INDEPENDENT EVALUATOR

Annual Report on Compliance for Wildfire Mitigation Plan Compliance Year 2024

JUNE 30, 2025

TABLE OF CONTENTS

DISCLAIMER

This report has been compiled through the process of observation and review of documents provided by the electric service provider named herein. The Office of Energy Infrastructure Safety ("Energy Safety") instituted the requirement for an independent evaluation of electric utility providers Wildfire Mitigation Plans ("WMP"). Bureau Veritas is not the designer, implementer, or owner of the WMP and is not responsible for its content, implementation, and/or any liabilities, obligations, or responsibilities arising therein.

The report reflects only those conditions and practices which could be ascertained through observation at the time of evaluation. This report is limited to those items specifically identified herein. The report is not intended to validate that dangers, hazards, and/or exposures are or are not present. Bureau Veritas shall only be responsible for the performance of the services identified or defined in its specific scope of services.

Bureau Veritas does not assume any responsibility for inaccurate, erroneous, or false information, express or implied, that was provided to Bureau Veritas for its evaluation herein. In addition, Bureau Veritas shall have no responsibility to any third party relying on this report. This report is for the sole benefit of Energy Safety and the electric Service Provider herein.

EXECUTIVE SUMMARY

The devastating wildfires of the past and present have taught us valuable lessons about safeguarding California's lands, particularly in areas where electrical infrastructure coexists with wildland environments. In response to these challenges, the California Public Utilities Commission (CPUC) initiated Rulemaking 18-10-007 to provide guidance on Wildfire Mitigation Plans (WMPs) for Investor-Owned Utilities (IOUs), now referred to as Electrical Corporations (ECs). These WMPs are designed to cover a three-year period, with the first cycle of independent evaluations beginning in 2020.

The 2024 WMP is part of the second three-year planning cycle. During the first evaluation of this cycle, which ended in 2023, San Diego Gas and Electric (SDG&E) experienced only one PSPS event that did not result in de-energization and overall observed a reduction in wildfire ignition risk. SDG&E's 2023-2025 WMP builds on the previous cycle by focusing on enhancements for data analytics and modeling capabilities, technological advancements for mitigating wildfire and PSPS risk, and PSPS awareness events and preparedness. These improvements, along with existing mitigation measures, are founded on the understanding that effective natural resource management is crucial for maintaining facilities. Many of these existing programs include comprehensive monitoring and data collection, such as wildfire cameras, in-depth Quality Assessment and Quality Control (QA/QC) programs, asset inspections, and situational awareness tools. Overall, the previous year saw a reduction in reportable ignitions within the High Fire Threat Districts (HFTD) and High Fire Risk Areas (HFRA) in SDG&E's service area.

This Independent Evaluator (IE) Annual Report of Compliance (ARC) assesses SDG&E's second cycle plan, which began in 2023 and extends to 2025. The IE ARC reviews the WMP initiatives as outlined for 2024 and evaluates SDG&E's performance in meeting their committed objective targets. These targets include specific quantifiable or qualitative performance goals, verification of QA/QC program implementation, processes, and results, as well as the distribution of funding to initiatives described within the WMP.

Pursuant to Public Utilities Code Section 8386.3(c)(2)(B)(i), (ii), (iii), and (iv), Bureau Veritas North America, Inc. (BVNA) has been selected as the IE to review and assess SDG&E's 2024 WMP in its entirety. This IE ARC will present BVNA's findings and results for review. BVNA was included in the Office of Energy Infrastructure and Safety (Energy Safety) Independent Evaluator List for 2024 WMPs, dated January 27, 2025, in accordance with Public Utilities Code section 8386.3(c)(2)(A).

In compliance with Energy Safety's requirements, San Diego Gas and Electric has contracted BVNA to provide the IE assessment. This assessment includes the IE responsibilities outlined in Public Utilities Code section 8386.3(c)(5)(C), which involve performing the following tasks:

- Task 1: Consult with Energy Safety on compliance assurance auditing that will be performed
- Task 2: Perform compliance assurance auditing, including field inspections
- Task 3: Draft and provide to Energy Safety a report on audit findings, including deficiencies of underfunded WMP activities
- Task 4: Draft and provide to Energy Safety a report on deficiencies of electrical corporations
- Task 5: Track and report deficiencies of audit findings

Docket Title: 2023 to 2025 Electrical Corporation Wildfire Mitigation Plans; Docket # 2023-2025-WMPs produced on July 5, 2024, for San Diego Gas and Electric. 2023-2025 WMP R5 update and the requirements of the Public Utilities Code (PU Code); Bureau Veritas North America, Inc. (BVNA), in partnership with C2 Group, have reviewed SDG&E's 2024 WMP.

Introduction:

Founded in 1881 and headquartered in San Diego, SDG&E is a regulated public utility providing energy services. As a subsidiary of Sempra Energy, a Fortune 500 company, SDG&E supplies power to more than 3.7 million people across 25 communities through 1.5 million electric meters and 900,000 gas meters in San Diego and part of Orange County. The service area spans 4,096 square miles, with ~69% located within High Fire Threat Districts (HFTD).

SDG&E's distribution infrastructure includes 17,467 circuit miles across 1,056 circuits, and 6,190 of those miles reside within the HFTD. The EC also operates 134 distribution substations and 24 transmission substations. Within these facilities, SDG&E maintains 7 synchronous condensers, 321 power transformers, 2,443 circuit breakers, and 263 capacitor banks. SDG&E's extensive infrastructure also includes federal-jurisdictional transmission lines and equipment. This transmission system comprises 1,993 circuit miles, with 1,037 miles within the HFTD

The utility operates four power generating plants in its territory. These include the Palomar Energy Center, a 588-megawatt gas-fired combined cycle plant; the Miramar Energy Facility, a 92-megawatt peaking plant; the Cuyamaca Peak Energy Plant, a 45-megawatt peaking plant; and the Desert Star Energy Center, a 480-megawatt combined-cycle plant located in Boulder City, NV.

The service territory encompasses a variety of habitats, such as marsh, coastal sage scrub, chaparral, grassland, riparian, woodlands, forest, and desert. Along the west side of the territory is over 80 miles of coastline and along the East lies mountains greater than 6,500 feet in elevation. Due to this variance, a wide range of weather exists in the service territory which. The area typically has cooler summers and warmer winters compared to other cities along similar latitudes due to its proximity to the Pacific Ocean and the westerly winds produced.

Throughout the 2023-2025 three-year cycle of the WMP, SDG&E's primary objective is to construct, maintain, and operate its electric line and equipment in a way that minimizes the risk of catastrophic wildfire. This goal is pursued through ongoing initiatives that aim to assess the EC's wildfire risk, develop comprehensive strategies to reduce ignitions, and ensure the reliability of electric systems. Using risk-informed decision making, SG&E aims to minimize ignition risk and outage impacts.

Independent Evaluator Review of Compliance

BVNA, in partnership with the C2 Group, have been selected as SDG&E's IE to assess compliance with the 2023-2025 WMP. The IE ARC focuses on SDG&E's progress in 2024, evaluation completion of proposed initiatives, distribution of fundings, and verification of QAQC programs.

The evaluation process began with an Energy Safety kick-off meeting, which served as an introduction between SG&E representatives, BVNA/C2 staff, and assigned Energy Safety personnel. This introductory meeting established key elements, including communication and documentation protocols, as well as the identification of individuals responsible for receiving requests from the IE. Following this meeting, the IE initiated a review of SDG&E's 2024 WMP and related publicly available documents, as listed in Section 7. This review aimed to identify SDG&E's stated goals within the 2024 WMP.

To evaluate activities described in the WMP that were not available in public records, BVNA's team of evaluators submitted data requests and conducted interviews with Subject Matter Experts (SMEs). These steps helped verify activities stated within the 2023-2025 WMP (see Section 7 for a list of Data Requests/SME Interviews). In addition to document analysis, data requests, and SME interviews, the IE conducted field assessments within HFTD Tier 2 and Tier 3 areas. These assessments allowed the IE to collect photographic evidence and evaluate compliance with 2024 activities and initiatives identified during the initial review. Detailed analysis and key findings for each respective category are presented in the following sections of this report.

The IE has classified each initiative as "Validated," "Not Validated", or "Not Applicable." "Validated" indicates that the EC has clearly demonstrated meeting the stated WMP target

for the review year. “Not Validated” means the EC either failed to provide sufficient documentation to support their claim or did not meet the WMP target, the individual reviews will elaborate and make the distinction. “Not Applicable” signifies that the EC has determined the initiative is not relevant to the current review period.

BVNA's understanding of collected utility strategies demonstrated throughout the state are summarized below:

1. **Inspection and maintenance of distribution, transmission, and substation** includes a comprehensive approach conducting system patrols and ground inspections using advanced technological tools, managing predictive and electrical preventative maintenance, performing vegetation inspections and management, implementing vulnerability detection methods such as Light Detection and Ranging (LiDAR) inspection, and utilizing geospatial and topography identification along with geographic information system (GIS) mapping data. A key aspect of these programs is the identification and collection of data elements through each initiative. Understanding how this data is used and shared is essential for improving utility practices and enhancing overall wildfire mitigation efforts.

2. **System hardening** includes pole replacement, non-expulsion equipment, advanced fuses, tree attachment removal, less flammable transformer oil, covered wire and wire wrap, and undergrounding where it is supported by a cost benefit analysis.

3. **De-energization** actions are triggered and prioritized based on various fire weather conditions such as: forecasted, imminent, and validated extreme fire weather conditions. Plans for re-energization when weather conditions subside to safe levels are implemented. Both manual and automatic capabilities to implement the de-energization and re-energization process exist.

4. **Advanced Technologies** include Distribution Fault Anticipation (DFA) technology, tree growth regulators, pulse control fault interrupters, oblique and hyperspectral imagery, advanced transformer fluids, advanced LiDAR systems, and advanced Supervisory Control and Data Acquisition (SCADA) systems. These technologies help reduce risk of electrical ignition, mitigate power outages, and prevent equipment damage.

5. **Vegetation management**, including routine preventative vegetation maintenance; corrective vegetative management and off-cycle tree work; emergency vegetation clearance, prioritized for portions of the service territory in Tier 2 and 3 HFTD; quality control processes; and resource protection plan, including animal and avian mitigation programs. Enhanced Vegetation Management (EVM) with enhanced inspections, aims to keep all aspects of trees away from power lines and to prescribe

minimum clearances that exceed state standards. EVM implements frequencies of inspection beyond the routine patrols to address dead, diseased or dying trees from power lines where they can do no harm.

6. **Situational Awareness** involves gathering real-time information from various sources to create a comprehensive understanding of current conditions. This included data from devices and sensors on electrical systems, weather monitoring equipment, and other tools that assess wildfire conductivity conditions. Utilization of programs such as online feeds and websites like the NFRDS help the EC employ risk-informed, data-supported decision-making processes. The goal of these situational awareness efforts is to achieve a shared understanding of actual conditions amongst all stakeholders, thereby improving collaborative planning and decision-making.

7. **Emergency Preparedness, Outreach, and Response** efforts engage a wide range of key stakeholders, including critical facilities, customers, local government, and essential agencies such as CAL FIRE. Strong communication channels are employed with local law enforcement agencies, first responders, hospitals, local emergency planning committees, other utility providers, and the California Independent System Operator. Coordination agreements such as mutual Aid or Assistance, as well as a community outreach plan is in place to inform and engage the various stakeholders.

8. **Operational practices** include communication protocols and the execution of specific plans designed to minimize fire danger. A key element of this approach is the strategic deactivation of automatic reclosers during high-risk periods. De-energization decisions are based on a multifaceted risk assessment that consider various factors, including the type of facility, tree and vegetation density, the presence of available dry fuel, and other location specific vulnerabilities to wildfire risk.

Key Findings

SDG&E's 2024 WMP demonstrates a strong commitment to advancing wildfire mitigation through strategic innovation, enhanced risk management, and continued stakeholder collaboration, building on lessons learned from the previous three-year planning cycle. The 2024 WMP focuses on integrating cutting-edge technologies, refining risk assessment methodologies, and strengthening community and regulatory partnerships, while building upon the successes of previous years.

SDG&E continues to excel in wildfire mitigation by implementing comprehensive measures to reduce wildfire risks and improve system resilience. The utility's proactive approach encompasses extensive system hardening, advanced situational awareness, and an enhanced vegetation management program.

The progress made in wildfire mitigation initiatives aligns with the strategic objectives of the 2024 WMP. Key projects in risk assessment, system hardening, asset management, and emergency planning have been successfully implemented. SDG&E has met or exceeded several target goals for initiatives, demonstrating the effectiveness of its mitigation strategies. The utility has also maintained strong partnerships with local stakeholders and regulatory bodies, ensuring a collaborative approach to wildfire mitigation.

WMP.461, 8.1.2.11.1 - PSPS Sectionalizing

SDG&E exceeded its target for installation switches to further increase the sectionalization of their energized lines. The installation of these switches allows SDG&E to deenergize high-risk areas without affecting the entire line, leading to a minimization of PSPS events for customers.

WMP.468, 8.1.2.11.2 - Standby Power Programs

SDG&E missed its target for WMP.468 completing only 54 power projects against a goal of 300, representing a negative variance of 82%. While SDG&E did not meet the specified target, the contextual information provided in the review section offers insight into why this shortfall should not be interpreted as an outright failure, despite the utility's non-compliance with this particular objective.

WMP.479, 8.1.3.2 - Transmission Overhead Detailed Inspections

SDG&E exceeded its target for WMP.479 completing 2,940 circuit miles of inspections against a goal of 1,960, representing a positive variance of 50%. Conducting thorough inspections helps identify potential areas of failure on lines and equipment.

WMP.481, 8.1.3.3 - Distribution Infrared Inspections

SDG&E missed its target for WMP.481 completing only 6,398 circuit miles of inspections against a goal of 9,532, representing a negative variance of 32%. While SDG&E did not meet the specified target, the contextual information provided in the review section offers insight into why this shortfall should not be interpreted as an outright failure, despite the utility's non-compliance with this particular objective.

WMP.497, 8.2.3 - Fuels Management

SDG&E missed its target for WMP.497 completing only 147 pole clearances against a goal of 500, representing a negative variance of 70%. While SDG&E did not meet the specified target, the contextual information provided in the review section offers insight into why this shortfall should not be interpreted as an outright failure, despite the utility's non-compliance with this particular objective.

WMP.512, 8.2.3.1 - Pole Clearing

SDG&E exceeded its target for WMP.512 completing 36,500 pole clearances against a goal of 33,010, representing a positive variance of 10.57%. Conducting thorough inspections helps identify potential areas of failure on lines and equipment.

Field Verified Initiative Key Findings:

WMP.479 – Transmission Overhead Detailed Inspections

SDG&E surpassed the inspection target by conducting detailed inspections of 2,940 circuit miles, exceeding the original target of 1,960 circuit miles (150% achievement). These inspections help proactively identify maintenance needs, thereby reducing potential ignition risks.

WMP.481 – Distribution Infrared Inspections

SDG&E conducted infrared inspections on 6,398 circuit miles, falling short of the targeted 9,532 circuit miles (67% achievement). The lower completion rate was influenced by changes in operational priorities and budget adjustments, potentially affecting timely identification of equipment issues.

Funding Verification Key Findings:

WMP.473 – Strategic Undergrounding

SDG&E completed 112 miles of undergrounding within high-risk wildfire areas against the original target of 125 miles (89.6% achievement). This significantly contributes to enhanced grid resiliency and reduces wildfire ignition sources associated with overhead power lines.

WMP.455 – Covered Conductor Installation

SDG&E installed 35.9 miles of covered conductors against a planned target of 60 miles (59.8% achievement). This initiative reduces wildfire risks by preventing energized lines from contacting vegetation or debris, though completion was below targeted levels due to operational delays and budget considerations.

WMP.497 – Fuels Management

SDG&E completed clearances for approximately 147 poles against an initial planned target of 500 poles (29.4% achievement). The shortfall was primarily related to temporary suspension due to budget constraints, with full funding resuming by the end of 2024 for continued implementation in 2025

SDG&E's service programs continue to evolve as their understanding of wildfire threats and mitigation opportunities deepens. The EC has consistently improved and developed programs to reduce fire risks within their territory and minimize the impact of Public Safety Power Shutoff (PSPS) events on customers. The 2024 WMP demonstrates a comprehensive approach to enhancing all five categories of their WMP initiatives, from grid design and system hardening to community outreach.

Initiatives Completed Within 5% of the WMP Targets: 29 Total Number of Initiatives (67%)

Table 1: List of Initiatives that Missed Target or Could Not Be Validated

Initiative Number, WMP Section Number, and Name	Missed Target or Could Not Be Validated
WMP.449, 8.1.8.2, Wireless Fault Indicators	Missed Target
WMP.455, 8.1.2.1, Distribution Overhead Hardening (Covered Conductor)	Missed Target
WMP.462, 8.1.2.7, Microgrids	Missed Target
WMP.463, 8.1.2.8.1, Advanced Protection	Missed Target
WMP.468, 8.1.2.11.2 - Standby Power Programs	Missed Target
WMP.473, 8.1.2.2, Strategic Undergrounding	Missed Target
WMP.481, 8.1.3.3 - Distribution Infrared Inspections	Missed Target
WMP.543, 8.1.2.5.2, Transmission Overhead Hardening	Missed Target
WMP.549, 8.1.2.8.3, Distribution Communications Reliability Improvement	Missed Target
WMP.550, 8.1.4.6, Lightning Arrester Removal and Replacement	Missed Target
WMP.552, 8.1.3.7, Drone assessments	Missed Target
WMP.1189, 8.1.2.10.2, Strategic pole replacement program	Missed Target
WMP.497, 8.2.3 - Fuels Management	Missed Target
WMP.970, 4.1.2, Air quality index	Missed Target

Table 2: Initiatives with Absolute % Differences > 10%
(Spend in Thousand $)
33 Total Number of Initiatives (38%)

Initiative Number, WMP Section Number, and Name	Total Budget ($)	Total Expenditure ($)	Total Variance Between Budget and Expenditure (%)
WMP.1008, 8.4.2, Emergency Preparedness Plan	$18,306	$21,141	15%
WMP.1017, Traditional overhead hardening	$739	$1,257	70%

Initiative Number, WMP Section Number, and Name	Total Budget ($)	Total Expenditure ($)	Total Variance Between Budget and Expenditure (%)
WMP.1189, 8.1.2.10.2, Strategic pole replacement program	$7,019	$2,605	63%
WMP.1195, 8.1.2.8.2, Early fault detection	$4,170	$3,600	14%
WMP.1337, 8.5.4, Collaboration on Local Wildfire Mitigation Planning	$622	$450	28%
WMP.442, 6.7, Risk Assessment and Mapping	$3,336	$4,573	37%
WMP.447, 8.3.2.1.1, Weather Stations and Normalized Difference Vegetation Index (NDVI) Cameras	$0	$99	100%
WMP.453, 8.1.4.3, Capacitor maintenance and replacement program (SCADA)	$287	$204	29%
WMP.459, 8.1.4.4, Expulsion fuse replacement	$1,463	$207	86%
WMP.461, 8.1.2.11.1, PSPS sectionalizing enhancements	$1,786	$2,135	20%
WMP.463, 8.1.2.8.1, Advanced protection	$15,810	$11,130	30%
WMP.464, 8.1.4.5, Maintenance, repair, and replacement of connectors, including hotline clamps	$1,702	$802	53%
WMP.466, 8.1.2.11.3, Generator grant program	$3,139	$927	70%
WMP.473, 8.1.2.2, Strategic undergrounding	$301,729	$217,140	28%
WMP.475, 8.1.2.5.1, Distribution overhead system hardening	$3,281	$6,459	97%
WMP.478, 8.1.3.1, Distribution overhead detailed inspections	$6,841	$8,550	25%
WMP.479, 8.1.3.2, Transmission overhead detailed inspections	$1,743	$1,030	41%
WMP.481, 8.1.3.3, Distribution infrared inspections	$10	$145	1350%
WMP.483, 8.1.3.5, Distribution wood pole intrusive inspections	$1,025	$296	71%
WMP.488, 8.1.3.8, Distribution overhead patrol inspections	$857	$2,708	216%
WMP.494, 8.2.2.1, Detailed inspections	$60,084	$76,305	27%
WMP.497, 8.2.3, Fuels management	$5,833	$3,159	46%
WMP.501, 8.2.3.3, Clearance	$10,235	$0	100%
WMP.511, 8.2.4, Vegetation Management Enterprise System	$353	$488	38%
WMP.512, 8.2.3.1, Pole clearing (brushing)	$7,893	$7,097	10%

Initiative Number, WMP Section Number, and Name	Total Budget ($)	Total Expenditure ($)	Total Variance Between Budget and Expenditure (%)
WMP.514, 8.1.8.3.2, Crew Accompanying Ignition Prevention and Suppression Resources and Services	$3,724	$4,819	29%
WMP.519, 8.1.5.4.1, WMP Data Platform	$10,667	$9,043	15%
WMP.521, Documentation and disclosure of wildfire-related data and algorithms	$59	$0	100%
WMP.523, Allocation methodology development and application	$8,083	$5,779	29%
WMP.549, 8.1.2.8.3, Distribution communications reliability improvements	$31,686	$22,506	29%
WMP.552, 8.1.3.7, Drone assessments	$95,493	$106,265	11%
WMP.557, 8.1.8.3.3, Aviation Firefighting Program	$13,066	$10,433	20%
WMP.970, 4.1.2, Air quality index	$0	$45	100%

Table 3: 10 Largest Initiatives by Planned Expenditure

No.	Initiative Number, WMP Section Number, and Name	Failed to Fund? (Funded below 100%)
1	WMP.473, 8.1.2.2, Strategic undergrounding	Yes
2	WMP.552, 8.1.3.7, Drone assessments	No
3	WMP.455, 8.1.2.1, Distribution overhead hardening (covered conductor)	Yes
4	WMP.494, 8.2.2.1, Detailed inspections	No
5	WMP.549, 8.1.2.8.3, Distribution communications reliability improvements	Yes
6	WMP.563, 8.4.4, Public Emergency Communication Strategy	Yes
7	WMP.1008, 8.4.2, Emergency Preparedness Plan	No
8	WMP.463, 8.1.2.8.1, Advanced protection	Yes
9	WMP.557, 8.1.8.3.3, Aviation Firefighting Program	Yes
10	WMP.545, 8.1.2.5.2, Transmission overhead hardening (distribution underbuild)	Yes

FOCUS INITIATIVES AND DISCUSSION

For the 2024 WMP Review Year, Energy Safety instructed the IE to select up to fifteen initiatives for a "focused" more robust analysis. These "Focus Initiative" were chosen by BVNA based on several key factors.

