability.¹³⁰

Cal Advocates recommends that the Commission remove costs incurred for work outside of Tier 2 and Tier 3 HFTDs from the WMPMA because such work is not consistent with legislation requiring utilities to construct and maintain electrical lines and equipment that minimize risk.¹³¹ As a result, Cal Advocates argues that such work is not a reasonable and prudent use of funds that is accountable to ratepayers. Cal Advocates recommends a reduction in cost recovery for this work of \$4.300 million in capital expenditures and \$0.122 million in O&M.

The Commission is not persuaded by Cal Advocates' arguments. In response to a data request, SDG&E stated that it recorded costs for mitigation work outside the HFTD because the work was generally performed near the HFTD boundary or in a Wildland Urban Interface area where installations will reduce the risk of ignition or reduce the chance of an ignition growing into a wildfire.¹³²

For this cost category, the specific amount disputed by Cal Advocates is \$4.300 million, which represents 1 percent of this work performed outside of the

¹³⁰ PCF Opening Brief at 61; Sempra Opening Brief at 30 citing to D.19-05-039 at 7.

¹³¹ Pub. Util. Code Section 8386(a).

¹³² Cal Advocates Ex-03 at 6-7, SDG&E's response to data request PubAdv-SDG&E-318-MW5, Q.13a.

HFTD. The Commission does not find this percentage of work to be significant. In addition, the areas within which risk should be minimized are not absolute nor clearly defined by legislation, risk analysis, and maps delineating HFTDs. Furthermore, the Commission finds it reasonable that SDG&E would perform some work near a HFTD boundary or in a Wildland Urban Interface area where installations outside a HFTD will reduce the risk of ignition or reduce the chance of an ignition causing a wildfire.

Since the Commission authorized this work in the last GRC, the Commission finds PCF's arguments in relation to this cost category fail to address the amount by which SDG&E's requested recovery of capital expenditures exceeds the amount authorized. The Commission has conditionally approved the replacement of wood poles with steel poles.¹³³

Considering all of the above, the Commission approves cost recovery for DOSH of \$97.139 million, (in Capital) minus direct cost reductions described in Section 13, based on the prudent manager standard. This standard gives the Commission discretion to find cost recovery reasonable where "it encompasses a spectrum of possible practices, methods, or acts consistent with the utility system needs, the interest of the ratepayers."¹³⁴ That is the case here with this longstanding method of hardening electric distribution lines. The Commission finds that SDG&E is reasonably replacing DOSH with covered conductor and strategic undergrounding where appropriate. However, SDG&E shall continue

¹³³ SDG&E Opening Brief at 48.

¹³⁴ D.22-06-032 at 8, quoting D.02-08-064 at 6, quoting D.87-06-021.

to monitor, evaluate, and report the cost-effectiveness of replacing wood poles with steel poles as the Commission has required. In future applications for cost recovery and GRCs, SDG&E shall provide the information required by D.19-05-039¹³⁵ in its initial cost recovery or GRC application as a condition of approval.

4.3. Covered Conductor

SDG&E requests Covered Conductor direct cost recovery of \$136.496 million in capital expenditures and \$3.762 million in O&M expenses for the 2019–2022 period.¹³⁶ The Commission approves initial cost recovery, for the reasons stated below, of \$110.903 million for capital expenditures and \$3.762 million in O&M expenses, subject to direct cost reductions in Section 13. On the record submitted, subject to the reductions discussed herein, the Commission finds these amounts to be incremental and just and reasonable.

The Covered Conductor Program is a program that replaces bare conductors with Covered Conductors in a HFTD. This program was originally designed to protect personnel and improve reliability. In 2018, SDG&E shifted towards using Covered Conductor as an alternative to SDG&E's traditional overhead hardening program with the primary focus of reducing outages and ignitions from light momentary contacts (e.g., mylar balloons, birds, and palm fronds). When SDG&E installs the Covered Conductor system, SDG&E also replaces other equipment that is required to accommodate the Covered Conductor, such as insulators, cross arms, or poles (where applicable), replacing

¹³⁵ D.19-05-039 at 27, Conclusions of Law 5 and 6; PCF Opening Comments at 13-14.

¹³⁶ SDG&E T2 Ex-01-R at 33.

other equipment that is determined to reduce risk, improve resiliency, and adding other protection measures such as animal guards or covered jumper wire to other equipment on the pole.¹³⁷

SDG&E has estimated that in the near term, Covered Conductor can reduce the faults that cause ignitions by approximately 65%,¹³⁸ and has the potential to raise the threshold for PSPS events to higher wind speeds compared to bare conductor hardening; however, as of the end of 2022 no circuits have been fully hardened with Covered Conductor and therefore the threshold for PSPS events has not been raised on any circuits with Covered Conductor installed. Furthermore, SDG&E states that, when later implemented, the wind speed threshold for fully covered circuit segments will be approximately 55-60 miles per hour.¹³⁹

PCF argues against authorizing cost recovery for SDG&E's Covered Conductor Program because it contends Covered Conductor provided an insufficient benefit. More specifically, PCF argues that an estimated amount of \$233.763 million per ignition reduced or avoided in 2019–2022 is not cost-effective and that “among all WMP mitigation measures with substantial program budgets, the Covered Conductor mitigation measure has the highest cost per ignition reduced or avoided.” For example, cost per ignitions avoided for Patrol Inspections of Distribution Equipment is, according to PCF, \$125,000

¹³⁷ SDG&E T2 Ex-01-R at 36.

¹³⁸ SDG&E T2 Ex-01-R at 36.

¹³⁹ SDG&E T2 Ex-01-R at 37.

per ignition avoided.¹⁴⁰ In addition, PCF argues that it would have been more cost-effective to equip customers with Behind-the-Meter Solar Plus Storage systems to enable shutdown of the existing grid as needed without impacting customer electricity supply reliability.¹⁴¹

The Commission is not persuaded by PCF. The Commission finds PCF's argument to reject the entire Covered Conductor program unreasonable, just as we did with respect to PCF's argument above regarding DOSH.

Cal Advocates recommends that the Commission remove costs incurred for work outside of Tier 2 and Tier 3 HFTDs from the WMPMA because such work is not consistent with legislation requiring utilities to construct and maintain electrical lines and equipment that minimize risk.¹⁴² Cal Advocates argues that such unauthorized work is not a reasonable and prudent use of funds that is accountable to ratepayers. As a result, Cal Advocates recommends reducing cost recovery for this work by \$0.410 million for capital expenditures and \$0.0114 million in O&M costs.

The Commission disagrees with Cal Advocates. SDG&E correctly argues that Covered Conductor is a generally accepted hardening strategy for reducing wildfire risk from foreign object-line contacts, and a cost-effective alternative to Strategic Undergrounding.¹⁴³ For example, a low estimated ignitions avoided number for Covered Conductor fails to capture the clear benefit of fundamental

¹⁴⁰ PCF T2 Ex-01 at 7, 9; PCF Opening Brief at 56.

¹⁴¹ PCF Opening Brief at 61.

¹⁴² Pub. Util. Code Section 8386(a).

¹⁴³ SDG&E Reply Brief at 33-34.

aspects of this work, such as replacing bare conductors with Covered Conductors in a HFTD. This demonstrates the difficulty in relying primarily on one statistical tool to authorize wildfire mitigation measures. Moreover, as the Commission concludes above, it is reasonable that SDG&E would perform some work outside of the HFTDs near the HFTD boundary or in an area outside the HFTD boundary in a Wildland Urban Interface area where installations will reduce this risk of ignition or reduce the chance of an ignition growing into a wildfire.

UCAN highlights SDG&E's high unit cost for Covered Conductor compared to SCE and PG&E and recommends an audit of SDG&E's Covered Conductor initiative. UCAN states that SDG&E's Covered Conductor costs per mile are \$1.6 million¹⁴⁴ compared to \$1.3 million for PG&E¹⁴⁵ and \$0.7 million for SCE.¹⁴⁶

UCAN's comparison of Covered Conductor costs with the cost of the same work performed by PG&E and SCE is informative. The Commission finds SDG&E's lack of explanation for its cost for Covered Conductor work to be troubling. SDG&E provides RSEs for installing Covered Conductor compared to Strategic Undergrounding,¹⁴⁷ but it does not support its request for recovery for installing Covered Conductor at its high unit cost. SDG&E provides RSEs for Covered Conductor compared to Strategic Undergrounding, but the Commission finds SDG&E's Covered Conductor cost to be unreasonable based on it being

¹⁴⁴ SDG&E T2 Ex-01 at 36.

¹⁴⁵ D.23-11-069 at 273.

¹⁴⁶ UCAN T2 Ex-01 at 12.

¹⁴⁷ SDG&E T2 Ex-06 at 8-10.

significantly higher than that of PG&E and SCE.¹⁴⁸ As such, the Commission finds it reasonable to reduce SDG&E's cost recovery by the approximate percentage difference between SDG&E's Covered Conductor cost per mile and the same cost for PG&E, approximately 19 percent. The Commission finds it reasonable to apply this reduction to SDG&E's capital expenditure only, based on the prudent manager standard. This standard gives the Commission discretion to find cost recovery reasonable where "it encompasses a spectrum of possible practices, methods, or acts consistent with the utility system needs, [and] the interest of the ratepayers."¹⁴⁹ That is the case here where the Commission finds SDG&E's scope of Covered Conductor work versus DOSH and undergrounding to be appropriate. SDG&E's amount of recovery for Covered Conductor work is reasonably disputed.¹⁵⁰ However, the prudent manager standard is not one of perfection that is limited to the optimum practice to the exclusion of all others. For the amount requested for this work, the Commission finds the cost per mile for Covered Conductor work for the 2019–2022 period to be an exercise of reasonable judgment for that time period. Accordingly, the Commission approves initial cost recovery for SDG&E's Covered Conductor direct costs for the 2019–2022 period of \$110.903 million for capital expenditures and \$3.762 million in O&M expenses, subject to direct cost reductions in Section 13.

¹⁴⁸ UCAN Opening Brief at 6-7.

¹⁴⁹ P. U. Code §451.1.

¹⁵⁰ PCF Opening Comments at 11.

4.4. Strategic Undergrounding

SDG&E's Strategic Undergrounding Program removes overhead electrical distribution systems and places them in trenches or other underground distribution systems. SDG&E states that Strategic Undergrounding reduces the need for PSPS events and reduces the risk of ignition related to electrical infrastructure by 98% or greater for the following reasons: 1) by moving the infrastructure underground, most faults that can cause an ignition (not including vehicle contact with pad-mounted equipment) are mitigated in their entirety; 2) risk related to failures from aging equipment is near zero when the infrastructure is underground; and 3) PSPS events are reduced on circuits that are fully underground as the wind speed and other weather conditions do not impact the infrastructure.¹⁵¹ SDG&E has deployed Strategic Undergrounding in HFTDs as well as in areas where substantial PSPS-event reductions can be gained through strategic installation of the underground electric system. SDG&E did this based on its WRRM and its WiNGS-Planning tool (used since 2022) to develop its risk reduction goals and the resulting grid hardening mitigations required. Such goals include reducing PSPS impacts for critical facilities, including schools, and those with frequent PSPS events. For instance, SDG&E completed Strategic Undergrounding of a section of overhead infrastructure in the Hellhole Canyon area, which has seen wind gusts over 90 miles per hour.

¹⁵¹ SDG&E T2 Ex-01-R at 48.

This area experienced seven PSPS events in 2019 and 2020 but was not de-energized during SDG&E's 2021 PSPS event.¹⁵²

The WiNGS-Planning tool assists in the allocation of grid hardening initiatives across HFTDs based on the Multi-Attribute Variable Factor (MAVF) framework in Risk Assessment and Mitigation Phase (RAMP) and evaluates both wildfire and PSPS impacts at the sub-circuit/segment level. This includes data on historic PSPS events, wind conditions, and others that are reviewed to determine where Strategic Undergrounding will have the largest impact. Investment decisions are also informed by RSEs, improving wildfire safety, and limiting the impact of PSPS on customers.¹⁵³

To calculate the wildfire risk reduction for Strategic Undergrounding, data were analyzed on historical ignitions associated with underground equipment, pre-mitigation overhead system risk event rate and ignitions rates, and underground mileage completed within the 2019–2022 time period. Specifically, the effectiveness of Strategic Undergrounding was measured by taking total CPUC-reportable ignitions associated with Strategic Undergrounding and dividing by total ignitions. Based on this analysis, Strategic Undergrounding is estimated to have prevented 0.67 ignitions and mitigated PSPS impacts to approximately 7,192 customers through 2022.¹⁵⁴

¹⁵² SDG&E T2 Ex-01-R at 48-49.

¹⁵³ SDG&E T2 Ex-01-R at 50.

¹⁵⁴ SDG&E T2 Ex-01-R at 53.

SDG&E's Strategic Undergrounding cost recovery request is for \$241.233 million in direct cost capital expenditures and \$0.176 million in O&M direct costs for the 2019–2022 period for 109.5 miles of Strategic Undergrounding. No party contends that SDG&E received funding for this Strategic Undergrounding work during this period, nor that SDG&E accomplished the work by redirecting other wildfire mitigation revenues to complete this work. On this record, the Commission finds SDG&E's requested Strategic Undergrounding costs to be incremental and just and reasonable.

4.4.1. Intervenor Positions and Recommendations

4.4.1.1. Cal Advocates

Cal Advocates recommends that the Commission remove costs incurred for work outside of Tier 2 and Tier 3 HFTDs from the WMPMA because such work is inefficient¹⁵⁵ and not consistent with legislation requiring utilities to construct and maintain electrical lines and equipment that minimize risk.¹⁵⁶ As a result, Cal Advocates argues that such unauthorized work is not a reasonable and prudent use of funds that is accountable to ratepayers. For this reason, Cal Advocates recommends a reduction in this cost of \$2.100 million in capital expenditures and \$1 million in O&M.¹⁵⁷

4.4.1.2. Protect our Communities Foundation

PCF argues against authorizing cost recovery for SDG&E's Strategic Undergrounding because, according to PCF, SDG&E itself says that Strategic

¹⁵⁵ Cal Advocates Opening Brief at 19-20.

¹⁵⁶ Pub. Util. Code section 8386(a).

¹⁵⁷ Cal Advocates Opening Brief at 19-20.

Undergrounding provides an insufficient benefit. More specifically, PCF contends that an estimated amount of \$90 million per ignition reduced or avoided in 2019–2022 is not cost-effective compared to other wildfire mitigations, such as Patrol Inspections of Distribution Equipment, which PCF says costs \$125,000 per ignition avoided.¹⁵⁸

PCF asserts that it would have been more cost-effective to equip customers with Behind-the-Meter Solar Plus Storage systems to enable shutdown of the existing grid as needed without impacting customer electricity supply reliability.¹⁵⁹

Lastly, PCF points out that the CPUC/OEIS 2021 Audit examined and called into question costs spent by SDG&E on Strategic Undergrounding. PCF argues that the Commission should determine whether SDG&E complied with the recommendations in the CPUC/OEIS 2021 Audit before authorizing any cost recovery for SDG&E's spending here.¹⁶⁰

4.4.1.3. TURN

SDG&E requests that the Commission find its 2019–2022 costs to be reasonable partly based on its WMPs for 2020, 2021, and 2022. TURN argues, however, that SDG&E's WMPs provide no specific information that supports SDG&E's choices leading to the recorded wildfire mitigation costs for which it seeks recovery.¹⁶¹

¹⁵⁸ PCF T2 Ex-01 at 7, 9; PCF Opening Brief at 56.

¹⁵⁹ PCF Opening Brief at 61.

¹⁶⁰ PCF Opening Brief at 33.

¹⁶¹ TURN Opening Brief at 10.

4.4.2. Discussion

As described above, SDG&E supports its request for recovery of its 2019–2022 wildfire mitigation costs for Strategic Undergrounding based on the benefit of reducing ignitions and PSPS events in HFTDs.¹⁶² To evaluate SDG&E's request, the Commission takes into consideration the evolving nature of wildfire risk, wildfire risk mitigation requirements, their risk analysis, WMPs, and their cost-effectiveness during this time period as fire threats and the responses to them have increased across the state. None of the work performed for these costs was fully anticipated or authorized in the last GRC. As such, the Commission finds SDG&E's requested costs to be incremental. In other words, the domains of wildfire risk and the above issues related to it, along with the information required to evaluate the prudence and reasonableness of these costs, have changed with each WMP approval during this time period. SDG&E developed risk assessment and modeling processes at the same time as it was performing wildfire mitigation work to reduce wildfires. Under such circumstances, the Commission finds that SDG&E has provided sufficient information for the 2019–2022 period to find its requested Strategic Undergrounding costs just and reasonable.

PCF argues that the estimated amount of \$90 million per ignition reduced or avoided for Strategic Undergrounding during the 2019–2022 period is not cost-effective compared to other wildfire mitigations, such as Patrol Inspections of Distribution Equipment, which costs \$125,000 per ignition avoided. This

¹⁶² SDG&E Opening Brief at 43-44.

argument does not take into consideration the complexity of the evolution of wildfire risk and related issues. Using PCF's information, even if patrol inspections may be cheaper per ignition avoided under some circumstances, they would be ineffective at avoiding high consequence fires under the circumstances of high fire danger in a HFTD. Moreover, even if equipping customers with Behind-the-Meter Solar Plus Storage systems may have had some merit, there is an insufficient record to demonstrate that it was a viable alternative to all Strategic Undergrounding during the 2019–2022 period.

At the very least, given the high degree with which Strategic Undergrounding can reduce risk under the highest risk circumstances, the Commission finds SDG&E was prudent in strategically undergrounding electric distribution lines, especially in the highest risk areas. SDG&E aimed its early Strategic Undergrounding work to reduce PSPS impacts for critical facilities, including schools, or other areas with frequent PSPS events. As a result, the Commission finds the costs recorded during the 2019–2022 period to be reasonable.

Cal Advocates recommends a reduction of \$2.100 million in capital expenditures and \$1 million in O&M, to remove costs incurred for work outside of Tier 2 and Tier 3 HFTD from the WMPMA, arguing such work is inefficient and not consistent with legislation requiring utilities to construct and maintain electrical lines and equipment that minimize risk.¹⁶³ As discussed above regarding DOSH and Covered Conductor, the Commission does not find this

¹⁶³ Pub. Util. Code Section 8386(a); Cal Advocates Opening Brief at 19-20.

recommendation to be supported. The Commission finds the small percentage of work outside the HFTD to be reasonable given there is not a clear-cut boundary while accommodating the design of SDG&E's existing infrastructure and addressing known risk, as described by SDG&E.¹⁶⁴

PCF claims the CPUC/OEIS 2021 Audit found that SDG&E underspent and redirected a total of \$240 million of GRC-adopted electric capital costs for 2019 and 2020.¹⁶⁵ The Commission finds PCF's rationale for denying this cost recovery to be unsupported for two reasons. First, by expanding the review of SDG&E wildfire mitigation spending to include years 2021 and 2022, which is not covered by the CPUC/OEIS 2021 Audit, the Commission finds no underspending. Second, SDG&E is allowed the flexibility to reprioritize authorized funds in order to ensure safe and reliable operations.¹⁶⁶ The evidence does not show that the redirected funds were inconsistent with providing safe and reliable operations.

The 2019 Wildfire Legislation requires electrical corporations to submit WMPs that minimize risk, but no legislation or regulation determines how much wildfire risk to reduce nor at what cost. Strategic Undergrounding provides a high degree of risk reduction at a high cost, so the reasonableness of the amount of Strategic Undergrounding in miles and at what cost is a difficult question. For the 2024–2027 period, the Commission approved forecasts to underground 140

¹⁶⁴ SDG&E Reply Brief at 40-43.

¹⁶⁵ PCF Opening Brief at 33.

¹⁶⁶ SDG&E Reply Brief at 56-61.

miles of electrical distribution lines and to install 400 miles of Covered Conductor.¹⁶⁷ With regard to the total requested by SDG&E for Strategic Undergrounding for the 2019–2022 period, the Commission finds that the profile of SDG&E’s wildfire mitigations by miles of DOSH plus Covered Conductor during the 2019–2022 period¹⁶⁸ is similar to the profile of the same work approved by the Commission in Track 1 of this proceeding. SDG&E also employed the three methods of system hardening close to the amounts forecasted in its WMPs, or less, in terms of miles and cost during the 2019-2022 period. As a result, and upon considering all of the parties’ arguments above, the Commission finds SDG&E’s cost recovery request for Strategic Undergrounding for the 2019–2022 period in the amount of \$241.233 million capital and \$0.176 million O&M plus the associated indirect costs to be reasonable as an initial authorization subject to direct cost reductions as described in Section 13.

Both PCF and TURN argue that SDG&E’s request for Strategic Undergrounding cost recovery should be denied because of its deficient showing of cost-effectiveness.¹⁶⁹ PCF contends that greater consideration should be given to the cost to reduce one ignition and the alternative of solar-plus-storage (SPS). As a remedy for SDG&E’s insufficient showing of cost-effectiveness, TURN proposes that the cost authorized should be simply limited to an amount that

¹⁶⁷ D.24-12-074 at 474, 481.

¹⁶⁸ For the 2019–22 period, SDG&E completed 109.5 miles of Strategic Undergrounding, 341.6 miles of DOSH, and 83.1 miles of Covered Conductor; $(109.5 / (341.6 + 83.1)) =$ approximately 26%.

¹⁶⁹ TURN Opening Comments at 5-9; PCF Opening Brief at 11-13.

was approximately 15% higher than the amount authorized for Covered Conductor.¹⁷⁰

Although cost-effectiveness is a valid concern, the Commission is unpersuaded by intervenor arguments claiming their proposed alternatives were superior alternatives compared to SDG&E's. PCF fails to demonstrate how much – if any - SPS can substitute for undergrounding, and TURN's proposal is limited to a simple increase of 15% over the amount for Covered Conductor. Based on the record submitted, the Commission finds that SDG&E met its burden to support its position in light of facts known or which should have been known at the time its decision was made, including utility system needs, and rejects intervenors' positions based on the record evidence.

However, this does not mean that Strategic Undergrounding, in the same amount, will continue to be prudent and reasonable in later years. Rather, circumstances change and information regarding wildfire risk and its related issues continues to evolve. As stated in Track 1 of this proceeding, the Commission expects SDG&E's risk analysis to continue to improve in future GRCs and applications for cost recovery.¹⁷¹

4.5. Other Work Performed Outside HFTD Tiers 2 or 3

Pub. Util. Code Section 8386(a) requires utilities to construct and maintain electrical lines and equipment that minimize risk. The highest wildfire risk areas are mapped within HFTD Tiers 2 and 3.

¹⁷⁰ TURN Opening Comments at 9.

¹⁷¹ D.24-12-074 at 483.

Cal Advocates recommends that the Commission deny SDG&E recovery of WMPMA costs incurred for work outside of Tier 2 and Tier 3 HFTDs because such work is not consistent with legislative mandates to reduce risk. More specifically, Cal Advocates recommends reducing cost recovery by the amounts shown in the table below for the work performed outside HFTDs for each of the listed GD&SH initiatives.

Table 4.5**System Hardening Recommended Reductions (\$million)**

Initiative	Recommended Reduction	Recommended Reduction (capital + O&M)	Units Outside HFTD
Dist. Communication Reliability Improvements	\$55.167 capital (cap)	\$55.167	16 stations
Dist. Overhead System Hardening	\$4.300 cap, \$0.122 O&M	\$4.422	3.94 miles
SCADA Capacitors	\$2.549 cap	\$2.549	45 capacitors
PSPS Sectionalizing Enhancements	\$2.429 cap	\$2.429	12 switches
Strategic Undergrounding	\$2.1 cap, \$0.001 O&M	\$2.101	0.96 miles
Microgrids	\$1.524 cap	\$1.524	2 microgrids
Covered Conductors	\$0.410 cap, \$0.0114 O&M	\$0.4214	0.25 miles
Expulsion Fuse Replacement	\$0.034 cap	\$0.034	18 fuses
Hotline Clamps	\$0.020 O&M	\$0.020	15 clamps
Lightning Arrestors	\$0.017 cap	\$0.017	14 arrestors
Avian Mitigation	\$0.006 cap	\$0.006	3 poles

The Commission finds SDG&E's explanation for its work outside the HFTDs to be reasonable. For example, much of SDG&E's infrastructure was

designed prior to the establishment of HFTDs. As a result, SDG&E states that certain investments near the HFTD may be necessary to align WMP work with existing infrastructure and to address PSPS risk, which may be crucial for achieving desired risk reduction within HFTDs.¹⁷² In other instances, work on either side of the HFTD boundaries overlapped and could not be separated at the boundaries of HFTDs. For example, certain circuit segments include infrastructure that crosses HFTD boundaries. In addition, work may have been performed outside the HFTD to reduce the number of customers impacted by PSPS events.