First, the IE considered the number and nature of "Notice of Violations" (NOVs) received by the EC in 2024, prioritizing initiatives related to these violations to verify compliance efforts. Funding allocation was another crucial consideration, with initiatives receiving the highest planned or actual expenditure being selected. Additionally, initiatives showing significant variance (~20%) between planned and actual spending were generally chosen, especially if target goals were not met. The WMP Risk Impact Percentage was also evaluated to assess each initiative's potential for fire risk reduction.

Historically, grid hardening and vegetation management initiatives have proven most effective in mitigating fire risks and typically comprise the majority of Focus Initiatives. The specific fifteen initiative selected by BVNA for focused analysis are listed in Table X below, followed by a brief rationale for each selection. This approach to initiative selection ensures a thorough evaluation of the EC's most critical and impactful wildfire mitigation efforts.

Table 4: List of Focus Initiatives

No.	Initiative Number, WMP Section Number, and Name
1	WMP.455 – 8.1.2.1 – Distribution Overhead Hardening (Covered Conductor)
2	WMP.463 – 8.1.2.8.1 – Advanced Protection
3	WMP.464 – 8.1.4.5 – Maintenance, Repair, and Replacement of Connectors, Including Hotline Clamps
4	WMP.473 – 8.1.2.2 – Strategic Undergrounding
5	WMP.475 – 8.1.2.5.1 – Distribution Overhead System Hardening
6	WMP.478 – 8.1.3.1 – Distribution Overhead Detailed Inspections
7	WMP.488 – 8.1.3.8 – Distribution Overhead Patrol Inspections
8	WMP.494 – 8.2.2.1 – Detailed inspections
9	WMP.497 – 8.2.3 – Fuels Management
10	WMP.512 – 8.2.3.1 – Pole Clearing (Brushing)
11	WMP.549 – 8.1.2.8.3 – Distribution Communications Reliability Improvements
12	WMP.550 – 8.1.4.6 – Lightning Arrester Removal and Replacement
13	WMP.552 – 8.1.3.7 – Drone Assessments
14	WMP.972 – 8.1.2.10.1 – Avian Protection

No.	Initiative Number, WMP Section Number, and Name
15	WMP.1189 – 8.1.2.10.2 – Strategic Pole Replacement Program

3. SITE AND SAMPLE SELECTION AND DISCUSSION

Table 5: List of Field Verified Initiatives

Initiative Number, WMP Section Number, and Name	Rationale if Not Field Verified	Rationale for Additional Field Verified Initiative
WMP.455 – 8.1.2.1 – Distribution Overhead Hardening (Covered Conductor)	N/A	N/A
WMP.463 – 8.1.2.8.1 – Advanced Protection	N/A	N/A
WMP.464 – 8.1.4.5 – Maintenance, Repair, and Replacement of Connectors, Including Hotline Clamps	N/A	N/A
WMP.473 – 8.1.2.2 – Strategic Undergrounding	N/A	N/A
WMP.475 – 8.1.2.5.1 – Distribution Overhead System Hardening	N/A	N/A
WMP.543 – 8.1.2.5.2 – Transmission Overhead Hardening	N/A	N/A
WMP.545 – 8.1.2.5.2 – Transmission Overhead Hardening (Distribution Underbuild)	N/A	N/A
WMP.549 – 8.1.2.8.3 – Distribution Communications Reliability Improvements	N/A	N/A
WMP.550 – 8.1.4.6 – Lightning Arrester Removal and Replacement	N/A	N/A
WMP.972 – 8.1.2.10.1 – Avian Protection	N/A	N/A
WMP.1189 – 8.1.2.10.2 – Strategic Pole Replacement Program	N/A	N/A
WMP.1195 – 8.1.2.8.2 – Early Fault Detection	N/A	N/A

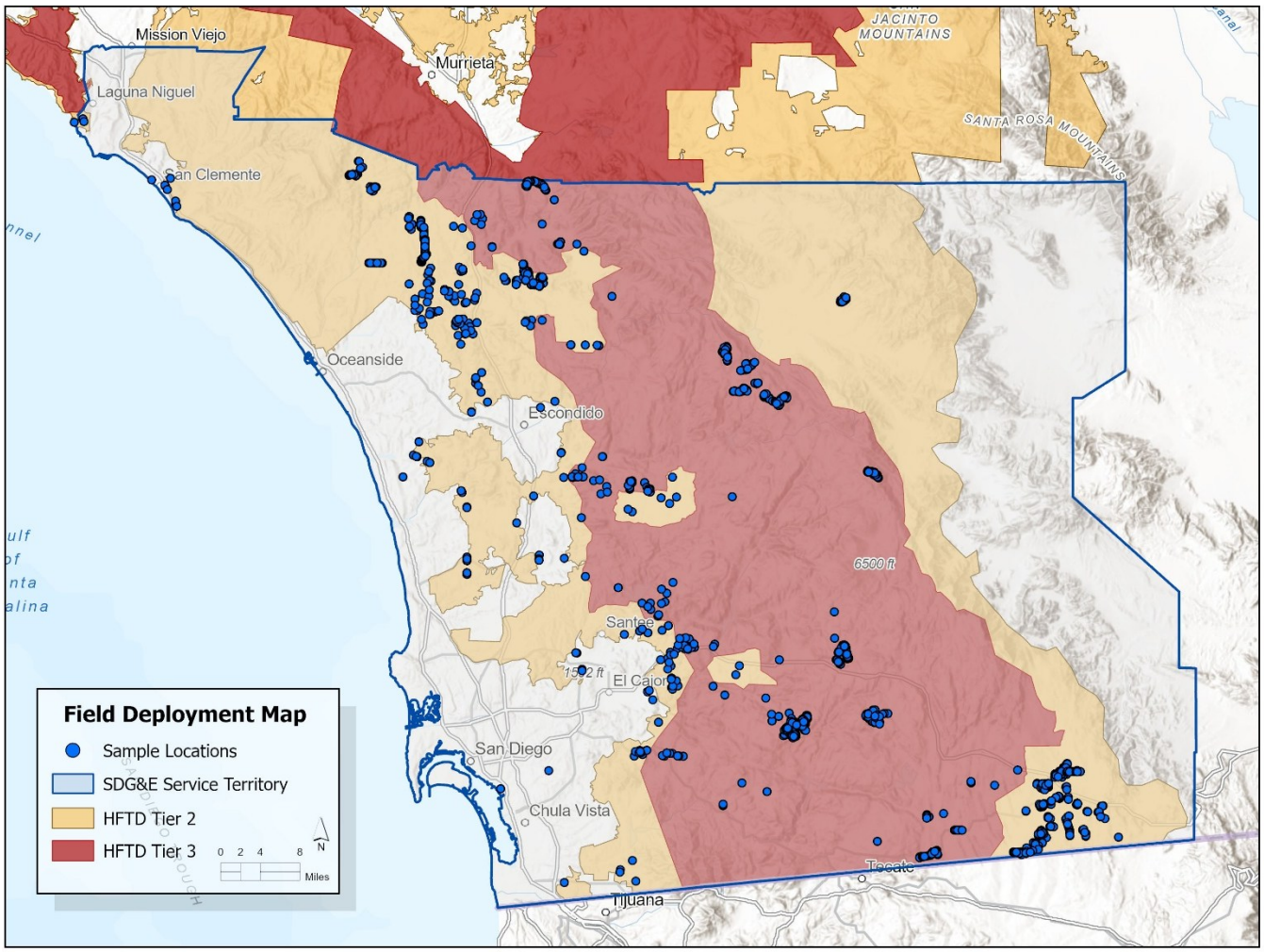
Sample Location Methodology

BVNA utilized random sampling for SDG&E based upon a simplified version of Cochran's Sample Size Formula. Utilization of this formula helps determine the appropriate sample size required to achieve a desired level of precision and confidence in the results – this ensures that the sample is representative of the larger population. By specifying a confidence level for the EC's individual initiatives based upon historical trends and data, mainly previous year's validation rates, the conclusions drawn from the sample data have a higher degree of statistical confidence. This confidence rate ranged from 85% and 95%, and if the previous year's validation rate fell outside of this range, the low or high end was utilized. For example, if the prior year sample validation rate was 96%, then 95% was used, if the previous year sample validation rate was 84%, then 85% was used. If no information on the prior year's sample validation rate exists, then 90% was used, unless other factors influenced that determination.

Whether or not an initiative was classified as Focus or non-Focus also affected the number of samples required for a given initiative. For Focus Initiatives, the margin of error (MOE) was set at 5% and for non-Focus Initiatives, the MOE was set at 10%. Although there is only a 5% difference between these two MOEs, the difference in sample size produced when utilizing these two MOE values is quite significant. As the margin of error *increases*, the required sample size decreases because a larger margin of error allows for *more* variability in the sample, requiring fewer samples to achieve the desired level of precision. As the margin of error *decreases*, the opposite happens because a smaller margin of error allows for *less* variability in the sample, requiring more samples to achieve the desired level of precision. Therefore, Focus Initiatives require more sampling than non-Focus Initiatives.

Once the total number of samples was calculated for each initiative, the IE determined how many samples should come from non-HFTD, HFTD Tier 2, and HFTD Tier 3 areas. Due to HFTD-Tier 3 areas posing the most significant threat to wildfire ignition risk, it was determined that 75% of the sampling would occur in these areas, while 25% of sampling would occur in HFTD Tier 2 areas. If a certain initiative did not reside within a HFTD Tier 3 area, then the sampling number would be drawn from a HFTD Tier 2 area; if an initiative did not reside within either a HFTD Tier 3 or 2 area, then all samples were drawn from the non-HFTD area. An additional 25% of samples were identified to be used in the case that any of the primary samples were unusable or inaccessible.

Figure 1: Overview of Field Areas Sampled



4. REVIEW OF INITIATIVES ACROSS WMP CATEGORIES: COMPLIANCE AND FUNDING

Table 6: WMP Initiative Category Initiative Summary

WMP Initiative Category	No. of Focus and Field Verifiable Initiatives	No. of Focus and Non-Field Verifiable Initiatives	No. of Non-Focus and Field Verifiable Initiatives	No. of Non-Focus and Non-Field Verifiable Initiatives
Grid Design, Operations, and Maintenance	9	3	3	21
Vegetation Management and Inspections	0	3	0	3
Situation Awareness and Forecasting	0	0	0	1
Emergency Preparedness	0	0	0	0
Community Outreach and Engagement	0	0	0	0

Funding Evaluation Methodology

The IE employed a comprehensive approach to evaluate funding compliance for each initiative in the WMP. The funding methodology approach included the following:

Budget Baseline Establishment: The IE established a baseline for planned expenditures by thoroughly reviewing budget information documented in SDG&E's approved 2024 WMP filing. These planned budget figures were cross-verified against SDG&E's officially reported data, specifically examining the Q4 2024 QDR Table 11.

Actual Expenditure Verification: Actual financial expenditures reported by SDG&E in their April 2025 ARC Appendix A: SDG&E 2024 ARC Summary Targets and Expenditures were compared against established WMP budget baselines.

Variance Analysis: The IE calculated the absolute percent differences for each initiative by applying the formula as required by Energy Safety guidelines. These calculations were

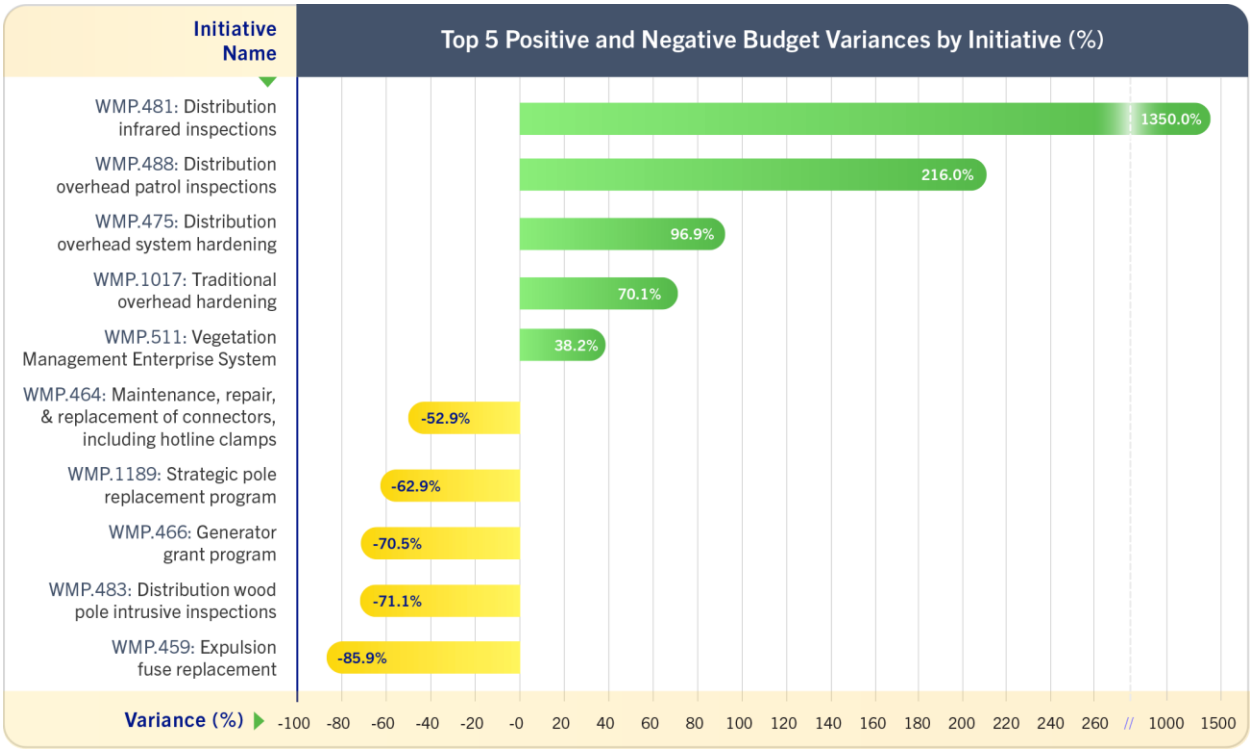
conducted for every initiative, generating detailed variance data for further review and analysis.

Threshold Application: A predefined threshold of 10% absolute percent difference was applied to systematically identify initiatives that required deeper review.

Supporting Documentation Review: For initiatives exceeding the established 10% variance threshold, the IE requested additional supporting documentation and detailed explanations from SDG&E. If SDG&E's rationale provided in the ARC was insufficient or incomplete, the IE explicitly asked for further documentation as necessary to achieve clarity and validate the reasoning behind the variances.

Detailed Analysis and Reporting: The IE documented any funding discrepancies identified during the evaluation, provided accurate corrected values, and analyzed the underlying causes for each variance, as detailed in Section 4 of this report and the top five (5) positive and negative variances as summarized in Figure 2.

Figure 2: Top 5 Positive and Negative Variances by Initiative (%)



4.1 GRID DESIGN, OPERATIONS, AND MAINTENANCE

4.1.1 Initiative Summary Table

Table 6: Initiative Summary Table (Spend in Thousand $)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress[1]	EC-Claimed Initiative Status	Sample Size[2]	Sample Validation[3] Rate (%)[4]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[5,6]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
WMP.449, 8.1.8.2, Wireless Fault Indicators	300 Wireless Fault Indicators	0 Wireless Fault Indicators	Delayed	N/A	N/A	SDG&E Written Response (DR029)	Initiative Not Validated (0%)	$0	$0.00 (+0.0%)	Yes (0.3395%)
WMP.453, 8.1.4.3, Capacitor Maintenance and Replacement Program (SCADA)	No Target	1 Capacitor	Completed	1 Capacitor	100%	Capacitor GIS Data (DR005b) Project As-Builts (DR030)	Initiative Validated (100%)	$287	$204.00 (-28.9%)	No Goal Provided
WMP.455, 8.1.2.1, Distribution Overhead Hardening (Covered Conductor)	60 Miles	35.9 Miles	Delayed	35.9 Miles	100%	Field Inspection Distribution Overhead Hardening GIS Data (DR005b) As-Builts (DR011b, DR011c)	Initiative Not Validated (60%)	$79,890	$78,642.00 (-1.6%)	No
WMP.459, 8.1.4.4, Expulsion Fuse Replacement	No Target	188 Fuses	Completed	23 Fuses	100%	Expulsion Fuse Replacement GIS Data (DR005b) As-Builts (DR031)	Initiative Validated (100%)	$1,463	$207.00 (-85.9%)	No Goal Provided
WMP.461 8.1.2.11.1, PSPS Sectionalizing	10 Switches	18 Switches	Exceeded	9 Switches	100%	-PSPS Sectionalizing List (DR012) -As-Builts/Redline Submission (DR012.b)	Initiative Validated (180%)	$1,786	$2,135.00 (+19.5%)	Yes (16.67%)
WMP.462, 8.1.2.7, Microgrids	4 Microgrids	0 Microgrids	Delayed	N/A	N/A	SDG&E Written Response (DR032)	Initiative Not Validated (0%)	$7,715	$7,396.00 (-4.1%)	Yes (98.8932%)
WMP.463, 8.1.2.8.1, Advanced Protection	8 Circuits	5 Circuits	Delayed	5 Circuits	100%	Field Inspection GIS Data (DR005b, DR013c) As-Builts (DR013b) SME Interview (DR013c)	Initiative Not Validated (63%)	$15,810	$11,130.00 (-29.6%)	No

[1] N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC.
[2] N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.
[3] Sample Validation is determined by taking the number of sampling data validated and dividing by the sampling request.
[4] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[5] As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.
[6] The Initiative Validation Rate is determined by taking the Sample Validation Rate and multiplying by the EC-claimed amount, this estimate is then divided by the WMP Target amount to determine the validation rate.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress[1]	EC-Claimed Initiative Status	Sample Size[2]	Sample Validation[3] Rate (%)[4]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[5,6]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
WMP.464, 8.1.4.5, Maintenance, Repair, and Replacement of Connectors, Including Hotline Clamps	250 Hotline Clamps	678 Hotline Clamps	Completed	83 Hotline Clamps	100%	Field Inspection Hotline Clamp GIS Data (DR005b)	Initiative Validated (271%)	$1,702	$802.00 (-52.9%)	Yes (0.0309%)
WMP.466, 8.1.2.11.3, Generator Grant Program	Continue to provide portable backup power solutions to vulnerable, electricity dependent customers	N/A	Completed	N/A	N/A	-SDGE Written Response -Generator Grant Program Annual 2024 (DR014)	Initiative Validated (100%)	$3,139	$927.00 (-70.5%)	No Goal Provided
WMP.467, 8.1.2.11.4, Generator Assistance Program	Continue to provide rebates on portable backup power solutions to customers who experience PSPS	N/A	Completed	N/A	N/A	-SDGE Written Response -Generator Assistance Program Final 2024 (DR015)	Initiative Validated (100%)	$486	$478.00 (-1.6%)	No Goal Provided
WMP.468, 8.1.2.11.2, Standby Power Programs	300 Generators	54 Generators	Delayed	17 Generators		-List of Fixed Power Backup Installations (DR016) -Fixed Power Backup Application/Work Flow (DR016.b)	Initiative Not Validated (18%)	$5,377	$5,207.00 (-3.2%)	No
WMP.473, 8.1.2.2, Strategic Undergrounding	125 Miles	112 Miles	Completed	58 Miles	100%	Field Inspection Strategic Undergrounding GIS Data(DR005b) As-Builts (DR034)	Initiative Not Validated (90%)	$301,729	$217,140.00 (-28.0%)	Yes (7.6234%)
WMP.475, 8.1.2.5.1, Distribution Overhead System Hardening	No Target	.54 Miles	Completed	.54 Miles	100%	Field Inspection Distribution Overhead System Hardening GIS Data (DR005b) As-Builts (DR035)	Initiative Validated (100%)	$3,281	$6,459.00 (+96.9%)	No Goal Provided
WMP.478, 8.1.3.1, Distribution Overhead Detailed Inspections	15,450 Inspections	16,503 Inspections	Exceeded	73 Inspections	100%	-Distribution Overhead Inspections List (DR017) -Inspection Results List (DR017.b)	Initiative Validated (106%)	$6,841	$8,550.00 (+25.0%)	Yes (2.2629%)
WMP.479, 8.1.3.2, Transmission Overhead Detailed Inspections	1,960 Inspections	2,940 Inspections	Exceeded	18 Inspections	100%	-Transmission Overhead Inspections List (DR018) -SDGE Written Response (DR018.b)	Initiative Validated (150%)	$1,743	$1,030.00 (-40.9%)	Yes (0.9488%)
WMP.481, 8.1.3.3, Distribution Infrared Inspections	9,532 Inspections	6,398 Inspections	Delayed	18 Inspections	100%	-Distribution Infrared Inspection List -2023 Change Order Request	Initiative Not Validated (67%)	$10	$145.00 (+1350.0%)	No