For seven of the 11 cost categories in the table above, the amount of work SDG&E performed outside HFTDs was 1% or less. The Commission finds this amount to be de minimus and reasonable, for the reasons stated above. For the remaining four areas, the percentage of work performed outside HFTDs was between 20 and 40 percent. We address the reasonableness in these areas below, including the installation of microgrids, Supervisory Control and Data Acquisition (SCADA) capacitors, PSPS Sectionalizing Enhancements, and Distribution Community Reliability Improvements.

4.6. Microgrids

SDG&E installed two of five (40%) microgrids during 2019–2022 at Butterfield Ranch and Shelter Valley outside the HFTD. Cal Advocates argues that SDG&E should have prioritized the two Tier 3 locations over Butterfield Ranch and Shelter Valley and that the costs for the Butterfield Ranch and Shelter

¹⁷² SDG&E Opening Brief at 41-43; SDG&E T2 Ex-06 at 27-29.

Valley microgrids¹⁷³ should therefore be denied recovery.¹⁷⁴ PCF also opposes cost recovery for the microgrid initiative because it is not cost-effective and does not utilize renewable energy.¹⁷⁵

In reply, SDG&E provides two reasons for installing the two microgrids outside the HFTD. First, these microgrids serve the indirect wildfire mitigation purpose of reducing the impact of PSPS events and, thereby, provide resiliency to the served communities. These two communities are at risk for de-energization during high-risk conditions because the circuits that feed both microgrids are located within Tier 2 and Tier 3 of the HFTDs. Second, the Shelter Valley microgrid also serves the critical facility of San Diego County Fire Station #53.¹⁷⁶ The Commission finds that these reasons support recovery of the two microgrids outside the HFTDs and approves such cost recovery.

PCF argues that recovery for SDG&E's microgrid costs should be denied for the following reasons: 1) SDG&E's microgrid initiative is not cost-effective, 2) SDG&E's microgrid initiative is not utilizing renewable power, and 3) traditional generators have a higher wildfire risk.¹⁷⁷ Although these arguments may have had merit, the Commission notes that SDG&E's four microgrid locations were upgraded in 2021 to remove temporary generators and install renewable power solutions. Mobile battery storage units and box power units

¹⁷³ 2020–22 WMP Update dated February 5, 2021 at 201.

¹⁷⁴ Cal Advocates Opening Brief at 26-27.

¹⁷⁵ PCF T2 Ex-01 at 18-21.

¹⁷⁶ SDG&E T2 Ex-06 at 33-35.

¹⁷⁷ PCF T2 Ex-01 at 22-23.

were also deployed to aid in mitigating the impacts of PSPS events for critical customers.¹⁷⁸ Nonetheless, PCF identifies areas that require further examination. As a result, in its next GRC, if SDG&E requests cost recovery for any additional microgrid projects, SDG&E shall provide evidence of the energy source and cost-effectiveness of future microgrid projects.

4.7. SCADA Capacitors

Electrical distribution capacitors are a necessary part of the electrical distribution system and can ignite fires when they fail by, for example, rupturing and leaking molten metal. Through the Supervisory Control and Data Acquisition (SCADA) Capacitor Maintenance and Replacement Program, SDG&E replaces non-SCADA capacitors with newer SCADA capacitors to mitigate wildfire risk. This is accomplished via remote electronic monitoring for risks that can be isolated before they cause catastrophic failure.¹⁷⁹

Cal Advocates recommends that the Commission deny SDG&E recovery of WMPMA costs incurred for 45 SCADA capacitors (out of 123, or 37 percent) that were installed outside of the HFTD.

The Commission finds that the number of non-SCADA capacitors SDG&E replaced outside HFTDs is reasonable because 93 percent of the capacitors in question were installed in the Wildland Urban Interface or coastal canyons with unique wildfire risk and 73 percent (33 of 45) were installed within two miles of the HFTD boundary. In such locations, replacing riskier capacitors that may lead

¹⁷⁸ SDG&E 2022 WMP Update at 3, 225.

¹⁷⁹ SDG&E T2 Ex-01-R at 34-35.

to catastrophic damage is a reasonable and cost-effective risk mitigation. As a result, the Commission rejects Cal Advocates' recommendation to deny such recovery.

4.8. PSPS Sectionalizing Enhancements

The PSPS Sectionalizing Enhancement Program installs switches in strategic locations to improve the ability to isolate high-risk areas for potential de-energization and to allow customers with lower-risk infrastructure to remain energized.¹⁸⁰

Cal Advocates recommends that the Commission deny SDG&E recovery of WMPMA costs incurred for 12 PSPS sectionalizing switches that were installed outside the HFTD (out of 55 switches, or 22 percent).

In reply, SDG&E states that of the 12 devices that Cal Advocates recommends for reduction, one is in fact in Tier 2 of the HFTD and 11 are immediately adjacent to Tier 2.

The Commission finds the number of sectionalizing switches installed outside HFTDs to be sufficiently tied to high-risk areas to be a reasonable method of providing rapid isolation during any wind or wildfire incidents. As a result, the Commission rejects Cal Advocates' recommendation to deny such recovery.

4.9. Distribution Communications Reliability Improvements (DCRI)

In D.19-09-051, the Commission authorized SDG&E to construct a mobile communications network to replace wire communications infrastructure which

¹⁸⁰ SDG&E T2 Ex-01-R at 39-40.

had become inadequate to meet demand for greater volumes of data at high speed. The scope of the Commission's authorization included expanding the system to provide coverage for a wider area.¹⁸¹

The new system provides increased bandwidth in the HFTD to support technologies deployed as wildfire mitigations, including the Advanced Protection Program, falling conductor protection through early fault detection, and SCADA switches to support PSPS events and day-to-day operations. These programs require high-speed data communication between field devices to operate quickly, de-energizing a circuit before a broken conductor can reach the ground, thereby reducing the wildfire risk associated with energized wire-down events. In addition, there are gaps in coverage of third-party communication providers in the rural areas of eastern San Diego County that limit the ability to communicate with field personnel during events requiring activation of the Emergency Operations Center (EOC). The ability to reliably enable and disable sensitive settings, enable or disable reclosing, or remotely operate a switch during a high-risk weather event requires reliable communication that the Distribution Communications Reliability Improvements (DCRI) program will provide.¹⁸²

SDG&E provided details regarding how the mobile communications network functions inside and outside the HFTDs. SDG&E's DCRI requires a network of base stations that allows communications to extend into SDG&E's

¹⁸¹ D.19-09-051 at 467-468.

¹⁸² SDG&E T2 Ex-01-R at 59-60.

backcountry areas throughout the HFTD. This system requires routes from the base stations in the HFTD back to the centralized data center and control center. In certain cases, a base station outside the HFTD was necessary to establish a path to the HFTD. In other cases, SDG&E installed base stations outside of the HFTD to optimize the wireless communications within the HFTD, which reduces the need for additional base stations.¹⁸³

Considering all the above, the Commission finds SDG&E's installation of communication stations outside HFTDs improves SDG&E's wireless communications in the HFTDs. The Commission also finds the additional cost of SDG&E installing a new mobile communications network, including stations outside HFTDs, to be a reasonable method of reducing costs and maximizing coverage for HFTDs. As a result, the Commission approves SDG&E's request for recovery of DCRI direct costs in the amount of \$42.622 million for capital expenditures and \$0.715 million for O&M expenses as an initial authorization subject to direct cost reductions in Section 13.¹⁸⁴

Cal Advocates' remaining recommended reductions for work performed outside HFTDs relate to initiatives for which the rate of installation outside the HFTD is one percent or less. Although these amounts are relatively small, the Commission finds them to be reasonable for several reasons. HFTD boundaries are not precise, and adding mitigations close to an HFTD can reduce risk within the HFTD. Certain work outside an HFTD, such as adding communication

¹⁸³ SDG&E T2 Ex-06 at 30-31.

¹⁸⁴ SDG&E T2 Ex-01-R at 59.

stations, can improve communications within an HFTD. Therefore, the Commission denies Cal Advocates' recommended reductions for the following initiatives: DOSH, Strategic Undergrounding , Expulsion Fuse Replacements, Hotline Clamps, Lightning Arrestors, Avian Mitigation, and Covered Conductors.

In future WMPs and other reports regarding wildfire mitigation work, SDG&E shall fully disclose the work and costs performed within and outside HFTDs.

4.10. Generator Grant, Generator Assistance, and Standby Power Programs

Several programs focus on helping customers to access electricity during PSPS events. The Generator Grant Program (GGP) helps vulnerable customers in Tiers 2 and 3 of the HFTDs to access electricity for medical devices and critical appliances by offering them portable backup battery units with solar charging capacity. From 2019 to 2022, SDG&E's GGP reduced the impact of PSPS events by providing portable backup battery units to approximately 4,700 customers.¹⁸⁵

From 2020 to 2022, the Generator Assistance Program (GAP) has offered rebates for portable fuel generators and portable power stations to encourage customers to acquire backup power options to enhance preparedness and mitigate the impacts of PSPS. The program has targeted customers who reside within Tiers 2 and 3 of HFTDs and have experienced at least one PSPS event since 2019. Eligible customers receive program materials via mail and email campaigns and are directed to an online portal to verify account information and

¹⁸⁵ SDG&E T2 Ex-01-R at 44-45.

learn more about the program. Upon verification, the program offers a \$300 rebate to customers who meet the basic eligibility criteria of residing in an HFTD zone and experiencing a recent PSPS event. In addition, customers enrolled in the California Alternate Rates for Energy (CARE) program are eligible for an enhanced rebate amount of \$450, providing a 70 to 90 percent discount on average portable generator models. The program also includes portable power stations and offers rebates of \$100, with an additional \$50 for CARE customers. The program provides the option for customers to receive one rebate for a fuel generator and one rebate for a portable power station to accommodate various backup power needs.¹⁸⁶

Through 2022, the Standby Power Program is an umbrella program that has provided backup power solutions to approximately 820 residential and nine commercial customers that would not directly benefit from grid hardening programs. These customers reside in rural, remote areas widely distanced from one another where other initiatives would not reduce potential PSPS events. The Standby Power Program includes the Fixed Backup Power (FBP) Programs for residential customers, commercial customers, and mobile home park clubhouses. Customers are identified based on meter, circuit, and PSPS event exposure. Outreach letters and other communications are sent to customers inviting them to participate and, depending on site requirements, feasibility, and cost, a customer could receive a fixed installation backup generator, a business could receive a critical facility generator on a temporary basis during an active PSPS

¹⁸⁶ SDG&E T2 Ex-01-R at 45-46.

event, or a clubhouse or central community building at a mobile home park could receive a solar panel and battery backup system to provide resilient access to electricity during power outages, particularly during a PSPS event. The program manages site permitting, construction, and final inspection to ensure the equipment is installed properly.

PCF argues that recovery for SDG&E's Generator Grant, Generator Assistance, and Standby Power Programs should be denied for the following reasons: 1) SDG&E does not attempt in Track 2 testimony to calculate how many ignitions have been avoided as a result of their generator programs; and 2) the programs present wildfire risk. As an example of the latter, PCF gives an example of a PG&E customer who in 2019 ignited their home with an at-home generator during a PG&E PPS event.

As discussed in SDG&E's WMPs, the generator and standby power programs are designed to mitigate the impact of PPS events, not necessarily to avoid ignitions. Although renewable sources would be preferred to meet sustainability goals, review of the generator source must also consider the reasonableness of the cost of the programs included in approved WMPs. SDG&E's 2022 WMP includes subsidizing the cost of standby power for residential customers who have medical and other critical needs for power during PPS events. SDG&E also seeks recovery for commercial customers even when they do not have medical or other critical needs. As such, the Commission denies recovery of the cost of Standby Programs for commercial customers. For nine commercial customers out of a total of 829 customers, this amounts to a

reduction of \$0.247 million¹⁸⁷ from SDG&E's request for direct cost recovery for Standby Power programs of \$22.744 million (plus the associated reduction to indirect costs).¹⁸⁸ In the absence of data showing the cost of renewable generator sources from 2019–2022 to be more cost-effective than the cost of non-renewable generator sources, the Commission finds the remainder of SDG&E's request for recovery of costs to be reasonable.

In SDG&E's next GRC or application for such cost recovery, SDG&E shall provide data comparing the cost of renewable generator sources with the cost of non-renewable generator sources. Specifically, in SDG&E's next GRC, SDG&E shall provide evidence of the following: the unit cost of generator and standby sources of power, including renewable options; and the distance at which grid hardening remote customers is unreasonable and standby power is recommended. The cost-effectiveness of such alternatives to grid hardening compared to standby, remote, and renewable sources should also be considered in SDG&E's next Risk Assessment and Mitigation Phase proceeding.

4.11. Remaining GD&SH Mitigations

For the remaining GD&SH mitigations described above and listed below, SDG&E provided initial testimony describing each initiative and its impact.¹⁸⁹ In rebuttal testimony, SDG&E also addressed Cal Advocates' arguments related to work performed outside HFTDs.¹⁹⁰ In addition, SDG&E provided additional data

¹⁸⁷ $(9/829) \times \$22.744 \text{ million} = \0.247 million .

¹⁸⁸ SDG&E T2 Ex-01-R at 46.

¹⁸⁹ SDG&E T2 Ex-01-R.

¹⁹⁰ SDG&E T2 Ex-06 at 30-31.

regarding the authorizations imputed in the last GRC in response to the ALJs' ruling.¹⁹¹

As discussed in background Section 1.4 on cost-effectiveness, various parties contested the cost-effectiveness of wildfire mitigations generally but did not specifically contest the remaining GD&SH mitigations. Based on SDG&E's imputed authorizations, methodology, and cost drivers in its supporting documents, the Commission finds direct cost recovery in the amounts in the following categories to be reasonable and approves them as initial authorizations subject to direct cost reductions in Section 13.

Table 4.11
Remaining GD&SH Mitigation Authorizations
(\$ millions)

Initiative	Capital	O&M
Expulsion Fuse Replacement	17.922	-
Advanced Protection	(7.267)	0.153
Hotline Clamps	-	9.937
Transmission Overhead System Hardening – Distribution Underbuild	14.321	-
Cleveland National Forest Fire Hardening	64.440	2.456
Lightning Arrestor Replacements	5.556	0.028
Avian Mitigation	(1.852)	0.017
Total	93.120	12.591

¹⁹¹ SDG&E T2 Ex-09.

5. Emergency Planning & Preparedness

SDG&E engages in proactive planning and preparedness efforts to respond effectively to all hazards it may encounter, which includes community awareness regarding the risk of wildfires and activity during and after PSPS events. This work is implemented through 1) Emergency Management Operations and 2) Community Outreach, Public Awareness, and Communications Efforts. Emergency Management Operations supports SDG&E's company-wide efforts associated with emergency planning, preparedness, response, and recovery for all hazards and risks, with a strong focus on wildfire-related events and includes planning, training, exercising, and supporting responses and recovery efforts related to incidents, emergencies, disasters, and catastrophes.¹⁹²

SDG&E's Emergency Planning & Preparedness (EP&P) cost recovery request is for \$2.449 million in capital expenditures and \$34.472 million in O&M (direct). For the Emergency Management Operations initiative, the capital authorized in the 2019 GRC of \$5.237 million (2019–22) was never used while SDG&E's O&M spending of \$42.203 million (2019–22) was more than five times its authorization (\$7.732 million). For the Community Outreach, Public Awareness, & Communications Efforts initiative, the Commission has not previously authorized capital expenditures, but the entire amount spent of \$7.686 million (2019–22) was charged by SDG&E as capital.¹⁹³ See also the table below.

¹⁹² SDG&E T2 Ex-01-R at 94-95.

¹⁹³ SDG&E T2 Ex-01-R at 94-100.

Table 5
Emergency Planning & Preparedness
Authorizations and Spending 2019–2022 (\$000)¹⁹⁴

Initiative	Authorized Capital	Actual Capital	Differential Capital	Authorized O&M	Actual O&M	Differential O&M
Emergency Management Operations	\$5,237	-	(\$5,237)	\$7,732	\$42,203	\$34,472
Community Outreach, Public Awareness, & Communications Efforts	-	\$7,686	\$7,686	-	-	-
<i>Total</i>	<i>\$5,237</i>	<i>\$7,686</i>	<i>\$2,449</i>	<i>\$7,732</i>	<i>\$42,203</i>	<i>\$34,472</i>

The 2019 Wildfire Legislation altered the regulations imposed upon the electric utilities to such an extent, however, that the budget categories used after 2018 are not readily comparable to those used before 2018.

PCF opposes full cost recovery of SDG&E's requested EP&P costs because PCF argues that SDG&E included no quantification of ignitions reduced or avoided or any other risk reduction data that would enable an assessment of the program's cost-effectiveness.¹⁹⁵ However, PCF neither acknowledges the benefit of any EP&P activity that would reasonably be necessary to plan and prepare for emergencies, nor does PCF recommend reasonable reductions or a methodology for determining such reductions. No other intervenor comments on nor contests SDG&E's EP&P cost recovery request.

¹⁹⁴ SDG&E T2 Ex-01-R at 94 and SDG&E T2 Ex-02-R at 6-7.

¹⁹⁵ PCF T2 Ex-41 at 4-5, 23.

Although SDG&E has managed emergencies since the beginning of its operations, the requirement for large-scale emergency planning and preparedness for the risk of wildfires arose after the last GRC in response to the 2019 Wildfire Legislation. Therefore, the Commission finds this requested cost to be incremental.

In light of the new legislative requirements for EP&P specific to wildfires, including PSPS events, and the need to increase efforts to reduce wildfires, the Commission also finds SDG&E's rapid increase in EP&P costs documented above to be prudent and reasonable. PCF's recommendation to reduce recovery of EP&P costs because there is no link between these costs and avoided ignitions is without merit, since EP&P activities are inherently concerned with post-ignition events and are meant to mitigate the consequences of a wildfire rather than prevent one. In other words, ignitions avoided have no bearing on EP&P.¹⁹⁶ Accordingly, the Commission approves SDG&E's request for cost recovery for EP&P, subject to indirect cost reductions for reduced direct costs in Section 13.

However, SDG&E has not substantiated how any EP&P cost should be considered a capital expenditure that extends over a year and would be depreciated over several years of useful life. As a result, the Commission finds the requested amount for the Community Outreach, Public Awareness, and Communication Efforts initiative of \$7.686 million to be reasonable only as an O&M cost, not a capital expenditure.

¹⁹⁶ SDG&E T2 Ex-06C at 51.

The amount of \$7.686 million is added to total EP&P O&M direct costs of \$42.203 million plus indirect EP&P costs of \$7.800 million. Minus the amount previously authorized for EP&P O&M of \$7.732 million and any additional direct cost reductions (E&Y or dues), the Commission authorizes recovery of EP&P costs in the amount shown in Tables 1 and 2.

6. Situational Awareness and Forecasting

The Situational Awareness & Forecasting (SA&F) initiatives broadly cover weather and fire potential monitoring and reporting, the installation and utilization of camera networks and fault indicators, climate adaptation, and the computing infrastructure, which supports wildfire mitigation. Many of the initiatives in the SA&F category were implemented to enable SDG&E's Fire Science and Climate Adaptation (FSCA) unit to effectively conduct wildfire response and preparedness activities. The FSCA unit, which was established in 2018, is comprised of meteorologists, community resiliency experts, fire coordinators, and project management personnel.¹⁹⁷

Another key component of Situational Awareness and Forecasting is SDG&E's Weather Station Network, which obtains data for operations and critical activities. This network includes weather stations, cameras, the Fire Potential Index (FPI), the Santa Ana Wildfire Threat Index (SAWTI), and other tools used to forecast weather across the service territory by location and severity

¹⁹⁷ SDG&E T2 Ex-01-R at 21-22.

of weather events. Ground level equipment is complemented with satellite-based ignition detection systems and a mountain-top camera network.¹⁹⁸

The SA&F budget category includes the seven initiatives shown in Table 6 below.¹⁹⁹ For this SA&F activity, SDG&E requests \$3.010 million in capital expenditures and \$1.854 million in O&M costs (direct costs). The authorized, actual, and net increased SA&F capital and O&M costs for which SDG&E requests recovery are shown below.

Table 6
Situational Awareness & Forecasting²⁰⁰
Authorizations and 2019–2022 Costs (\$000)

Initiative	Authorized Capital	Actual Capital	Differential Capital	Authorized O&M	Actual O&M	Differential O&M
Advanced Weather Monitoring & Weather Stations	\$2,769	\$2,539	(\$229)	-	-	-
Air Quality Index	-	-	-	-	-	-
Camera Network	-	\$9	\$9	-	-	-
Wireless Fault Indicators	\$10,218	\$3,670	(\$6,548)	-	-	-
Fire Science & Climate Adaptation Dept.	-	-	-	\$9,588	\$11,442	\$1,854
Fire Potential Index	-	\$4,539	\$4,539	-	-	-
High Performance Computing Infrastructure	-	\$5,240	\$5,240	-	-	-
<i>Total</i>	<i>\$12,987</i>	<i>\$15,997</i>	<i>\$3,010</i>	<i>\$9,588</i>	<i>\$11,442</i>	<i>\$1,854</i>

¹⁹⁸ SDG&E T2 Ex-01-R at 22.

¹⁹⁹ SDG&E T2 Ex-01-R at 22.

²⁰⁰ SDG&E T2 Ex-01-R at 22.

Similar to Emergency Planning & Preparedness, the 2019 Wildfire Legislation altered the regulations imposed upon the electric utilities to such an extent that the budget categories used after 2018 are not readily comparable to those used before 2018. The authorizations, if any, underlying SDG&E's 2019–2022 SA&F costs from SDG&E's Test Year 2019 GRC are shown in Table 6.

Some average unit costs for SA&F activities declined in 2021–2022 compared to 2019–2020. For example, that is the case for the capital expenditure for installing 139 weather stations under the Advanced Weather Monitoring & Weather Stations initiative during the 2019–2022 period.

PCF opposes full cost recovery for SDG&E's requested SA&F costs because PCF argues that SDG&E included no quantification of ignitions reduced or avoided or any other risk reduction data that would enable an assessment of the program's cost-effectiveness.²⁰¹ However, PCF does not acknowledge the benefit of any SA&F activity that would reasonably be necessary to gather data needed to conduct operations and forecast critical activities. Nor does PCF recommend reasonable reductions or a methodology for determining any such reductions. No other intervenor comments on or contests SDG&E's SA&F costs for which SDG&E requests recovery.

Although the budget categories used after 2018 are difficult to compare with those used before 2018, SDG&E was able to identify amounts authorized for capital and O&M SA&F costs in the last GRC. The Commission recognizes that

²⁰¹ PCF-T2 Ex-41 at 4-5, 23.

the need to develop the Fire Potential Index, develop the High-Performance SA&F Computing Infrastructure, and expand the Fire Science and Climate Adaption Department arose since the last GRC (in response to the catastrophic California wildfires of 2017 and 2018, and the 2019 Wildfire Legislation). Therefore, the Commission finds these requested additional costs to be incremental.

In light of the new legislative requirements for Situational Awareness specific to wildfire mitigation, the Commission also finds SDG&E's increase in costs documented above to be prudent and reasonable. PCF recommends reducing recovery of SA&F costs because there is no link between these costs and avoided ignitions. This recommendation is without merit since SA&F activities that concern post-ignition events are inherently future-oriented and are meant to mitigate the consequences after a wildfire rather than prevent one. In other words, ignitions avoided have no bearing on SA&F.²⁰² Accordingly, the Commission approves cost recovery for SDG&E SA&F in the amounts of \$3.010 million for capital expenditures and \$1.854 million for O&M costs subject to direct cost reductions described in Section 13.

7. Asset Management and Inspections

SDG&E's asset management and inspection programs comprehensively inspect SDG&E's transmission and distribution electric lines. These programs consist of separate programs for detailed inspections, visual patrols, infrared inspections, and other various specialty patrols, inspections, and assessments.

²⁰² SDG&E T2 Ex-06C at 51.

Some inspections are required by General Order (GO) 95 while others inspect structures, attachments, and conductor spans to identify facilities and equipment that may not meet regulatory requirements.²⁰³ The cost categories below include the costs of inspections as well as corrective work, such as pole replacements, resulting from each inspection program.

The Asset Management & Inspections (AM&I) budget category includes eight initiatives:

1. Detailed Inspections of Distribution Equipment (DIDE),
2. Detailed Inspections of Transmission Equipment (Distribution Underbuild),
3. Infrared Inspections of Distribution Infrastructure,
4. Intrusive Pole Inspections,
5. HFTD Tier 3 Inspections,
6. Drone Assessments of Distribution Infrastructure,
7. Circuit Ownership, and
8. Patrol Inspections of Distribution Equipment.

The Commission addresses individual programs in separate sections below, but as an overview we note that when SDG&E initially imputed AM&I capital authorization, it combined the imputed values for Patrol Inspections of Distribution Equipment, Intrusive Pole Inspections, and HFTD Tier 3 Inspections in the value provided for Detailed Inspections of Distribution Equipment. Later, in response to an ALJ ruling, SDG&E provided separate values for imputed

²⁰³ Public Resources Code Sections 4292 and 4293 and General Order 95; SDG&E T2 Ex-01-R at 63.

capital authorizations for the above categories, which the Commission finds to be reasonable and are shown in the table below.²⁰⁴ The total capital authorization among these three AM&I initiatives remained unchanged.

The updated authorizations, actual recorded costs, the differential cost for capital expenditures, and O&M for each AM&I cost is shown in the table below, (including O&M authorizations for which there is no change) in order to provide necessary background before exploring individual initiatives.²⁰⁵

Table 7.B.

Asset Management and Inspections Costs 2019–2022 Totals (\$000)

Initiative	Authorized Capital	Actual Capital	Differential Capital	Authorized O&M	Actual O&M	Differential O&M
Detailed Inspections of Distribution Equipment	\$30,757	\$37,139	\$6,383	\$50,628	\$4,630	(\$45,998)
Detailed Inspections of Transmission Equipment (Distribution Underbuild)	\$2,369	\$2,594	\$225	-	-	-
Infrared Inspections of Distribution Infrastructure	-	-	-	-	\$577	\$577
Intrusive Pole Inspections	\$3,028	\$5,092	\$2,064	-	\$2,987	\$2,987
HFTD Tier 3 Inspections	\$5,848	\$8,959	\$3,111	-	-	-
Drone Assessments	-	\$80,809	\$80,809	-	\$137,446	\$137,446

²⁰⁴ SDG&E T2 Ex-09.

²⁰⁵ SDG&E T2 Ex-01-R at 62-63.

Initiative	Authorized Capital	Actual Capital	Differential Capital	Authorized O&M	Actual O&M	Differential O&M
of Distribution Infrastructure						
Circuit Ownership	-	\$713	\$713	-	-	-
Patrol Inspections of Distribution Equipment	\$3,103	\$4,030	\$927	-	-	-
<i>Total</i>	<i>\$45,105</i>	<i>\$139,338</i>	<i>\$94,233</i>	<i>\$50,628</i>	<i>\$145,641</i>	<i>\$95,013</i>

SDG&E's Asset Management & Inspections direct cost recovery request is for \$94.233 million in capital and \$95.013 million in O&M for a total of \$189.246 million. The average or unit cost of each inspection program is shown below.

Table 7.C

Asset Management and Inspections Unit Costs (\$000)

Initiative	Inspections	Unit Cost 2019	Unit Cost 2020	Unit Cost 2021	Unit Cost 2022	Unit Cost Average
Drone Assessments of Dist. Infrastructure	110,774	\$371	\$2,900	\$2,094	\$3,203	\$1,970
Detailed Inspections of Dist. Equip.	74,595	\$608	\$540	\$520	\$586	\$560
Detailed Inspections of Dist. Underbuild	6,959	n/a	\$359	\$234	\$314	\$309
HFTD Tier 3 Inspections	47,930	\$118	\$115	\$265	\$243	\$187
Intrusive Pole Inspections	43,867	\$96	\$103	\$323	\$1,949	\$184
IR Inspections of Dist. Infrastructure	42,409	n/a	\$13	\$9	\$13	\$14
Patrol Inspections of Dist. Equip.	345,876	\$10	\$10	\$14	\$13	\$12

The only AM&I initiative identified by PCF to lack reported data on ignitions reduced or avoided is the Circuit Ownership initiative. Each of the remaining seven Asset Management & Inspections initiatives was identified by PCF to possess a relatively high cost per inspection or cost per ignition reduced or avoided.²⁰⁶ SDG&E has performed Detailed Inspections of Distribution Equipment, Detailed Inspections of Distribution Underbuild, Intrusive Pole Inspections, and Patrol Inspections of Distribution Equipment since 1997 as required by GO 165.²⁰⁷ SDG&E bundles them together under the title Compliance Maintenance Program aka Corrective Maintenance Program (CMP), which helps mitigate wildfire risk by providing additional information about the condition of the electric distribution system, including the HFTD. These four programs, which SDG&E includes in its WMPs,²⁰⁸ are addressed here first.

7.1. Detailed Inspections of Distribution Equipment

General Order 165 requires SDG&E to perform a service territory-wide inspection of its electric distribution system. With this information, potential infractions can be addressed before they develop into issues or failures that may result in ignition. GO 165 requires utilities to conduct detailed inspections at a minimum of every 5 years for overhead structures. This requirement predates the 2019 Wildfire Legislation, and costs for this work prior to 2019 have been included in rates.

²⁰⁶ PCF T2 Ex-01 at 4-5.

²⁰⁷ D.97-03-070; D.17-12-024.

²⁰⁸ SDG&E 2020–2022 WMP Update at 248.

Additionally, SDG&E prioritizes detailed inspections in the HFTD prior to fire season. For 2019–2022, an estimated 5.44 ignitions would have occurred if inspections and repairs had not been completed in the prescribed timeframes as part of the 5-year detailed distribution inspection program.²⁰⁹

For Detailed Inspections of Distribution Equipment for the 2019-2022 period, SDG&E seeks direct cost recovery of \$6.383 million in capital expenditures and underspending of O&M expenses of \$45.998 million.²¹⁰

SDG&E bases its request for cost recovery for DIDE on imputed authorizations.²¹¹ The Commission finds the imputed authorizations in Table 7.B to be reasonable based on the values updated by SDG&E. As shown in the table above, for DIDE, SDG&E overspent the capital authorization by 21 percent and underspent the O&M authorization. For 2019–2022, SDG&E performed 74,595 detailed inspections at an average unit cost of \$560 per inspection at a decreasing rate (2019 unit cost was \$608; 2022 unit cost was \$586). Based on this increase in efficiency for this required uncontested cost, the Commission finds direct cost recovery in the amount of \$6.382 million in capital for DIDE to be reasonable and adopts it as an initial authorization subject to direct cost reductions in Section 13.

7.2. Detailed Inspections of Transmission Equipment (Distribution Underbuild)

GO 165 requires SDG&E to perform a service territory-wide inspection of its electric transmission system, including within the HFTD. The costs associated

²⁰⁹ SDG&E T2 Ex-01-R at 64-65.

²¹⁰ SDG&E T2 Ex-01-R at 62.

²¹¹ SDG&E T2 Ex-09.

with this initiative include any related distribution equipment located near or associated with the transmission system²¹² (known as Distribution Underbuild) and any related corrective work resulting from the detailed inspections. For 2019–2022, an estimated 5.08 ignitions would have occurred if inspections and repairs had not been completed in the prescribed timeframe as part of the Distribution Underbuild detailed inspection program.

For the 2019–2022 period, SDG&E requests recovery of the \$0.225 million in capital expenditures, which is the incremental amount resulting from the difference between recorded direct costs of \$2.594 million and the \$2.369 million in capital expenditures authorized in the last GRC.²¹³

For 2020–2022,²⁵ 6,959 inspections were performed at an average and downward-trending unit cost of \$309 per inspection. Based on this increase in efficiency for this required uncontested cost, the Commission finds the inspection cost to be incremental, and reasonable.

However, SDG&E has not demonstrated how performing such inspections is a capital cost. Inspections necessarily incur labor O&M costs, but would incur capital expenditures only if the inspection led to corrective work requiring a capital expenditure (such as for new equipment). It is SDG&E's responsibility to clearly document, and report to the Commission, costs in terms of both capital expenditure and O&M. SDG&E fails to explain clearly why all of the costs sought for recovery in this instance are capital expenditures and none are O&M. Absent

²¹² SDG&E 2020 WMP dated March 2, 2020 at 87.

²¹³ SDG&E T2 Ex-01-R at 62.

a clear explanation, the Commission finds the requested amount for this category to be reasonable only as an O&M cost, not capital expenditures. In future requests for cost recovery, SDG&E shall separately specify the O&M costs for all wildfire mitigation inspections from the capital costs for repair or replacement of poles and other equipment.

7.3. Wood Pole Intrusive Inspections

An intrusive inspection of a wood pole typically involves an excavation around the pole base and a boring into the pole at ground level. Depending on the severity of the deterioration, the pole either passes inspection or is replaced. This cost category includes the inspections and the replacement work.²¹⁴

GO 165 requires all transmission wood poles over 15 years of age to be inspected intrusively within 10 years, and all poles which previously passed intrusive inspection to be inspected intrusively again on a 20-year cycle. Distribution wood pole intrusive inspections are performed on a 10-year cycle. For 2019–2022, an estimated 1.2 ignitions would have occurred if inspections and repairs had not been completed as part of the wood pole intrusive inspection program.²¹⁵

For the 2019–2022 period, SDG&E requests recovery of the direct costs related to this activity in the amount of \$2.064 million for capital expenditures and \$2.987 in O&M costs.²¹⁶ Based on SDG&E's updated data, the Commission finds the imputation of \$3.028 million in authorized capital to be reasonable. For

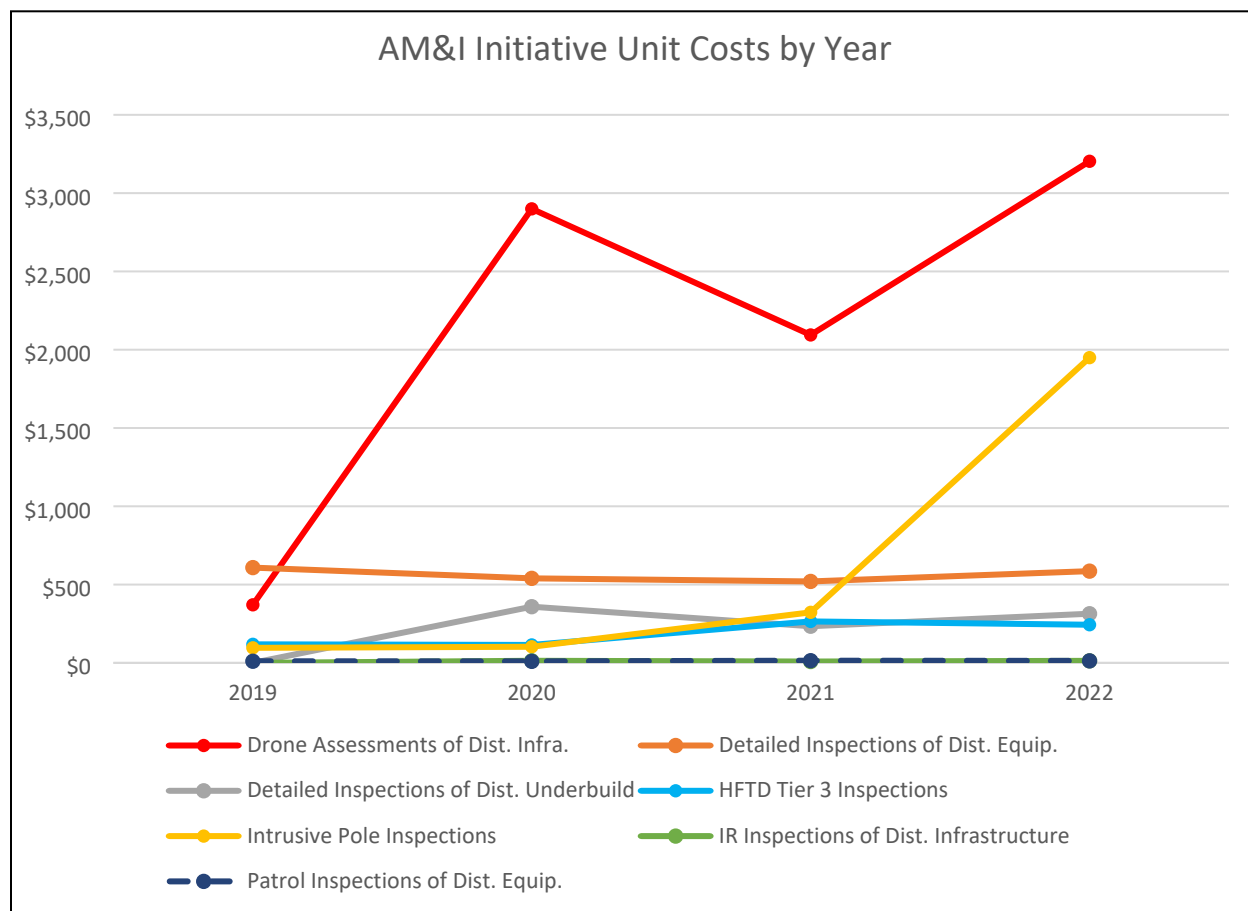
²¹⁴ SDG&E T2 Ex-01-R at 68.

²¹⁵ SDG&E T2 Ex-01-R at 69.

²¹⁶ SDG&E T2 Ex-01-R at 68.

2019–2022, SDG&E performed 43,867 inspections including pole replacements and other corrective work at an increasing rate and at an increasing unit cost as shown below.

Figure 2



SDG&E's 2022 RSAR data shows that the driver of this cost increase is an increase in corrective work resulting from the inspections, rather than the inspections themselves.²¹⁷

As shown above, in 2019 and 2020, the approximate capital cost per replaced pole is \$1,250 and \$1,100, respectively; the same metric increases to approximately \$2,800 and \$2,200 for years 2021 and 2022, respectively. SDG&E explains that the variances for both dollars and units are due to a higher than planned average number of jobs and an overall increase in pole replacement

²¹⁷ SDG&E 2022 Risk Spending Accountability Report dated at A-15.

labor and material costs over time, due partly to supply chain disruptions caused by the COVID-19 pandemic.²¹⁸

The Commission finds this explanation to be reasonable and approves the imputed capital cost and O&M cost as needed corrective measures for safety and reliability purposes. As a result, the Commission finds direct cost recovery in the amount of \$2.064 million in capital expenditures and \$2.987 million in O&M to be reasonable and adopts it as an initial authorization subject to direct cost reductions in Section 13 (with indirect costs remaining to be adjusted and authorized).

GO 165 has required wood pole intrusion inspections since 1997. The relevant costs have been requested and authorized in rates. The Commission needs additional information, however, in future requests for cost recovery to adequately judge what costs are just and reasonable. As such, the Commission requires that SDG&E shall specify the O&M costs for inspections separately from the capital costs for repair or replacement of poles and other equipment and the number of poles being replaced. SDG&E shall also demonstrate how such costs are incremental to other authorized pole replacement programs and how SDG&E is coordinating and optimizing pole inspection and replacement programs to avoid redundancies. In addition, in the next GRC, SDG&E shall perform cost-benefit analyses to compare the costs and benefits of the use of wood poles compared to metal poles (with the additional data for the 2019–2022 period that

²¹⁸ SDG&E 2022 Risk Spending Accountability Report dated at A-15.

was not reviewed in D.19-05-039), and to demonstrate how SDG&E has accounted for savings in using metal poles instead of wood poles.

7.4. Patrol Inspections of Distribution Equipment

GO 165 requires SDG&E to patrol their electrical systems 1) once a year in urban areas, 2) once a year in Tiers 2 and 3 of HFTDs, and 3) every two years in rural areas outside of the HFTD.

GO 165 defines patrol inspections as simple visual inspections of applicable utility equipment and structures. These inspections are intended to identify obvious structural problems and hazards, for which the remediation work can be carried out in the course of other company business. Both the patrol inspections themselves and the corrective work are included in this initiative.²¹⁹ However, as a long-standing practice SDG&E performs patrol inspections in all areas on an annual basis. Patrol inspections have been performed on all distribution structures potentially affected by a PSPS event prior to and after the PSPS event, and patrols are prioritized in the HFTD prior to wildfire season, typically by April of each year. SDG&E performed 86,075 Patrol Inspections in 2019 and at a similar rate each year through 2022 for a total of 345,876 patrol inspections performed over the 2019–2022 period at an average unit cost of \$12 per inspection.²²⁰

²¹⁹ SDG&E 2022 Risk Spending Accountability Report dated at A-15.

²²⁰ SDG&E T2 Ex-01-R at 75.

For this cost category for the 2019–2022 period, SDG&E seeks recovery of \$0.927 million in capital expenditures and no O&M expenditures (and the associated indirect costs).

Neither GO 165 nor SDG&E's WMPs specify the cost of patrol inspections, the extent of patrol inspections in terms of personnel and equipment, or how their costs should be accounted for to avoid overlap. Patrol inspections of distribution structures could be a drive-by inspection or they could be performed with trucks, drones, or other special equipment, involving different levels of staff and other O&M expenses. GO 165 specifically states that patrol inspections may be carried out in the course of other company business, thereby avoiding separate O&M expenses.

Given that SDG&E's patrol inspection costs are performed with the least unit cost compared to other programs and are mandated by GO 165, the Commission finds them to be reasonable. However, SDG&E has not demonstrated how work performed by staff performing inspections is a capital cost, nor accounted for the nature of the capital cost. As a result, the Commission finds imputed authorization and the requested recovery for this cost to be reasonable only as O&M costs, not capital costs. Accordingly, the Commission approves recovery of \$0.927 million in O&M to be just, reasonable, and incremental (i.e., costs of \$4.030 million minus the authorization of \$3.103 million equals \$0.927 million) subject to direct cost reductions in Section 13 (with indirect costs remaining to be adjusted and authorized).

In future applications for recovery of these costs, SDG&E shall provide evidence regarding how inspection programs are coordinated to avoid or

account for overlapping activity, associated O&M, and capital costs, if any. SDG&E shall also separately specify the O&M costs for inspections from the capital costs for repair or replacement of poles and other equipment.

7.5. HFTD Tier 3 Distribution Pole Inspections

In accordance with a settlement approved in D.10-04-047 after the 2007 Witch fire, SDG&E increased the frequency of inspections of poles in Tier 3 HFTDs from every five years to every three. This results in the inspection of an additional 11,000 poles annually on average, which is about one-third of the distribution poles in the Tier 3 HFTDs. More specifically, SDG&E performed 11,864 extra distribution pole inspections in Tier 3 HFTDs in 2019 and at a similar rate each year through 2022. Including the extra inspections, over the period 2019–2022, SDG&E performed 47,930 inspections at an average unit cost of \$187 per inspection. SDG&E estimates that 2.37 ignitions would have occurred over 2019–2022 if inspections and repairs had not been completed as part of the HFTD Tier 3 inspection program.

For this activity, SDG&E seeks recovery of \$3.111 million in capital expenditures and no O&M expenditures for the 2019–2022 period (plus the associated indirect costs). The Commission is not persuaded.

SDG&E has neither demonstrated how work performed by staff performing such inspections is a capital cost nor accounted for the nature of the capital cost. Inspections necessarily incur O&M costs due to labor, but incur capital expenditures only if the inspection led to corrective work requiring a capital expenditure (such as for new equipment). It is SDG&E's responsibility to document and report costs clearly to the Commission, both in terms of capital

expenditure and O&M. As a result of SDG&E's failure to explain clearly why all of the costs sought for recovery in this instance are capital expenditures and none are O&M, the Commission finds the above amount for this category to be reasonable only as an O&M cost, not capital expenditures. The Commission finds the uncontested amount of \$3.111 million for this required activity during the 2019–2022 time period to be reasonable and approves its cost recovery as O&M and subject to direct cost reductions in Section 13 (with indirect costs remaining to be adjusted and authorized).

In addition, in all future requests for pole inspections that may involve pole replacement, SDG&E shall separately specify the O&M costs for inspections from the capital costs for repair or replacement of poles and other equipment.

7.6. Drone Assessments of Distribution Infrastructure

In 2019, SDG&E started a Drone Assessments of Distribution Infrastructure pilot program to determine whether the use of drone technology could identify potential fire hazards on distribution facilities in the Tier 3 HFTD that could not be identified, or were difficult to identify, from the ground during traditional inspections.²²¹ SDG&E's analysis of the data collected by the drone program concluded that through the enhanced view of infrastructure, especially in hard to reach or difficult terrain,²²² the program found a higher percentage of total issues than traditional ground inspection programs. By drone, SDG&E found more damaged arrestors, damaged insulators, issues with pole tops, issues

²²¹ SDG&E Reply Brief at 36.

²²² SDG&E Reply Brief at 36.

with armor rods, crossarm or pole top damage, exposed connections, loose hardware, improper splices, damaged conductors, damaged transformers, and issues with Communication Infrastructure Provider (CIP) connections.²²³ The DIAR program found a higher percentage of issues by: 1) providing a view of the top of the pole, 2) using high-resolution imagery that allowed inspectors to zoom, enhance contrast, and manipulate the images to better identify damages that could otherwise be difficult or impossible to see from the ground, and 3) using a dedicated inspection team to enhance consistency and quality.²²⁴ As a result, SDG&E prioritized drone inspections within the HFTD starting with Tier 3 in 2020 and moving into Tier 2 in 2021 and 2022, with the goal of completing inspections for all HFTD structures within the 2019–2022 period. For that period, SDG&E estimated that 45.9 ignitions would have occurred if inspections and repairs had not been completed as part of this inspection program.²²⁵

As shown in the table above, SDG&E spent over five times as much on Drone Assessments of Distribution Infrastructure as it spent on five of six other inspection programs. The utility's cost recovery requests for this activity are shown in the table below:²²⁶

Table 7.6A
Drone Assessments of Distribution Infrastructure
Authorizations and Costs 2019-2022 (\$000)

²²³ SDG&E T2 Ex-01-R at 72-73; SDG&E Reply Brief at 37.

²²⁴ SDG&E Reply Brief at 38.

²²⁵ SDG&E T2 Ex-01-R at 72-73.

²²⁶ SDG&E T2 Ex-01-R at 71.

Year	Units (inspections)	Authorized Capital	Actual Capital	Differential Capital	Authorized O&M	Actual O&M	Differential O&M
2019	37,310	-	\$274	\$274	-	\$13,557	\$13,557
2020	21,420	-	\$16,145	\$16,145	-	\$45,964	\$45,964
2021	22,000	-	\$12,903	\$12,903	-	\$33,170	\$33,170
2022	30,044	-	\$51,488	\$51,488	-	\$44,755	\$44,755
Total	110,774	-	\$80,809	\$80,809	-	\$137,446	\$137,446

The Commission did not authorize funds for Drone Assessments of Distribution Infrastructure in the last GRC. However, for this activity SDG&E recorded capital expenditures of \$80.809 million (2019–2022), and O&M expenses of \$137.446 million (2019–2022). During this time, SDG&E performed 110,774 inspections at an average unit cost of \$1,970 per inspection. Unlike patrol inspections and distribution pole inspections in Tier 3 HFTDs, SDG&E's 2019 costs are lower than other years. The average cost of inspections by drones is also over 3.5 times that of the next costliest initiative (Detailed Inspections of Distribution Equipment) by unit costs as shown above in Table 7.C.