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress[1]	EC-Claimed Initiative Status	Sample Size[2]	Sample Validation[3] Rate (%)[4]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[5,6]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
						-2025 Change Order Request -2025 Petition to Amend (DR036)				
WMP.482, 8.1.3.4, Transmission Infrared Inspections	6,179 Inspections	7,161 Inspections	Exceeded	18 Inspections	100%	-Transmission Infrared Inspection List (DR019) -SDGE Written Response (DR019.b)	Initiative Validated (115%)	$0	$0.00 (+0.0%)	Yes (0.1848%)
WMP.483, 8.1.3.5, Distribution Wood Pole Intrusive Inspections	No Target	2,225 Inspections	Completed	18 Inspections	100%	-Distribution Wood Pole Inspection List (DR020) -SDGE Written Response (DR020.b)	Initiative Validated (100%)	$1,025	$296.00 (-71.1%)	No Goal Provided
WMP.488, 8.1.3.8, Distribution Overhead Patrol Inspections	86,197 Inspections	86,140 Inspections	Completed	73 Inspections	100%	-Distribution Overhead Patrol Inspection List (DR021) -SDGE Written Response (DR021.b)	Initiative Validated (99%)	$857	$2,708.00 (+216.0%)	Yes (4.3508%)
WMP.489, 8.1.3.9, Transmission Overhead Patrol Inspections	6,337 Inspections	7,366 Inspections	Exceeded	18 Inspections	100%	-Transmission Overhead Patrol Inspection List (DR022) -SDGE Written Response (DR022.b)	Initiative Validated (116%)	$0	$0.00 (+0.0%)	Yes (0.0298%)
WMP.491, 8.1.6.2, Quality Assurance/Quality Control of Distribution Detailed Inspections	77 Structures	440 Structures	Complete	23 Structures	100%	QA/QC GIS Data (DR005b) Inspection Reports (DR037)	Initiative Validated (571%)	$0	$0.00 (+0.0%)	No Goal Provided
WMP.492, 8.1.3.11, Substation Patrol Inspections	384 Inspections	379 Inspections	Completed	17 Inspections	100%	-Substation Patrol Inspection List (DR023) -SDGE Written Response (DR023.b) -Substation Inspection Reports (DR023.b)	Initiative Validated (98%)	$0	$0.00 (+0.0%)	No Goal Provided
WMP.543, 8.1.2.5.2, Transmission Overhead Hardening	10.2 Miles	9.08 Miles	Completed	9.08 Miles	100%	Field Inspection Transmission Overhead Hardening GIS Data (DR005b) As-Builts (DR024)	Initiative Not Validated (89%)	$0	$0.00 (+0.0%)	No
WMP.545, 8.1.2.5.2, Transmission Overhead Hardening (Distribution Underbuild)	1 Mile	7 Miles	Completed	7 Miles	100%	Field Inspection Transmission Overhead Hardening (Distribution Underbuild) GIS Data(DR005b) As-Builts (DR044)	Initiative Validated (700%)	$12,464	$12,039.00 (-3.4%)	Yes (0.0053%)
WMP.549, 8.1.2.8.3, Distribution Communications Reliability Improvements	60 Base Stations	3 Base Stations	Delayed	3 Base Stations	100%	Field Inspection Distribution Communications Reliability Improvements GIS Data (DR005b)	Initiative Not Validated (5%)	$31,686	$22,506.00 (-29.0%)	No Goal Provided

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress[1]	EC-Claimed Initiative Status	Sample Size[2]	Sample Validation[3] Rate (%)[4]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[5,6]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
WMP.550, 8.1.4.6, Lightning Arrester Removal and Replacement	1,848 Lightning Arresters	1,654 Lightning Arresters	Completed	88 Lightning Arresters	100%	Field Inspections Lightning Arrester GIS Data (DR005b)	Initiative Not Validated (90%)	$2,983	$2,719.00 (-8.9%)	No
WMP.552, 8.1.3.7, Drone Assessments	13,500 Structures	6,529 Structures	Delayed	92 Structures	100%	Drone Inspection GIS Data (DR005b) SDG&E Written Response (DR046) Inspection Reports (DR046)	Initiative Not Validated (48%)	$95,493	$106,265.00 (+11.3%)	No
WMP.555, 8.1.3.10, Transmission 69kV Tier 3 Visual Inspections	1,632 Inspections	1,605 Inspections	Completed	18 Inspections	100%	-Transmission 69kV T3 Visual Inspections (DR026) -SDGE Written Response (DR026.b)	Initiative Validated (98%)	$0	$0.00 (+0.0%)	Yes (0.0193%)
WMP.972, 8.1.2.10.1, Avian Protection	200 Poles	774 Poles	Completed	84 Poles	100%	Field Inspections Avian Protection GIS Data (DR005b)	Initiative Validated (387%)	$1,113	$1,108.00 (-0.4%)	Yes (0.0204%)
WMP.1189, 8.1.2.10.2, Strategic Pole Replacement Program	267 Poles	40 Poles	Delayed	40 Poles	100%	Field Inspections Pole Replacement GIS Data (DR005b)	Initiative Not Validated (15%)	$7,019	$2,605.00 (-62.9%)	No
WMP.1190, 8.1.3.6, Transmission Wood Pole Intrusive Inspections	0 Inspections	164 Inspections	Exceeded	17 Inspections	100%	-Transmission Wood Pole Intrusive Inspection List (DR006) -SDGE Written Response (DR006.b)	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No Goal Provided
WMP.1191, 8.1.6 QA/QC – Transmission Inspection	100% Internal Audits	100% Internal Audits	Completed	N/A	N/A	--QAQC Transmission Inspection List (DR007)	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No Goal Provided
WMP.1192, 8.1.6.3, Quality Assurance/Quality Control of Distribution Drone Assessments	13,500 Structures	6,529 Structures	Completed	23 Structures	100%	Drone Assessment QA/QC GIS Data (DR005b) Drone Inspection QAQC Audit Documentation (DR028)	Initiative Validated (100%)[7]	$0	$0.00 (+0.0%)	No Goal Provided
WMP.1193 , 8.1.6, QA/QC – Wood Pole Intrusive	0 Inspections	150 Inspections	Exceeded	37 Inspections	100%	-QAQC Wood Pole Intrusive List (DR008) - Inspection Details List (DR008.b)	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No Goal Provided
WMP.1194, 8.1.6 QA/QC – Substation Inspections	18 Inspections	22 Inspections	Exceeded	10 Inspections	100%	--QAQC Substation Inspection List (DR009) QAQC Substation Inspection Reports (DR009.b)	Initiative Validated (122%)	$0	$0.00 (+0.0%)	No Goal Provided
WMP.1195, 8.1.2.8.2, Early Fault Detection	60 Nodes	62 Nodes	Completed	18 Nodes	100%	Field Inspections Early Fault Detection GIS Data (DR005b)	Initiative Validated (103%)	$4,170	$3,600.00 (-13.7%)	Yes (2.6493%)

[7] Validation percentage calculated as the percentage of IE verified completed QA/QC audits for completed drone assessments

4.1.2 Written Detail for Initiatives

WMP.449 – 8.1.8.2 – Wireless Fault Indicators – Non-Focus & Non-Field Verifiable – Non-Focus & Non-Field Verifiable

Wireless fault indicators are intended to enhance situational awareness and reduce wildfire risks by enabling rapid identification of faults on distribution circuits. SDG&E's 2023–2025 WMP set a 2024 target to install 300 wireless fault indicator devices, with a risk reduction goal of 0.34%.

According to SDG&E's 2024 Q4 QDR, the utility did not install any wireless fault indicators during 2024. SDG&E confirmed in response to Data Request DR029 that zero installations occurred.

In response to Data Request DR029 and as reported in the 2024 ARC, SDG&E stated that this initiative was paused due to manufacturer upgrades to the selected wireless fault indicators, which required a communications protocol not currently used by SDG&E. A Change Order requesting to update the 2024 target to zero (0) installations was submitted on November 1, 2023, but Energy Safety rejected this request on May 13, 2024. SDG&E stated that intended risk reduction goals were met using manual fault indicators and enhanced situational awareness via existing SCADA devices.

The IE conducted a subject matter expert (SME) interview in response to Data Request DR045. SDG&E also discussed the calculation used to determine the risk reduction for each initiative which considers the likelihood and consequence of wildfire ignitions comparing pre and post mitigation values and distributes the planned risk reduction between the years represented in the WMP cycle. For initiatives that are classified as delayed, the achievement of the risk reduction target is reviewed by a team of subject matter experts to confirm whether the intended risk reduction was achieved independently of the achievement of the quantitative target.

SDG&E did not meet its 2024 target for this initiative. Given the absence of completed installations during the reporting period, the IE does not validate this initiative. As reported in the ARC, SDG&E confirmed that the risk reduction goal for this initiative was achieved using manual fault indicators.

Table 7: Wireless Fault Indicators Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR029 Response	Summary
300 WFIs	0 WFIs	0 WFIs	0 WFIs	Initiative Not Validated

WMP.453 – 8.1.4.3 – Capacitor Maintenance and Replacement Program (SCADA) – Non-Focus & Non-Field Verifiable

The Capacitor Maintenance and Replacement Program aims to improve reliability by maintaining or replacing capacitors, focusing primarily on upgrading to SCADA-enabled equipment. SDG&E's 2023–2025 WMP did not establish a target for 2024 for replacing existing non-SCADA capacitors, nor did it identify a specific risk reduction goal.

According to SDG&E's 2024 Q4 QDR, the utility completed the replacement of one capacitor in 2024. In response to Data Request DR005b, SDG&E provided capacitor GIS data within the consolidated yearly geospatial dataset for 2024, confirming this single capacitor replacement.

The IE reviewed the provided geospatial data and corresponding as-built documentation provided in response to Data Request DR030 for this capacitor replacement. No issues or discrepancies were identified during this review.

Although there was no established target for this initiative, SDG&E completed one capacitor replacement during the reporting period. Based on the documentation reviewed, the IE validates this initiative.

Table 8: Capacitor Maintenance and Replacement Program (SCADA) Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR030 Response	Summary
No Target	1 Capacitor	1 Capacitor	1 Capacitor	Initiative Validated

WMP.455 – 8.1.2.1 – Distribution Overhead Hardening (Covered Conductor) –Focus & Field Verifiable

Distribution overhead hardening through covered conductor installation mitigates wildfire ignition risks by using insulated overhead conductors to prevent faults resulting from incidental contact. SDG&E's 2023–2025 WMP set a 2024 target to install 60 circuit miles of covered conductor, with an associated risk reduction goal of 0.81%.

According to SDG&E's 2024 Q4 QDR, the utility completed installation of 35.91 circuit miles of covered conductor. SDG&E provided consolidated yearly geospatial GIS data in response to Data Request DR005b, which confirmed the installation of 35.91 circuit miles. In its 2024 ARC, SDG&E reported submitting a Change Order request to reduce the 2024 installation

target from 60 to 40 miles, reallocating 20 miles to 2025; Energy Safety denied this request. SDG&E attributed project delays to land acquisition challenges, engineering, permitting, customer negotiations, material availability, and construction delays from Santa Ana wind events.

The IE assessed all 35.91 reported miles of covered conductor installation through review of distribution covered conductor documentation and as-built construction documents provided in response to Data Requests DR011b and DR011c. Field verification included foot patrols with GPS-enabled high-resolution handheld cameras and vehicle-mounted 360° cameras with GPS data-logging capabilities. Field observations were cross-referenced with historical Google Streetview imagery (2019–2024) and as-built construction drawings. For illustrative examples of these installations, please refer to Figure 3: Example Distribution Overhead Hardening (Covered Conductor) Field Images.

Figure 3: Example Distribution Overhead Hardening (Covered Conductor)

P45166 Circuit 444

During field assessments, the IE verified that:

- Covered conductor installations were completed.
- Installed spans aligned accurately with reported GIS coordinates.
- Installation workmanship complied with industry construction standards.

Field assessments verified workmanship quality and accuracy of the reported installations, aligned with SDG&E's 2023–2025 WMP descriptions. Although SDG&E did not meet the original 2024 target of 60 miles, based on thorough field verification and supporting documentation, the IE validates the completion of the 35.91 miles reported for 2024.

Table 9: Distribution Overhead Hardening (Covered Conductor) Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
60 Miles	35.9 Miles	35.91 Miles	35.91 Miles	Initiative Not Validated

WMP.459 – 8.1.4.4 – Expulsion Fuse Replacement – Non-Focus & Non-Field Verifiable

The expulsion fuse replacement initiative addresses wildfire risks by replacing existing expulsion fuse equipment within the HFTD with lower-risk alternatives. SDG&E's 2023–2025 WMP did not establish a target for 2024 for replacing expulsion fuse equipment in the HFTD, nor was a risk reduction goal identified.

According to SDG&E's 2024 Q4 QDR, the utility completed the replacement of 188 expulsion fuses during 2024. In response to Data Request DR005b, SDG&E confirmed this replacement total by providing detailed expulsion fuse GIS data within the consolidated yearly geospatial dataset for 2024.

The IE reviewed a sample of GIS records covering 23 expulsion fuse replacements, cross-checked with corresponding as-built documentation provided in response to Data Request DR031. No issues or discrepancies were identified during this review.

Although no formal target was established for 2024, SDG&E successfully completed 188 expulsion fuse replacements within the reporting period. Based on the documentation reviewed, the IE validates this initiative.

Table 10: Expulsion Fuse Replacement Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
0 Fuses	0 Fuses	0 Fuses	188 Fuses	Initiative Validated

WMP.461, 8.1.2.11.1 - PSPS Sectionalizing – Non-Focus & Non-Field Verifiable

WMP.461 outlines SDG&E's PSPS Sectionalizing Program which installs switches in strategic locations. These installations improve the ability to isolate high-risk areas for potential de-energization. By increasing the number of remotely operated sectionalizing devices, SDG&E can reduce the number of customers that have the potential to be impacted by a PSPS event. In 2024, SDG&E aimed to install 10 switches and claimed to install 18 switches, exceeding the target by 80%.

In response to DR012, SDG&E provided an itemized list of the 18 PSPS Sectionalizing Enhancements made during 2024. This list contained the HFTD, location, asset feature, a work start and end date, circuit name, and asset location (underground/overhead/surface). In DR012.b, the IE requested proof of installation for the sectionalizing enhancements during 2024. The documentation provided included an "As-Built Smart Form" which included a summarized version of the work function for all completed assets. SDG&E also provided a mixture of "completed as-builts" or "Construction Vegetation Management Redline Submission." The latter documentation supplied a package of documents that included the release, materials list, construction plan, asset information, photos, permit, sketches, and other job/contractor related documentation. Both of the documentation types supplied provided ample data that SDG&E has completed the switch installs as planned. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 11: PSPS Sectionalizing Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR012/.b Response	Summary
10 Switches	18 Switches	18 Switches	18 Switches	Initiative Validated

WMP.462 – 8.1.2.7 – Microgrids – Non-Focus & Non-Field Verifiable

Microgrids provide localized power solutions, enhancing customer resilience by mitigating the impacts of PSPS events. SDG&E's 2023–2025 WMP established a 2024 target to complete four (4) microgrids as part of the Backup Power for Resilience program and set a risk reduction goal of 98.89%.

According to SDG&E's 2024 Q4 QDR, the utility did not complete any microgrids in 2024. SDG&E confirmed in response to Data Request DR032 that zero (0) microgrids were completed during the year.

As detailed in the ARC and in response to DR032, SDG&E reported that one of the targeted four microgrids was completed in 2023 and is operational with renewable generation. However, battery storage installations at the remaining sites were paused indefinitely due to SDG&E's 2024 General Rate Case (GRC) decision. SDG&E confirmed that the remaining sites are currently operational with conventional generators, providing temporary resilience during PSPS de-energization events.

The IE conducted a subject matter expert (SME) interview in response to Data Request DR045. SDG&E also discussed the calculation used to determine the risk reduction for each initiative which considers the likelihood and consequence of wildfire ignitions comparing pre and post mitigation values and distributes the planned risk reduction between the years represented in the WMP cycle. For initiatives that are classified as delayed, the achievement of the risk reduction target is reviewed by a team of subject matter experts to confirm whether the intended risk reduction was achieved independently of the achievement of the quantitative target.

SDG&E did not meet its 2024 target for this initiative. Given the absence of microgrid completions within the reporting period, the IE does not validate this initiative. As reported in the ARC and discussed in the SME interview, SDG&E confirmed that the risk reduction goal for this initiative was achieved with the operation of permanent and temporary microgrid deployments.

Table 12: Microgrids Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR032 Response	Summary
4 Microgrids	0 Microgrids	0 Microgrids	0 Microgrids	Initiative Not Validated

WMP.463 – 8.1.2.8.1 – Advanced Protection–Focus & Field Verifiable

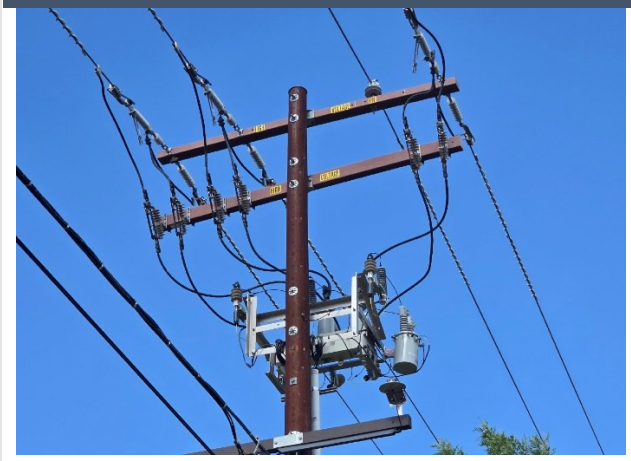
Advanced protection involves deploying a suite of technologies—including Falling Conductor Protection, Sensitive Ground Fault Protection, and Sensitive Relay Profile Settings—to enhance situational awareness and mitigate ignition risks within HFTD areas. SDG&E's 2023–2025 WMP established a 2024 target to install advanced protection equipment on 8 circuits, with an associated risk reduction goal of 0.92%.

According to SDG&E's 2024 Q4 QDR, the utility installed advanced protection system automation equipment on 5 circuits during 2024. SDG&E provided consolidated yearly geospatial GIS data in response to Data Request DR005b, which confirmed these 5 circuit installations.

To confirm the specific nature and scope of the advanced protection installations, the IE conducted a subject matter expert (SME) interview with SDG&E representatives on May 29, 2025, in response to Data Request DR013c. During this interview, SDG&E provided detailed explanations regarding the components and functionalities of the installed advanced protection systems. SDG&E described the central computer within the substation that communicates with field-installed devices, providing real-time data to the 24/7 control center. SDG&E also reviewed applicable construction standards related to these field installations.

The IE performed field observations of system automation equipment installations on all 5 reported circuits. Geo-referenced photographs were captured at each location. For illustrative examples, please refer to Figure 4: Example of Advanced Protection Field Images.

Figure 4 Example of Advanced Protection Field Images



P172683

P294511

During field assessments, the IE verified that:

- System automation equipment was properly installed.
- Structure locations matched accurately with the reported coordinates.
- Installation workmanship complied with industry construction standards.

Field assessments confirmed workmanship quality and accuracy of the installation details aligned with SDG&E's 2023–2025 WMP descriptions. Although SDG&E did not meet the original 2024 target of 8 circuits, based on thorough field verification, the SME interview, and supporting documentation, the IE validates the completion of advanced protection installations on the 5 circuits reported for 2024.

Table 13: Advanced Protection Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
8 Circuits	5 Circuits	5 Circuits	5 Circuits	Initiative Not Validated

WMP.464 – 8.1.4.5 – Maintenance, Repair, and Replacement of Connectors, Including Hotline Clamps –Focus & Field Verifiable

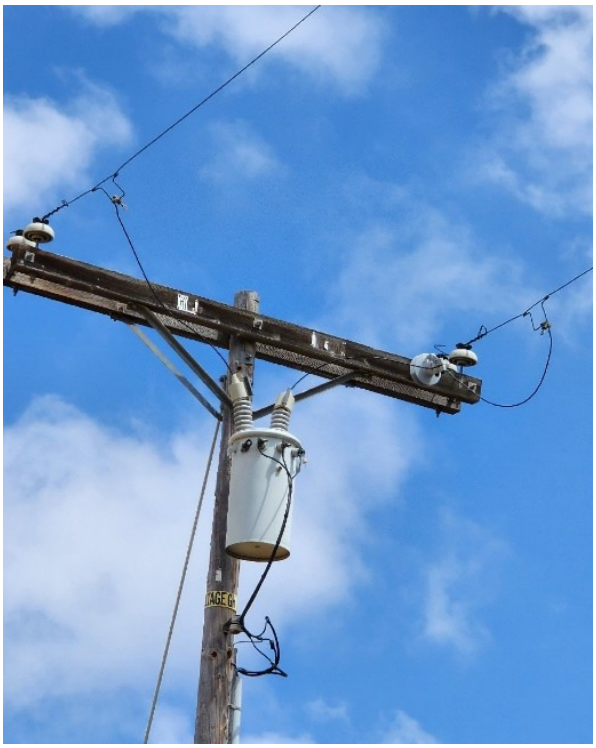
This initiative reduces ignition risks associated with wire-down incidents by replacing existing hotline clamps with approved connectors. SDG&E's 2023–2025 WMP established a 2024 target to replace 250 hotline clamps, with an associated risk reduction goal of 0.03%.

According to SDG&E's 2024 Q4 QDR, the utility replaced 678 hotline clamps, exceeding the annual target. SDG&E provided consolidated yearly geospatial GIS data in response to Data Request DR005b, confirming these 678 replacements.

Field assessments were performed using guidance from the California Power Line Fire Prevention Guide, 2021 Edition, distinguishing exempt equipment installations (Pages 101–108, Figures B-54 through B-74) from non-exempt installations (Pages 68–70, Figures NE-29 through NE-37). For illustrative examples, please refer to Figure 5: Example Hotline Clamp Replacement Field Images.

Figure 5: Example Hotline Clamp Replacement Field Images

P814148



P106634

The IE conducted field observations at 83 randomly selected hotline clamp replacement locations, capturing geo-referenced photographs at each site. During field verification, the IE confirmed:

- Hotline clamps were properly removed and replaced with compliant connectors.
- Structure locations aligned accurately with the reported coordinates.
- Installation workmanship complied with industry construction standards.

Field assessments verified workmanship quality and the accuracy of installation details, aligned with SDG&E's 2023–2025 WMP descriptions. No issues or discrepancies were identified during field assessments. Based on the comprehensive review and field verification, the IE validates this initiative.

Table 14: Maintenance, Repair, and Replacement of Connectors, Including Hotline Clamps Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
250	678	678	678	Initiative Validated

WMP.466, 8.1.2.11.3 - Generator Grant Program – Non-Focus & Non-Field Verifiable

WMP.466 outlines SDG&E's objective to continue to provide portable backup power solutions to customers. SDG&E did not set a risk reduction goal for this initiative. As outlined in section 8.1.2.11.3, the program provides pre-charged units within one (1) to four (4) hours of eligible requests to customers. These portable backup battery units provide solar charging capacity to customers which leverages cleaner, renewable generator options. In reference to table 8-1 and section 8.1.2.11.3, SDG&E does not provide a specific target for 2024, but rather a broader objective to continue to provide this program to customers.