PCF argues that SDG&E has not demonstrated how its more costly drone inspections were cost-effective nor that it was reasonable to prioritize drone inspections over less-costly inspection alternatives.²²⁷ PCF bases this on the following: 1) PCF contends that SDG&E's estimates of ignitions avoided is not credible due to the difference between current estimates and those reported in WMPs without explanation;²²⁸ 2) SDG&E provides no information on how much

²²⁷ PCF T2 Ex-01 at 13-14; PCF Opening Brief at 57.

²²⁸ PCF Reply Brief at 57-58.

duplication there is between drone inspections and manual inspections; 3) manual inspectors can see most of the hardware from the ground (except the top surfaces at the top of the poles) and inspectors can inspect the surfaces not visible from the ground as necessary via truck-mounted lift baskets or their own handheld drones; and 4) SDG&E provides no evidence that its drone inspections and patrol inspections are coordinated to optimize efficiencies and avoid redundancies.²²⁹

In reply, SDG&E provides additional explanation for its increased estimation of ignitions avoided and how they changed over time. SDG&E also states that manual inspectors cannot inspect poles using mounted lift baskets or their own handheld drones because they don't carry them and poles are often inaccessible by lift basket trucks—particularly in SDG&E's rural backcountry. As a result, SDG&E argues that it is not reasonable to compare the effectiveness of drone inspections with manual inspection programs.²³⁰

SDG&E began its drone program by learning from the programs of other utilities, including SCE and PG&E.²³¹ In 2019, SDG&E's drone inspection unit costs were \$371 per inspection.²³² However, starting in 2020 and continuing through 2022 SDG&E's unit costs skyrocketed as shown in the table below.

Table 7.6B

²²⁹ PCF Opening Brief at 58.

²³⁰ SDG&E Reply Brief at 36-39.

²³¹ SDG&E 2020 WMP dated February 7, 2020 at 105, SDG&E 2020 WMP dated March 2, 2020 at 106.

²³² From SDG&E's figures in Table 7.6A for 2019, \$274,000 in capital expenditures plus \$13,557 in O&M costs divided by 37,310 inspections equals \$371 per inspection.

SDG&E Drone Assessment Unit Costs

	Year	Inspections	Unit Cost
	2019	37,310	\$371 per inspection
	2020	21,420	\$2,900 per inspection
	2021	22,000	\$2,094 per inspection
	2022	30,044	\$3,203 per inspection
	2019-22	110,774	\$1,970 <i>per inspection</i>

SCE redesigned its drone inspection program by combining ground-based and aerial inspections to save money.²³³ In contrast, after piloting its drone inspection program, SDG&E decided to expand its drone program to complete Tier 2 of the HFTD in the following two years, as well as the portions of its transmission system within the HFTD.²³⁴

In its Opening Comments on the Proposed Decision, SDG&E claims that the Proposed Decision erred in denying 100% of costs for SDG&E's Drone Investigation, Assessment and Repair (DIAR) program because the Proposed Decision: 1) contravenes applicable legal requirements because it disallows costs for programmatic inspections and repairs that were required to comply with regulatory requirements, approved by Energy Safety, and highly effective and efficient; 2) misapplies the prudent manager standard by requiring perfection rather than reasonableness; 3) irrationally compares SDG&E's costs to PG&E's costs; and 4) erroneously disallows 100 percent of the costs SDG&E incurred to

²³³ SDG&E 2020 WMP Q4 Report at 11.

²³⁴ SDG&E 2020 WMP dated February 7, 2020 at 105; SDG&E 2020 WMP Revised (Mar. 2, 2020) at 106; SDG&E 2020 WMP Q4 Report at 11.

repair risks identified through the drone inspections, including replacements and remediations required to repair infrastructure presenting clear fire risk.²³⁵

the Commission recognizes that drone inspections can provide an enhanced view of infrastructure and assist in inspecting infrastructure in hard-to-reach areas or rugged terrain. On the record presented, however, we cannot find the drone inspection costs to be reasonable due to SDG&E's lack of analysis and evidence supporting the high costs incurred for its drone inspection program. We will further consider SDG&E's costs incurred for repairs undertaken as a result of the inspections in Track 3 of this proceeding, as detailed below.

We find SD&E's comments to the PD unpersuasive for several reasons.

First, the Commission applies the same prudent manager standard as in previous SDG&E reasonableness reviews.²³⁶ As stated fully in Section 2.2 above, this standard has included the requirement of considering cost-effectiveness for years prior to the recording of costs in 2019.

Second, SDG&E's arguments that the Commission must approve all costs because the activities are included in its WMP filings does not account for the Commission's duty to determine if the requested costs are reasonable.²³⁷

Third, neither the Commission nor the intervenors could evaluate the cost of SDG&E's drone inspections alone because SDG&E did not separately track the

²³⁵ SDG&E Opening Comments at 11-16.

²³⁶ D.22-06-032 at 8, quoting D.02-08-064 at 6, quoting D.87-06-021.

²³⁷ D.24-12-074 at 467-468.

cost of drone inspections from repair costs. SDG&E further claims that traditional inspections of these assets were sometimes impossible or not cost-effective, and that “manual inspectors do not carry drones”.²³⁸ But without any quantitative analysis of drone inspection costs, as distinct from the costs SD&E incurred to undertake repairs resulting from those inspections, SDG&E has not provided evidence to support finding the drone inspection costs themselves to be reasonable.

Fourth, SDG&E argues that comparing their drone inspection costs with PG&E’s is inapt for several reasons,²³⁹ including that the comparisons are made to data outside the record. We note, however, that SDG&E’s comments to the PD include estimates of its average inspection cost/pole from 2019–2022 without any citation to the record.²⁴⁰ Furthermore, while SDG&E describes numerous potential benefits of the drone inspection program and claims it is cost-effective, SDG&E does not meaningfully analyze the cost of the drone program.²⁴¹ Nevertheless, given the lack of any comparisons by SDG&E of its drone inspection costs to any of its other AM&I inspection programs to support the claimed costs, the Commission finds it unnecessary to consider comparisons of SDG&E’s drone inspection costs to other utilities as a basis for disallowing costs of the drone inspections. However, the parties should consider similar drone

²³⁸ SDG&E Opening Comments at 2, 12.

²³⁹ SDG&E Opening Comments at 2.

²⁴⁰ SDG&E Opening Comments at 14.

²⁴¹ SDG&E Opening Comments at 15-16.

inspection and repair costs of other utilities when such costs are evaluated in Track 3.

In short, SDG&E provided insufficient record evidence to demonstrate the costs of the drone inspections alone are reasonable, including the extent to which drones have been used instead of other inspection programs, their total cost, their unit cost, their overlap with other programs, and the prudence of expanding the use of drones without modification at cost far greater than other inspection programs and drone inspection programs by other utilities. With the drone program being 77 percent of the AM&I 2019–2022 cost recovery request, data regarding how these high costs are balanced by high benefits is needed, but it is lacking. SDG&E also provided insufficient evidence to establish the reductions in risk based on ignitions avoided by drone inspections due to fluctuations and inconsistencies in the data on those risk reductions due to drone inspections.²⁴²

Much of SDG&E's drone inspection costs appear to be for processing the data collected by the drones. If a technology has the potential to be used in wildfire mitigation, but is clearly not yet developed to such a level to be readily deployable and useful, a prudent manager might either contract with an appropriate technology company to develop the technology, or develop that technology in-house and then adopt it only when it was proven to be ready. As a result, the Commission finds insufficient evidence to support the prudence of SDG&E having deployed a novel technology in the manner that SDG&E did at a

²⁴² PCF T2 Ex-01 at 13-14.

high cost and at ratepayer expense before determining how to use it effectively and efficiently. SDG&E has not demonstrated how it avoided redundancies and why drones cannot be utilized in the field with other programs. SDG&E also has not demonstrated the degree to which high-cost separate remote inspection using drones and subsequent analysis is needed or beneficial, compared to using drones as a supplemental tool that may be used and controlled by the manual patrol inspectors on an as-needed basis.²⁴³

Based on the current record of the proceeding, the Commission finds that SDG&E has failed to demonstrate the prudence of the Drone Assessments of Distribution Infrastructure program and the reasonableness of its total costs from 2019–2022. The Commission does not find that SDG&E should have stopped its drone program entirely as SDG&E claims. In contrast, although SDG&E did not demonstrate the prudence of the Circuit Ownership Program discussed in Section 7.8, SDG&E prudently discontinued the Circuit Ownership Program to avoid imprudently incurring costs, unlike what SDG&E did for the drone program. As a result, the Commission does not authorize recovery for SDG&E's drone program in this decision.

In order for the Commission to consider whether to authorize any costs requested for this program, SDG&E, consistent with its burden of proof, must provide sufficient evidence and detailed information for the Commission to determine the reasonableness of such costs. In this case, SDG&E did not separately break down drone inspection and associated repair costs. Without

²⁴³ PCF T2 Ex-01 at 17-18.

having these specific costs, the Commission was unable to make a reasonableness finding for these costs. SDG&E did not meet its burden here.

While the Commission is perfectly within its right to deny all costs not found to be reasonable based on SDG&E's failure to meet its burden, the Commission also recognizes that wildfire mitigation activities and the reasonable costs associated with these activities play an important role in ensuring safe and reliable service. After consideration of the party briefs, arguments, and additional review of the proceeding record, the Commission will allow SDG&E to supplement the record for this one category, consistent with the direction provided in this decision. We need to carefully weigh ensuring that Investor Owned Utilities (IOUs) are provided with the appropriate incentives for fully, effectively and efficiently implementing wildfire mitigation activities. That said the Commission also does not want to send a message that the IOUs will be given multiple bites at the apple where they fail to meet their burden by failing to provide what should be basic information for the Commission and parties to assess the reasonableness of the cost recovery requested in an application. This is not a case of first impression, as we faced a similar issue in Phase 1 of this proceeding. There, the Commission provided SoCalGas an opportunity to provide additional evidence in Phase 3 of this proceeding to allow for a full assessment of Pipeline Safety Enhancement Program (PSEP) costs.²⁴⁴ Similar to the decision in Phase 1, we will defer a final determination on the cost for this

²⁴⁴ See D.24-12-074 at 233, 239, *Decision Addressing The 2024 Test Year General Rate Cases of Southern California Gas Company and San Diego Gas & Electric Company*, dated.

program, subject to SDG&E providing detailed and specific information required to fully assess the costs sought to be recovered here.

Accordingly, the Commission orders that SDG&E submit specific and detailed supplemental testimony of both the inspection and the repair costs associated with the category of costs at issue for this program. Parties will be able to conduct discovery and submit any supplemental testimony in response to the supplemental testimony to be provided by SDG&E. The reasonableness review of this cost recovery request will be addressed in Track 3 of this proceeding. To provide a full record to determine reasonableness of the inspections and repairs resulting from drone inspections, SDG&E shall serve supplemental testimony providing a breakdown of all AM&I costs except circuit ownership on an annual basis for the 2019–2022 period in the following categories:

- Repair costs;
- Inspection costs;
- Capital expenditures; and
- O&M expenses.

Within 30 days of the issuance of this decision, SDG&E shall meet and confer with all the active parties in this proceeding, serve the additional testimony required above, and propose a schedule for party evaluation, discovery, and service of any supplemental party testimony in response to SDG&E's supplemental testimony, determine whether additional hearings will be needed on this topic and confirm that briefing on this topic will occur consistent with the briefing schedule for Track 3 of this proceeding.

The Commission requires electric utilities to optimize and implement risk mitigation measures that prioritize risk reduction in a manner that is safe and cost-effective.²⁴⁵ SDG&E provides little evidence that the above programs are coordinated to optimize efficiencies and avoid redundancies. In future applications for recovery of asset management and inspection costs and GRCs, SDG&E shall provide additional evidence regarding how inspection programs are coordinated to avoid or account for overlapping activity and associated O&M and capital costs. SDG&E shall also detail the staffing employed, their cost, and the justification for the additional cost in coordination with other inspection programs, including their risk benefit cost ratios. Such differences would be reasonable to compare with other inspection programs.

SDG&E is now fully on notice that what should have been baseline information to assess reasonableness is required to determine what costs are recoverable. SDG&E should not expect the Commission to provide this type of leniency in future GRC proceedings or other applications for cost recovery. Safety is a top priority for the Commission and should also be for SDG&E. That said, proper care and submission of adequate evidence to ensure only appropriate costs are recovered is also an equally important priority.

7.7. Infrared Inspections of Distribution Infrastructure

Distribution Infrared Inspections utilize ground-based infrared or thermal imaging technology to examine the radiation emitted from electrical connections to look for abnormalities that may be remedied before they cause equipment to

²⁴⁵ PCF Opening Brief at 63, citing to D.16-08-018 at 192.

fail. The inspections themselves and the corrective work resulting from infrared inspections is captured within this initiative.²⁴⁶ For 2019–2022, SDG&E inspected approximately 12,000 distribution structures each year²⁴⁷ and estimates that 0.036 ignitions were avoided due to the Distribution Infrared Inspections Program.²⁴⁸ For 2019–2022, 42,409 inspections were performed at an average unit cost of \$14 per inspection.

For these infrared inspections, SDG&E seeks recovery of \$0.577 million in O&M expenses and no capital expenditures for the 2019–2022 period. The prior GRC did not authorize any funds for this activity.²⁴⁹

SDG&E provides estimates of risks avoided for this program, which began in 2020. However, SDG&E provides even less information about this than it did about the drone inspection program. Moreover, SDG&E does not provide information regarding whether a greater percentage of abnormalities were found using infrared technology than with other technology. Since no costs were sought for capital expenditures, it appears that no equipment was replaced. Although the unit cost for this program is comparatively less than some other programs, SDG&E does not detail the staffing employed, their cost, nor the justification for the additional cost compared with other inspection programs, including their risk spend efficiency. SDG&E does not indicate how or when it assessed such information before initiating it as a pilot or continuing it beyond

²⁴⁶ SDG&E T2 Ex-01-R at 67.

²⁴⁷ SDG&E T2 Ex-01-R at 67.

²⁴⁸ SDG&E T2 Ex-01-R at 67.

²⁴⁹ SDG&E T2 Ex-01-R at 67.

the pilot stage. Without such information, SDG&E has not demonstrated the reasonableness or prudence of this program. Accordingly, cost recovery for the infrared inspection program is denied.

7.8. Circuit Ownership Platform

In 2019 and 2020, SDG&E employees used a mobile phone application, known as the Circuit Ownership Platform, to identify potential hazards that could lead to wildfires. This application was used in addition to others to record relevant information.²⁵⁰

This program was discontinued after 2020 by capturing the same data via other inspection programs including the DIAR program, QA/QC inspections, enhanced infrared inspections in HFTD, and pre- and post-PSPS-event patrols.²⁵¹ SDG&E requests \$0.713 million for this program in 2019 and 2020 for capital expenditures that were not authorized in the GRC (plus the associated indirect costs). No evidence shows that this initiative directly reduced a risk driver or ignitions.²⁵² As such, SDG&E provides insufficient information to support the reasonableness and prudence of initiating this program without authorization. As a result, cost recovery for the amount of \$0.672 million in 2019 and \$0.041 million in 2020 (plus the associated indirect costs) is denied. The Commission and SDG&E's ratepayers require prudent evaluation of programs before costs are reasonably recoverable.

²⁵⁰ SDG&E T2 Ex-01-R at 67.

²⁵¹ SDG&E T2 Ex-01-R at 74.

²⁵² SDG&E T2 Ex-01-R at 73.

8. Vegetation Management and Inspections

SDG&E addresses the risk of vegetation-infrastructure contact outages and ignitions through its comprehensive Vegetation Management Program. SDG&E's WMP vegetation management initiatives span several activities including inspections, trimming and removals, fuels treatment, pole brushing, and audits. This section addresses those activities performed outside of the Tree Trimming Balancing Account (TTBA) and included within the WMPMA.²⁵³

This decision address SDG&E's request for Vegetation Management and Inspections including four initiatives: (1) Fuels Management, (2) Pole Brushing, (3) LiDAR Inspections of Vegetation around Distribution Infrastructure, and (4) Vegetation Restoration.²⁵⁴ This decision does not address these costs according to how SDG&E has categorized them in its WMP.²⁵⁵ Cal Advocates proposes cost savings from Strategic Undergrounding, which this decision also addresses in this section.

SDG&E requests recovery of the costs related to this activity shown in the table below.²⁵⁶

Table 8
Vegetation Management & Inspections
Authorizations and Costs 2019–2022 (\$000)

Initiative	Authorized O&M	Actual O&M	Differential O&M
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²⁵³ SDG&E T2 Ex-01-R at 76.

²⁵⁴ SDG&E T2 Ex-01-R at 76.

²⁵⁵ SDG&E Opening Comments at 22, fn. 74 citing to SDG&E Ex-T2-01-R-C (SDG&E 2022 WMP Update).

²⁵⁶ SDG&E T2 Ex-01-R at 76.

Pole Brushing	\$16,552	\$19,691	\$3,139
Fuels Management	-	\$22,442	\$22,442
LiDAR Inspections of Vegetation around Distribution Infrastructure	-	\$4,152	\$4,152
Vegetation Restoration	-	\$1,265	\$1,265
<i>Total</i>	<i>\$16,552</i>	<i>\$47,550</i>	<i>\$30,998</i>

8.1. Pole Brushing

Pole brushing is a fire prevention measure involving the removal of vegetation at the base of poles that carry specific types of electrical hardware that could cause sparking or molten material to fall to the ground. The clearance requirements in Public Resources Code (PRC) Section 4292 require the removal of all vegetation down to bare mineral soil within a 10-foot radius from the outer circumference of subject poles located within the boundary of the State Responsibility Area (SRA). The requirement also includes the removal of live vegetation up to 8 vertical feet and the removal of dead vegetation up to conductor level within the clearance area. Approximately 34,000 distribution poles that have non-exempt subject hardware attached are brushed annually. Inspectors determine which poles require work and update the records in the work management database. Three separately scheduled pole brush activities are performed annually, including mechanical brushing, chemical application, and re-clearing. Pole brushing inspections occur in conjunction with tree inspection activity.²⁵⁷ SDG&E requests recovery of the costs related to this activity shown in the table below.²⁵⁸

²⁵⁷ SDG&E T2 Ex-01-R at 76.

²⁵⁸ SDG&E T2 Ex-01-R at 79.

Table 8.1**Pole Brushing Authorizations and Direct Costs 2019–2022 (\$000)**

Year	Units (poles)	Authorized O&M	Actual O&M	Differential O&M
2019	36,563	\$3,988	\$2,591	(\$1,397)
2020	35,102	\$4,093	\$5,435	\$1,342
2021	34,000	\$4,194	\$5,558	\$1,364
2022	35,485	\$4,277	\$6,107	\$1,830
Total	141,150	\$16,552	\$19,691	\$3,139

In SDG&E's 2019 GRC,²⁵⁹ the Commission authorized \$26.415 million in Test Year 2019 for SDG&E's vegetation management program, including pole brushing and tree trimming programs,²⁶⁰ and in Track 1 of this GRC, the Commission authorized \$5.369 million in O&M for pole brushing in Test Year 2024.

Cal Advocates asserts that SDG&E requests \$18.825 million in O&M expenses for pole brushing activities. Cal Advocates contends that SDG&E cannot obtain rate recovery for such activity because it is standard maintenance.²⁶¹

SDG&E claims that Cal Advocates is incorrect for two reasons.²⁶² First, SDG&E is authorized in Track 2 of this proceeding to seek recovery for wildfire

²⁵⁹ D.19-09-051.

²⁶⁰ D.19-09-051 at 266-267.

²⁶¹ Cal Advocates Opening Brief at 12

²⁶² SDG&E Reply Brief at 44-45.

mitigation costs booked in its WMPMA consistent with pertinent statutes²⁶³ and SDG&E's Test Year 2019 GRC. Secondly, the amount SDG&E requests is \$3.139 million, not \$18.825 million.

SDG&E requests \$3.139 million as an incremental cost increase based on dramatic increases associated with contracted labor beginning in 2020 as a result of SB 247,²⁶⁴ which brought utility vegetation management (pole brushing and tree trimming) wages on par with utility apprentice line-workers.²⁶⁵ The Commission finds this request to be reasonable and approves the additional amount of \$3.139 million (O&M) subject to direct cost reductions in Section 13 (plus associated, adjusted indirect costs).

8.2. Fuels Management

Fuels management includes the thinning of ground vegetation surrounding structures, including poles, located in HFTDs where the risk of ignition and propagation is present. Specifically, vegetation is thinned in a 50-foot radius from the outside circumference of the structures down to an approximate 30 percent vegetation cover where achievable. Structures that are subject to the pole clearing (brushing) requirements of PRC Section 4292 are

²⁶³ Pub. Util. Code Section 8386.4(a) states that "at the time of approval of an electrical corporation's wildfire mitigation plan, the commission shall authorize the electrical corporation to establish a memorandum account to track costs incurred to implement the plan." Pub. Util. Code Section 8386.4(b)(1) states that "Each electrical corporation shall establish a memorandum account to track costs incurred for fire risk mitigation that are not otherwise covered in the electrical corporation's revenue requirements."

²⁶⁴ SDG&E Opening Brief at 57, citing to SB 247, Stats. 2019-2020, Ch. 406 at Section 2(b).

²⁶⁵ SDG&E Reply Brief at 44-45.

targeted for fuels activity treatment. This is a discretionary activity started by SDG&E in 2019 that is not required by the PRC.²⁶⁶

SDG&E states that it prioritizes these structures because the risk of ignition is relatively higher due to the presence of hardware that makes them subject to pole clearing.²⁶⁷ However, for fuels management, SDG&E provides no RSE or estimate of ignitions avoided as a measure of risk reduction.

The Commission authorized no funds for fuels activity treatment in the last GRC. For this activity during the 2019–2022 period, SDG&E requests \$22.442 million for clearing 1,787 poles at a unit cost of \$12,558 per pole, which is almost 100times the unit cost for pole brushing. This decision finds SDG&E's request for recovery of its cost for fuels management to be unreasonable because the high unit cost was not supported by a benefit in terms of risk reduction in addition to pole brushing.

In SDG&E's Opening Comments, it states that the Proposed Decision's disallowance for this cost is contradicted by the Commission's near full approval of the fuels management costs requested in SDG&E's TY 2024 GRC.²⁶⁸ But the Track 1 authorization reflects the difference in the types of review in which the GRC forecast is based. The GRC authorization was also based on different evidence, such as estimated averages.²⁶⁹

²⁶⁶ SDG&E T2 Ex-01-R at 78.

²⁶⁷ SDG&E T2 Ex-01-R at 78.

²⁶⁸ SDG&E Opening Comments at 23.

²⁶⁹ D.24-12-074 at 489.

SDG&E also provides information from its description of this activity from SDG&E's 2022 WMP, stating that fuels management is significantly more labor-intensive, requires larger crews, specialized equipment, and includes environmental mitigation measures and biomass disposal. This supports the need to evaluate the reasonableness of this activity's costs, not to approve this cost without any such an evaluation. Regardless of whether cost-efficiency data was available during the 2019-2022 period, the Commission requires SDG&E to consider cost in some manner. In addition, SDG&E does not demonstrate whether new employees were hired or whether existing resources were redeployed. SDG&E requests recovery for over \$22 million in costs, with only one page of support without discussion of costs in workpapers.²⁷⁰

8.3. LiDAR Inspections of Vegetation around Distribution Infrastructure

Light Detection and Ranging (LiDAR) inspection is a remote sensing technology that uses laser beams to measure distances and movement within an environment. SDG&E uses it to supplement detailed ground-based inspections. In 2021 and 2022, SDG&E used LiDAR data to perform risk analysis on selected circuits within the entire HFTD. This LiDAR data is used to support pole loading calculations needed for system hardening projects, such as Covered Conductor, traditional overhead hardening, and corrective work orders involving pole or crossarm replacements.

SDG&E was not authorized to incur costs for this activity in the last GRC (D.19-09-051) and requests recovery of \$4.152 million in O&M expenses for the

²⁷⁰ SDGE T2 Ex-01R at 78.

2019–2022 period.²⁷¹ In its Opening Comments, SDG&E bases this request on SDG&E’s inclusion of its LiDAR work in an approved WMP Update.²⁷²

While the inclusion of an activity in an approved WMP is a pertinent consideration for determining cost recovery, we find that alone is insufficient because SDG&E has not provided any other evidentiary support to justify the requested costs for this program. Although the Commission recognizes the potential benefits of using LiDAR, SDG&E provides no justification for its cost, nor has SDG&E demonstrated how use of this technology is tied to reducing a specific risk driver and reducing ignitions, nor how the O&M costs are incurred. In fact, SDG&E acknowledges that “this initiative is not directly tied to reducing a specific risk driver and reducing ignitions.”²⁷³ More specifically, SDG&E has not provided information regarding how personnel are employed in coordination with employees performing ground-based patrols and other inspections. Nor has SDG&E shown how it coordinates work to avoid redundancies and to optimize cost-effectiveness. Nor does SDG&E demonstrate whether new employees were hired or whether existing resources were used and replaced.²⁷⁴ SDG&E has failed to meet its burden of proof that its cost recovery request is reasonable. As a result, the Commission finds this request to be unreasonable and denies it in this proceeding. None of the information regarding LiDAR inspections in SDG&E’s testimony, workpapers, or WMPs support

²⁷¹ SDG&E T2 Ex-01-R at 82-84.

²⁷² SDG&E Opening Comments at 23.

²⁷³ SDG&E T2 Ex-01-R at 82.

²⁷⁴ SDGE T2 Ex-01-R at 81-82.

finding the cost to be reasonable. The extent of the Commission's disallowance of the requested cost is dependent on the evidence of the cost submitted.

8.4. Vegetation Restoration

In response to customer requests, SDG&E plants replacement trees that are compatible with powerlines and the local terrain. The program mitigates tree removals focused in the HFTD through planting efforts that are largely oriented toward areas that are not prone to wildfire and outside the HFTD. SDG&E initiated this activity as part of the Right Tree Right Place program as a customer service and to build resilience to climate impacts. SDG&E was not authorized to incur costs for this activity in the last GRC and requests recovery of \$1.265 million in O&M expenses for the 2019–2022 period.²⁷⁵

Although the Commission recognizes the benefits of this program, this initiative is not part of any of SDG&E's WMPs, and it is not tied to reducing a specific risk driver and reducing ignitions.²⁷⁶ SDG&E fails to meet its burden of proof that this cost is reasonably recoverable. As a result, the Commission finds this request to be unreasonable and denies it in this proceeding.

8.5. Cost Savings from Strategic Undergrounding

Cal Advocates recommends reducing SDG&E's direct costs for WMP undergrounding completed between 2019 and 2022 by future savings associated with SDG&E's Strategic Undergrounding Program, including the costs of PSPS, vegetation management, inspections, and pole replacements. Cal Advocates estimates these savings to be \$15.431 million for the five years from 2023 through

²⁷⁵ SDG&E T2 Ex-01-R at 82-84.

²⁷⁶ SDG&E T2 Ex-01-R at 82-84.

2027.²⁷⁷ SDG&E responds by arguing that it is not true that none of the savings are reflected in SDG&E's data and that, more importantly, Cal Advocates' argument is appropriate for a forecasted request, not for recovery of incurred costs for the 2019–2022 period.²⁷⁸ The Commission agrees that such savings should be reflected in forecasted requests and denies Cal Advocates' requested adjustment.

9. Grid Operations & Operating Protocols (GO&OP)

SDG&E's grid operations and operating protocols consist of mitigations that reduce risk through changing the way SDG&E operates during periods of elevated and extreme wildfire risk.²⁷⁹ For this activity during the 2019–2022 period, SDG&E requests recovery for costs in the two categories discussed below.

Table 9

Grid Operations and Operating Protocols

Authorizations and Costs 2019–2022 (\$000)²⁸⁰

Initiative	Auth. Capital	Actual Capital	Differential Capital	Auth. O&M	Actual O&M	Differential O&M
Personnel Work Procedures and Training in Conditions of Elevated Fire Risk	-	\$851	\$851	\$9,648	\$10,527	\$878

²⁷⁷ Cal Advocates T2 Ex-02 at 16-18.

²⁷⁸ SDG&E Reply Brief at 46-48.

²⁷⁹ SDG&E T2 Ex-01-R at 84.

²⁸⁰ SDG&E T2 Ex-01-R at 84.

Aviation Firefighting Program	-	\$32,601	\$32,601	\$26,529	\$24,853	-\$1,675
<i>Total</i>	-	\$33,452	\$33,452	\$36,177	\$35,380	-\$797

9.1 Personnel Work Procedures and Training in Conditions of Elevated Fire Risk

SDG&E trains all its field personnel on its fire prevention procedures at least annually. Additional resources can be ordered throughout the year to meet California's year-round fire season, and SDG&E takes the proactive step of supplying field crews with daily resources once the fire environment and Fire Potential Index begin to indicate elevated risk. SDG&E also works to align with the staffing of the seasonal resources of the local, state, and federal agencies in the service territory. These qualified resources are staffed by two personnel that have the appropriate amount of training, water, and tools to meet the needs of the work activity.²⁸¹

For this activity, for the 2019–2022 period, SDG&E represents that the last GRC authorized \$9.648 million in O&M costs and no capital costs. Based on its actual spending, SDG&E now requests recovery of an additional \$0.851 million in capital expenditures and \$0.878 million for O&M (plus the associated indirect costs).²⁸²

As discussed in the section on cost-effectiveness, various parties contested the cost-effectiveness of wildfire mitigations generally but did not specifically contest this cost category. Although the Commission recognizes the benefits of

²⁸¹ SDG&E T2 Ex-01-R at 84-85.

²⁸² SDG&E T2 Ex-01-R at 85-86.

SDG&E's use of personnel for this activity, SDG&E provides insufficient evidence to support its request for recovery of capital expenditures. As a result, the Commission denies the request for recovery of \$0.851 million in capital expenditures. Based on SDG&E's imputed authorizations, methodology and cost drivers in its supporting documents, the Commission finds direct cost recovery in the amount of \$0.878 million for O&M to be reasonable and approves it subject to direct cost reductions in Section 13.

9.2 Aviation Firefighting

SDG&E's Aviation Firefighting Program focuses on reducing the consequences of wildfires through the suppression of their spread by maintaining aerial fire suppression resources in cooperation with county and state agencies. These resources include three water-carrying helicopters. The first, an Erickson S-64 helitanker (Air Crane), was authorized in SDG&E's prior GRC. The second, a Sikorsky UH-60 Blackhawk helitanker, is equipped with night vision for night firefighting with the appropriate crew, training, and CAL FIRE support.²⁸³ And the third, a Sikorsky S-70M, was purchased in 2022 but, due to Federal Aviation Administration certification requirements, is estimated not to be in service until the end of 2023.

For this activity for the 2019–2022 period, SDG&E represents that its last GRC for TY 2019 authorized \$26.529 million in O&M costs and no capital costs.²⁸⁴ Based on its actual spending, SDG&E now requests recovery of \$32.601 million

²⁸³ SDG&E T2 Ex-06 at 44.

²⁸⁴ SDG&E T2 Ex-01-R at 86.

for capital and zero dollars for O&M. SDG&E asserts that this amount is reasonable given SDG&E claims it underspent the O&M expenses authorized by \$1.675 million (plus the associated indirect costs).²⁸⁵

SBUA recommends denial of cost recovery for this activity. In support, SBUA argues that SDG&E fails to demonstrate the reasonableness of its request in several respects. First, SBUA argues that SDG&E fails to explain what was authorized in the last GRC under the heading “Wildfire Caused by SDG&E Equipment.” Second, SBUA contends SDG&E fails to demonstrate how the authorized funding compares to the amount now requested. Third, SBUA states that SDG&E fails to ensure that customers are not paying for use of SDG&E equipment by firefighting agencies unrelated to SDG&E’s utility activities. In support of this third claim, SBUA points out that SDG&E itself admits that “[t]hese resources are available not only for fires associated with SDG&E equipment but to the entire community regardless of the cause of ignition” because SDG&E “has agreements with the County of San Diego, CAL FIRE, and the Orange County Fire Authority for aerial firefighting within the service territory.”²⁸⁶

In reply, SDG&E first claims that SDG&E provided year-over-year comparisons between its actual and authorized spending related to Aviation Firefighting to demonstrate a \$32 million undercollection for capital, and the overcollection for O&M.

²⁸⁵ SDG&E T2 Ex-01-R at 86.

²⁸⁶ SBUA T2 Ex-01 at 10-11.

Second, in disagreeing with SBUA's representations and arguments, SDG&E provides the following additional information and arguments. SDG&E disagrees with SBUA's representations that SDG&E is supplanting county emergency services operations and stepping in to provide "conventional public safety services." Instead, SDG&E states that SDG&E has made heavy-construction helicopters available to fire authorities within the region for use in fighting fires under a Memorandum of Understanding (MOU) with the County of San Diego Fire Authority and CAL FIRE. The MOU details how assets are dispatched to aid in firefighting and includes a cost-sharing arrangement to reduce the burden on ratepayers. SDG&E claims that the MOU ensures that aviation firefighting suppression assets, including SDG&E's, will remain in the region and available should they be needed.²⁸⁷

SDG&E states that this arrangement is necessary because CAL FIRE owns and contracts aerial firefighting assets, which can be moved out of the area to aid in fighting fires in other regions. When this occurs, there is less support if a fire occurs in or near SDG&E's service territory, which has happened in the past. In addition, SDG&E states that any wildfire in the SDG&E service territory can affect its infrastructure, complicate recovery efforts and service restoration, and threaten customer safety. Extinguishing ignitions quickly, before they can become potentially catastrophic wildfires, no matter the cause of the fire, reduces or eliminates the need for costly electrical infrastructure repairs and enhances reliability. Because the cause of the ignition is often not known at the time of

²⁸⁷ SDG&E T2 Ex-06 at 44-45.

initial response, bifurcating suppression responsibility based on cause would lead to inconsistent and delayed response, and further exacerbate the effects of an ignition.²⁸⁸

The Commission agrees with SDG&E that it uses its firefighting helicopters to reduce wildfire risk in SDG&E's service territory in a manner consistent with its WMPs.²⁸⁹ Nonetheless, the Commission agrees with SBUA that SDG&E has not sufficiently accounted for what it was authorized to spend by the last GRC in O&M expenses, its unauthorized capital costs, and its cost sharing arrangement with counties and CAL FIRE. That is, SDG&E fails to reasonably account for the costs it seeks to recover for the use of the three helicopters.

Further, SDG&E states that its Aviation Services department manages SDG&E's aviation assets, including the exclusive use of SDG&E-owned helicopters, and Unmanned Aerial Systems (UAS). SDG&E does not adequately explain, however, how the UAS costs under Aviation services are separated from the costs sought under the Drone Inspection Program.²⁹⁰ In addition, SDG&E has not provided evidence that it considered alternatives to purchasing the last two helicopters, and how much, if any, cost recovery for the third helicopter (the Sikorsky S-70M) is reasonable when it was not placed into service until after 2022.²⁹¹

²⁸⁸ SDG&E T2 Ex-06 at 44-45; SDG&E Reply Brief at 45-46.

²⁸⁹ SDG&E 2022 WMP Update at 313.

²⁹⁰ SDG&E T2 Ex-01-R at 98.

²⁹¹ SDG&E T2 Ex-01-R at 87.

The Commission finds that SDG&E failed to meet its burden of proof that these costs are reasonably recoverable. As a result, the Commission denies SDG&E's request for cost recovery for Aviation Firefighting.

10. Data Governance (DG)

SDG&E's wildfire mitigation programs and initiatives require data from a variety of systems to support operational needs, trend analysis, and predictive modeling. To enhance data quality and improve the efficiency of the data gathering process, SDG&E began developing a WMP Data Governance Framework (DGF) and an automated Central Data Repository, which SDG&E will make available for use by multiple internal and external stakeholders. SDG&E divides its request for recovery of Data Governance costs into the following two categories addressed below: 1) Centralized Repository for Data and 2) the Documentation and Disclosure of Wildfire-Related Data and Algorithms.

Table 10

Data Governance: Authorizations and Recorded Costs 2019–2022 (\$000)²⁹²

Initiative	Auth. Capital	Actual Capital	Differential Capital	Auth. O&M	Actual O&M	Differential O&M
Centralized Repository for Data	-	\$35,742	\$35,742	-	-	-

²⁹² SDG&E T2 Ex-01-R at 88.

Documentation and Disclosure of Wildfire-Related Data and Algorithms	-	\$8,714	\$8,714	\$2,013	\$1,321	(\$692)
<i>Total</i>	-	\$44,456	\$44,456	\$2,013	\$1,321	(\$692)

10.1 Centralized Repository for Data

The WMP Centralized Repository for Data consolidates data from over 10 different sources into a central repository, with a focus on automating data processes for the WMP Quarterly Data Report as well as to advance SDG&E's Asset Management capabilities as they relate to electric assets. For this activity for the 2019–2022 period, SDG&E requests recovery of \$35.742 million in capital expenditures (plus associated indirect costs), none of which was authorized in the last GRC.²⁹³ SDG&E requests zero dollars for O&M costs for this category.

10.2 Documentation and Disclosure of Wildfire-Related Data and Algorithms

OEIS requires submission of a Quarterly Data Report (QDR) utilizing certain features for WMP data analysis. SDG&E states that its requested cost recovery for the automation of documentation and disclosure of wildfire data supports submission of this report. For this activity for the 2019–2022 period, SDG&E states that it was authorized \$2.013 million for O&M and zero dollars for capital. Based on SDG&E's costs recorded in the WMPMA, SDG&E requests recovery of \$8.714 million in capital expenditures, none of which was authorized

²⁹³ SDG&E T2 Ex-01-R at 89-90.

in the last GRC.²⁹⁴ SDG&E requests zero dollars for O&M costs for this category. SDG&E also requests recovery of the associated indirect costs.

Cal Advocates recommends denying cost recovery for data governance based on SDG&E having underspent funds authorized for this category in the last GRC.²⁹⁵ Cal Advocates, however, does not specify whether the amounts authorized in the last GRC are for capital expenditures, O&M expenses, or the combined total.

In rebuttal, SDG&E claims that Cal Advocates' recommendation should be denied because it is based on referencing an incorrect amount authorized in the last GRC. SDG&E states that the amount authorized for this category was \$2.013 million and that Cal Advocates' figure of \$9.587 million corresponds to a different cost category.²⁹⁶

In SDG&E's Opening Comments on the Proposed Decision, SDG&E describes the wildfire mitigation plan framework that supports Data Governance costs in Table 10, including the WMP Enterprise Asset Management Platform, WMP WSD Data Schema, WMP Electric Distribution Asset Investment Prioritization, WMP Advanced Analytics, and WMP Data Foundation and Reporting. These tools were all developed in response to Data Guidelines requirements set forth by the WSD and the Office of Energy Infrastructure Safety (OEIS). The collection of wildfire mitigation data and regulatory mandates

²⁹⁴ SDG&E T2 Ex-01-R at 90-91.

²⁹⁵ Cal Advocates T2 Ex-05 at 5.

²⁹⁶ SDG&E T2 Ex-06 at 20.

required utilities to automate, consolidate, and report wildfire mitigation data in standardized formats, including the Quarterly Data Report (QDR). Further, over several WMP cycles, SDG&E was required to bolster its data governance framework in response to several Areas for Continued Improvement in WMP approvals (e.g., creating centralized data repositories and improving data quality controls).²⁹⁷ However, the information on the Wildfire Mitigation Plan framework in SDG&E's Opening Comments regarding Data Governance in general does not support the separate capital requests of \$35.742 and \$8.174 million. SDG&E's testimony²⁹⁸ does not articulate any connection to the workpapers supporting this request or why the requests are capital expenditures versus O&M expenses. Workpapers breaking down costs by Capital (at the project level and software or hardware purchased), O&M, and labor (e.g. FTEs for new employees or existing resources) are incomplete. More specifically, SDG&E does not demonstrate the basis for this request being incremental, whether software was purchased, whether new employees were hired, or whether existing resources were used and replaced to provide data to produce additional reports. Nor does the record determine whether the request could be capital versus O&M. As a result, SDG&E's request for recovery of additional capital expenditures for the Documentation and Disclosure of Wildfire-Related Data and Algorithms is denied.

²⁹⁷ SDG&E Opening Comments at 19-20.

²⁹⁸ SDG&E T2 Ex-01-R at 90-91.

11. Resource Allocation Methodology (RAM)

SDG&E represents that it was authorized to spend \$5.234 million²⁹⁹ on its enterprise risk management process.³⁰⁰ That process includes risk-informed investment decision-making related to its enterprise-wide investment prioritization process.³⁰¹ The latter process is led by the Asset Management organization.³⁰²

For this activity specific to wildfire mitigation for the 2019–2022 period, SDG&E requests recovery of an additional \$7.964 million in direct O&M expenses plus associated indirect costs. This request includes an initiative using the WiNGS wildfire mitigation model to apply more granular analytics to grid hardening projects. More specifically, SDG&E states that it needed to develop a more granular application of modeling to tackle specific wildfire-related issues such as targeted grid hardening to reduce PSPS. This includes the wildfire mitigation teams that developed the WiNGS-Planning model used to quantify both the impacts of wildfire and PSPS, and also identify more optimal solutions to target both wildfire risk reduction and PSPS reduction. The WiNGS-Planning model was developed internally with the support of third-party consultants to validate the methodology and provide external proxies to improve data used in the model. A centralized wildfire mitigation team was also created with the

²⁹⁹ After being contested initially, this amount was confirmed in CA T2 Ex-05-R; SDG&E Opening Comments at 21-22.

³⁰⁰ SDG&E T2 Ex-01-R at 92.

³⁰¹ SDG&E T2 Ex-09, citing to SDG&E Ex-WP, Electric Distribution O&M, Asset Management.

³⁰² SDG&E T2 Ex-06 at 92-94.

responsibility of developing, executing, and overseeing SDG&E's wildfire mitigation plan across the organization.³⁰³

Cal Advocates recommends denying cost recovery for this category because SDG&E was authorized a total of \$36.176 million for the 2019–2022 period for Resource Allocation Methodology O&M, which SDG&E did not spend.³⁰⁴

After finding insufficient support for this request, SDG&E provided additional information in its Opening Comments. SDG&E clarified the difference between the costs associated with RAM and those associated with Risk Assessment and Mapping (RA&M), which address the “what and where” of risk reduction; whereas, RAM reflects the “how and how much.” SDG&E states that both were essential to meeting regulatory compliance guidelines mentioned and were consistent with OEIS WMP initiative categories.³⁰⁵ Although the Commission recognizes the value of risk-informed investment decision-making specific to wildfire mitigation work, the Commission finds that SDG&E has failed to support this request sufficiently. This is not an activity with known, reasonable metrics or targets. SDG&E provides insufficient accounting to document the costs requested. Workpapers providing metrics for labor, such as FTEs, are lacking. Supporting material lacks an accounting of base data for the

³⁰³ SDG&E T2 Ex-06 at 93-94.

³⁰⁴ Cal Advocates T2 Ex-05-R at 5.

³⁰⁵ SDG&E Opening Comments at 21-22.

expense. SDG&E also doesn't break down O&M expenses sufficiently to demonstrate whether existing resources were redirected to achieve the work or whether additional labor was required. More specifically, SDG&E does not provide base data for the activity authorized in the last GRC, for the additional amount of cost recovery requested, and the amount requested for development of the WiNGS model within Risk Assessment and Mapping. In addition, SDG&E does not demonstrate whether new employees were hired or whether existing resources were redirected to achieve the work or whether additional labor was required. As a result, SDG&E's request for recovery of additional costs for Resource Allocation Methodology is denied.

12. Stakeholder Cooperation & Community Engagement (SC&CE)

SDG&E partners with utility customers, elected officials, tribal nations, nonprofit support organizations, first responders, and other public safety and community partners and stakeholders to prevent and mitigate wildfires in its service territory. SDG&E also identifies and communicates separately with customers who have access and functional needs in Tiers 2 and 3 HFTDs.³⁰⁶ During PSPS events, communities depend on complete, accurate, and timely information for their safety. Consequently, SDG&E provides information to stakeholders to enable them to prepare to navigate the adversity of an emergency, wildfire, or PSPS event.³⁰⁷

Table 12

³⁰⁶ SDG&E T2 Ex-01-R at 12-13, 44-45.

³⁰⁷ SDG&E T2 Ex-01-R at 101.

Stakeholder Cooperation and Community Engagement

Authorizations and Recorded Costs 2019–2022 (\$000)

Initiative	Auth. Capital	Actual Capital	Differential Capital	Auth. O&M	Actual O&M	Differential O&M
Community Engagement	-	-	-	-	\$1,614	\$1,614
PSPS Communication Practices	-	\$15,809	\$15,809	\$1,096	\$32,151	\$31,055
<i>Total</i>	-	\$15,809	\$15,809	\$1,096	\$33,765	\$32,669

12.1 Community Engagement

SDG&E developed a comprehensive wildfire safety communications and outreach plan that provides information to the community prior to a PSPS event, thereby increasing emergency preparedness and community resiliency to wildfires. This plan is implemented through outreach advisors, providing webinars, Wildfire Safety Fairs, and working with the Wildfire Safety Community Advisory Council (WSCAC) and the Energy Solutions Partner Network. This network is comprised of nearly 200 Community Based Organizations, which help to disseminate information to multicultural, multilingual, senior, special needs, disadvantaged, and Access and Functional Needs communities. The WSCAC is a forum that allows well-connected and trusted community leaders to provide feedback recommendations and support to SDG&E senior management and the Safety Committee of SDG&E's Board of Directors.³⁰⁸

³⁰⁸ SDG&E T2 Ex-01-R at 102-103.

For the 2019–2022 period, SDG&E represents that the Commission did not authorize funding for this activity because it was unforeseen at the time of SDG&E's last GRC. SDG&E now requests recovery of \$1.614 million in O&M costs (plus associated indirect costs) based on its actual costs recorded in the WMPMA.³⁰⁹

Although the Commission agrees with SDG&E regarding the need to provide information to stakeholders to prepare the community for PSPS events, the Commission finds that SDG&E has not provided sufficient information to evaluate the reasonableness of its request. This includes failure to provide adequate information on the number of FTEs employed for this activity. It also includes failure to provide adequate information on whether and how SDG&E coordinated the amount requested here (to avoid duplication and inefficiencies) with similar work in the category of Community Outreach, Public Awareness, and Communication Efforts under Emergency Planning and Preparedness.³¹⁰ SDG&E has failed to meet its burden of proof. As a result, SDG&E's request for recovery of this cost is denied.

12.2 Communication Practices

SDG&E conducts PSPS-specific communications in three phases: prior to, during, and following a PSPS event. In 2020, SDG&E expanded its public education and outreach efforts associated with its PSPS Communications Plan. In light of COVID-19 considerations, SDG&E launched a PSPS Mobile App called

³⁰⁹ SDG&E T2 Ex-01-R at 102.

³¹⁰ SDG&E T2 Ex-01-R at 100.

“Alerts by SDG&E.” This new tool enables customers to receive information including, but not limited to, notifications, Community Resource Center information with GPS directions, and other real-time updates and safety information related to PSPS activities. SDG&E has also employed standard communication channels to promote 2-1-1 service resources, including but not limited to social media channels, broadcast and print media, and the SDG&E News Center and website. Lastly, following a PSPS event, SDG&E examines communications and solicits customer feedback with the intent of refining and improving communication efforts for the following year. Specifically, SDG&E reaches out to customers, through formal surveys, to establish a baseline awareness of PSPS-related messaging and communications at the beginning of wildfire season. At the end of wildfire season, customers have been surveyed again to measure the effectiveness of public education efforts and communications.³¹¹

For this activity during the 2019–2022 period, SDG&E represents that the Commission authorized \$1.096 million in O&M, and zero dollars in capital expenditures. Based on its actual costs recorded in the WMPMA, SDG&E requests recovery of \$15.809 million in capital expenditures and \$31.055 million in O&M costs (plus associated indirect costs).³¹²

Cal Advocates recommends no ratepayer funding for the “Alerts by SDG&E” application (app) based on it being unnecessary, redundant, and

³¹¹ SDG&E T2 Ex-01-R at 103-105.