In response to SDG&E_DR014, SDG&E provided the Final Report for Program Year 2024 on the Generator Grant Program which was dated 04/04/2025 and written by a 3rd-party named RHA – Resource Innovations. The report provides a thorough review on the program for 2024 and includes but is not limited to a scope of work, program timeline, inventory status, challenges, and lessons learned/best practices. The program timeline clearly shows that the battery shipment was received in August and September, and deliveries began in October. This report clearly indicates that SDG&E is maintaining and implementing the portable backup power program. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 15: Generator Grant Program Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR014 Response	Summary
Continue to provide portable backup power solutions to vulnerable, electricity dependent customers	N/A	N/A	Continued to provide portable backup power solutions to vulnerable, electricity dependent customers	Initiative Validated

WMP.467, 8.1.2.11.4 - Generator Assistance Program – Non-Focus & Non-Field Verifiable

WMP.467 outlines SDG&E's objective to continue rebates on portable backup power solutions to customers. SDG&E did not set a risk reduction goal for this initiative. As outlined in section 8.1.2.11.4, the program focuses on customers who reside in HFTD Tier 2 and 3 areas. Eligible customers receive program materials where they are directed to an online portal to verify account information and learn more about the program. If verified, the program offers a $300 rebate to customers for a portable generator. Customers who are enrolled in the California Alternate Rates for Energy (CARE) program are eligible for a rebate of $450 for a portable generator. The program also provides the option for customers to receive one rebate for a fuel generator and one rebate for a portable power station ($100/$150 CARE). In reference to table 8-1 and section 8.1.2.11.4, SDG&E does not provide a specific target for 2024, but rather a broader objective to continue to provide this program to customers.

In response to SDG&E_DR015, SDG&E provided the SDG&E Generator Assistance Program Annual Report for May 2024- January 2025, dated April 24, 2025, and prepared by a 3rd-party named CLEAResult. This report outlines the successes and improvements of the program, which products and retailers are utilized, and the challenges and lessons learned. This report states that 530 customers participated in this program during 2024 and that rebate amounts were increased for customers which provided them with better discounts. This report clearly indicates that SDG&E is maintaining and implementing the rebates on portable backup power solutions program. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 16: Generator Assistance Program Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR015 Response	Summary
Continue to provide rebates on portable backup power solutions to customers who experience PSPS	N/A	N/A	Continued to provide rebates on portable backup power solutions to customers who experience PSPS	Initiative Validated

WMP.468 – 8.1.2.11.2 – Standby Power (Fixed Power Backup) – Non-Focus & Non-Field Verifiable

WMP.468 outlines SDG&E's Standby Power program which targets customers and communities that will not directly benefit from other grid hardening programs. These

customers typically reside in the backcountry and are generally distanced from one another. Due to these factors, traditional grid hardening initiative will not reduce PSPS exposure. Several programs exist under this initiative such as the Fixed Backup Power (FBP) Program which targets residential customers, an FBP Program targeting commercial customers, and the Mobile Home Park Resilience Program (MHRP). Depending on site requirements, feasibility, and cost, customers could receive a fixed installation backup generator, a business could receive a critical facility generator, and mobile home parks could receive a solar panel and battery backup system on a clubhouse or central community building.

SDG&E accomplished only 18% of the projected targets for this initiative. This program during 2024 faced planning challenges due to uncertainty with the then-pending GRC decision, which funds the program's operation. SDG&E states that 2024 was used to complete outstanding projects from prior years and evaluate alternative offerings that could be provided moving forward. SDG&E submitted a change order to energy safety on December 19, 2023, to reduce the target from 300 to 58 in anticipation of budgetary constraints. Energy Safety rejected this change order on May 13, 2024, therefore the originally stated target of 300 generator installations remained.

In response to DR016, SDG&E provided an itemized list that showed the 54 fixed power backup project completed in 2024. This list included HFTD, address, description of work, the start and end date, and the status of the work. In DR016.b, the IE requested work orders or proof of installation for 17 installed assets in both HFTD Tier 2 and Tier 3. SDG&E provided copies of the requested assets and documentation was standard across all. The documentation was in the form of an application that showed applicant information, the program, contractor completing the work, and a summary of the workflow. All documentation provided clearly showed a "work completed" date.

The IE can verify that SDG&E has completed the work they claimed in 2024. SDG&E provided contextual information as to why the originally outlined target was missed, however, due to the rejection of the change order by Energy Safety, the IE has not validated this initiative.

Table 17: Standby Power Programs Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR016/.b Response	Summary
300 Generators	54 Generators	54 Generators	54 Generators	Initiative Not Validated

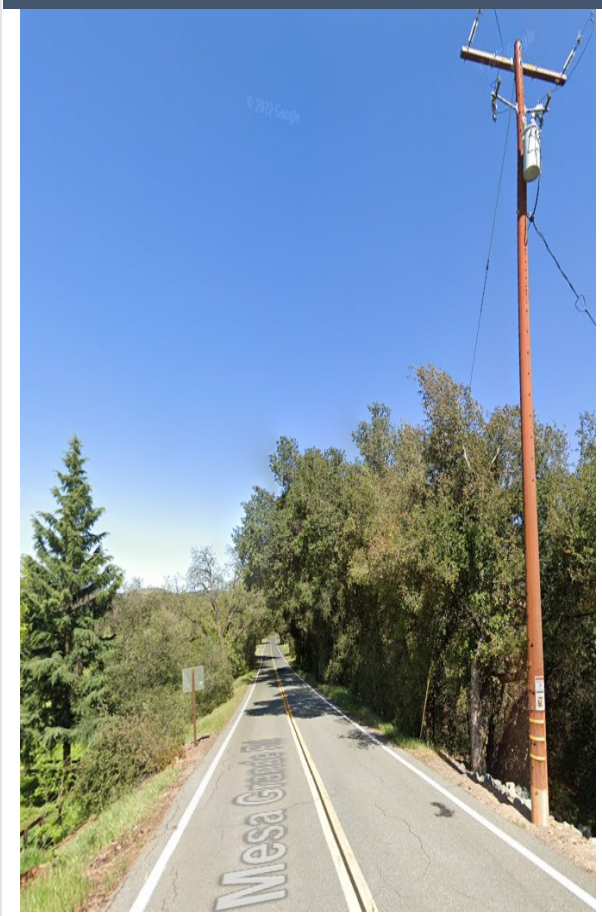
WMP.473 – 8.1.2.2 – Strategic Undergrounding – Focus & Field Verifiable

The strategic undergrounding initiative reduces wildfire ignition risk by converting overhead electric lines to underground infrastructure. SDG&E's 2023–2025 WMP established a 2024 target of 125 miles for undergrounding, with a corresponding risk reduction goal of 7.14%.

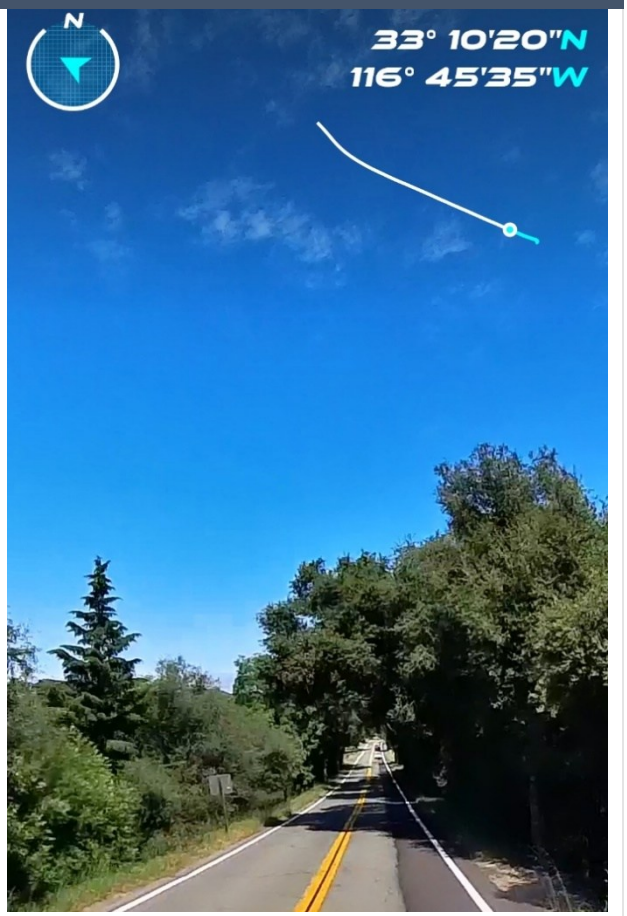
According to SDG&E's 2024 Q4 QDR, the utility completed 112 miles of strategic undergrounding. SDG&E provided consolidated yearly geospatial GIS data in response to Data Request DR005b, identifying completion of 108.05 miles. SDG&E explained in response to Data Request DR034b that the variance between the QDR-reported completion (112 miles) and the GIS database (108.05 miles) results from different compilation methodologies: the QDR uses installed cable footage from construction as-builts, whereas the GIS database uses engineering plan files measuring only over-the-ground distances.

The IE conducted field verification for a random sample of 58 circuit miles from the completed undergrounding projects. Field assessments included review of the strategic undergrounding GIS data alongside as-built construction documents provided in response to Data Request DR035. Field assessments utilized a vehicle-mounted 360° camera with GPS data-logging capabilities to confirm installations through comparison with historical Google Streetview imagery (2019–2024) and as-built construction drawings. For illustrative examples, please refer to Figure 6: Example Underground Assets Field Images.

Figure 6: Example Underground Assets Field Images



D243798 - Circuit 220
P816438 – April 2022



D243798 - Circuit 220
Pole Removed – May 2025

During field assessments, the IE verified that:

- Strategic undergrounding was completed.
- Equipment installations aligned accurately with reported coordinates.
- Installation workmanship complied with industry construction standards.

The IE conducted a subject matter expert (SME) interview in response to Data Request DR034.c. In the interview SDG&E explained the basis for the initiative status classification used in both the QDR and the ARC. Initiatives are classified into three (3) tiers based on the quantitative progress towards the initiative target; initiatives where progress is 90% - 110%

of the target are classified as Completed, initiatives where progress is greater than 110% are classified as Exceeded, and initiatives where progress is less than 90% are Classified as Delayed. SDG&E confirmed that the statuses were provided by Energy safety, and the criteria for each of the statuses were left up to SDG&E to define. SDG&E also discussed the calculation used to determine the risk reduction for each initiative which considers the likelihood and consequence of wildfire ignitions comparing pre and post mitigation values and distributes the planned risk reduction between the years represented in the WMP cycle. SDG&E confirmed that the final risk reduction for this initiative for 2024 was 7.34%. For initiatives that are classified as delayed, the achievement of the risk reduction target is reviewed by a team of subject matter experts to confirm whether the intended risk reduction was achieved independently of the achievement of the quantitative target.

Field assessments confirmed workmanship quality and accuracy relative to SDG&E's descriptions in the 2023–2025 WMP. SDG&E did not achieve the 2024 target of 125 miles, based on the validation threshold of 95% identified in Energy Safety's IE ARC Outline for WMP Compliance Year 2024 which differs the initiative status classification used by SDG&E. The final calculated risk reduction for 2024 was 103% of the target and the IE confirms that the risk reduction goal was met. Based on thorough field review and supporting documentation, the IE validates the completion of 112 miles of strategic undergrounding reported for 2024.

Table 18: Strategic Undergrounding Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
125 Miles	112 Miles	112 Miles	108.05 Miles	Initiative Not Validated

WMP.475 – 8.1.2.5.1 – Distribution Overhead System Hardening – Focus & Field Verifiable

Distribution overhead system hardening reduces wildfire ignition risk through various measures, including replacing wood poles with steel, installing high-strength bare conductor, and in some cases removing overhead electric lines. SDG&E did not establish a quantitative target or specific risk reduction goal for this initiative in its 2023–2025 WMP.

According to SDG&E's 2024 Q4 QDR, the utility completed 0.54 miles of distribution overhead system hardening. SDG&E provided consolidated yearly geospatial GIS data in response to Data Request DR005b, confirming completion of these 0.54 miles.

The IE assessed the full 0.54 miles of reported system hardening using provided GIS data and as-built construction documents submitted in response to Data Request DR035. Field assessments included foot patrols with GPS-enabled, high-resolution handheld cameras to verify installations against historical Google Streetview imagery (2019–2024) and as-built construction drawings. For illustrative examples, please refer to Figure 7: Example Distribution Overhead System Hardening Field Images.

Figure 7: Example Distribution Overhead System Hardening Field Images

Overhead Hardening - P423538 - Circuit 217

During field verification, the IE confirmed:

- Distribution overhead system hardening was fully completed.
- Installation spans aligned accurately with reported GIS coordinates.
- Installation workmanship complied with industry construction standards.

Field assessments verified workmanship quality and accuracy of the installations relative to SDG&E's 2023–2025 WMP descriptions. No issues or data discrepancies were identified during field assessments. Based on comprehensive field review and supporting documentation, the IE validates the completion of the distribution overhead system hardening reported for 2024.

Table 19: Distribution Overhead System Hardening Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
0 Miles	.54 Miles	.5 Miles	.54 Miles	Initiative Validated

WMP.478, 8.1.3.1 -Distribution Overhead Detailed Inspections – Non-Focus & Non-Field Verifiable

As part of the 2024 WMP initiative focused on enhanced distribution overhead inspections in High Fire Threat Districts, SDG&E committed to completing at least 15,450 detailed inspections. The goal of this initiative was to proactively identify and address potential ignition risks in HFTD Tier 2 and 3 areas. Based on documentation provided in response to data requests, SDG&E exceeded this target, completing 16,503 inspections. The data set included location information, inspection dates, HFTD tiers, whether a work order was generated, and associated findings codes. All inspected assets were located in HFTD Tiers 2 or 3 which aligns with the WMP's fire risk reduction priorities.

To verify that these inspections met the initiative's quality and scope expectations, the IE requested detailed inspection reports for 73 selected locations. 18 locations were selected in HFTD Tier 2 and 55 in Tier 3. SDG&E submitted a spreadsheet that included asset-level data fields for the targeted locations. These fields allowed the IE to confirm that each inspection was completed and logged in the system, and that assets identified with conditions had associated work orders. Analysis of the sample showed that 11 of the locations had findings that resulted in work orders. All of these locations were in HFTD Tier 3 areas, aligning with expectations that Tier 3 regions are more likely to contain priority conditions requiring corrective action.

Inspection documentation showed that conditions requiring follow-up were correctly identified and that corresponding work orders had been issued where applicable. Additionally, based on the volume and completeness of documentation provided, the utility demonstrated sufficient recordkeeping and data management practices. The structure of the data aligned asset inspection outcomes with the stated WMP targets.

Due to the exceedance of this initiative, it can be determined that SDG&E substantially met the risk reduction goal. The evidence submitted addressed the information requested in the data request and showed that SDG&E met both its inspection volume target and the broader risk reduction objective of the initiative. This initiative met its goals in 2024, with no compliance issues able to be observed. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 20: Distribution Overhead Detailed Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR017/.b Response	Summary
15,450 Inspections	16,503 Inspections	16,503 Inspections	16,503 Inspections	Initiative Validated

WMP.479, 8.1.3.2 -Transmission Overhead Detailed Inspections – Non-Focus & Non-Field Verifiable

WMP.479 outlines SDG&E program to perform territory-wide inspections of its electrical transmission system. Internal linemen visit every structure scheduled for the year, looking at all components of the structure and conductor. An assessment of the assets current and future maintenance requirements is made and an internal severity code is assigned to ensure that the condition is properly prioritized. SDG&E outlined a 2024 target of 1,960 structures to be inspected and claimed 2,940 were inspected.

The projected target for Transmission Overhead Detailed Inspections was exceeded by 50% due to several factors. This program was expanded to include structures within the Wildland Urban Interface (WUI) that were not previously included. This proactive decision was made primarily in response to several wildfires in WUI regions that occurred in 2023. The IE requested a sampling review of (14)-Tier 3 and (4)-Tier 2 Structures. In response to DR018.b, SDG&E stated that inspection reports are only generated when a condition is found. From the eighteen (18) requested reports, one contained a condition and a report was provided. Per the provided report, a support structure was found needing replacement due to woodpecker damage and this pole was replace within five (5) days. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 21: Transmission Overhead Detailed Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR018/.b Response	Summary
1,960 Inspections	2,940 Inspections	2,940 Inspections	2,940 Inspections	Initiative Validated

WMP.481, 8.1.3.3 - Distribution Infrared Inspections – Non-Focus & Non-Field Verifiable

The Distribution Infrared Inspections initiative set a target of completing 9,532 inspections by year-end of 2024, with interim goals of 4,766 by Q2 and 7,149 by Q3. According to the utility's response to data requests, SDG&E completed 6,398 inspections, falling short of the final target but surpassing the Q2 benchmark and approaching the Q3 goal. The utility attributed the shortfall to delays in CPUC decisions on the General Rate Case settlement, which introduced funding and operational uncertainties.

Despite these setbacks, SDG&E maintained a risk-informed approach, using analytics and asset prioritization models to target inspections with the highest potential impact. Notably, 1,255 of the completed inspections were located in Tier 3 High Fire-Threat Districts (HFTDs), demonstrating continued focus on high-risk areas. In the 2024 EC ARC, SDG&E

stated that a review of program history was conducted and found that this inspection program yielded only a 0.2% find rate SDG&E concluded that the risk reduction goal for this initiative was met. However, due to the target goal not being reduced and SDG&E leaving 3,134 inspections unaccounted for, the IE has found that the risk reduction goal has not been met as originally outlined in the 2024 WMP.

The data provided by SDG&E includes detailed information on each inspection, including location and HFTD tier classification, and confirms that all inspections were recorded as both ground-type and infrared inspections. This aligns with the initiative's core methodology, which requires ground-based thermographers to detect abnormal heat signatures that could signal impending electrical failures. Although the total number of inspections fell below the stated goal, SDG&E's implementation strategy upheld the WMP initiative's intent by prioritizing inspections based on wildfire risk, system reliability, and recent performance indicators.

Given these constraints and the utility's strategic adjustments, the 2024 program execution supports the broader wildfire mitigation goals, even if it did not achieve the precise numerical targets. While the WMP target was not met for 2024, the utility was found to have worked under the intent of the WMP and provided transparent information regarding the inspection shortfall. However, even with the accomplished risk reduction, due to not meeting the outlined target for 2024 and the rejection of the change order from Energy Safety to adjust the target number, the IE is unable to validate this initiative.

No explicit recommendations are needed as SDG&E has already stated that they intend to continue using the risk-informed approach as outlined above and that a revised number of structure inspections have been approved for the 2025 WMP update. SDG&E provided ample documentation and context to explain why this initiative missed its target.

Table 22: Distribution Infrared Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR036 Response	Summary
9,532 Inspections	6,398 Inspections	6,398 Inspections	6,398 Inspections	Initiative Not Validated

WMP.482, 8.1.3.4 - Transmission Infrared Inspections – Non-Focus & Non-Field Verifiable

WMP.482 outlines SDG&E's program to utilize infrared technology to examine radiation emitted by connections to determine if there are potential issues with a connection before failure. In 2024, the projected target for Transmission Infrared Inspections was exceeded by 16% due to the inaccuracy of the forecast. The forecast for this program was determined in

late 2023 and was subject to the variability of active structures on energized tielines. All risk reduction was met in 2024 with completion of this program. Findings are documented as the required repair work is tracked through completion.

Infrared patrols on transmission lines are most effective during higher loading conditions; therefore, they typically begin in the warmer months prior to San Diego's wildfire season. As corrosion, rust, and other structural impacts may cause hotspots on structures and equipment, all energized transmission lines are included in the scope of this program. Transmission infrared inspections are currently completed on an annual basis for all energized tielines, including those in the HFTD. Non-routine infrared inspections may be performed prior to weather events based on meteorological data.

In response to DR_019, SDG&E provided a list of all infrared inspections completed for 2024 that contained various information including the HFTD. This documentation verifies the 7,161 inspections SDG&E claimed to complete in 2024 and includes the date the inspection was conducted. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 23: Transmission Infrared Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR019/.b Response	Summary
6,179 Inspections	7,161 Inspections	7,161 Inspections	7,161 Inspections	Initiative Validated

WMP.483, 8.1.3.5 - Distribution Wood Pole Intrusive Inspections – Non-Focus & Non-Field Verifiable

GO 165 requires all wood poles over 15 years of age to be intrusively inspected 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 (WMP.483) are performed over a 10-year cycle. An intrusive inspection typically involves an excavation around the pole base and/or a sound and bore of the pole at ground-line. Depending on the cavities found or the amount of rot observed, an estimate of the remaining pole strength is determined utilizing industry-wide standards. Depending on the severity of the deterioration, the pole either passes inspection with greater than 80 percent strength remaining or is replaced. The corrective work for replacement is described in Section 8.1.7 Open Work Orders.

In 2024, the projected target for Distribution Wood Pole Intrusive Inspections was exceeded by 12% due to an increase in the number of overhead facilities that had required inspection

due dates, as outlined in GO 165. The forecasted targets are based on a snapshot in time, and the fluidity of the grid and ongoing changes often result in the inclusion of additional structures. All risk reduction was met in 2024 with completion of this program. Inspections performed in this program undergo QA/QC under QA/QC of Wood Pole Intrusive. See Section 5.2.3.4.

In response to DR020, SDG&E provided a list of all distribution wood pole inspections completed in 2024, that included the HFTD and date that the inspection was conducted. Documentation provided in response to DR020.b reflect the inspection details for poles that the IE requested to sample. Each line contained a required start and end date, condition code, code explanation, and ignition risk – if found. All condition codes for requested samples stated "no repairs needed" and the ignition risk stated "no ignition risk issues found." Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 24: Distribution Wood Pole Intrusive Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR020/.b Response	Summary
0 Inspections	2,225 Inspections	2,225 Inspections	2,225 Inspections	Initiative Validated

WMP.488, 8.1.3.8 - Distribution Overhead Patrol Inspections – Focus & Non-Field Verifiable

Based on documentation provided by SDG&E in response to the requests for data, the utility has been found to have met the 2024 target for the Distribution Overhead Patrols initiative under the WMP. The initial request called for evidence that 86,140 distribution overhead patrol inspections were completed in HFTD Tiers 2 and 3. SDG&E submitted a comprehensive list confirming that the full target number of patrols had been performed in 2024, complete with HFTD classification, location information, inspection dates, and identification of whether issues were found at each site.