³¹² SDG&E T2 Ex-01-R at 102.

inconsistent with Commission directives. In support, Cal Advocates contends that the County of San Diego (County) had already established a county-wide emergency notification system known as “AlertSanDiego.” The County’s alert system sends emergency notifications to every landline phone (listed or unlisted) in the County as well as to any cell phone, internet phone, or email that is registered with the County.³¹³ Cal Advocates contends that the app thereby fragments the emergency alert system into two separate entities, rather than uniting them into one, pursuant to the objectives of the Commission’s direction.

In reply, SDG&E contends that development of the Alerts by SDG&E app was prudent and reasonable for several reasons. First, SDG&E notes that the Commission directed utilities to integrate local governments in their communication of de-energization notifications.³¹⁴ Second, SDG&E claims that the app implements the requirements of D.19-05-042, which compels utilities to bear the “primary” burden of “initial” PSPS notifications, but allows use of county notification systems “at their discretion.”³¹⁵ Third, SDG&E states that a PSPS event does not meet the criteria for a wireless emergency alert from the San Diego County Alerts system and therefore, a PSPS app alert does not duplicate the county’s notification system. Fourth, PSPS information does not meet the criteria to be sent through the separate San Diego County Emergency app because the County system is limited to notifications that provide information on

³¹³ Cal Advocates T2 Ex-02 at 14.

³¹⁴ Cal Advocates T2 Ex-02 at 14, citing to D.19-05-042.

³¹⁵ San Diego Reply Brief at 44 citing to D.19-05-042, Appendix A at A1-A2, A15-A16.

emergency preparedness, response, and recovery activities, whereas a PSPS event is not considered an emergency. Fifth, SDG&E states that its alert system also needs to provide notification to Orange County customers. Sixth, SDG&E claims that if the San Diego County Alerts system was used to send SDG&E messages then the associated cost could be passed on to the ratepayers, further supporting the reasonableness of using an app-based system, which reduces the potential for ongoing, long term notification costs.³¹⁶ Finally, on the issue of whether the Alerts by SDG&E app is unnecessary or redundant, SDG&E states that not all of the costs in this cost category are correlated with development of the Alerts by SDG&E app.³¹⁷ In its Opening Comments on the Proposed Decision, SDG&E reiterates several of these points and adds more with citations to the requirements of D.19-05-042, including that: 1) the costs were incurred to broadly reach customers no matter where the customer is located and to deliver messaging in an understandable manner; 2) the app strategy was reasonable to satisfy Commission-imposed requirements at the time.³¹⁸

The Commission has several concerns regarding the reasonableness and prudence of PSPS Communications costs. The concerns are substantially based on the limited information provided by SDG&E years after the development of the “Alerts by SDG&E” app.

³¹⁶ SDG&E T2 Ex-06 at 40-42.

³¹⁷ SDG&E T2 Ex-06 at 39-40.

³¹⁸ SDG&E Opening Comments at 17-19.

First, it appears that SDG&E overstates the requirements of D.19-05-042 regarding making initial notifications of PSPS events.

Second, although SDG&E acknowledges its role in coordinating PSPS notifications with local governments, the Commission finds that SDG&E fails to provide any evidence that it sought the feedback of San Diego and Orange County governments and customers regarding PSPS notifications, especially regarding costs. For example, a fundamental consideration before unilaterally deciding to develop an app would be whether communication through a website, email, or texts to phone numbers might have sufficed rather than requiring customers and residents to download an app, which continues to be a suboptimal method of communicating such notifications.

Third, the Commission finds the claim that the development and deployment of an app would save money to be wholly unsupported. That is, SDG&E provides insufficient information regarding the cost of the app separate from other costs requested, and fails to show cost savings. Further, a more prudent course would have been for SDG&E to coordinate with stakeholders regarding options for communications along with associated costs rather than unilaterally incurring them.

Fourth, the Commission finds insufficient information regarding the reasonableness of SDG&E developing its own app, including the FTEs of the annual O&M costs, relative to the costs of other tasks in this cost category.

Finally, although Cal Advocates appears to acknowledge that not all the costs in this category are tied to the app, SDG&E fails to state what portion of

such costs are tied to the app.³¹⁹ Considering all of the above, SDG&E's has not met its burden to prove the reasonableness of the costs requested with no alternative figure in the record. As a result, this leaves the Commission with little choice but to deny the total request as unreasonable.

13. Labor and Indirect Costs along with Independent Review by Ernst and Young

13.1 Additional Straight-Time Labor

In addition to SDG&E's capital-related costs, SDG&E's Track 2 request includes cost recovery for additional total labor performed, including over 40 new FTEs to support SDG&E's wildfire mitigation efforts.³²⁰ Within the additional total labor claimed, SDG&E includes new employees in the following areas:³²¹

- 35 FTEs within the Wildfire & Climate Science Division;
- 17 FTEs within the new Wildfire Mitigation Department formed in mid-2019;
- 10 FTEs within Emergency Management;
- 8 FTEs within the Fire Science & Climate Adaptation Department; and
- 5 FTEs within the new Access & Functional Needs Department.

The amount requested by SDG&E for the additional labor described above is included in SDG&E's capital and O&M expense requests.

³¹⁹ Oral Argument Transcript Vol. 28 at 4763-4765; SDG&E-T2-09, Attachment (O&M) B-2 at 27, Attachment B-16 at 41.

³²⁰ SDG&E Opening Brief at 73-74.

³²¹ SDG&E Opening Brief at 74-77.

Cal Advocates recommends a reduction in SDG&E's capital request by \$10.899 million and reduction in its O&M expense request by \$25.107 million. This would remove costs Cal Advocates says are associated with straight-time labor and executive labor because, according to Cal Advocates, SDG&E fails to provide any analysis to substantiate that these requested costs are incremental and are not already being recovered in rates.³²² In support, Cal Advocates claims that SDG&E failed to provide any data documenting new hires associated with the work it claimed to be incremental in this application. Cal Advocates states that SDG&E instead admitted that it was unable to identify the employees or hiring dates "as the employees charging labor to WMP-related activities do so on an allocation basis and are not hired specifically for this purpose."³²³ Based on such information, Cal Advocates argues that "because the labor for those existing positions is already embedded in rates from its prior GRC cycle, SDG&E's reliance on supplemental contractors and overtime, and its redeployment of existing employees, demonstrate that its straight-time labor is not incremental" and should be removed from SDG&E's request.³²⁴

In rebuttal, SDG&E claims that Cal Advocates misrepresents SDG&E's responses to data requests related to straight-time labor (in an attempt to argue that SDG&E did not hire additional staff to implement its WMP), ignores

³²² Cal Advocates Opening Brief at 7.

³²³ Cal Advocates Opening Brief at 7-8.

³²⁴ Cal Advocates Opening Brief at 8.

evidence of new hires, and ignores testimony regarding accounting procedures.³²⁵ Cal Advocates does not address SDG&E's rebuttal testimony.

The Commission finds that SDG&E's testimony provided sufficient evidence of its capital and O&M labor cost by WMP work categories, including evidence of the new FTEs and accounting procedures discussed above unaddressed by Cal Advocates. The Commission is not persuaded to the contrary by Cal Advocates. The Commission finds SDG&E's request for cost recovery for increased and unforeseen responsibilities for wildfire safety, climate science, PSPS communications and awareness, and emergency response discussed above to be reasonable and incremental.

13.2 Employee Benefits

SDG&E requests cost recovery for employee benefit costs it claims it incurred in addition to the amount of employee benefit costs relating to WMP activities authorized in the 2019 GRC. This request is for \$0.221 million in capital and \$0.261 million for O&M expenses associated with these additional employee benefits (such as event tickets, cash awards, recognition awards, signing bonuses, employee relocation, and gift cards).³²⁶

Cal Advocates argues that these costs are already embedded in rates through the GRC and are redundant and unreasonable. In addition, Cal Advocates asserts SDG&E acknowledged that it did not hire new employees or create new positions to perform the work recorded in the WMPMA. As a result,

³²⁵ SDG&E T2 Ex-06 at 21-22, citing to SDG&E T2 Ex-07 at 2-9.

³²⁶ Cal Advocates Opening Brief at 8-9; Cal Advocates T2 Ex-02 at 9, citing to SDG&E's response to a data request.

Cal Advocates concludes that the employee benefit costs related to those employees should be removed because they cannot be incremental if the labor to which they are associated is not incremental.³²⁷

However, the Commission finds that SDG&E hired new employees to perform work recorded in the WMPMA. Since the Commission has found hiring of new employees to be incremental and the amount of these costs is not in dispute, , the Commission finds SDG&E's request for cost recovery for \$0.221 million in capital and \$0.261 million for O&M expenses for employee benefits to be reasonable.

13.3 Indirect or Overhead Costs

Consistent with Commission precedent, SDG&E's request for cost recovery includes indirect or overhead costs added to both capital expenditures and O&M direct costs. These include additional labor-related costs, such as pension and benefits, incentive compensation plan (ICP), payroll taxes, contract administration, small tools, and purchasing and warehouse. Other overhead costs, such as engineering, department overheads, and administrative & general, are added for capital work only. Such overhead costs are generally understood to mean expenses that are necessary for a business to operate but that are not directly related to the production of goods or services.³²⁸

As discussed above, various intervenors contested the direct costs underlying SDG&E's overhead costs, but did not contest SDG&E's methodology

³²⁷ Cal Advocates Opening Brief at 8-9; Cal Advocates T2 Ex-02 at 9, citing to SDG&E's response to a data request.

³²⁸ SDG&E Opening Brief at 78.

for adding overhead costs. The Commission denies some of SDG&E's direct costs, however, and therefore adopts proportional reductions to SDG&E's indirect costs below.

13.4 Dues

SDG&E requests cost recovery of \$0.003 million in capital and \$0.218 million in O&M expenses for dues relating to memberships in joint Investor-Owned Utility (IOU) collaborative and other organizations including: the International Wildfire Risk Mitigation Consortium (IWRMC); the California Utilities Emergency Association (CUEA); and the San Jose State University sponsored Industry-University Cooperative Research Center – Wildfire Interdisciplinary Research Center (IUCRC-WIRC). In addition, this cost category includes O&M costs totaling roughly \$11,000 for employee reimbursements relative to professional licensing renewals and the capital payment for dues relative to fees paid for engineering staff working on capital work and attending technical conferences.³²⁹

Cal Advocates recommends denial of this request because such dues are typically paid to organizations that engage in lobbying.³³⁰

In response, SDG&E contends that the above costs are unrelated to any lobbying activity. Instead, SDG&E claims that the activities support collaborative research work in furtherance of safety objectives by sharing information, lessons

³²⁹ SDG&E T2 Ex-06 at 47-48.

³³⁰ Cal Advocates Opening Brief at 12.

learned, and data, which may result in potential benefits in cost efficiencies and reduction of overlapping work.

Professional membership costs such as the above may provide some value, but that value must be demonstrated in each rate case.³³¹ In this case, the Commission finds insufficient evidence of realized benefits from potential cost efficiencies and reduction in overlapping work compared to costs. As a result, the Commission denies these costs consistent with the denial of similar costs in this proceeding.

13.5 Market Research

SDG&E requests cost recovery of \$1.056 million in O&M expenses associated with costs allocated to market research based on the requirements of OEIS's WMP guidelines and Commission directives and orders implemented through the De-Energization proceedings. To successfully implement PSPS events, these guidelines, directives, and orders require PSPS communications, outreach, and ongoing awareness. For example, SDG&E personnel participate in monthly meetings during high fire seasons. These meetings provide ongoing updates on utility activities to support PSPS notifications, outreach, and collaboration with community safety partners. The meetings also address critical infrastructure resources, including educating the Communication Infrastructure Providers on the call to understand their needs during PSPS.³³²

³³¹ D.24-12-074 at 771.

³³² SDG&E T2 Ex-06 at 25-26.

To support PSPS communications and awareness, SDG&E performed market research to better understand customer needs and tailor PSPS alerts. For example, SDG&E conducted surveys committed to educating customers year-round about wildfire safety, preparedness, and PSPS events. SDG&E leverages more than 20 diverse communications platforms to reach the public. Some of them include hyperlocal social media messaging, in-community signage and mobile marquees, and a dedicated Spanish media team, to name a few.³³³

Cal Advocates argues that rate recovery for such market research is inappropriate because 1) it does not focus on distribution assets or facilities in a Tier 2 or Tier 3 HFTD, and 2) SDG&E received ratepayer funding through the revenue requirement track of the GRC to support market research activities.³³⁴

In response, SDG&E notes that these activities were in support of SDG&E's WMPs and wholly unforeseen in SDG&E's TY 2019 GRC, as the PSPS requirements evolved after SDG&E's GRC decision. The Commission agrees. Cal Advocates provides no authority for its criteria for cost recovery. Nor does Cal Advocates address SDG&E's points.

The Commission finds that the market research activity described above is required by both OEIS and Commission directives and is necessary for the successful implementation of PSPS events (to prevent fires and protect the public). These costs are both reasonable and incremental (since they were not authorized in the last GRC).

³³³ SDG&E T2 Ex-06 at 25-27.

³³⁴ Cal Advocates Opening Brief at 9; CA T2 Ex-02 at 10-11.

13.6 Ernst & Young Report

SDG&E retained Ernst & Young (E&Y) to independently review a sampling of the \$2.2 billion in wildfire mitigation costs SDG&E incurred in 2019–2022 and booked to the WMPMAs for the purpose of evaluating whether they were incremental and reasonable.³³⁵ E&Y tested approximately \$405 million of the \$2.2 billion in total incurred costs. As a result, E&Y identified items totaling approximately \$0.8 million (extrapolated to \$2.6 million) that were not properly evidenced for inclusion in the WMPMA for the following reasons: Non-incremental, Does Not Align to Contract, Contract Not Reasonable/Prudent, Contract Out of Scope, Contract Transmission, Trip to Unrelated City, Transmission instead of Distribution, and Events/Tickets Unrelated to PSPS Events. SDG&E has agreed to forgo seeking E&Y's full extrapolated amount of \$2.6 million in its request for recovery in this proceeding.³³⁶

In addition to the adjustments identified by E&Y, SDG&E identified additional electric O&M costs of \$1.4 million that have been removed from the costs being requested.³³⁷ These reductions result in the revised WMPMA electric undercollection revenue requirement shown in Appendix C.³³⁸

Cal Advocates contends that E&Y's analysis includes uneven category sampling and skewed extrapolation and recommends a different method of determining the number of costs improperly included in the WMPMA. E&Y

³³⁵ SDG&E Reply Brief at 64.

³³⁶ SDG&E Reply Brief at 66.

³³⁷ SDG&E Opening Brief at 88, citing to SDG&E T2 Ex-02-R at 16.

³³⁸ SDG&E Reply Brief at 64-67.

identifies \$0.745 million or 89.76% of its \$0.830 million recommended exclusion as transmission-related. Of the \$0.745 million in transmission-related costs, the O&M portion is \$0.239 million (or 32%) and capital is \$0.506 million (or 68%). Cal Advocates then uses the 89.76% ratio of improperly evidenced transmission costs and compares this rate of occurrence to the total population of costs to extrapolate \$9.128 million in unsupported costs related to transmission assets. Cal Advocates contends that this method provides a more accurate way to estimate improperly evidenced costs and recommends that \$9.128 million be removed from SDG&E's rate recovery request in the Asset Management and Inspections work category.

SDG&E claims that Cal Advocates' argument, that E&Y's exclusions relating to transmission should be extrapolated to \$9.128 million, should be rejected for its lack of statistically valid support and failure to take into account the expanded procedures E&Y performed to address transmission costs,³³⁹ as detailed further in rebuttal testimony.³⁴⁰ The Commission agrees.

The Commission finds insufficient support for Cal Advocates' claim that E&Y's analysis includes uneven category sampling and skewed extrapolation, and that Cal Advocates' extrapolation method is more accurate according to professional statistical and accounting standards. Accordingly, the Commission finds that \$2.6 million in costs, as discussed above, were not properly included in the WMPMA. In addition, within 90 days of the effective date of this decision,

³³⁹ SDG&E Reply Brief at 66, footnote 216.

³⁴⁰ SDG&E T2 Ex-07 at 18.

SDG&E shall file a Tier 1 Advice Letter verifying that SDG&E removed \$1.4 million in additional electric O&M costs from the cost recovery requested.

13.7 Proportional Reductions to Indirect Costs

SDG&E's request for cost recovery includes indirect or overhead costs associated with direct costs that are necessary for a business to operate but are not directly related to the production of goods or services. Indirect costs include labor-related costs (including pension and benefits, incentive compensation plan (ICP), and payroll taxes), contract administration, shop order, small tools, and purchasing and warehouse. Other overhead costs, such as engineering, department overheads, and administrative & general, are added for capital work only.³⁴¹

Based on the Commission's adopted reductions to direct costs, the Commission reduces cost recovery for indirect costs proportionally to the amount of the reductions for direct costs. The proportional deductions to indirect costs are shown in Appendix B. The Commission finds these deductions to indirect costs proportional to the reductions to direct costs to be reasonable and adopts them.

14. Recovery of the Total Undercollected Revenue Requirement For Authorized 2019–2022 WMPMA Recorded Costs and Forecast for 2023–2027

The sections above determine the total authorized O&M expenses and capital expenditures for the 2019–2022 period. This section determines remaining components of the total revenue requirement requested by SDG&E for this

³⁴¹ SDG&E Opening Brief at 77-79; CA Ex-04.

period. The remaining components of the revenue requirement are the depreciation, taxes, and return on rate base according to the following revenue requirement (RRQ) formula:

$$\text{RRQ} = [\text{Expenses} + \text{Depreciation} + \text{Taxes} + (\text{Rate of Return} \times \text{Rate Base})].^{342}$$

The total amount of undercollected revenue requirement SDG&E requests is \$774.7 million for the 2023–2027 period. The depreciated capital captures the recovery of capital on an annual basis over the life of each asset. With the exception of the rate of return, the three capital-related costs (depreciation, taxes, rate base) were not addressed in Track 1 of this proceeding because the associated costs are determined in this track. The revenue requirement below is based on the rate of return (ROR) of 7.55% adopted for 2020–2022.³⁴³ SDG&E shall use the ROR adopted for each year to calculate the return on rate base for years 2023–2027.

SDG&E requests recovery of the three costs in the tables below for electric WMP and gas assets net of already authorized (interim) revenues.³⁴⁴

Table 14A

Ongoing Electric O&M, Capital, and Related Costs for Projects Put Into Service Between 2019–2022³⁴⁵

³⁴² D.24-12-074 at 21-22; D.20-01-002 at 8-10.

³⁴³ D.19-12-056 at 2.

³⁴⁴ This is consistent with the Commission’s ruling in PG&E’s GRC with respect to balances recorded to a memorandum account pending a reasonableness review. SDG&E Opening Brief at 89.

³⁴⁵ SDG&E T2-02R Appendix 7.

WMP Electric Costs			
(\$ in millions)			
Track 2 (2019-2022)	Actuals 5/30/2019 to 12/31/22	Forecasts 2023 to 2027	Totals
Authorized Revenues	(244.8)	(53.1)	(297.9)
O&M	427.4	0.0	427.4
Capital Related Costs	188.2	807.3	995.5
Interest @ 3 month CP rate	5.6	0.0	5.6
Totals	376.4	754.2	1,130.6

Table 14B**Ongoing Gas O&M, Capital, and Related****Costs for Capital Projects Put Into Service Between 2019–2022³⁴⁶**

WMP Gas Costs			
(\$ in millions)			
Track 2 (2019-2022)	Actuals 5/30/2019 to 12/31/22	Forecasts 2023 to 2027	Totals
Authorized Revenues	(10.0)	0.0	(10.0)
O&M	7.1	0.0	7.1
Capital Related Costs	(0.7)	20.6	19.9
Interest @ 3%/ month (Commercial Paper rate)	0.1	0.0	0.1
Totals	(3.7)	20.6	16.9

Cal Advocates, PCF, and SBUA assert the forecast costs for 2023–2027 cannot be approved here. For example, Cal Advocates recommends that these costs be reviewed separately in a future proceeding because it contends that it is

³⁴⁶ SDG&E T2-02R Appendix 7.

currently not possible to determine the incrementality or reasonableness of these future costs, or their appropriateness for ratepayer funding, without a complete showing and adequate supporting documentation of the recorded costs.

According to Cal Advocates, these costs should be subject to their own reasonableness review at a later date when SDG&E can produce the necessary supporting documentation such as time records, journal entries, and invoices for subcontractors.³⁴⁷

PCF contends that SDG&E's request for capital-related revenue requirements for 2023–2027 for WMP spending encompasses spending for years that are outside the scope of Track 2 of the Scoping Memorandum published in this proceeding.³⁴⁸

Similarly, SBUA contends that SDG&E's Track 2 application and testimony do not meaningfully discuss the programs or activities over the 2024-2027 period, nor how the costs associated with them should change over time, and assume that future capital projects will be put into service as planned.³⁴⁹

In reply, SDG&E addresses the intervenors' arguments as follows. First, SDG&E states that the "ongoing" capital-related costs are not new costs; nor do they support new assets. Rather, the capital-related costs are the depreciation, taxes, and the return on rate base. As a result, SDG&E states that there are no new invoices or time records to support these costs, as the capital projects have

³⁴⁷ Cal Advocates Opening Brief at 50.

³⁴⁸ PCF Opening Brief at 67-69.

³⁴⁹ SBUA Opening Brief at 18-19.

already been placed in service during 2019-2022. As such, SDG&E states that ongoing costs will not change over time. Second, SDG&E states that the ongoing capital costs are within the scope of this proceeding because they are directly tied to costs recorded to the WMPMAs for 2019–2022 and request for recovery of them in this track is consistent with Commission directives.³⁵⁰

In its Opening Comments, SDG&E requests correction of what appears to be the omission of interest on the undercollected revenue requirement for the authorized time period. SDG&E states that its approved WMPMA preliminary statement includes the recording of interest at the three-month commercial paper rate, and SDG&E should similarly be authorized to collect interest expense for costs authorized in a final decision. SDG&E claims this interest rate is the standard for undercollections and is a tangible financing cost borne by SDG&E.

SDG&E's approved preliminary statement for its WMPMA states that an "entry equal to the interest on the average of the balance at the beginning of the month and the balance in this account after the above entries, at a rate equal to one-twelfth of the interest rate on three-month nonfinancial Commercial Paper for the previous month, as reported in the Federal Reserve Statistical Release, H.15, or its successor publication."³⁵¹

SDG&E is authorized to recover interest accrued on the undercollected revenue requirement through years 2026 and 2027 via a Tier 2 advice letter. In

³⁵⁰ SDG&E Reply Brief at 68-70.

³⁵¹ [SDGE ELEC ELEC-PRELIM WMPMA](https://tariffsprd.sdge.com/sdge/tariffs/?utilId=SDGE&bookId=ELEC§Id=ELEC-PRELIM), "Wildfire Mitigation Plan Memorandum Account (WMPMA)" Preliminary Statement, available [from](https://tariffsprd.sdge.com/sdge/tariffs/?utilId=SDGE&bookId=ELEC§Id=ELEC-PRELIM) <https://tariffsprd.sdge.com/sdge/tariffs/?utilId=SDGE&bookId=ELEC§Id=ELEC-PRELIM>.

the advice letter, SDG&E shall (1) propose an amortization period and any accrued interest from that amortization (per the WMPMA Preliminary Statement³⁵²); (2) include annual accrued interest from approved 2019–2025 amortized balance for the respective year; and (3) include associated bill impacts, to be effective at the beginning of years 2026 and 2027. However, the Commission finds it reasonable to suspend the accrual of interest on recorded drone inspection and repair costs because it's not reasonable for SDG&E to accrue memorandum account interest caused for any cost authorization delayed by SDG&E's inadequate showing. As a result, the accrual of interest on recorded drone inspection and repair costs is suspended effective January 15, 2026. This is consistent with the scope of Track 3 of this proceeding for delayed PSEP cost determinations³⁵³ and the recommendation made by TURN.³⁵⁴

Considering all of the above, the Commission finds that a separate proceeding to determine the authorized ongoing electric costs recorded to the WMPMA for 2019–2022 that are forecast to continue over 2023–2027 is unnecessary. This is reasonable because the annual depreciation, taxes, and return on rate base for approved WMPMA capital costs over 2019–2022 are determined in the Results of Operation Model for 2019–2022 and also for 2023–2027 (just as they were for Track 1). Here, in Track 2, they are based on the totals for the 2019–2022 period. These costs are shown in the table below and detailed

³⁵² *Ibid.*

³⁵³ Assigned Commissioner's Amended Scoping Memo and Ruling for Track 3 dated March 12, 2025 at 3.

³⁵⁴ TURN Opening Comments at 5.

in Appendices A, B, and C, along with the Results of Operations Modeling Results for Track 1. The total requested undercollection of O&M is \$434 million and the total undercollection of capital expenditures is \$1,015 million, less the 2019 authorized GRC revenue requirement of \$308 million, results in a total requested undercollection of \$1,141 million for both electric and gas.³⁵⁵ The total undercollection of capital expenditures is determined by reducing SDG&E's total request of \$1,188.37 million³⁵⁶ by the amount of direct cost reductions shown in Appendix B, totaling \$213.700 million and \$28.766 million in indirect cost reductions, totaling \$242.466 million in capital cost reduction.³⁵⁷ They are within the scope of Track 2, reasonable, and incremental. The revenue requirements requested for 2023–2027 with supporting documentation (e.g., time records, journal entries, invoices) are not needed to determine reasonableness for ratepayer funding because these revenue requirements are based on what has been found reasonable for 2019–2022.

The total amount of authorized undercollected revenue requirement for electric O&M and capital-related costs for capital projects placed into service between 2019–2022 determined by the Results of Operation Model is \$707.210 million. The undercollected revenue requirement for 2019–2022 is \$131.752 million and \$575.459 million for 2023–2027.³⁵⁸ The 2019–2027 total revenue requirement is \$1,005.144 million, including interest, and less the TY 2019 GRC

³⁵⁵ SDG&E T2 Ex-02R.

³⁵⁶ SDG&E T2 Ex-02R.

³⁵⁷ Appendix B Cost Reduction Summary.

³⁵⁸ Appendix C Results of Operations Model (Electric).

authorized revenue requirement of \$297.934 million.³⁵⁹ For electric costs this is a reduction of \$423.417 million from the amount requested of \$1,130.627 million with interest (shown in Table 14A above). The calculation for this amount is shown in Appendix C and summarized in Table C-1 below. As discussed in Section 15, SDG&E is authorized to recover the under-collected amount over a three-year period.

Table C-1

Authorized Total Undercollected Revenue Requirement of Electric O&M and Capital-Related Costs for Capital Projects Put into Service Between 2019–2022

WMP Electric Revenue Requirement				
(\$ in millions)				
Track 2 (2019-2022)	Actuals 5/30/2019 to 12/31/22	Forecasts 2023 to 2027	Totals	
Authorized Revenues	(244.8)	(53.1)	(297.9)	
O&M	222.2	(0.9)	221.3	
Capital Related Costs	152.8	629.4	782.3	
Interest @ 3%/ month CP rate	1.5	-	1.5	
Totals	131.8	575.4	707.2	

For ongoing gas capital-related costs for capital projects put into service between 2019–2022, SDG&E requests \$16.9 million, which is calculated in testimony.³⁶⁰ A separate proceeding would also be unnecessary to review

³⁵⁹ Appendix C Results of Operations Model (Electric).

³⁶⁰ Table 7 reflects Table 5 from Ex. SDG&E-T2-02R (Gentes) at 8, modified to reflect the E&Y adjustments discussed in Section IV(G)(3) above to reduce SDG&E's request for recovery. See Ex. SDG&E-T2-11; SDG&E Opening Brief at 91.

SDG&E's request for ongoing capital costs for gas projects,³⁶¹ but in the Proposed Decision the Commission found that SDG&E had failed to meet its burden of proof to demonstrate their connection to wildfire mitigation costs and denied such costs as unsupported. In Sempra's Opening Comments on the proposed decision, SDG&E states that the requested \$16.9 million is based on an allocation of costs for SDG&E's Distribution Communication Reliability Improvement Program (DCRI)³⁶² based on an allocation process approved in the decision approving SDG&E's last GRC.³⁶³ The last GRC does not contain the rules for allocating revenue requirement that may be in Preliminary Statement. As such, SDG&E fails to explain what the DCRI program is, how any allocation method is implemented, and how SDG&E arrived at \$16.9 million. In the alternative, SDG&E proposes that if the Commission finds that segmentation, in this case, is inappropriate, the Commission should authorize these costs allocated 100% to electric customers because the Commission found the direct costs to be reasonable. The Commission also finds this request to be unsupported and denies this request.

PCF and other intervenors recommend denying SDG&E's request for capital-related revenue requirements for its 2023–2027. This recommendation is based on the contention that such costs are out of scope because the request is

³⁶¹ SDG&E T2 Ex-02, Appendix 4, Wildfire Mitigation Plan Memorandum Account (WMPMA) - Gas Account # 1150745 / (2190351), Appendix 6.

³⁶² SDG&E T2 Ex-01R at 58-59.

³⁶³ D.19-09-051 at 601, 606-607; SDG&E Opening Comments at 24-25.

based on spending that occurred after the 2019–2022 period of costs, and the request lacks sufficient support.³⁶⁴

We reject this argument because SDG&E’s request is for undercollected revenue requirement that results from components of the rate formula that are only associated with costs authorized during the May 2019 through December 31, 2023 time period. When these costs were placed in service is also evident throughout the record of this proceeding. When the capital costs authorized for the 2019–2022 period are authorized, the Commission also authorizes the revenue requirement, including the depreciated capital and other associated costs, that are partly recovered through 2027. Finally, the determination and financing of undercollected revenue requirement is also part of SDG&E’s regulatory account proposal and includes the manner by which authorized costs are recovered in rates, as noted in the October 3, 2022 Scoping Memorandum governing this proceeding. Accordingly, this recommendation is not adopted.

15. Undercollection Financing

The amount of undercollected revenue requirement associated with 2019–2022 capital expenditures accrues annually in the amounts shown in the table below:

Table 15³⁶⁵

**WMP Electric Costs
(\$ in millions)**

Track 2 (2019-2022)	2019	2020	2021	2022
Authorized Revenues		(88.7)	(73.7)	(82.4)

³⁶⁴ PCF Opening Brief at 67-69; PCF Opening Comments at 22-23; SBUA Reply Comments at 6.

³⁶⁵ Appendix C Results of Operations (Electric).

O&M	80.7	59.4	82.1
Capital Related Costs	11.3	40.6	100.9
Interest @ 3 month CP rate	(0.16)	.00	1.7
Total Cost by Year	91.9	100.0	184.6
Activity by Year	3.1	26.3	102.3
Accumulated Undercollection	3.1	29.4	131.7

SDG&E proposes to submit a securitization request for the remaining undercollected electric WMPMA balance after the issuance of this decision.³⁶⁶ SDG&E makes this proposal due to the significant amount of money to be collected and the rate shock that ratepayers might otherwise experience if recovered over a short period.

The Commission has already authorized the interim collection of some WMPMA costs in rates. As a result, SDG&E has collected \$193.8 million in 2024 and \$96.1 million in 2025, for a total over the two years of \$289.9 million.³⁶⁷ After subtracting the amount authorized for interim relief, the remaining balance that may be recovered is \$416.575 million³⁶⁸ for 2019–2027.

SDG&E presents and compares two scenarios for paying for the undercollected balance of the electric WMPMA. The first is a three-year amortization of the undercollected balance. The second is a proposal to securitize the undercollected balance over a 10-year period.³⁶⁹ SDG&E claims that the 10-year securitization proposal supports affordability by: 1) avoiding a

³⁶⁶ SDG&E Opening Brief at 92.

³⁶⁷ D.24-02-010, Ordering Paragraph 1 at 22.

³⁶⁸ See Appendix C Total Revenue Requirement table for Electric and Gas.

³⁶⁹ SDG&E Opening Brief at 96-97.

substantial near-term rate increase by reducing the amount a typical non-CARE residential customer would pay by more than half between 2026–2028; 2) smoothing customer bill impacts over 10 years; and 3) reducing the overall costs for CARE and FERA customers.³⁷⁰ As a result, SDG&E outlined a proposal to securitize total undercollected costs over a 10-year period in more detail and requests that the Commission express support in this proceeding for SDG&E pursuing a subsequent securitization application³⁷¹ in accordance with Pub. Util. Code Section 850 *et seq.*

TURN supports the concept of addressing the adverse impacts that recovery of wildfire mitigation costs will have on rate affordability. TURN recommends that the Commission provide guidance to support a well-constructed securitization proposal consistent with prior decisions and TURN-identified deficiencies. TURN identified several deficiencies. First, TURN recommends that SDG&E only be permitted to securitize capital expenditures and capital-related costs. In support, TURN says the proposed securitization would not achieve a lower-cost financing for the O&M expenses but instead, would result in additional financing and related costs to the amount ultimately collected from ratepayers.³⁷² TURN correctly notes that the Commission has disfavored securitizing O&M expenses due to the higher financing costs and

³⁷⁰ SDG&E Opening Brief at 93.

³⁷¹ SDG&E Reply Brief at 80.

³⁷² TURN Opening Brief at 29-31.

rates that result in the later years due to securitization of O&M expenses, rather than relying on more traditional ratemaking.³⁷³

Second, TURN notes that SDG&E intends to seek approval of its securitization proposal within the 120-day statutory timeline.³⁷⁴ This will make it very difficult for intervenors to reasonably understand and address the proposal. Thus, TURN recommends that the Commission direct SDG&E to include, with its initial securitization application and supporting materials, a showing that includes the data and calculations necessary to permit a meaningful and timely consideration of the utility's proposal and alternatives,³⁷⁵ including those described below.

TURN opposes SDG&E's proposal to securitize a portion of its total undercollected capital revenue requirement over a 10-year period, rather than the capital expenditures themselves. In support, TURN says doing so would not achieve reduced costs to benefit ratepayers.³⁷⁶

TURN also recommends that the Commission follow the path of SCE and PG&E and seek securitization tied to SDG&E's \$215 million share of the \$5 billion of capital expenditures for which AB 1054 denied an equity return. In support of this recommendation, TURN claims that if SDG&E securitized the undepreciated balance as of the start of 2026 and achieved present value savings of even 50%, the Commission could reasonably estimate present value savings of

³⁷³ D.21-10-025 at 27-29.

³⁷⁴ Pub. Util. Code Section 850.1(g).

³⁷⁵ TURN Opening Brief at 24-26.

³⁷⁶ TURN Opening Brief at 32.

approximately \$85 million, or more than double the amount SDG&E calculates from its proposal.³⁷⁷ UCAN supports TURN's recommendations.³⁷⁸

PCF opposes SDG&E's entire request along with its securitization proposal as unjustified and unreasonable. In particular, PCF opposes SDG&E's proposal to securitize O&M expenses.³⁷⁹

In reply, SDG&E recommends that the Commission require SDG&E to file a securitization application without providing the guidance recommended by TURN. SDG&E opposes this additional guidance for several reasons.³⁸⁰ First, SDG&E contends that TURN's proposal to require SDG&E to securitize its capital expenditures and forego its resulting revenue requirement, including its rate of return, imposes unconstitutional requirements.³⁸¹

Second, SDG&E states that it calculated the impact of securitization both including O&M and excluding O&M, with those expenses recovered over a 1-3 year period. As a result, SDG&E states that most of SDG&E's WMPMA O&M balance will be recovered through interim relief. In addition, SDG&E states that although the difference is relatively marginal, SDG&E does not believe that the small overall revenue requirement savings resulting from amortizing O&M is worth the additional increase in customer bills for 2026–2028, and it would result

³⁷⁷ TURN Opening Brief at 37-38.

³⁷⁸ UCAN Opening Brief at 10-13.

³⁷⁹ PCF Opening Brief at 69-71.

³⁸⁰ SDG&E Reply Brief at 80.

³⁸¹ SDG&E Reply Brief at 71-73.

in additional costs for CARE and FERA customers in 2026–2028 compared to securitizing the remaining electric WMPMA balance over 10 years.³⁸²

Lastly, SDG&E claims that TURN’s recommendations unconstitutionally seek to deny SDG&E revenue requirement recovery that it is entitled to recover for capital expenditures.

The question before the Commission is whether SDG&E’s proposal to securitize 10 years of SDG&E’s WMPMA electric undercollection is the best option for customers compared to other recovery methods and periods. The Commission declines to rule on a securitization order without information that would accompany a financing application.

The Commission first considers the amount of undercollected revenue requirement that is currently owed before authorizing a mechanism for collecting the 2026 and 2027 revenue requirements owed in years 2026 and 2027. After deducting the amount authorized for interim relief of \$193.8 million in 2024 and \$96.1 million in 2025, the amount undercollected through the end of 2025 that may be collected through amortization is \$177.458 million. In addition, SDG&E may collect the 2026 and 2027 revenue requirement in rates at the beginning of those years.³⁸³

Appendix D in the Proposed Decision shows the bill impacts of amortizing the 2019–2025 undercollected amount over three-year and six-year periods. The difference between the bill impacts for a six-year versus a three-year

³⁸² SDG&E Reply Brief at 76-79.

³⁸³ SDG&E shall update the 2026 and 2027 revenue requirements with the authorized rate of return approved in the cost of capital proceeding.

amortization period is less than 1% for an average non-CARE customer on January 1, 2026. With a three-year amortization schedule, the average bill increases \$3.31 or 3.1% to \$110.31 per month for CARE customers and \$5.09 or 2.94% to \$178.09 per month for non-CARE customers. These estimated bill impacts are based on the data in the Proposed Decision, which has changed slightly due to the changes made in this decision. The Commission finds that the Proposed Decision data provides a sufficient estimate of bill impacts to determine the amortization period.

Considering the additional financing cost and monthly bill impacts, the Commission finds amortization of the amount of \$177.458 million over a three-year period to be reasonable. This increase is reasonably necessary to finance the cost of mitigations to prevent wildfires and to maintain the safety and reliability of SDG&E's electrical service system. The Commission does not consider the parties' arguments further because they do not consider the impact of the disallowances and the interim rate relief in reducing the lower authorized revenue requirement.

SDG&E shall request recovery of the balance of the undercollected revenue requirement through years 2026 and 2027 of \$239.117 million through a Tier 2 Advice Letter. In the Advice Letter, SDG&E shall propose an amortization period and associated bill impacts, to be effective at the beginning of years 2026 and 2027. In the alternative, SDG&E may file an application to securitize the WMPMA costs approved by this application less the amount recovered through interim rates.

16. Timing of Applications

PCF contends that SDG&E's filing of its application for recovery of 2019–2022 WMPMA costs in this GRC application five years after the costs were incurred is untimely in violation of Pub. Util. Code Section 8386.4, and made PCF's review unreasonably difficult. As a result, PCF argues that SDG&E should be held accountable for the consequences of the delay which made review extraordinarily difficult for all parties and the Commission.³⁸⁴

In reply, SDG&E contends that it complied with statutory requirements and Commission directives. Furthermore, SDG&E argues that the timing of its filing allows for a complete review of all GRC authorized costs over the rate case period to allow a comprehensive understanding of incrementality.³⁸⁵

Pub. Util. Code Section 8386.4 specifies that utilities may seek recovery of incremental WMP costs through two approaches: (1) the utility's General Rate Case; or (2) a separate application filed at the end of the time period covered by the applicable three-year WMP. However, SDG&E notes that the Commission has recognized that the statute defers all consideration of cost to the GRC.³⁸⁶ This is correct. The GRC following SDG&E's incurring of wildfire mitigation costs in 2019, and subsequent years, is this GRC proceeding. In this proceeding, the Scoping Memorandum established this track to review the reasonableness of WMP costs incurred during the 2019–2022 period.

³⁸⁴ PCF Opening Brief at 17-18.

³⁸⁵ SDG&E Reply Brief at 50-51.

³⁸⁶ SDG&E Reply Brief at 50, citing to D.19-05-036 at 21; Pub. Util. Code Section 8386.4(b)(1) states that "[t]he commission shall consider whether the cost of implementing each electrical corporation's plan is just and reasonable in its general rate case application."

While it might have been more reasonable to review 2019–2022 WMP costs prior to reviewing the Test-Year 2024 WMP forecasts in this GRC, that was not practicable given that this GRC application was required to be filed in May 2022. Consequently, the Commission finds that PCF failed to demonstrate the timing of SDG&E’s request for WMPMA cost recovery for the 2019–2022 period to be improper.

In a subsequent proceeding, the Commission will review SDG&E’s wildfire mitigation costs after 2023. As provided in Pub. Util. Code Section 8386.4, this can be in the next GRC or a separate proceeding. If this is done in the next GRC (Test Year 2028), a review of wildfire mitigation costs will be better informed by receiving SDG&E’s wildfire mitigation costs for years 2024 and 2025 before SDG&E files its next GRC. Since SDG&E’s next GRC will be filed in 2026, SDG&E’s application for recovery of wildfire costs for 2026 shall wait until SDG&E’s next GRC.

17. CPUC/OEIS 2021 Audit and Other Issues Raised by PCF

On December 15, 2021, OEIS published the CPUC/OEIS 2021 performance audit of SDG&E’s Wildfire Mitigation Plan Expenditures (CPUC/OEIS 2021 Audit or “the Audit” or “the Crowe Audit”) recorded to SDG&E’s WMPMA during the 2019–2020 period. PCF recommends that the Commission verify that SDG&E has thoroughly addressed and complied with the CPUC/OEIS 2021 Audit’s findings and recommendations before it approves any of the 2019 or 2020 spending at issue in this proceeding. Further, PCF highlights the following two conclusions of the CPUC/OEIS 2021 Audit: 1) in 2019 and 2020, SDG&E

underspent \$240 million of GRC authorized funds and instead recorded those funds to incremental accounts; and 2) because SDG&E's WMP cost categories did not align with its 2019 GRC cost categories, it was difficult for the auditors to assess the incrementality of SDG&E's wildfire mitigation costs.³⁸⁷

With regard to the first finding, the Audit recommends that, in any case where the 2019 GRC-authorized projects were not completed, SDG&E should not be allowed future recovery of any incremental wildfire expenditures from 2019 to 2020 that were funded as a result of SDG&E deferring and never completing GRC-adopted projects or activities.³⁸⁸

In reply, SDG&E concludes that the Commission should find that SDG&E has complied with any and all of the Crowe Audit recommendations and provided its WMPMA costs at a thorough and reasonable level of detail for facilitating review.³⁸⁹ With regard to the Audit's finding regarding underspending, SDG&E states that it presented evidence that, since the time period covered by the Crowe Audit, SDG&E has overspent its 2019 GRC authorized amounts.³⁹⁰ Whether that is true or not, the Commission does not find the Crowe Audit findings and recommendations to be directly relevant to this proceeding for the following reasons: 1) the Crowe Audit's first recommendation pertained to SDG&E's WMPMA balance before it authorized SDG&E's 2021 Interim Relief Application, not the specific issues in this case; 2) the Crowe Audit

³⁸⁷ PCF Opening Brief at 32-33.

³⁸⁸ PCF Opening Brief at 34.

³⁸⁹ SDG&E Reply Brief at 55-64.

³⁹⁰ SDG&E Reply Brief at 56-61.

reflects SDG&E's WMP costs as of December 31, 2020, and includes costs incurred from January to May of 2019, not a complete picture of SDG&E's Track 2 request.

With regard to the misalignment between SDG&E's WMP cost categories and its 2019 GRC cost categories, the second recommendation of the Crowe Audit reflected that "the timing of the 2019 GRC and the implementation of the WMP did not allow for complete alignment between the two documents." As a result, "alignment [of WMP and GRC reporting] would not be possible until the requirements of the WMP are updated in the next GRC cycle."³⁹¹ To address this misalignment, the ALJs in this proceeding required SDG&E to provide supplemental evidence to map the costs incurred for SDG&E's WMP cost categories and its 2019 GRC cost categories for the purpose of assessing incrementality.

PCF also argues that SDG&E's request for cost recovery should be denied due to spending discrepancies among SDG&E's WMPs, WMP Updates, and SDG&E's testimony.³⁹² In reply, SDG&E contends that there are no cost discrepancies at issue to resolve because: 1) the discrepancies were explained in testimony; 2) SDG&E's witness explained that the tables were accurate at the time they were submitted; 3) "there could have been updates since that time and the time SDG&E prepared the Track 2 testimony;" 4) adjustments could have been efforts to correct errors, or reflect progress that was made in various

³⁹¹ SDG&E Reply Brief at 62.

³⁹² PCF Opening Brief at 23-31.

categories of work; and 5) SDG&E testimony has been the subject of more thorough review.

Whether these discrepancies are material or not, the Commission resolves them above in its review of requests for recovery specific to each cost category, some of which have been denied. In so doing, the Commission notes that the WMP review process does not address cost recovery, and the Commission primarily reviews the evidence of costs provided in this proceeding where it is accorded more evidentiary weight than in WMPs.

18. Conclusion

In response to legislation mandating the reduction of wildfire risk, SDG&E made investments in wildfire mitigation during the 2019-2022 period to ensure the health and safety of its electrical system. The Commission finds most of these costs to have been effective in reducing wildfire risk and to be reasonable. But the Commission finds approximately 30 percent of such costs to be unreasonable. In the future, the Commission expects SDG&E to consider making additional investments in wildfire mitigation programs, but such investments will require a greater showing that they are just, reasonable, and cost-effective.

19. Procedural Matters

This decision affirms all rulings made by the ALJs and the assigned Commissioner in this proceeding. All motions not ruled on are deemed denied.

20. Comments on Proposed Decision

The Proposed Decision of ALJ John H. Larsen in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice

and Procedure. Comments were filed on December 4, 2025 by SDG&E, Cal Advocates, TURN, PCF, and UCAN, and reply comments were filed on December 9, 2025 by SDG&E, Cal Advocates, TURN, PCF, and SBUA.

Pursuant to Rules 14.3(c) and 14.3(d), comments are required to focus on factual, legal, or technical errors in the Proposed Decision or the comments of the other parties with specific references to the record or applicable law. Comments that failed to do so were accorded no weight. Parties provided helpful and extensive comments on a wide range of issues, and all comments were considered carefully. In response to comments, the Proposed Decision has been revised to correct errors, clarify the decision, maintain consistency, and update the revenue requirement.

In its Opening Comments, SDG&E claims that the Proposed Decision errs by disallowing costs based on cost-effectiveness standards that were issued or adopted after SDG&E incurred those costs in the 2019–2022 timeframe.³⁹³ The decision has been clarified to correctly state the cost-effectiveness standard within the prudent manager standard in effect prior to 2019. This was the standard applied in this decision. Other areas of the decision have been corrected to clarify how the conclusions in this decision were based on the prudent manager standard in effect prior to 2019, not based on any cost-efficiency standards promulgated after 2019 or any new interpretation of it, as SDG&E claims.

³⁹³ SDG&E Opening Comments at 9-11.

As discussed in the Track 1 decision in this proceeding³⁹⁴ and commented on by intervenors, SDG&E was required to submit plans for wildfire mitigations in WMPs to obtain its safety certificate³⁹⁵ and to comply with other statutory obligations. The Commission should not need to reiterate what SDG&E has acknowledged—that WMP approval is not synonymous with approval of associated costs, which are addressed in Commission proceedings. OEIS decisions do not address a utility’s optimal portfolio of wildfire mitigations considering the affordability and reasonableness of rates. In evaluating a utility’s WMP, OEIS considers the areas where the electrical corporation must improve, as well as the progress it plans to achieve in its areas of strength.³⁹⁶ Intervenors have also argued that SDG&E has not complied with various WMPs that it has relied upon. However, since this is not a WMP compliance proceeding, the focus in this decision is whether SDG&E demonstrated that it incurred its costs reasonably. The WMP process is not a substitute for the Commission’s statutory objective of determining the reasonableness of costs.³⁹⁷

Contrary to the claims of SDG&E,³⁹⁸ Section 8386.4 requires the Commission to disallow unreasonable costs even when OEIS and the Commission have determined that the program promotes public safety. The 2019 Wildfire Legislation did not intend for ratepayers to pay for unlimited costs for

³⁹⁴ D.24-12-074 at 467-468.