To verify the completeness and quality of inspections, the IE requested inspection reports for a representative sample of 73 locations, of which 18 were targeted in HFTD Tier 2 and 55 in Tier 3. SDG&E responded by providing documentation extracted from their SAP system of record. These included patrol descriptions, inspection start and end dates, location

metadata, and notification numbers. All data points were consistent with the original inspection list and aligned with the initiative's intent to enhance situational awareness and support timely maintenance in wildfire-prone areas.

The desktop review focused on SDG&E's response to a formal Data Request which requested both a high-level accounting of all 2024 patrols and detailed inspection records for a targeted subset of locations. SDG&E's initial dataset included full inspection coverage data, clearly indicating locations, HFTD tiers, and findings, and the follow-up submission of individual patrol reports for the 73 requested sites was complete. The inspection records retrieved from the SAP system allowed the IE to confirm that inspections were performed as scheduled, and that information was accurately recorded.

Recordkeeping and data management appear to be in place. The SAP system was effectively used to retrieve specific patrol details, and all responses aligned with the required information, suggesting mature data infrastructure and traceability with consistent formatting and accessibility of records. No evidence was found indicating that the target was missed, and all reviewed records supported the conclusion that SDG&E achieved the planned patrol volume. Based on the completion of this initiative, it can be determined that SDG&E met the risk reduction goal.

The Distribution Overhead Patrols initiative for 2024 was found to have met the WMP's stated goals. Based upon this analysis and the documentation provided, the IE has validated this initiative. However, it was noted that integrating visual inspection findings into risk-prioritization findings and expanding the granularity of issue descriptions in future reports would further enhance transparency for assessments of fire risk reduction efforts.

Table 25: Distribution Overhead Patrol Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR021/.b Response	Summary
86,197 Inspections	86,140 Inspections	86,140 Inspections	86,140 Inspections	Initiative Validated

WMP.489, 8.1.3.9 - Transmission Overhead Patrol Inspections – Non-Focus & Non-Field Verifiable

WMP.489 outlines SDG&E's program to conduct visual patrols by helicopter on overhead tielines, including those in HFTD. These patrols provide an overhead view of structure and components to identify issues such as cracked pole tops or rust/corrosion and large issues that can pose fire risk. The projected target for 2024 was exceeded by 16% due to the inaccuracy of the forecast. The forecast was determined in late 2023 and was subject to the

variability of active structure on the energized tielines. All risk reduction was met in 2024 with completion of this program.

In response to DR022, SDG&E provided documentation that listed all of the overhead inspections conducted in 2024 that contained various information including the HFTD and the date the inspection was conducted. In response to DR022.b, SDG&E stated that inspection reports are not generated unless a condition is found and all relevant information is recorded on the previously provided documentation in DR022. The requested sample of inspection reports contained no conditions; therefore no reports were provided. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 26: Transmission Overhead Patrol Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR022/.b Response	Summary
6,337 Inspections	7,366 Inspections	7,366 Inspections	7,366 Inspections	Initiative Validated

WMP.491 – 8.1.6.2 – Quality Assurance/Quality Control of Distribution Detailed Inspections – Non-Focus & Non-Field Verifiable

QA/QC audits for distribution overhead detailed inspections enhance reliability by verifying inspection accuracy and ensuring compliance with established standards. SDG&E's 2023–2025 WMP set a 2024 target to complete QA/QC audits for 0.5%–1.5% of Distribution Overhead Detailed Inspections (WMP.478), translating to an annual goal of 77 structures. SDG&E did not set a risk reduction goal for this initiative.

According to SDG&E's 2024 Q4 QDR, the utility completed QA/QC audits for 440 structures, representing approximately 2.7% of the 16,503 Distribution Overhead Detailed Inspections performed under WMP.478, exceeding the established target. In response to Data Request DR005b, SDG&E confirmed this completion by providing detailed QA/QC GIS data in the consolidated yearly geospatial dataset for 2024.

The IE reviewed a sample of QA/QC records covering 23 structures, cross-referenced with detailed inspection reports provided in response to Data Request DR037. No issues or discrepancies were identified during this review. Based on the documentation review and sample verification, the IE validates this initiative.

Table 27: Quality Assurance/Quality Control of Distribution Detailed Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
77 Structures	440 Structures	440 Structures	440 Structures	Initiative Validated

WMP.492, 8.1.3.11 - Substation Patrol Inspections – Non-Focus & Non-Field Verifiable

SDG&E's Substation Patrol Inspections program set a goal for 2024 to complete 384 inspections by year's end, with intermediate benchmarks of 192 inspections by Q2 and 281 by Q3. SDG&E did not set a risk reduction goal for this initiative. The utility reported that it had identified 379 targeted inspections for 2024, and in response to a data request, it provided a detailed list including substation names, inspection dates, and whether they were located in High Fire-Threat Districts. Although 379 is slightly below the stated annual target, SDG&E provided explanation that the forecast was determined in late 2023 which was prior to the decommissioning of two substations.

The EC also claimed that the inspection cycle may change from monthly to bi-monthly, or vice versa, which could account for the three remaining deficiencies. Based upon the reasoning provided and the number of completed inspections bringing the initiative with 1% of its target goal, it can be determined that the utility is largely on track to meet its 2024 goal. Additionally, SDG&E submitted 66 related work orders, showing follow-through on findings from patrol inspections.

To further assess the program's performance, a follow-up request asked for inspection reports from 17 specific substations in HFTD Tier 2 areas. SDG&E responded with a comprehensive 425-page PDF document containing patrol records from all requested substation locations, with inspection dates and closure dates in 2024. These reports documented routine evaluations of key equipment types and noted both standard and degraded conditions, including transformer seal leaks and breaker contamination—evidence of inspections actively identifying issues. While the reports lacked direct follow-up action details, their completeness, scope, and alignment with HFTD priorities support the conclusion that the Substation Patrol Inspections program is being implemented as described in the WMP. Though the annual inspection target was 99% met, the documentation demonstrates sufficient progress to consider the 2024 goal substantially met and in compliance for the 2024 review period. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 28: Substation Patrol Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR023/.b Response	Summary
384 Inspections	379 Inspections	379 Inspections	379 Inspections	Initiative Validated

WMP.543 – 8.1.2.5.2 – Transmission Overhead Hardening – Non-Focus & Field Verifiable

Transmission overhead hardening reduces wildfire ignition risks through implementation of enhanced design criteria to upgrade existing transmission lines. As described in the 2023–2025 WMP, SDG&E's 2024 target for this initiative was to complete 10.2 miles of transmission overhead hardening, with a risk reduction goal of 0.29%.

According to SDG&E's 2024 Q4 QDR, the utility completed 9.08 miles of transmission overhead hardening. SDG&E provided consolidated yearly geospatial GIS data in response to Data Request DR005b, confirming the completion of these 9.08 miles.

Due to access restrictions at Camp Pendleton, the IE assessed 7.95 of the reported 9.08 miles using provided GIS data and as-built construction documents submitted in response to Data Request DR024. For illustrative examples, please refer to Figure 8: Example Transmission Overhead Hardening Field Images and Figure 9: Example Camp Pendleton Access Restriction.

Figure 8: Example Transmission Overhead Hardening Field Images

Pole: Z11974 – Circuit: 698
March 2023 - Google Street View

Pole: Z11974 – Circuit: 698
May 2025 – 360 Camera Capture

Figure 8 Continued

Circuit 13804

Figure 9: Example Camp Pendleton Access Restriction

GIS Map View – Access Restricted Structures

Field assessments utilized ground patrols with high-resolution, GPS-enabled handheld cameras, supplemented by vehicle-mounted 360° cameras with GPS data-logging capabilities. Installations were verified against historical Google Streetview imagery (2019–2024) and as-built construction drawings. For the accessible 7.95 miles reviewed, the IE confirmed:

- Transmission overhead hardening was fully completed.
- Installation spans aligned accurately with reported GIS coordinates.
- Installation workmanship met industry construction standards.

The IE conducted a subject matter expert (SME) interview in response to Data Request DR024.c. In the interview SDG&E explained the basis for the initiative status classification used in both the QDR and the ARC. Initiatives are classified into three (3) tiers based on the quantitative progress towards the initiative target; initiatives where progress is 90% - 110% of the target are classified as Completed, initiatives where progress is greater than 110% are classified as Exceeded, and initiatives where progress is less than 90% are Classified as Delayed. SDG&E confirmed that the statuses were provided by Energy safety, and the criteria for each of the statuses were left up to SDG&E to define. SDG&E also discussed the

calculation used to determine the risk reduction for each initiative which considers the likelihood and consequence of wildfire ignitions comparing pre and post mitigation values and distributes the planned risk reduction between the years represented in the WMP cycle. SDG&E confirmed that the final risk reduction for this initiative for 2024 was 0.26%. For initiatives that are classified as delayed, the achievement of the risk reduction target is reviewed by a team of subject matter experts to confirm whether the intended risk reduction was achieved independently of the achievement of the quantitative target.

Field assessments verified workmanship quality and accuracy relative to SDG&E's 2023–2025 WMP descriptions. No issues or data discrepancies were identified during the field assessments. SDG&E did not meet the 2024 target of 10.2 miles, based on the validation threshold of 95% identified in Energy Safety's IE ARC Outline for WMP Compliance Year 2024 which differs the initiative status classification used by SDG&E. Based on field verification and supporting documentation, the IE validates the completion of the 9.08 miles reported for 2024.

Table 29: Transmission Overhead Hardening Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
10.2 Miles	9.2 Miles	9.08 Miles	9.08 Miles	Initiative Not Validated

WMP.545 – 8.1.2.5.2 – Transmission Overhead Hardening (Distribution Underbuild) – Non-Focus & Field Verifiable

The Transmission Overhead Hardening (Distribution Underbuild) initiative involves upgrading overhead distribution lines sharing structures and routes with overhead transmission hardening projects (WMP.543). As described in the 2023–2025 WMP, SDG&E's 2024 target was to complete 1 mile of transmission overhead hardening for distribution underbuild, with a risk reduction goal of 0.005%.

According to SDG&E's 2024 Q4 QDR, the utility completed 7 miles of transmission overhead hardening for distribution underbuild. In response to Data Request DR005b, SDG&E provided consolidated yearly GIS data confirming the completion of these 7 miles.

Due to access restrictions at Camp Pendleton, the IE assessed 4.84 of the reported 7 miles using provided GIS data and as-built construction documents from Data Request DR044. For illustrative examples, please refer to Figure 10: Example Transmission Overhead Hardening (Distribution Underbuild) Field Images and Figure 11: Example Camp Pendleton Access Restriction.

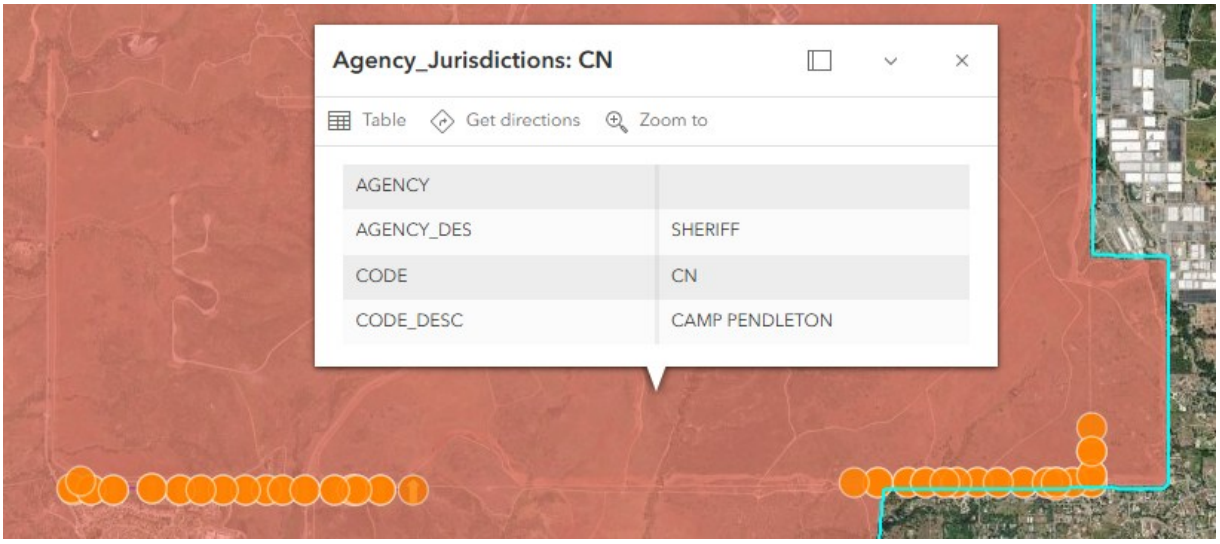
Figure 10 Example Transmission Overhead Hardening (Distribution Underbuild) Field Images

Figure 10: Example Transmission Overhead Hardening (Distribution Underbuild) Field Images

April 2019 Google Streetview
Pole ID: Z515243

May 2025 360-Camera Capture
Pole ID: Z515243

Figure 11: Example Camp Pendleton Access Restriction



GIS Map View – Access Restricted Structures

Field assessments utilized vehicle-mounted 360° cameras with GPS data-logging to accurately verify selected work orders against historical Google Streetview imagery (2019–2024) and as-built construction drawings. For the 4.84 accessible miles reviewed, the IE confirmed:

- Distribution underbuild hardening was fully completed.
- Installation spans aligned accurately with reported GIS coordinates.
- Installation workmanship met industry construction standards.

Field assessments verified workmanship quality and accuracy relative to SDG&E's 2023–2025 WMP descriptions. No issues or data discrepancies were identified during the field assessments. SDG&E exceeded the 2024 target for this initiative. Based on field verification and supporting documentation, the IE validates the completion of the 7 miles reported for 2024.

Table 30: Transmission Overhead Hardening (Distribution Underbuild) Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
1 Mile	7 Miles	7 Miles	7 Miles	Initiative Validated

WMP.549 – 8.1.2.8.3 – Distribution Communications Reliability Improvements – Focus & Field Verifiable

The Distribution Communications Reliability Improvements (DCRI) program enhances communication network reliability to support wildfire mitigation initiatives requiring continuous and reliable communication. As described in the 2023–2025 WMP, SDG&E's 2024 target was to install 60 base stations, and no specific risk reduction goal was identified.

According to SDG&E's 2024 Q4 QDR dated February 1, 2025, the utility installed 3 base stations. In response to Data Request DR005b, SDG&E provided consolidated yearly GIS data confirming the installation of these 3 base stations.

The IE assessed all 3 completed base station installations provided in the DCRI documentation. For illustrative examples, refer to Figure 12: Example Distribution Communications Reliability Improvements Field Images.

Figure 12: Example Distribution Communication Reliability Improvements Field Images

Paradise Substation

P295214

The IE visited each base station, capturing geo-referenced photographs and verifying the following:

- Base stations were installed.
- Device locations accurately aligned with reported GIS coordinates.
- Installation workmanship met industry construction standards.

Field assessments verified workmanship quality and the accuracy of the reported information consistent with SDG&E's 2023–2025 WMP descriptions. Although SDG&E did not meet the 2024 target of 60 base stations, based on field reviews and supporting documentation, the IE validates the completion of the 3 base stations reported for 2024.

Table 31: Distribution Communications Reliability Improvements Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
60 Base Stations	3 Base Stations	3 Base Stations	3 Base Stations	Initiative Not Validated

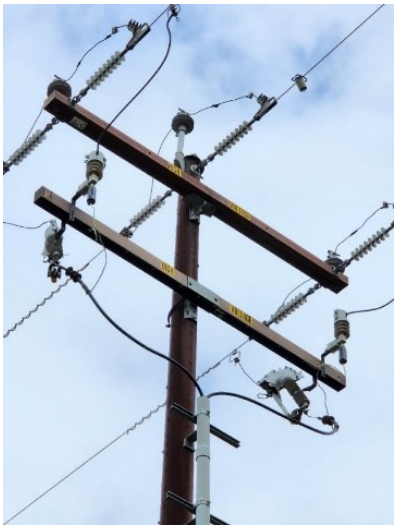
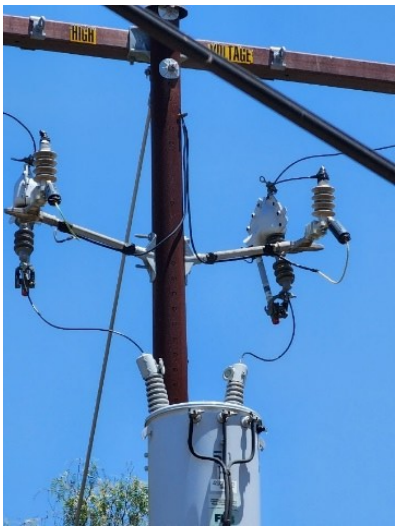
WMP.550 – 8.1.4.6 – Lightning Arrester Removal and Replacement – Focus & Field Verifiable

The Lightning Arrester Replacement program reduces ignition risk by installing Cal Fire-approved lightning arresters equipped with external devices designed to operate before an arrester overload occurs. As described in the 2023–2025 WMP, SDG&E's 2024 target for this initiative was to replace 1,848 lightning arresters, with a risk reduction goal of 0.51%.

According to SDG&E's 2024 Q4 QDR dated February 1, 2025, the utility replaced 1,654 lightning arresters. In response to Data Request DR005b, SDG&E provided consolidated yearly GIS data confirming the replacement of these 1,654 lightning arresters.

The IE field assessment team utilized the California Power Line Fire Prevention Guide (2021 Edition) to verify exempt equipment installations (Pages 113–114, Figures B-86 through B-88) compared to non-exempt equipment (Pages 63–67, Figures NE-19 through NE-28). For illustrative examples, see Figure 13: Example Lightning Arrester Replacement Field Images.

Figure 13: Example Lightning Arrestor Replacement Field Images

	
P166742	P111942

The IE randomly sampled 88 lightning arrester replacement locations from the provided GIS data. Field verification confirmed that all sampled locations complied with the initiative by successfully removing non-exempt equipment and installing exempt equipment. Field assessments validated:

- Lightning arresters were replaced as reported.
- Installation locations aligned with reported GIS coordinates.
- Workmanship adhered to industry construction standards.

The IE conducted a subject matter expert (SME) interview in response to Data Request DR045. In the interview SDG&E explained the basis for the initiative status classification used in both the QDR and the ARC. Initiatives are classified into three (3) tiers based on the quantitative progress towards the initiative target; initiatives where progress is 90% - 110% of the target are classified as Completed, initiatives where progress is greater than 110% are classified as Exceeded, and initiatives where progress is less than 90% are Classified as Delayed. SDG&E confirmed that the statuses were provided by Energy safety, and the criteria for each of the statuses were left up to SDG&E to define. SDG&E also discussed the calculation used to determine the risk reduction for each initiative which considers the likelihood and consequence of wildfire ignitions comparing pre and post mitigation values and distributes the planned risk reduction between the years represented in the WMP cycle. SDG&E confirmed that the final risk reduction for this initiative for 2024 was 0.42%. For

initiatives that are classified as delayed, the achievement of the risk reduction target is reviewed by a team of subject matter experts to confirm whether the intended risk reduction was achieved independently of the achievement of the quantitative target.

Field assessments verified workmanship quality and the accuracy of reported information consistent with SDG&E's 2023–2025 WMP descriptions. SDG&E did not meet the 2024 target of 1,848 lightning arresters based on the validation threshold of 95% identified in Energy Safety's IE ARC Outline for WMP Compliance Year 2024 which differs the initiative status classification used by SDG&E. Based on field reviews and supporting documentation, the IE validates the completion of the 1,654 lightning arrester replacements reported for 2024.

Table 32: Lightning Arrester Removal and Replacement Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
1,848 Lightning Arresters	1,654 Lightning Arresters	1,654 Lightning Arresters	1,654 Lightning Arresters	Initiative Not Validated

WMP.552 – 8.1.3.7 – Drone Assessments – Focus & Non-Field Verifiable

Drone assessments support wildfire risk mitigation by efficiently identifying potential issues on distribution structures. SDG&E's 2023–2025 WMP established a 2024 target to complete drone assessments for 13,500 distribution structures with a risk reduction goal of 13.91%.

According to SDG&E's 2024 Q4 QDR, the utility completed drone assessments for 6,529 distribution structures. In response to Data Request DR005b, SDG&E confirmed this total by providing detailed drone assessment GIS data within the consolidated yearly geospatial dataset for 2024.

In response to Data Request DR046 and as reported in the 2024 ARC, SDG&E clarified that this program was revised to align Wildfire Mitigation Plan costs with the utility's 2024 General Rate Case (GRC) decision. SDG&E submitted a Change Order on November 1, 2023, requesting to adjust the 2024 target to 6,500 drone assessments. Energy Safety rejected this request on May 13, 2024. Subsequently, SDG&E submitted a petition to amend concurrently with the 2024 ARC on April 10, 2025.

The IE reviewed a sample of GIS records covering 92 drone assessments, cross-referenced with detailed inspection reports provided in response to Data Request DR046. No issues or discrepancies were identified during this review.

Although SDG&E did not achieve the original 2024 target of 13,500 assessments, based on the thorough documentation review, the IE validates the reported completion of 6,529 drone assessments for 2024.