³⁹⁵ Pub. Util. Code Section 8389.

³⁹⁶ D.24-12-074 at 467.

³⁹⁷ Pub. Util. Code Section 8386.4.

³⁹⁸ SDG&E Opening Comments at 3-9.

programs, which may be duplicative or not cost-effective. The disallowance of costs as unreasonable also does not conflict with the approval of possible future costs for similar programs in SDG&E's 2024 GRC decision. Nor does any of the above violate due process, as SDG&E is on notice that the Commission must disallow costs not demonstrated to be reasonable. In addition, Section 463(b) requires a mandatory disallowance when the utility has not provided sufficient records for the Commission to perform a thorough reasonableness review of its capital expenditures and O&M costs.

For the Commission to determine if a requested cost is reasonable, utilities have the burden to provide sufficient evidence of reasonableness. Without sufficient evidence, the Commission is unable to authorize cost-based rates that utilities are obligated to charge according to the regulatory compact.³⁹⁹ For example, SDG&E advocates for correcting the Proposed Decision to allow recovery of the capital expenditures (\$66.6 million) and O&M costs (\$69.5 million) related to necessary repairs resulting from drone inspections. Unfortunately, SDG&E failed to provide citations to record evidence to substantiate such costs. However, to repair infrastructure presenting fire risk, the Commission finds it reasonable to allow additional evidence into the proceeding to the limited degree specified at the end of Section 7.6.

For activities without known metrics or targets, more information is needed to determine reasonableness. Capital expenditures require more information to support categorizing costs compared to O&M. O&M expenses

³⁹⁹ D.20-01-002 at 10; SDG&E Opening Comments at 6.

that may be similar to existing work also require utilities to provide more information to establish incrementality by demonstrating whether the utility hired additional employees, or used existing resources and replaced them with additional labor.

For Fuels Management SDG&E requests recovery for over \$22 million in costs, with only one page of support without discussion of costs in workpapers for a cost that has not been well-scrutinized.

In SDG&E's Opening Comments, SDG&E argued that the Proposed Decision was in error because the Proposed Decision wrongly assumed that all PSPS Communication and Stakeholder Engagement costs arose from the Alerts by SDG&E app. However, contrary to what the parties unclearly stated during oral argument,⁴⁰⁰ a search of the workpapers for meaningful information regarding the Stakeholder Cooperation & Community Engagement (SC&CE) cost category only revealed two line items in the workpapers: Community Engagement – Community Outreach and Public Awareness and PSPS Communication Practices. In other words, the conclusion in the Proposed Decision was partly based on a factual claim that could not be verified to be in the record.

This decision rejects SDG&E's arguments and denies SDG&E's request for \$16.9 million in revenue requirement for the segmentation of gas costs from SDG&E's Distribution Communication Reliability Improvement Program (DCRI)

⁴⁰⁰ Oral Argument Transcript Vol. 28 at 4763-4765; SDG&E-T2-09, Attachment (O&M) B-2 at 27, Attachment B-16 at 41.

and the denial of its reallocation. This is another example of SDG&E's failure to support its request. SDG&E's citation to the methodology approved in a previous decision is not sufficient to identify the allocation method, how it was implemented, and how the requested amount of \$16.9 million is reasonable.

The decision allows SDG&E to recover accrued interest by providing the information specified through a Tier 2 Advice Letter. However, accrual of interest on recorded drone inspection and repair costs is suspended effective January 15, 2025.

The Commission finds the cost of employee benefits, for employees the Commission found to be incremental, to be reasonable. This corrects the disallowance in Section 13.2.

The Commission clarifies but does not alter any other disallowances.

The intervenors largely agree that SDG&E's showings were deficient, particularly with regard to strategic hardening. In fact, TURN filed a motion supported by PCF recommending that the Commission require SDG&E to refile its application for this reason. Although the Commission agrees with intervenors to some extent regarding the deficiency of SDG&E's showings regarding cost-effectiveness, the Commission disagrees with intervenors regarding SDG&E's request for recovery of strategic undergrounding costs in particular. In this regard, the Commission revises the decision to better describe how it determines whether a cost is unreasonable or not.

The Commission has the discretion, in cases such as this, where a reasonableness review follows a test-year GRC decision, to approve costs partly due to consistency with the decision authorizing a GRC forecast. However,

unlike SDG&E argues,⁴⁰¹ the Commission is not bound to approve costs after-the-fact based on a decision authorizing similar costs in a GRC forecast.

The Commission revises the decision to make the following clarifications:

- the decision clarifies the applicable incrementality standard and its application;
 - the decision revises Ordering Paragraph 10 regarding a potential future securitization application;
 - the decision clarifies that the Ernst & Young review is provided in a “report” and not an “audit;”
 - the decision clarifies how the determination of revenue requirement and the authorization of its rate recovery through 2025 and later through 2027 is within the scope of this proceeding. This is how undercollected reasonable costs are recovered in rates as required by law, which is the purpose of this proceeding;
 - the decision is revised to indicate that little, if any, weight is given to the Supplemental Exhibit in any conclusions reached in the decision;
 - the decision is revised to reflect that the Crowe Audit is not directly relevant to this proceeding.

Contrary to the arguments of SDG&E, the Commission finds that the disallowances in this decision result primarily from SDG&E’s failure to provide information as part of its obligations under the regulatory compact.⁴⁰²

21. Assignment of Proceeding

Darcie L. Houck is the assigned Commissioner and John H. Larsen is the assigned Administrative Law Judge in this proceeding.

⁴⁰¹ SDG&E Opening Comments at 7-8.

⁴⁰² D.20-01-002 at 10.

Findings of Fact

1. SDG&E's request to recover \$1.89 million in capital expenditures and \$1.824 million in Operations & Maintenance expenses for SDG&E's Risk Assessment and Mapping Program is reasonably based on SDG&E's imputed authorizations, methodology, and identified costs drivers.

2. SDG&E reasonably completed wildfire mitigation work outside of the HFTD boundary in a Wildland Urban Interface area to reduce the risk of ignition and the possible growth of a fire once started. This work is further supported by the lack of regulatory requirements defining HFTD boundaries.

3. SDG&E's Covered Conductor costs are significantly higher than that of PG&E and SCE, and it is reasonable to reduce SDG&E's recovery of capital expenditures for Covered Conductor by approximately 19 percent to reflect the approximate percentage difference between SDG&E's and PG&E's Covered Conductor cost per mile.

4. San Diego Gas & Electric Company's Strategic Undergrounding cost recovery request of \$241.233 million in direct cost capital expenditures and \$0.176 million in Operations & Maintenance direct costs for the 2019–2022 period for 109.5 miles of Strategic Undergrounding is reasonable based on the degree to which Strategic Undergrounding can reduce ignitions and Public Safety Power Shutoff events in High Fire Threat Districts.

5. San Diego Gas & Electric Company's combination of Strategic Undergrounding, Distribution Overhead System Hardening, and Covered Conductor during the 2019–2022 period corresponds approximately to the profile of the same work approved by the Commission in Track 1 of this proceeding.

6. San Diego Gas & Electric Company did not underspend General Rate Case-authorized amounts for electric capital wildfire mitigation for the 2019-2022 period, which includes the years 2021 and 2022 that were not covered by the CPUC/OEIS 2021 Audit.

7. The number of non-Supervisory Control and Data Acquisition capacitors San Diego Gas and Electric Company replaced outside High Fire Threat Districts (HFTDs) during the 2019-2022 period is reasonable because 93 percent of those capacitors were installed in the Wildland Urban Interface or coastal canyons with unique wildfire risk and 73 percent were installed within two miles of the HFTD boundary.

8. The number of sectionalizing switches San Diego Gas & Electric Company installed outside High Fire Threat Districts during the 2019-2022 period was closely related to high wildfire risk areas and was a reasonable method of providing rapid isolation during any wind or wildfire events.

9. San Diego Gas & Electric Company's (SDG&E's) installation of communication stations outside High Fire Threat Districts (HFTDs) during the 2019-2022 period reasonably improved SDG&E's wireless communications in the HFTDs, and the additional cost of SDG&E installing a new mobile communications network, including stations outside HFTDs, was a reasonable method of reducing costs and maximizing coverage for HFTDs.

10. San Diego Gas & Electric Company's Standby Power Program costs that benefit commercial customers were not reasonable because commercial customers lack medical and other critical needs during Public Safety Power Shutoff events.

11. San Diego Gas & Electric Company (SDG&E) failed to demonstrate that its costs for its Drone Investigation Assessment and Repair pilot program after 2020 were reasonable for many reasons, including the lack of cost breakdowns, the lack of comparisons with other SDG&E inspection programs, and this program's high unit cost.

12. San Diego Gas & Electric Company's costs of \$22.442 million for Fuels Management were not reasonable because of that program's high unit cost of almost 100 times the unit cost for pole brushing.

13. In its report of a sample of San Diego Gas & Electric Company's costs incurred from May 30, 2019 through December 31, 2022, the accounting firm Ernst & Young identified approximately \$0.8 million in costs that were not properly evidenced for inclusion in the Wildfire Mitigation Plan Memorandum Account. In this report, Ernst & Young reasonably extrapolated the amount of improperly evidenced costs incurred during the report period to be \$2.6 million.

14. For the May 30, 2019 through December 31, 2022 period, San Diego Gas & Electric Company's Results of Operations Model determined the amount of undercollected revenue requirement attributed to Operations & Maintenance expenses, and depreciation, taxes, and the return on rate base for capital placed into service during this period in the same manner that the Results of Operations Model determined these costs for Track 1 of this proceeding.

15. After deducting the amount authorized for interim relief of \$193.8 million in 2024 and \$96.1 million in 2025, the amount San Diego Gas & Electric Company undercollected in revenue requirement for 2019–2022 wildfire mitigation costs through the end of 2025 is \$177.458 million.

16. For the undercollected revenue requirement of \$177.458 million, the difference between the bill impacts for a six-year versus a three-year amortization period is less than 1% for an average non-California Alternative Rates for Energy customer on January 1, 2026.

17. To collect the amount of \$177.458 million over a three-year period, the average San Diego Gas & Electric Company electricity bill increases \$3.31 or 3.1% to \$110.31 per month for California Alternative Rates for Energy (CARE) customers and \$5.09 or 2.94% to \$178.09 per month for non-CARE customers.

Conclusions of Law

1. San Diego Gas & Electric Company's (SDG&E's) request for recovery of \$1.869 million in capital expenditures and \$1.824 million in Operations & Maintenance expenses for SDG&E's Risk Assessment and Mapping Program is incremental, just, and reasonable and should be authorized.

2. San Diego Gas and Electric Company's (SDG&E's) request for \$613.417 million (in direct costs only) in capital expenditures and \$51.665 million (in direct costs only) in Operations & Maintenance expenses for SDG&E's Grid Design & System Hardening cost category is incremental, just, and reasonable and should be authorized.

3. San Diego Gas and Electric Company's (SDG&E's) request for recovery of Emergency Planning & Preparedness (EP&P) capital costs for Community Outreach, Public Awareness, and Communication Efforts is not reasonable because SDG&E failed to demonstrate how such costs would be incurred for over a year as a capital cost. As a result, SDG&E's request for EP&P costs should be authorized as an Operations & Maintenance cost in the amount of \$7.686

million for Community Outreach, Public Awareness, and Communication Efforts.

4. San Diego Gas & Electric Company (SDG&E) total Operations & Maintenance expenses for emergency Planning & Preparedness including the amount of \$7.686 million for Community Outreach, Public Awareness, and Communication Efforts, indirect costs, and all reductions discussed above and shown in Appendix B is just and reasonable and should be authorized.

5. San Diego Gas & Electric Company's request for \$3.010 million (in direct costs only) in capital expenditures and \$1.854 million (in direct costs only) in Operations & Maintenance expenses for Situational Awareness costs is just, reasonable, and incremental and should be authorized.

6. Though San Diego Gas & Electric Company's (SDG&E's) request for capital cost recovery of Detailed Inspections of Transmission Equipment (Distribution Underbuild) costs is not reasonable because SDG&E failed to demonstrate how such costs would be incurred for over a year as a capital cost, SDG&E's Distribution Underbuild costs are just, reasonable, and incremental and should be authorized for recovery as an Operations & Maintenance cost in the amount of \$225,000.

7. Though San Diego Gas and Electric Company's (SDG&E's) request for capital cost recovery of High Fire Threat District Tier 3 Distribution Pole Inspections (DPI) cost is not reasonable because SDG&E fails to demonstrate how such costs would be incurred for over a year as a capital cost, SDG&E's DPI costs are just, reasonable, and incremental and should be authorized for recovery as an Operations & Maintenance cost in the amount of \$3.111 million.

8. San Diego Gas & Electric Company (SDG&E) failed to demonstrate the prudence of SDG&E's Drone Investigation Assessment and Repair program and failed to establish the reasonableness of the high unit cost and total costs from 2019–2022 for this program. The Commission will allow SDG&E to supplement the record for this one category, consistent with the direction provided in this decision, due to the significant impact that wildfire mitigation activities have on ensuring safe and reliable electric service.

The Commission should deny recovery for the Circuit Ownership Platform program because San Diego Gas & Electric Company failed to demonstrate the reasonableness and prudence of initiating this program.

9. Though San Diego Gas & Electric Company's (SDG&E's) request for capital cost recovery of Patrol Inspections costs is not reasonable because SDG&E failed to demonstrate how such costs would be incurred for over a year as a capital cost, SDG&E's Patrol Inspections costs are just, reasonable, and incremental and should be authorized for recovery as an Operations & Maintenance cost in the amount of \$0.927 million.

10. San Diego Gas and Electric Company's request for \$8.446 million (in direct costs only) in capital expenditures and -\$38.746 million (in direct costs only) in Operations & Maintenance expenses for Asset Management and Inspections costs is just, reasonable, and incremental and should be authorized.

11. The Commission should deny recovery for the Light Detection and Ranging (LiDAR) inspections program as not reasonable and imprudent because San Diego Gas & Electric Company (SDG&E) did not: 1) provide information regarding whether a greater percentage of abnormalities were found using

infrared technology than with other technology, 2) support the additional cost compared with other inspection programs, and 3) indicate how or when it assessed such information before initiating this program as a pilot or continuing it beyond the pilot stage.

12. San Diego Gas & Electric Company's (SDG&E's) request for recovery for the cost of its Vegetation Restoration Program is not reasonable and should be denied because the program is not part of any of SDG&E's WMPs and is not tied to reducing a specific risk driver and reducing ignitions.

13. San Diego Gas & Electric Company's (SDG&E's) request for \$3.139 million (in direct costs only) in Operations & Maintenance expenses for Vegetation Management and Inspections costs is just, reasonable, and incremental and should be authorized.

14. San Diego Gas & Electric Company's (SDG&E's) request for recovery for Aviation Firefighting is not reasonable and should be denied because SDG&E has not sufficiently demonstrated what the last general rate case authorized SDG&E to spend in Operations & Maintenance expenses for this cost category, has not accounted for its unauthorized capital costs, has not accounted for its cost sharing arrangement with counties and CAL FIRE, and has not considered alternatives to purchasing helicopters.

15. San Diego Gas & Electric Company's (SDG&E's) request for recovery of capital expenditures for Grid Operations & Operating Protocols is not reasonable and should be denied because SDG&E failed to sufficiently support such costs as capital expenditures.

16. San Diego Gas & Electric Company's (SDG&E's) request for recovery of

additional costs for the Centralized Repository for Data is not reasonable and should be denied because SDG&E failed to provide sufficient evidence required by the Rate Case Plan to support the request and failed to separate the amounts requested for data governance from other requests that may also support Wildfire Mitigation Plan data processing functions.

17. San Diego Gas & Electric Company's (SDG&E's) request for recovery of Resource Allocation Methodology costs is not reasonable and should be denied because SDG&E failed to provide sufficient evidence required by the Rate Case Plan to support the amount requested, including how the amount requested is separate from the amount requested for the development of the WiNGS model as part of Risk Assessment and Mapping work.

18. San Diego Gas & Electric Company's (SDG&E's) request for recovery of Community Engagement costs is not reasonable and should be denied because SDG&E failed to provide sufficient information required by the Rate Case Plan, including how the amount requested is separate from the amount requested for recovery of costs requested under Community Outreach, Public Awareness, and Communication Efforts of Emergency Planning and Preparedness.

19. San Diego Gas & Electric Company's (SDG&E's) request for recovery of Public Safety Power Shutoff Communications costs is not reasonable and should be denied as unsupported because SDG&E failed to demonstrate the cost of the mobile phone application (App) separate from other costs requested, failed to demonstrate the value of an App compared to other alternatives, and failed to demonstrate the App's value to county governments and residents.

20. San Diego Gas & Electric Company's (SDG&E's) request for recovery of

Employee Benefits costs in the amounts of \$0.221 million in capital expenditures and \$0.261 million for Operations & Maintenance expenses is just, reasonable, and incremental and should be authorized 1 because these costs are associated with additional employees hired since the Company's 2019 GRC who performed work reasonably recorded in the WMPMA.

21. San Diego Gas & Electric Company's (SDG&E's) request for recovery of professional membership dues in the amount of \$0.003 million in capital expenditures and \$0.218 million in Operations & Maintenance expenses is not reasonable and should be denied because SDG&E provided insufficient evidence to demonstrate the ratepayer benefits of such costs.

22. It is reasonable for the Commission to reduce San Diego Gas & Electric Company's (SDG&E's) cost recovery by reducing indirect costs in proportion to reductions for direct costs. As a result, SDG&E should be denied cost recovery for indirect costs in the amounts shown in Appendix B, totaling \$38.966 million, with \$28.760 million denied for indirect capital expenditures and \$10.206 million denied for indirect Operations & Maintenance expenses.

23. San Diego Gas & Electric Company should be denied cost recovery in the amount of \$2.6 million for costs identified by Ernst & Young in a report to have not been properly evidenced for inclusion in the Wildfire Mitigation Plan Memorandum Account and extrapolated.

24. For the May 2019 – December 31, 2022 period, total cost recovery for San Diego Gas & Electric Company (SDG&E) in the amounts of \$146.351 million in capital expenditures and \$228.976 million in Operations & Maintenance expenses is just, reasonable, and incremental and should be authorized. The total revenue

requirement for May 2019–December 31, 2022 authorized by this decision should be \$121.924 million as reasonably determined by SDG&E's Results of Operations Model based on the amounts authorized for capital expenditures and Operations & Maintenance expenses as shown in Appendix C.

25. A separate proceeding to determine the ongoing capital-related electric costs recorded to the Wildfire Mitigation Plan Memorandum Account (WMPMA) for 2019–2022 is not necessary because the depreciated capital, taxes, and return on rate base for the WMPMA costs are determined by the Results of Operation Model as they were for Track 1 of this proceeding.

26. A separate proceeding is not necessary to review San Diego Gas & Electric Company's (SDG&E's) request for ongoing capital costs for gas projects because SDG&E has failed to demonstrate their connection to wildfire mitigation costs. As a result, SDG&E's request for recovery of \$16.9 million in ongoing capital-related costs for gas projects is unsupported and should be denied.

27. SDG&E should request recovery of the balance of the undercollected revenue requirement through years 2026 and 2027 of \$239.117 million through a Tier 2 Advice Letter that includes a proposed amortization period and associated bill impacts, to be effective at the beginning of years 2026 and 2027.

28. Authorizing the collection of \$177.458 million in revenue requirement through 2025 for 2019-2022 wildfire mitigation costs over a three-year period is a reasonable outcome to recover the cost of mitigations to prevent wildfires and to maintain the safety and reliability of San Diego Gas & Electric Company's electrical service based on the financing cost and monthly bill impacts.

29. San Diego Gas & Electric Company's filing of its application for recovery of wildfire mitigation costs for the 2019-2022 period in this general rate case (GRC) is consistent with statutory authority, Commission directives requiring the filing of this GRC in May 2022, and the Assigned Commissioner's Scoping Memorandum in this GRC.

O R D E R

IT IS ORDERED that:

1. San Diego Gas & Electric Company (SDG&E) is authorized to recover undercollected revenue requirement of \$416.575 million for the amount owed from 2019 through 2027. The 2019 through 2025 undercollected revenue requirement of \$177.458 million shall be implemented by amortizing it over a minimum of a three-year period effective with SDG&E's next scheduled rate change. This additional amount authorized here shall roll off at the next regularly scheduled January 1 rate change following completion of the minimum three-year amortization period. The 2026 and 2027 revenue requirements shall be implemented in rates on January 1 of the specific year or with the next scheduled rate change for each respective year.

2. San Diego Gas & Electric Company is authorized to recover the balance of the undercollected revenue requirement through years 2026 and 2027 via a Tier 2 Advice Letter. In the Advice Letter, SDG&E shall (1) propose an amortization period and any accrued interest from that amortization (per the Wildfire Mitigation Plan Memorandum Account Preliminary Statement); (2) include annual accrued interest from approved 2019–2025 amortized balance for the respective year; and (3) include associated bill impacts for 2026 and 2027.

However, accrual of interest on drone inspection and repair costs is suspended effective January 15, 2025.

3. In future applications for cost recovery, San Diego Gas & Electric Company shall provide and incorporate Cost-Benefit Ratios in its analysis as required by the Commission's Risk-Based Decision-Making Framework.

4. San Diego Gas & Electric Company (SDG&E) shall continue to monitor, evaluate, and report the cost-effectiveness of replacing wood poles with steel poles. In the next general rate case, SDG&E shall perform cost-benefit analyses to compare the costs and benefits of the use of wood poles compared to metal poles and to demonstrate how SDG&E has accounted for savings in using metal poles instead of wood poles.

5. If San Diego Gas & Electric Company requests cost recovery for any additional microgrid projects in a future application for cost recovery or General Rate Case, that request shall provide evidence of the energy source and cost-effectiveness of those microgrid projects as wildfire mitigations.

6. In future Wildfire Mitigation Plans and other reports regarding wildfire mitigation work, San Diego Gas & Electric Company shall fully disclose the work and costs performed within and outside High Fire Threat Districts.

7. In San Diego Gas & Electric Company's (SDG&E's) next General Rate Case application, SDG&E shall provide evidence of the unit cost of generator and standby sources of power, including renewable options, and the distance at which grid hardening remote customers is unreasonable and standby power is recommended.

8. In its next General Rate Case application, San Diego Gas & Electric Company (SDG&E) shall specify the Operations & Maintenance costs for all Asset Management and Inspection programs separately from the capital costs for repair or replacement of poles and other equipment and the number of poles being replaced. SDG&E shall also coordinate and optimize pole inspection and replacement programs and demonstrate the lack of redundancy between such programs.

9. Within 90 days of the effective date of this decision, San Diego Gas & Electric Company (SDG&E) shall file a Tier 1 Advice Letter verifying that SDG&E removed \$1.4 million in additional electric Operations & Maintenance costs from the cost recovery requested.

10. San Diego Gas & Electric Company (SDG&E) may file an application for a financing order to securitize the balance of undercollected Wildfire Mitigation Plan Account capital expenditures consistent with Public Utilities Section 850 *et seq.*

11. If San Diego Gas & Electric Company (SDG&E) seeks recovery of wildfire mitigation costs for years 2024 and 2025, SDG&E shall file an application before it files its next General Rate Case (GRC). SDG&E's application for recovery of wildfire costs for 2026 shall be part of SDG&E's next GRC.

12. The March 12, 2025 Assigned Commissioner's Amended Scoping Memorandum and Ruling for Track 3 extended the statutory deadline in this proceeding to December 31, 2025. This decision extends the statutory deadline to complete this proceeding to December 30, 2026.

This order is effective today.

Dated _____, at Sacramento, California.