Table 33: Drone Assessments Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
13,500 Structures	6,529 Structures	6,529 Structures	6,529 Structures	Initiative Not Validated

WMP.555, 8.1.3.10 - Transmission 69kV Tier 3 Visual Inspections – Non-Focus & Non-Field Verifiable

Review of documentation provided by SDG&E in response to data requests related to the Transmission 69kV Tier 3 Visual Inspections initiative showed that the utility appears to have substantially met the 2024 WMP goals. The WMP set a target of 1,632 inspections for 2024, and SDG&E provided data confirming the completion of 1,605 inspections as of the request date. The EC explained that the 2% of uncompleted inspections were due to forecast inaccuracies. These inaccuracies arose because the forecast was made in 2023 and could not account for the variable number of active structures on energized tielines. This number is just shy of the year-end goal, but within reasonable expectation given the stated September 1st completion deadline for wildfire season. The list included relevant details such as inspection dates, HFTD classification, facility IDs, and method of inspection (aerial via helicopter), aligning with the standardized process described in the WMP.

SDG&E's data submission supports the initiative's emphasis on proactively identifying structural hazards in Tier 3 High Fire-Threat Districts. The IE requested sampling in both HFTD Tier 3 and Tier 2 in DR026.b. SDG&E responded and inspections were confirmed from the utility in a written comment as having found no issues, and no work orders were generated, consistent with the WMP's projection of a very low expected hit rate in Tier 3 for 2024. While SDG&E did not retain or provide copies of inspection reports for 18 specific locations requested, they affirmed that no adverse conditions were found at those sites. This is in line with their stated approach of recording findings within an asset management system rather than retaining individual reports.

Despite the lack of detailed report copies, the utility's process and submission provide sufficient documentation to demonstrate performance against the stated goals of the initiative and support the claim of ongoing maintenance effectiveness in reducing wildfire risk. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 34: Transmission 69kV Tier 3 Visual Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR026/.b Response	Summary
1,632 Inspections	1,605 Inspections	1,605 Inspections	1,605 Inspections	Initiative Validated

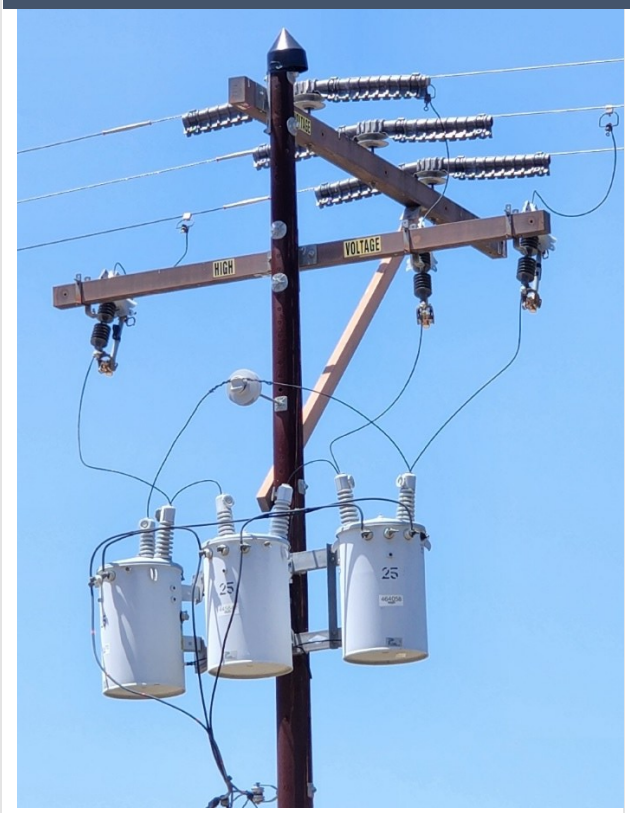
WMP.972 – 8.1.2.10.1 – Avian Protection Program –Focus & Field Verifiable

The Avian Protection Program reduces wildfire ignition risk and improves reliability by installing avian protective equipment on distribution poles, preventing faults associated with avian contact. As described in the 2023–2025 WMP, SDG&E's 2024 target for this initiative was to install avian protection on 200 poles, with a risk reduction goal of 0.02%.

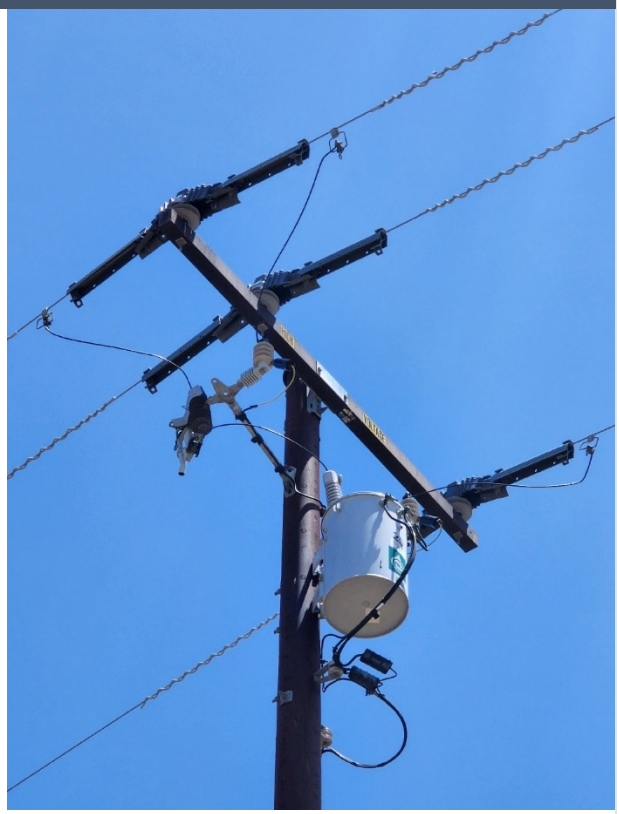
According to SDG&E's 2024 Q4 QDR dated February 1, 2025, the utility installed avian protection equipment on 774 poles. In response to Data Request DR005b, SDG&E provided consolidated yearly GIS data confirming installations on these 774 poles.

The IE field assessment team verified completed installations per definitions provided in Section 8.1.2.10.1 (Avian Protection Program) of the 2023–2025 WMP. For illustrative examples, refer to Figure 14: Example Avian Protection Program Field Images.

Figure 14: Example Avian Protection Program Field Images



P774454



P116941

The IE randomly sampled 84 avian protection installation locations from the provided GIS data. Field verification confirmed that all sampled installations complied with the initiative goals. The IE visited each pole, capturing geo-referenced photographs. For each location, the IE verified:

- Avian protection equipment was installed.
- Structure location aligned with reported GIS coordinates.
- Installation workmanship met industry construction standards.

Field assessments of the avian protection installations were reviewed for workmanship quality and accuracy of information. No workmanship issues were identified, but one data discrepancy was found during field the assessment. Refer to Table 35: Data Discrepancy – Avian Protection and Figure 15: Data Discrepancy – Avian Protection for additional details.

Table 35: Data Discrepancy – Avian Protection Summary

GH Status	Change Order	Line Deenergized	Performed By	Circuit Name	BusinessID
Complete	No	Yes	Contractor	C972	P162775

Based on the information provided in SDG&E's response to Data Request DR005b, this structure had avian guards installed by a contractor. It currently has transformer bushing lugs and lightning arrester lugs taped, but no avian protection devices are installed.

Figure 15 Data Discrepancy – Avian Protection

Pole ID: P167775

Based on field assessments and supporting documentation, the IE validates the completion of avian protection equipment installations on 773 of the 774 poles reported for 2024.

Table 36: Avian Protection Program Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
200 poles	774 poles	774 poles	774 poles	Initiative Validated

WMP.1189 – 8.1.2.10.2 – Strategic Pole Replacement Program –Focus & Field Verifiable

The Strategic Pole Replacement Program reduces wildfire ignition risk by replacing high-risk, gas-treated poles with a higher potential for failure. As described in the 2023–2025 WMP, SDG&E's 2024 target was to replace 267 poles, with a risk reduction goal of 0.285%.

According to SDG&E's 2024 Q4 QDR dated February 1, 2025, the utility replaced 40 poles. In response to Data Request DR005b, SDG&E provided consolidated yearly GIS data confirming these 40 pole replacements.

In the 2024 ARC dated April 1, 2025, SDG&E reported that the selection of a new engineering design firm caused delays in the engineering and design phases. Corrective actions identified include awarding engineering and design contracts prior to the planned year of construction and distributing workloads among multiple contractors.

The IE conducted field observations at 37 of the 40 reported pole replacement locations. Three locations were inaccessible due to locked gates. All 37 accessible poles complied with initiative requirements. The IE visited each location, capturing geo-referenced photographs, and verified that:

- Strategic pole replacements were completed.
- Structure locations aligned with the reported GIS coordinates.
- Installation workmanship met industry construction standards.

For illustrative examples, see Figure 16: Example Strategic Pole Replacement Program Field Images.

Figure 16: Example Strategic Pole Replacement Program Field Images

Pole: P74592

Field assessments validated the workmanship quality and accuracy of information aligned with SDG&E's 2023–2025 WMP descriptions. Although SDG&E did not meet the 2024 target of 267 poles, based on the field review and supporting documentation, the IE validates the completion of the 40 poles reported for 2024, including the 37 poles physically verified.

Table 37: Strategic Pole Replacement Program Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
267 poles	40 poles	40 poles	40 poles	Initiative Not Validated

WMP.1190, 8.1.3.6 - Transmission Wood Pole Intrusive Inspections – Non-Focus & Non-Field Verifiable

In support of the WMP initiative WMP.1190, SDG&E provided documentation of its ongoing Transmission Wood Pole Intrusive Inspection program. Although no specific target was set for 2024 and the 2024 WMP listed a goal of "0 targeted," the utility submitted a record of 164 completed inspections for the year. SDG&E did not set a risk reduction goal for this initiative. These inspections were performed in line with the established 8-year cycle—exceeding the 10-year requirement in General Order 165—and were consistent with the stated inspection process of evaluating poles over 15 years old using intrusive methods like sound and bore testing. While no findings or condition results were included in the main inspection list, the data did confirm inspection types, dates, geographic locations, and HFTD tier designations, with activity largely taking place in HFTD Tier 2 or non-HFTD areas.

In response to a follow-up data request for inspection reports from 17 specific locations listed in the original dataset, SDG&E provided a second spreadsheet extracted from its asset management system. However, this supplemental file included only basic fields—structure ID, inspection type, and 2024 inspection dates—without any findings, condition data, or supporting documentation. Despite the absence of detailed results, the volume of work completed in 2024 (164 structures) exceeds both the 2023 actual of 90 inspections and the 2025 target of 60. This demonstrates that SDG&E continued to actively execute and possibly front-load its long-term maintenance strategy. Although the lack of inspection findings limits the ability to verify pole conditions or outcomes, the data provided supports that the utility maintained its proactive inspection program as described in the WMP, meeting or exceeding expected levels of activity for the year. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 38: Transmission Wood Pole Intrusive Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR006/.b Response	Summary
0 Inspections	164 Inspections	164 Inspections	164 Inspections	Initiative Validated

WMP.1191, 8.1.6 - QA/QC-Transmission Inspections – Non-Focus & Non-Field Verifiable

The utility's response to the data request regarding its 2024 QA/QC efforts on transmission inspections aligns with the stated goals of the WMP initiative for that year. SDG&E did not set a risk reduction goal for this initiative. The WMP targeted 100% internal inspection audit completion as an objective. SDG&E provided documentation for 276 completed transmission overhead detailed inspections, all of which had undergone QA/QC review. Each

record included severity level, audit date, and inspection outcomes, with all outcomes marked as "non issue," indicating effective primary inspections and follow-up validation. Furthermore, all inspections were located in either HFTD Tier 2 or non-HFTD areas, consistent with prioritization guidance based on severity and fire threat district tiers.

The utility's documentation supports the goal of validating inspection findings through secondary assessments as described in the initiative. The provided data suggests a functioning QA/QC pipeline that includes classification of severity levels and field verification by qualified construction supervisors. While the long-term goal of integrating a new system for tracking QA/QC results remains pending, the 2024 actions demonstrate progress toward improved consistency and visibility in QA/QC practices. The response shows that the utility met its target of auditing 100% of identified inspection conditions internally, aligning with the broader objectives of the WMP initiative. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 39: QA/QC-Transmission Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR007 Response	Summary
100%	100%	100%	100%	Initiative Validated

WMP.1192 – 8.1.6.3 – Quality Assurance/Quality Control of Distribution Drone Assessments – Non-Focus & Non-Field Verifiable

Quality Assurance/Quality Control (QA/QC) of distribution drone assessments ensures the accuracy and consistency of inspections performed under WMP.552. SDG&E's 2023–2025 WMP established a 2024 target to complete QA/QC for 100% of distribution drone assessments, with an annual goal of 13,500 structures listed in the QDR but did not specify a risk reduction goal.

According to SDG&E's 2024 Q4 QDR, the utility completed QA/QC for 6,529 drone assessments, achieving 100% of the 6,529 drone assessments completed under WMP.552. SDG&E confirmed this completion in response to Data Request DR005b by providing detailed drone inspection QA/QC GIS data in the consolidated yearly geospatial data for 2024.

The IE reviewed a sample of QA/QC records covering 23 drone assessments, cross-referenced with detailed drone inspection QA/QC audit documentation provided in response to DR028. No issues or discrepancies were identified during this review.

Based on the review of documentation and sample verification, the IE validates this initiative.

Table 40: Quality Assurance/Quality Control of Distribution Drone Assessments Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
13,500 Structures (100% of Drone Assessments)	6,529 Structures (100% of Drone Assessments)	6,529 Structures (100% of Drone Assessments)	6,529 Structures (100% of Drone Assessments)	Initiative Validated

WMP.1193 – 8.1.6 – QA/QC-Wood Pole Intrusive – Non-Focus & Non-Field Verifiable

WMP.1193 outlines SDG&E's QA/QC program for Transmission and Distribution Wood Pole Intrusive Inspections. SDG&E did not set a risk reduction goal for this initiative. The program targets 10 percent of completed inspections to audit monthly and utilizes a randomizer to select the structures. A 3rd-party is contracted to perform a field audit for the identified structures. This field audit verifies the initial inspection results, and the audit findings are recorded in the wood pole inspection management system.

In response to DR008, SDG&E provided documentation listing all the QAQC audits conducted during 2024. This documentation contained various information including the HFTD, date the audit was conducted, and whether the audit found any issues with the initial inspection results.

In DR008.b, the IE requested sampling reports for specific QAQC audits that were conducted in both HFTD Tier 3 and Tier 2. SDG&E supplied audit results through an excel spreadsheet that contained various entries for the auditor to make, these include the audit date, related work ID, details noted, location, and areas for conditions to be entered. All of the received reports were complete and the status for all entries was "approved." Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 41: QA/QC-Wood Pole Intrusive Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR008/.b Response	Summary
0 Inspections	150 Inspections	150 Inspections	150 Inspections	Initiative Validated

WMP.1194, 8.1.6 - QA/QC-Substation Inspections – Non-Focus & Non-Field Verifiable

The utility's response to data requests under initiative WMP.1194, focused on QA/QC of substation inspections, supports the 2024 targets outlined in the WMP. SDG&E did not set a risk reduction goal for this initiative. SDG&E responded to a data request with a list of 22 substations where QA/QC field audits were completed in 2024. All locations were within High Fire Threat Districts (HFTD) 2 or 3, aligning with the initiative's priority for elevated-risk areas. Notably, four of these inspections were in HFTD 3, the highest risk tier, demonstrating adherence to the initiative's focus on risk-based prioritization.

Further supporting the initiative's objectives, SDG&E provided individual QA/QC reports for 10 checklist evaluations marked as passed, with handwritten annotations and unique check marks indicating independent completion rather than mass duplication. While most comments across reports appeared highly consistent, minor handwritten variations suggest standardization rather than copying. This is consistent with the WMP's stated QA/QC process under SOP 510.040, which includes field audits by a construction supervisor using a standardized checklist. The 100% pass rate of the reports reviewed indicates that SDG&E met or exceeded the WMP's 2024 goals for substation patrol QA/QC. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 42: QA/QC-Substation Inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR009/.b Response	Summary
18 Inspections	22 Inspections	22 Inspections	22 Inspections	Initiative Validated

WMP.1195 – 8.1.2.8.2 – Early Fault Detection – Non-Focus & Field Verifiable

The Early Fault Detection initiative utilizes Advanced Radio Frequency Sensors (ARFS) and PQ Meters to proactively identify and mitigate equipment failures on the electric system, reducing the risk of wildfire ignition. SDG&E's 2023–2025 WMP established a 2024 target to install 60 early fault detection nodes, with an associated risk reduction goal of 2.65%.

According to SDG&E's 2024 Q4 QDR, the utility installed 62 early fault detection nodes, exceeding the annual target. SDG&E confirmed these installations by providing consolidated yearly geospatial GIS data in response to Data Request DR005b, identifying all 62 completed node installations.

The IE conducted field observations at 20 randomly selected early fault detection installation sites. Geo-referenced photographs were captured at each location. For illustrative examples of these installations, please refer to Figure 17: Example Early Fault Detection Field Images.

Figure 17: Example Early Fault Detection Field Images

P372256

P214208

During field verification, the IE confirmed:

- Early fault detection nodes were properly installed.
- Installed structures matched accurately with reported coordinates.
- Installation workmanship complied with industry construction standards.

Field assessments confirmed workmanship quality and accuracy of installation details, aligned with SDG&E's 2023–2025 WMP descriptions. No issues or discrepancies were identified during field assessments. Based on this review, the IE validates this initiative.

Table 43: Early Fault Detection Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
60 nodes	62 nodes	62 nodes	62 nodes	Initiative Validated

4.1.2.1 Funding Verification – Findings

WMP.1016, Traditional overhead hardening

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1017, Traditional overhead hardening

Strategic Overview and Risk Mitigation

This initiative covers the trailing environmental restoration costs associated with the completed overhead hardening program in Cleveland National Forest (CNF).

Financial Performance Analysis

- Planned Spend: $738,809
- Actual Expenditure: $1,257,300
- Variance: +$518,491 (+70.2% overspend)
- SDG&E Justification: Overspend due to trailing environmental restoration expenses.

Operational Impact and Risk Reduction

The core system hardening activities had previously been completed. Current expenses were dedicated to environmental restoration work necessary following those prior hardening activities.

Assessment and Conclusion

The financial variance was appropriately explained by necessary environmental restoration activities. The initiative's current activities had a negligible direct impact on risk reduction, as primary system hardening was completed previously.

WMP.1189, 8.1.2.10.2, Strategic pole replacement program

Strategic Overview and Risk Mitigation

This initiative strategically replaces deteriorated wood poles with resilient alternatives to reduce the risk of pole failure and subsequent ignitions.

Financial Performance Analysis

- Planned Spend: $7,018,949
- Actual Expenditure: $2,604,787

- Variance: -$4,414,162 (-62.9% underspend)
- SDG&E Justification: Project delays due to design firm transitions, material supply challenges, and weather-related disruptions.

Operational Impact and Risk Reduction

Only 40 poles were replaced, achieving 15% of the planned target of 267 poles. This significantly limited the intended operational impact on reducing pole-related wildfire risks.

Assessment and Conclusion

The operational shortfall is significant relative to planned targets. The financial variance was adequately explained by the reported delays. Overall, the initiative's impact on risk reduction was substantially below expectations due to the limited number of poles replaced.

WMP.1190, 8.1.3.6, Transmission wood pole intrusive inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1191, 8.1.6.1, Quality assurance / quality control of transmission inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1192, 8.1.6.3, Quality assurance / quality control of distribution drone assessments

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1193, 8.1.6.4, Quality assurance / quality control of wood pole intrusive (transmission and distribution)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1194, 8.1.6.5, Quality assurance / quality control of substation inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1195, 8.1.2.8.2, Early fault detection

Strategic Overview and Risk Mitigation This initiative deploys sensors designed to detect electrical faults early, preventing potential wildfire ignitions from equipment failures.

Financial Performance Analysis

- Planned Spend: $4,170,000
- Actual Expenditure: $3,600,000
- Variance: -$570,000 (-13.7% underspend)
- SDG&E Justification: Resource shifts in Q4 and forecasting challenges leading to reduced spending.

Operational Impact and Risk Reduction

SDG&E installed 62 nodes, exceeding the initial target of 60 nodes by 103%. This enhanced coverage supports early fault detection, significantly reducing ignition risks.

Assessment and Conclusion

The underspend and operational exceedance are adequately justified, positively contributing to wildfire risk reduction through early fault detection.

WMP.1202, Line removals (in HFTD)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1203, Open work orders

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1204, Equipment Settings to Reduce Wildfire Risk (Grid Ops)

Since the absolute percent difference between budgeted and actual for this item is less than Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

0%, please refer to Table 6.

WMP.1205, Grid Response Procedures and Notifications (Grid Ops)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1206, 8.1.9.3, Risk Event Inspection Workforce Planning Improvement Plans

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1207, Open work orders

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.1208, Workforce Planning

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.449, 8.1.8.2, Wireless Fault Indicators

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.453, 8.1.4.3, Capacitor maintenance and replacement program (SCADA)

Strategic Overview and Risk Mitigation This initiative focuses on maintaining and replacing capacitors to prevent electrical failures, enhancing the reliability of the electric system and reducing ignition risks.

Financial Performance Analysis

- Planned Spend: $287,413
- Actual Expenditure: $204,442
- Variance: -$82,971 (-28.9% underspend)
- SDG&E Justification: Reduced unit costs and minimal expenditures for residual trailing costs.

Operational Impact and Risk Reduction

One capacitor project was completed, exceeding the initial target of zero planned capacitor replacements.

Assessment and Conclusion

The initiative exceeded its operational expectations and effectively utilized cost savings. The underspend was sufficiently justified, and the completed work had a neutral to slightly positive impact on wildfire risk reduction.

WMP.455, 8.1.2.1, Distribution overhead hardening (covered conductor)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.458, 8.1.2.3, Distribution Pole Replacements and Reinforcements

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.459, 8.1.4.4, Expulsion fuse replacement

Strategic Overview and Risk Mitigation

This initiative replaces expulsion fuses with current-limiting fuses to reduce the likelihood of equipment-related ignitions.

Financial Performance Analysis

- Planned Spend: $1,463,217
- Actual Expenditure: $207,314
- Variance: -$1,255,903 (-85.8% underspend)
- SDG&E Justification: Cost reductions achieved through direct cost savings and bundling work with other programs.

Operational Impact and Risk Reduction

SDG&E replaced 188 expulsion fuses, exceeding the initial target of zero fuses for the year. This significantly contributed to reducing the potential for ignition events related to fuse operation.

Assessment and Conclusion

The initiative exceeded its operational goals while maintaining substantial cost savings. The financial variance was adequately explained, and the outcomes positively supported the risk reduction commitment.

WMP.461, 8.1.2.11.1, PSPS sectionalizing enhancements

Strategic Overview and Risk Mitigation This initiative involves installing sectionalizing devices to reduce customer impact during Public Safety Power Shutoff (PSPS) events.

Financial Performance Analysis

- Planned Spend: $1,786,000
- Actual Expenditure: $2,135,000
- Variance: +$349,000 (+19.5% overspend)
- SDG&E Justification: Installation of additional devices beyond the initial plan.

Operational Impact and Risk Reduction

SDG&E installed 18 sectionalizing devices, exceeding the planned target of 10 devices by 180%. This substantially improved the ability to minimize customer impacts during PSPS events.

Assessment and Conclusion

The overspend is justified by the greater number of devices installed, positively enhancing the intended wildfire risk mitigation capabilities.

WMP.462, 8.1.2.7, Microgrids

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.463, 8.1.2.8.1, Advanced protection

Strategic Overview and Risk Mitigation

This initiative involves deploying advanced protection systems designed to rapidly detect and isolate electrical faults, minimizing the potential for wildfire ignitions.

Financial Performance Analysis

- Planned Spend: $15,810,639
- Actual Expenditure: $11,130,462
- Variance: -$4,680,177 (-29.6% underspend)
- SDG&E Justification: Crews were reallocated to other priority wildfire mitigation programs.

Operational Impact and Risk Reduction

SDG&E completed advanced protection on 5 circuits, achieving 62.5% of the planned target of 8 circuits, resulting in a delay in fully realizing the initiative's risk reduction benefits.

Assessment and Conclusion

The underspend and shortfall in operational targets were sufficiently explained by crew reallocations. The initiative partially achieved its intended wildfire risk reduction objectives due to the reduced scope of implementation.

WMP.464, 8.1.4.5, Maintenance, repair, and replacement of connectors, including hotline clamps

Strategic Overview and Risk Mitigation

This initiative focuses on maintaining, repairing, and replacing electrical connectors, specifically hotline clamps, to reduce the risk of equipment failure and potential wildfire ignitions.

Financial Performance Analysis

- Planned Spend: $1,702,120
- Actual Expenditure: $801,990
- Variance: -$900,130 (-52.9% underspend)
- SDG&E Justification: Achieved cost efficiencies through bundling maintenance activities with other scheduled work.

Operational Impact and Risk Reduction

SDG&E significantly exceeded its operational target by addressing 678 hotline clamps, representing 271% of the initial target of 250 clamps. This proactive approach significantly reduced the potential for connector-related equipment failures and ignition risks.

Assessment and Conclusion

The initiative effectively surpassed its operational targets while achieving substantial cost savings. The financial variance was clearly explained and justified, and the outcome positively supported the intended wildfire risk reduction commitment.

WMP.466, 8.1.2.11.3, Generator grant program

Strategic Overview and Risk

Mitigation This initiative provides backup power solutions to vulnerable customers during Public Safety Power Shutoff (PSPS) events, ensuring continued electrical service during critical periods.

Financial Performance Analysis

- Planned Spend: $3,138,767

- Actual Expenditure: $927,000
- Variance: -$2,211,767 (-70.5% underspend)
- SDG&E Justification: Delays attributed to battery market availability and General Rate Case (GRC) budget implications.

Operational Impact and Risk Reduction

Administrative milestones related to the initiative were met. However, fewer customers received backup units due to procurement delays, limiting the scope of intended benefits during PSPS events.

Assessment and Conclusion

While administrative goals were achieved, the initiative's operational scope was significantly constrained by market-related delays. The financial variance is sufficiently explained.

WMP.467, 8.1.2.11.4, Generator assistance program

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.468, 8.1.2.11.2, Standby power (fixed power backup)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.472, 8.1.2.4, Transmission Pole/Tower Replacements and Reinforcements

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.473, 8.1.2.2, Strategic undergrounding

Strategic Overview and Risk Mitigation This initiative involves converting overhead electrical lines to underground systems in areas with high wildfire risk.

Financial Performance Analysis

- Planned Spend: $301,728,570
- Actual Expenditure: $217,140,190
- Variance: -$84,588,380 (-28.0% underspend)
- SDG&E Justification: Underspend due to construction delays and cost efficiencies realized through competitive bidding.

Operational Impact and Risk Reduction

Completed 112 miles of undergrounding, achieving 90% of the planned 125-mile target, reflecting substantial completion of the intended work.

Assessment and Conclusion

The financial underspend and operational shortfall were clearly explained. Although there was minor shortfall in target mileage, substantial progress was made, resulting in a moderate positive impact on wildfire risk reduction.

WMP.475, 8.1.2.5.1, Distribution overhead system hardening

Strategic Overview and Risk Mitigation This initiative focuses on strengthening overhead distribution infrastructure to prevent equipment failures that could lead to wildfires. No mileage target was initially set for 2024.

Financial Performance Analysis

- Planned Spend: $3,280,607
- Actual Expenditure: $6,459,284
- Variance: +$3,178,677 (+96.9% overspend)
- SDG&E Justification: Additional unplanned construction was transferred into this initiative.

Operational Impact and Risk Reduction

SDG&E completed 0.54 miles of system hardening, exceeding the originally unplanned target.

Assessment and Conclusion

The additional system hardening positively contributed to risk reduction. The financial variance is adequately explained by the transfer of additional construction activities.

WMP.478, 8.1.3.1, Distribution overhead detailed inspections

Strategic Overview and Risk Mitigation

This initiative entails detailed inspections of overhead distribution equipment to identify and rectify potential faults, significantly reducing wildfire risks from equipment failures.

Financial Performance Analysis

- Planned Spend: $6,840,867
- Actual Expenditure: $8,550,022
- Variance: +$1,709,155 (+25.0% overspend)
- SDG&E Justification: Greater-than-anticipated completion of corrective maintenance activities.

Operational Impact and Risk Reduction

Quantitative targets and actual progress for this initiative are yet to be determined. However, increased corrective maintenance activities suggest proactive management of equipment-related wildfire risks. SDG&E completed 16,503 inspections, surpassing the planned target of 15,450 inspections by 107% .

Assessment and Conclusion

The financial overspend is justified based on the volume of corrective maintenance work completed. Final assessment of the initiative's effectiveness will depend upon confirmation of operational targets.

WMP.479, 8.1.3.2, Transmission overhead detailed inspections

Strategic Overview and Risk Mitigation

This initiative entails conducting detailed inspections of transmission overhead lines to identify and mitigate potential equipment issues that could lead to wildfires.

Financial Performance Analysis

- Planned Spend: $1,743,377
- Actual Expenditure: $1,030,433
- Variance: -$712,944 (-40.9% underspend)
- SDG&E Justification: Lower-than-anticipated repairs required based on historical equipment conditions.

Operational Impact and Risk Reduction

SDG&E inspected 2,940 structures, significantly exceeding the initial target of 1,960 structures by 150%. These detailed inspections enhanced the early identification of potential issues, substantially contributing to wildfire risk mitigation.

Assessment and Conclusion

The initiative successfully exceeded its operational targets while maintaining cost savings. The financial variance was sufficiently explained by lower-than-anticipated repair

requirements. Overall, the initiative positively and effectively supported the intended wildfire risk reduction commitment.

WMP.481, 8.1.3.3, Distribution infrared inspections

Strategic Overview and Risk Mitigation

This initiative utilizes infrared inspections on electric distribution lines and equipment to identify potential equipment issues that could lead to wildfires. The 2024 target was inspecting 9,532 structures.

Financial Performance Analysis

- Planned Spend: $10,000
- Actual Expenditure: $145,000
- Variance: +$135,000 (+1,350% overspend)
- SDG&E Justification: The budget was adjusted to align with the 2024 General Rate Case (GRC).

Operational Impact and Risk Reduction

SDG&E inspected 6,398 structures, achieving 67% of the planned target. The completed inspections contributed to identifying critical equipment issues.

Assessment and Conclusion

The overspend and incomplete target achievement reflect operational challenges. The inspections conducted partially supported the initiative's risk reduction goals.

WMP.482, 8.1.3.4, Transmission infrared inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.483, 8.1.3.5, Distribution wood pole intrusive inspections

Strategic Overview and Risk Mitigation This initiative involves intrusive inspections of wood poles to evaluate their internal condition and structural integrity, aimed at preventing pole failures and subsequent ignitions.

Financial Performance Analysis

- Planned Spend: $1,024,460
- Actual Expenditure: $295,762

- Variance: -$728,698 (-71.1% underspend)
- SDG&E Justification: Corrective actions were funded through other program budgets.

Operational Impact and Risk Reduction SDG&E inspected 2,225 wood poles, significantly exceeding the initially set target of zero structures. These inspections contributed positively to identifying potential structural issues early and mitigating associated risks.

Assessment and Conclusion Operational targets were substantially exceeded, and the underspend was effectively explained. The initiative positively impacted wildfire risk reduction through comprehensive pole inspections.

WMP.484, Asset inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.488, 8.1.3.8, Distribution overhead patrol inspections

Strategic Overview and Risk Mitigation

This initiative involves visual inspections of distribution overhead lines to identify hazards and prevent equipment failures that could spark wildfires. The 2024 target was 86,197 structures.

Financial Performance Analysis

- Planned Spend: $856,338
- Actual Expenditure: $2,708,163
- Variance: +$1,851,825 (+216.2% overspend)
- SDG&E Justification: Overspend due to significantly more corrective maintenance than anticipated.

Operational Impact and Risk Reduction

SDG&E inspected 86,140 structures, reaching 99.9% of the target, effectively addressing potential ignition risks through maintenance.

Assessment and Conclusion

The financial variance is justified by the volume of corrective actions performed. Operational targets were met, enhancing wildfire risk mitigation.

WMP.489, 8.1.3.9, Transmission overhead patrol inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.491, 8.1.6.2, Quality assurance / quality control of distribution detailed inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.492, 8.1.3.11, Substation patrol inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.493, Environmental compliance and permitting

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.515, 8.1.8.3, Personnel Work Procedures and Training in Conditions of Elevated Fire Risk

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.519, 8.1.5.4.1, WMP Data Platform

Strategic Overview and Risk Mitigation This initiative establishes a centralized data platform aimed at improving analytics and decision-making capabilities for wildfire mitigation.

Financial Performance Analysis

- Planned Spend: $10,667,182
- Actual Expenditure: $9,042,688
- Variance: -$1,624,494 (-15.2% underspend)
- SDG&E Justification: Reduced scope and vendor consolidation.

Operational Impact and Risk Reduction

Foundation work progressed, but some analytical and visualization capabilities were deferred.

Assessment and Conclusion

The financial underspend is justified by scope reduction. Deferred capabilities represent a minor negative impact on immediate risk reduction commitments.

WMP.543, 8.1.2.5.2, Transmission overhead hardening

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.545, 8.1.2.5.2, Transmission overhead hardening (distribution underbuild)

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.549, 8.1.2.8.3, Distribution communications reliability improvements

Strategic Overview and Risk Mitigation

This initiative seeks to improve the reliability of the distribution communication network, essential for maintaining critical communication capabilities during wildfire events and emergency conditions.

Financial Performance Analysis

- Planned Spend: $31,686,439
- Actual Expenditure: $22,506,006
- Variance: -$9,180,433 (-29.0% underspend)
- SDG&E Justification: Budget reductions due to anticipated outcomes from the General Rate Case (GRC).

Operational Impact and Risk Reduction

Only 3 of the planned 60 base stations were completed, representing just 5% of the targeted improvements. This significantly delayed planned enhancements to network reliability.

Assessment and Conclusion The operational shortfall and financial underspend were adequately explained by budget constraints. However, the substantial shortfall in achieving the initiative's goals negatively impacted the planned improvements in distribution communication reliability.

WMP.550, 8.1.4.6, Lightning arrester removal and replacement

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.551, Asset inpsections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.552, 8.1.3.7, Drone assessments

Strategic Overview and Risk Mitigation

This initiative utilizes drone technology for enhanced inspections of electrical infrastructure, aiming to promptly identify and rectify potential risks.

Financial Performance Analysis

- Planned Spend: $95,492,930
- Actual Expenditure: $106,264,937
- Variance: +$10,772,007 (+11.3% overspend)
- SDG&E Justification: Higher-than-planned volume of corrective work identified through drone inspections.

Operational Impact and Risk Reduction

SDG&E inspected 6,529 poles/structures, achieving 48.4% of the initial target of 13,500.

Assessment and Conclusion

The overspend was adequately explained by increased corrective actions. However, the significant shortfall in reaching operational targets negatively impacted overall risk reduction effectiveness.

WMP.555, 8.1.3.10, Transmission 69kV tier 3 visual inspections

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.557, 8.1.8.3.3, Aviation Firefighting Program

Strategic Overview and Risk Mitigation This initiative provides aerial firefighting capabilities to enable rapid suppression of wildfires, reducing fire spread and associated risks.

Financial Performance Analysis

- Planned Spend: $13,065,974
- Actual Expenditure: $10,433,405
- Variance: -$2,632,569 (-20.1% underspend)
- SDG&E Justification: Delays in delivery of Firehawk helicopters from the manufacturer.

Operational Impact and Risk Reduction

Existing aerial firefighting assets were maintained; however, the delay in acquiring new Firehawk helicopters impacted the planned enhancement of capabilities.

Assessment and Conclusion

The underspend due to external delivery delays was adequately justified. The delay in new helicopter deployment resulted in a negative impact on the intended improvement of rapid wildfire suppression capabilities.

WMP.558, 8.1.2.12, Ignition Management Program

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

WMP.972, 8.1.2.10.1, Avian protection

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 6.

4.1.3 Synthesis of Findings

4.1.3.1 Initiative Review

In review of SDG&E's 2024 WMP initiatives, it can be determined that the utility was mostly successful in implementation, with most targets met or exceeding the stated goal. Notable achievements include surpassing goals in PSPS Sectionalizing and Transmission Detailed Inspections. Where targets were missed, such as in Distribution Infrared Inspections, SDG&E provided reasonable explanations related to funding uncertainties or forecast inaccuracies. The utility demonstrated a strong commitment to wildfire risk reduction, consistently prioritizing HFTD Tier 2 and Tier 3 areas.

This risk-informed approach was maintained even when quantitative targets weren't fully achieved, ensuring focus on high-impact/high-risk areas. The utility showed proactive risk management by expanding inspections to include the Wildland Urban Interface areas in response to related wildfires. Looking forward, SDG&E has outlined strategies for improving performance, including the continued use of risk-informed approaches, more accurate forecast-based target revisions, and integration of new technologies for tracking and analysis. While there were minor shortfalls, SDG&E's overall implementation of it 2024 WMP appears strong, with a clear focus on risk reduction in HFTD/HFRA areas and ongoing efforts to enhance data management and inspection processes.

4.1.3.2 Funding Verification

Budget and Expenditure Summary: The Grid Design, Operations, and Maintenance category had a total planned budget of $612,541 with actual expenditures of $515,031, representing a 15.9% variance below budget.

Initiatives with Significant Variances: Of the 54 total initiatives in this category, 20 (37%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Resource reallocation due to General Rate Case (GRC) decision impacts, affecting undergrounding (-28.0%) and advanced protection (-29.6%) initiatives
- Higher-than-anticipated corrective maintenance requirements in inspection programs, including distribution overhead patrol inspections (+216.0%) and drone assessments (+11.3%)
- Cost reductions through bundling work activities and competitive bidding processes in expulsion fuse replacement (-85.8%) and hotline clamp maintenance (-52.9%)

Key Trends and Funding Compliance: The category's funding patterns reflect resource shifts to address different priorities throughout 2024. Several initiatives exceeded operational targets while spending less than budgeted, including transmission overhead detailed inspections (150% of target with 40.9% underspend) and PSPS sectionalizing enhancements (180% of target with 19.5% overspend). The overall underspend resulted from construction delays in capital projects and budget adjustments related to the GRC decision, while inspection and maintenance activities continued as planned.

4.2 VEGETATION MANAGEMENT AND INSPECTIONS

4.2.1 Initiative Summary Table

Table 44: Initiative Summary Table (Spend in Thousand $)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[8]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[9],[10]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
WMP.494, 8.2.2.1, Detailed inspections	485,400 Inspections	523,949 Inspections	Completed	92 Inspections	100%	Detailed Inspections GIS Data (DR005b) SME Interview (DR038)	Initiative Validated (108%)	$60,084	$76,305.00 (+27.0%)	Yes (24.85%)
WMP.497 [8.2.3] Fuels Management	500 Poles	147 Poles	Delayed	64 Poles	100%	-Fuels Management List (DR039) -Fuels Management Fulcrum (DR039.b)	Initiative Not Validated (29%)	$5,833	$3,159.00 (-45.8%)	Yes – due to completion of WMP.512 (0.6259%)
WMP.501 [8.2.3.3] Clearance	11,200 Trees	11,788 Trees	Exceeded	18 Trees	100%	-Clearance List (DR040) -Clearance Work Dispatch (DR040.b)	Initiative Validated (105%)	$10,235	$0.00 (-100.0%)	Yes (0.1034%)
WMP.505, 8.2.5, Quality Assurance/Quality Control Vegetation Management	15% of Inspections	37% of Inspections	Completed	92 QA/QC Audits	100%	QA/QC GIS Data (DR005b) SME Interview (DR038, DR041b)	Initiative Validated (120%)[11]	$0	$0.00 (+0.0%)	No Goal Provided
WMP.508 [8.2.2.1.1] Off-Cycle Patrol	106 VMAs	106 VMAs	Completed	16 VMAs	100%	--Off-Cycle Patrol List (DR042) -Off-Cycle Patrol Work Order (DR042.b)	Initiative Validated (100%)	$0	$0.00 (+0.0%)	No Goal Provided
WMP.512 [8.2.3.1] Pole Clearing	33,010 Poles	36,500 Poles	Exceeded	73 Poles	100%	--Off-Cycle Patrol List (DR042) -Off-Cycle Patrol Work Order (DR042.b)	Initiative Validated (110%)	$7,893	$7,097.00 (-10.1%)	Yes (2.8435%)

[8] Sample Validation is determined by taking the number of sampling data validated and dividing by the sampling request.
[9] As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.
[10] The Initiative Validation Rate is determined by taking the Sample Validation Rate and multiplying by the EC-claimed amount, this estimate is then divided by the WMP Target amount to determine the validation rate.
[11] Validation percentage calculated using the IE verified audit sample percentage

4.2.2 Written Detail for Initiatives

4.2.2.1 Initiative Review – Findings & Method

WMP.494 – 8.2.2.1 – Detailed inspections –Focus & Non-Field Verifiable

Detailed vegetation inspections proactively identify and address vegetation risks near SDG&E assets. SDG&E's 2023–2025 WMP established a 2024 target to complete detailed vegetation inspections for 485,400 trees with a risk reduction goal of 24.85%.

According to SDG&E's 2024 Q4 QDR, the utility completed detailed vegetation inspections for 523,949 trees, exceeding the annual target. In response to Data Request DR005b, SDG&E confirmed this completion by providing detailed geospatial data for all 523,949 inspected trees in the consolidated yearly dataset for 2024.

The IE conducted a subject matter expert (SME) interview in response to Data Request DR038. During this interview, SDG&E explained its detailed vegetation inspection planning and completion-tracking processes, and provided a demonstration of the vegetation management database. SDG&E confirmed that inspection data from the database are used directly for QDR reporting.

The IE reviewed a sample of detailed vegetation inspection records covering 92 trees. No issues or discrepancies were identified during this review. Based on the review of documentation, SME interview, and sample verification, the IE validates this initiative.

Table 45: Detailed inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
485,400 Inspections	523,949 Inspections	523,949 Inspections	523,949 Inspections	Initiative Validated

WMP.497, 8.2.3 - Fuels Management –Focus & Non-Field Verifiable

WMP.497 outlines SDG&E's Vegetation and Fuels Management program. Fuels activity treatment includes the thinning of ground vegetation surrounding structures located in HFTD. Non-native vegetation is prioritized for thinning and typically vegetation is thinned in a 50-foot radius down to an approximate 30 percent vegetation cover where achievable. Structures that are subject to pole clearing (WMP.512) are targeted for fuels activity treatment due to their risk of ignition being higher due to the presence of hardware.

In 2024, SDG&E had a target of 500 poles cleared and claimed to have completed 147 poles, this meaning only 29% of the projected target was completed. SDG&E elected to reduce this program in anticipation of its then-pending 2024 GRC decision. This reduction was informed by the knowledge that the remaining poles in the fuels management initiative would be addressed by other risk-reducing vegetation measures such as pole clearing (WMP.512). Based upon this reasoning and the verification of completion of work related to WMP.512 realistically determines that the risk reduction goal for this initiative has been met.

In response to DR039, SDG&E provided an itemized list of all fuels activity completed during 2024. This document contained HFTD, asset ID, project location, pole ID, VMP ID, a description of work, the start and end date, and if the work was completed. In DR039.b, the IE requested proof of work completed for the items identified in the supplied list. In response, SDG&E stated that activity of fuels management is not tracked and recorded within Vegetation Management's work management system, Cityworks, because this work began years after the implementation of Cityworks.

The fuels management activities are tracked by SDG&E's Project Management contractor within the Fulcrum asset management tool. This tool does not utilize work orders to track and record activities. SDG&E provided an Excel spreadsheet generated from Fulcrum which includes the unique work activity number and work completion date for the 64 poles requested. Review of this document does show the unique Fulcrum ID, as well as the completion date, the crew company utilized, the HFTD, and any notes related to the work.

Based upon the ultimate rejection of the Change Order Request submitted by SDG&E and SDG&E falling short of meeting the goal for WMP.497 as outlined in the approved 2024 WMP, the IE is unable to validate this initiative. However, based upon contextual evidence provided by SDG&E and the over completion of related initiative WMP.512, it can be determined that SDG&E has upheld the objectives as outlined in the WMP and met the risk reduction target for this initiative, if not through this initiative alone, then coupled with the related WMP.512.

Table 46: Fuels Management Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR039/.b Response	Summary
500 Poles	147 Poles	147 Poles	147 Poles	Initiative Not Validated

WMP.501, 8.2.3.3 - Clearance – Non-Focus & Non-Field Verifiable

WMP.501 outlines SDG&E's program related to trees and required clearance based upon regulatory minimums outlined in GO95. This program continues to focus on applying expanded post-trim clearances on targeted species identified as higher risk due to growth potential, failure characteristics, and relative outage frequency. The criteria for determining these clearances are based upon several factors as outlined in WMP Section 8.2.3.3 and the compliance goal is to trim an appropriate clearance to prevent a tree from encroaching on power lines.

The target forecast for this initiative is based on historical trim and removal rates, however, the actual number of trees that receive enhanced clearances is influenced by several factors, including annual precipitation, expected growth rate, proper pruning practice, minimum clearance requirements, and the health of the tree. In 2024, SDG&E had a target of 11,200 trees and claimed to have completed 11,788 trees, meaning the projected target was exceeded by 5%.

In response to DR040, SDG&E provided an itemized list of all trees targeted for this initiative. This document included the VmpID, unique tree ID, how many tree units are included in each ID, HFTD, location address, tree genus, species, name, growth rate, height, diameter, if it is a danger tree, and radial clearance distance, as well as the completion status and start and end date. The total number of tree units provided in this document aligns with the claimed amount.

In DR040.b, the IE requested proof of work completed for 18 assets in both HFTD Tier 2 and Tier 3. In response, SDG&E provided a list that included the Tree ID, start date and end date, description of work, and the work order dispatch ID. This document verified that SDG&E created and closed a work order utilizing their dispatch system. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 47: Clearance Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR040/.b Response	Summary
11,200 Trees	11,788 Trees	11,788 Trees	11,788 Trees	Initiative Validated

WMP.505 – 8.2.5 – Quality Assurance/Quality Control Vegetation Management – Non-Focus & Non-Field Verifiable

Quality Assurance/Quality Control (QA/QC) for vegetation management verifies inspection and mitigation activities to ensure consistent and accurate vegetation management practices. SDG&E's 2023–2025 WMP established a 2024 target to perform QA/QC for 15% of the total vegetation management inspections and mitigation efforts, and no risk reduction goal was identified.

According to SDG&E's 2024 Q4 QDR, the utility completed QA/QC for 37% of vegetation management inspections and mitigation efforts, exceeding its target. However, consolidated yearly geospatial data provided by SDG&E for 2024 identified the completion of QA/QC for 18.4% of these efforts, provided in response to Data Request DR005b.

The IE conducted a subject matter expert (SME) interview in response to DR038. During this interview, SDG&E outlined the vegetation QA/QC processes, including audit planning and completion tracking. SDG&E also demonstrated the vegetation management database, confirming that records exported from this database support QDR reporting.

The IE conducted a second SME interview in response to Data Request DR041b, in which SDG&E explained the calculation used to report completion for vegetation management QA/QC in the QDR and the ARC and how that relates to the audit sample percentage reported in the ARC. SDG&E confirmed that the calculation for reporting QA/QC is an average of the completion percentages for the three programs and the audit sample percentage is calculated by dividing the number of audits by the population of audited activities.

The IE reviewed a sample of QA/QC inspection records covering 92 vegetation management activities. No issues or discrepancies were identified during this review. Based on the review of documentation, SME interview, and sample verification, the IE validates this initiative.

Table 48: Quality Assurance/Quality Control Vegetation Management Summary

Description	2024 Target	2024 ARC	2024 Q4 QDR	DR005b Response	Summary
Initiative	15%	37%	37%	18.4%	Initiative Validated
Detailed Inspections	15%	16.8%	N/A	16.9%	Initiative Validated
Clearance	15%	15.1%	N/A	68.4%	Initiative Validated
Pole Clearing	15%	24.4%	N/A	24.4%	Initiative Validated

WMP.508, 8.2.2.2 - Off-Cycle Patrol – Non-Focus & Non-Field Verifiable

WMP.508 outlines SDG&E's program for off-cycle patrol related to vegetation management. SDG&E did not set a risk reduction goal for this initiative. SDG&E has a total of 133 vegetation management areas (VMAs) and 106 are either partially or wholly within the HFTD. All trees within the strike zone of the secondary, distribution, and transmission lines receive a hazard evaluation during these inspections. Frequency for these inspections is primarily driven by GO95, Rule 35 and is based on the Vegetation Management Master Schedule. Any priority tree work identified during these inspections is expedited as needed via the "Memo" process. Memos are completed the day a condition is observed or up to two weeks following depending on the situation's priority.

In 2024, SDG&E aimed to complete off-cycle patrol inspections in all 106 VMAs residing within the HFTD. 100% of the projected target for this initiative was completed, therefore the risk reduction goal was met.

In response to DR042, SDG&E provided an itemized list that contained a line item for all 106 VMAs completed in 2024. This documentation also included the VMA ID, HFTD, location, start and end date, inspection type, comments, tree trim count, and tree removal count. In DR024.b, the IE requested proof of work completed for 16 of the VMAs. SDG&E provided screenshots from Cityworks for all 16 of the VMAs requested. The requested work order number was included in the screenshot, and the screenshot included the date initiated, when the project finished, the work cycle, and the status of the project. This documentation was consistent for all 16 work orders, and all included the completed status. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 49: Off-Cycle Patrol Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR042/.b Response	Summary
106 VMAs	106 VMAs	105 VMAs	106 VMAs	Initiative Validated

MP.512, 8.2.3.1 - Pole Clearing – Non-Focus & Non-Field Verifiable

WMP.512 outlines SDG&E's Pole Clearing program which is a fire prevention measure that involves the removal of vegetation at the base of poles that carry specific electrical hardware. Clearance requirements are set by PRC4292 and require the removal of all vegetation down to bare mineral soil within a 10-foot radius from the outer circumference of subject poles. PRC4292 also requires the removal of live vegetation up to 8 vertical feet and the removal

of dead vegetation up to conductor level. SDG&E outlined a risk reduction goal of 2.8435% for this initiative.

In 2024, SDG&E had a target of 33,010 poles and claimed to have completed 36,500, meaning the projected target was exceeded by 11%. This exceedance was due to clearing of additional poles in the first half of the year that were technically exempt from PRC4292 but were cleared as an added precautionary measure to reduce the likelihood of ignition caused by arcing material falling to the ground. Based upon this, the risk reduction goal appears to be met and substantial.

In response to DR043, SDG&E provided an itemized list of all fuels activity completed during 2024. This document contained HFTD, asset ID, project location, pole ID, VMP ID, a description of work, the start and end date, and if the work was completed. In DR043.b, the IE requested proof of work completed for 73 items identified in the supplied list. In response, SDG&E provided a list that included the Pole ID, start date and end date, description of work, and the work order dispatch ID. This document verified that SDG&E created and closed a work order utilizing their dispatch system for each identified item. Based upon this verification, it can be determined that SDG&E met their risk reduction goal for 2024 and provided more work than originally targeted, indicating the risk reduction was substantial. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 50: Pole Clearing Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR043/.b Response	Summary
33,010 Poles	36,500 Poles	36,500 Poles	36,500 Poles	Initiative Validated

4.2.2.2 Funding Verification – Findings

WMP.1325, 8.2.3.6, Right Tree, Right Place

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

WMP.1326, 8.2.3.6, Community Tree Rebate Program

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

WMP.494, 8.2.2.1, Detailed inspections

Strategic Overview and Risk Mitigation This initiative involves conducting detailed vegetation inspections to identify and mitigate contact risks between vegetation and electrical equipment, thus reducing wildfire ignition risks.

Financial Performance Analysis

- Planned Spend: $60,084,000
- Actual Expenditure: $76,305,000
- Variance: +$16,221,000 (+27.0% overspend)
- SDG&E Justification: Increased contractor costs resulting from new service agreements.

Operational Impact and Risk Reduction

SDG&E completed inspections on 523,949 trees, surpassing the planned target of 485,400 trees by 108%. This thorough inspection approach significantly reduced vegetation-related ignition risks.

Assessment and Conclusion

The overspend was clearly justified by increased contractor costs. The initiative's operational targets were exceeded, positively enhancing the intended wildfire risk reduction efforts.

WMP.496, 8.2.3.8, Emergency Response Vegetation Management

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

WMP.497, 8.2.3, Fuels management

Strategic Overview and Risk Mitigation

This initiative involves managing vegetation fuels around utility poles to decrease fire intensity and prevent fire spread, thus minimizing wildfire risks.

Financial Performance Analysis

- Planned Spend: $5,833,202
- Actual Expenditure: $3,159,000
- Variance: -$2,674,202 (-45.8% underspend)

- SDG&E Justification: Reduction in expenditures due to strategic planning aligned with anticipated General Rate Case (GRC) outcomes and cost savings from tribal collaboration efforts.

Operational Impact and Risk Reduction

SDG&E cleared vegetation around 147 poles, achieving only 29% of the intended target of 500 poles. This significantly limited the intended operational impact on reducing fire intensity and potential fire spread.

Assessment and Conclusion

The initiative experienced a notable shortfall in operational targets due to intentional reductions. The financial variance was adequately explained by strategic budget management and collaboration efforts. However, the initiative fell short of fully meeting its intended risk reduction objectives.

WMP.501, 8.2.3.3, Clearance

Strategic Overview and Risk Mitigation

This initiative involves enhanced vegetation management by trimming or removing trees to reduce the risk of wildfire ignitions. The 2024 target was managing 11,200 trees.

Financial Performance Analysis

- Planned Spend: $10,235,000
- Actual Expenditure: $0
- Variance: -$10,235,000 (-100% underspend)
- SDG&E Justification: Costs were integrated into Initiative WMP.494 (Detailed Inspections).

Operational Impact and Risk Reduction

SDG&E managed 11,788 trees, surpassing the planned target by 105%, effectively reducing the risk of vegetation-related ignitions.

Assessment and Conclusion

The financial variance is appropriately explained through budget integration. The initiative successfully met its operational and risk reduction goals.

WMP.505, 8.2.5, Quality assurance / quality control vegetation management

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

WMP.508, 8.2.2.2, Off-cycle patrol

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 44.

WMP.511, 8.2.4, Vegetation Management Enterprise System

Strategic Overview and Risk Mitigation

This initiative implements an enterprise system to efficiently manage vegetation management data and operations, enhancing oversight and operational effectiveness.

Financial Performance Analysis

- Planned Spend: $352,721
- Actual Expenditure: $487,552
- Variance: +$134,831 (+38.2% overspend)
- SDG&E Justification: Additional costs incurred for system advancements and enhancements.

Operational Impact and Risk Reduction

The enhancements implemented have improved system capabilities, enabling better tracking and management of vegetation-related risks.

Assessment and Conclusion

The overspend was adequately justified by unexpected system enhancements. These improvements are likely to positively impact long-term wildfire risk management through enhanced data management capabilities.

WMP.512, 8.2.3.1, Pole clearing (brushing)

Strategic Overview and Risk Mitigation

This initiative involves clearing vegetation around utility poles to create defensible space, reducing ignition risks.

Financial Performance Analysis

- Planned Spend: $7,893,000
- Actual Expenditure: $7,097,000
- Variance: -$796,000 (-10.1% underspend)
- SDG&E Justification: Halting the clearing of exempt poles as a cost efficiency measure.

Operational Impact and Risk Reduction

SDG&E brushed vegetation around 36,500 poles, exceeding the target of 33,010 poles by 110.6%.

Assessment and Conclusion

The financial underspend was justified by refined operational scope, and exceeding the operational target positively impacted risk reduction.

4.2.3 Synthesis of Findings

4.2.3.1 Initiative Review

SDG&E's vegetation management section in 2024 demonstrates a mixed performance across the four initiatives analyzed, with three out of four initiatives meeting or exceeding targets. The Fuels Management Program was the only initiative that missed its target, completing only 29% of projected work. This appears to be due to a strategic reduction of work completed in anticipation of a pending GRC decision. However, this shortfall was offset by overachievement in the related Pole Clearing program, which exceeded its target by 11%.

Overall, the level of wildfire risk reduction achieved appears substantial. This assessment is based on the over completion in critical areas such as enhanced tree clearances and pole clearing, as well as the completion of required off-cycle patrol inspections. The strategic reallocation of resources regarding fuels management and the pole clearing program suggests a thoughtful and adaptive approach to risk management, ensuring that high-risk areas receive priority attention.

4.2.3.2 Funding Verification

Budget and Expenditure Summary: The Vegetation Management and Inspections category had a total planned budget of $85,398 with actual expenditures of $87,971, representing a 3.0% variance above budget. The category's overall expenditure remained within 10% of the planned budget allocation.

Initiatives with Significant Variances: Of the 10 total initiatives in this category, 5 (50%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Increased contractor costs from new service agreements in detailed inspections (+27.0%)
- Program reductions in fuels management (-45.8%) based on anticipated GRC outcomes and tribal collaboration arrangements
- Budget integration where clearance costs (-100%) were consolidated into detailed inspection activities
- System updates for the Vegetation Management Enterprise System (+38.2%) for data management improvements

Key Trends and Funding Compliance: Most vegetation management initiatives met or exceeded their operational targets. The detailed inspections initiative exceeded its target by 108% with a 27% budget increase due to contractor costs. Pole clearing activities surpassed targets by 110.6% while achieving a 10.1% cost reduction through revised operational scope. The funding reallocations show prioritization of certain vegetation management activities in HFTD areas while achieving cost reductions through program integration. The 3% budget overage corresponded with increased vegetation management activities completed during 2024.

4.3 SITUATIONAL AWARENESS AND FORECASTING

4.3.1 Initiative Summary Table

Table 51: Initiative Summary Table (Spend in Thousand $)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size[12]	Sample Validation Rate (%)	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[13]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
WMP.970, 4.1.2, Air Quality Index	6 Sensors	0	Delayed	N/A	N/A	SDG&E Written Response (DR047)	Initiative Not Validated (0%)	$0	$45.00 (+100.0%)	No Goal Provided

[12] N/A in the Sample Size column means that no target was provided by the EC, or the target was qualitative and did not have a sampling component.
[13] As detailed in Energy Safety's issued IE ARC Outline for WMP Compliance Year 2024 document, if the total initiative validation is greater or equal to 95%, the initiative is considered validated by the IE.

4.3.2 Written Detail for Initiatives

4.3.2.1 Initiative Review – Findings & Method

WMP.970 – 4.1.2 – Air Quality Index – Non-Focus & Non-Field Verifiable

Installation of Air Quality Index sensors supports wildfire risk mitigation by detecting particulate matter (PM2.5) to enhance situational awareness and response capabilities. SDG&E's 2023–2025 WMP established a 2024 target to install six (6) sensors capable of detecting PM2.5 but did not set a risk reduction goal.

According to SDG&E's 2024 Q4 QDR, the utility did not install any Air Quality Index sensors during 2024. SDG&E confirmed in response to Data Request DR047 that zero sensors were installed, indicating 0% completion of the 2024 target.

In response to DR047 and as reported in the 2024 ARC, SDG&E clarified that all six sensor installations were completed ahead of schedule in 2023. A Change Order requesting to adjust the 2024 target to zero installations was submitted on November 1, 2023, but this request was rejected by Energy Safety on May 13, 2024.

SDG&E did not meet its original 2024 target for this initiative. Given the absence of sensor installations within the reporting period, the IE does not validate this initiative.

Table 52: Air Quality Index Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR047 Response	Summary
6 Sensors	0 Sensors	0 Sensors	0 Sensors	Initiative Not Validated

4.3.2.2 Funding Verification – Findings

WMP.1209, Wildfire Mitigation Strategy Development

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.1430, 8.3.2.1.1, Weather Station Maintenance & Calibration

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.1431, 8.3.2.1.3, Air Quality Station Maintenance

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.442, 6.7, Risk Assessment and Mapping

Strategic Overview and Risk Mitigation

This initiative involves developing and enhancing advanced risk assessment and mapping tools to improve the accuracy and effectiveness of wildfire risk identification and mitigation strategies.

Financial Performance Analysis

- Planned Spend: $3,335,710
- Actual Expenditure: $4,573,000
- Variance: +$1,237,290 (+37.1% overspend)
- SDG&E Justification: Expanded scope of advanced analytics to meet regulatory requirements.

Operational Impact and Risk Reduction Enhanced risk modeling capabilities were successfully implemented, improving SDG&E's ability to predict and manage wildfire risks more effectively.

Assessment and Conclusion The financial variance is justified by the necessary expansion of analytical capabilities, directly supporting improved wildfire risk management strategies.

WMP.443, Weather forecasting

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.447, 8.3.2.1.1, Weather Stations and Normalized Difference Vegetation Index (NDVI) Cameras

Strategic Overview and Risk Mitigation This initiative establishes and maintains a monitoring network using weather stations and NDVI cameras to monitor vegetation and weather conditions relevant to wildfire risks.

Financial Performance Analysis

- Planned Spend: $0
- Actual Expenditure: $99,019
- Variance: +$99,019 (+100%)
- SDG&E Justification: Unclear explanations provided; expenses likely associated with necessary system maintenance.

Operational Impact and Risk Reduction

Qualitative maintenance activities assumed to sustain existing monitoring capabilities, essential for wildfire risk assessment.

Assessment and Conclusion

The justification for the expenditure is unclear given the lack of initial budgeting. If maintenance-related, this expense maintains existing risk mitigation capabilities.

WMP.450, 8.3.6, Fire Potential Index

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $5,916
- EC-Claimed Actual Spend ($ and % from budget): $5,646.00 (-4.6%)

WMP.521, Documentation and disclosure of wildfire-related data and algorithms

Strategic Overview and Risk Mitigation This initiative involves documenting and publicly disclosing wildfire-related data and algorithms to ensure transparency and validate wildfire risk modeling.

Financial Performance Analysis

- Planned Spend: $58,868
- Actual Expenditure: $0
- Variance: -$58,868 (-100% underspend)
- SDG&E Justification: Costs reallocated to Initiative WMP.519 (Centralized Repository).

Operational Impact and Risk Reduction

Activities have been reallocated; no direct quantitative targets were specified. Ongoing transparency supports comprehensive risk management.

Assessment and Conclusion

The financial variance due to reallocation is adequately justified. Continued efforts in data disclosure support the overall goals of risk mitigation.

WMP.523, Allocation methodology development and application

Strategic Overview and Risk Mitigation

This initiative develops methodologies to optimize resource allocation across the Wildfire Mitigation Plan (WMP) portfolio.

Financial Performance Analysis

- Planned Spend: $8,083,179
- Actual Expenditure: $5,779,234
- Variance: -$2,303,945 (-28.5% underspend)
- SDG&E Justification: Costs were reallocated to other initiatives within the WMP.

Operational Impact and Risk Reduction

Activities under this initiative were reallocated, with ongoing work continuing within other WMP initiatives.

Assessment and Conclusion

The financial underspend is adequately explained by the reallocation of costs. Provided activities continue under other initiatives, this initiative has negligible direct impact on risk reduction.

WMP.541, High-Performance Computing Infrastructure

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.970, 4.1.2, Air quality index

Strategic Overview and Risk Mitigation This initiative involves installing and regularly maintaining air quality sensors to enhance real-time awareness during wildfire and Public Safety Power Shutoff (PSPS) events.

Financial Performance Analysis

- Planned Spend: $0
- Actual Expenditure: $45,045
- Variance: +$45,045 (unplanned expense)
- SDG&E Justification: Expenses were for maintenance and calibration of sensors installed in the previous year (2023).

Operational Impact and Risk Reduction

No new sensors were installed in 2024 as installations were completed in 2023. Ongoing maintenance ensured continued sensor functionality and reliability.

Assessment and Conclusion

The unplanned expense for maintenance is adequately justified as it ensured the sensors remained operational, directly supporting the initiative's intended risk reduction.

4.3.3 Synthesis of Findings

4.3.3.1 Initiative Review

SDG&E's situational awareness category for 2024 reflects the evolving priorities of the WMP at the point of transition. This category is comprised of a single initiative with a quantitative target that did not meet the yearly target because SDG&E reports that it was completed in 2023. The remaining initiatives in this category have been established and do not have targets and are discussed in the financial evaluation. This demonstrates the success of previous initiatives to establish the situational awareness tools that support various lines of business at SDG&E. As situational awareness remains a key component of the WMP, SDG&E has the opportunity to identify new initiatives to enhance the existing suite of tools.

4.3.3.2 Funding Verification

Budget and Expenditure Summary: The Situational Awareness and Forecasting category had a total planned budget of $17,394 with actual expenditures of $16,142, representing a 7.2% variance below budget.

Initiatives with Significant Variances: Of the 11 total initiatives in this category, 5 (45%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Expanded scope for risk assessment and mapping capabilities (+37.1%) to meet regulatory requirements
- Unbudgeted maintenance expenses for weather stations and NDVI cameras (+100%)
- Cost reallocations where documentation and disclosure activities (-100%) were moved to the WMP Data Platform
- Allocation methodology costs (-28.5%) redistributed to other WMP initiatives

Key Trends and Funding Compliance: The category's funding shows investment in risk assessment and mapping capabilities (+37.1% overspend) and maintenance of monitoring infrastructure. The Air Quality Index sensor initiative reported zero installations in 2024, as SDG&E indicated all six sensors were installed in 2023. Maintenance activities for these sensors accounted for $45 in unplanned expenses. The overall 7.2% underspend resulted from cost reallocations across initiatives while maintaining monitoring and analytical capabilities.

4.4 EMERGENCY PREPAREDNESS

4.4.1 Initiative Summary Table

Initiatives for Emergency Preparedness are not listed in SDG&E's 2024 WMP initiatives Q4 QDR Table 1; however, a financial evaluation was completed for the reported financial planned budgets and expenditures.

4.4.2 Written Detail for Initiatives

4.4.2.1 Initiative Review – Findings & Method

Initiatives for Emergency Preparedness are not listed in SDG&E's 2024 WMP initiatives Q4 QDR Table 1; however, a financial evaluation was completed for the reported financial planned budgets and expenditures.

4.4.2.2 Funding Verification – Findings

WMP.1007, Customer support in wildfire and PSPS emergencies

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.1008, 8.4.2, Emergency Preparedness Plan

Strategic Overview and Risk Mitigation

This initiative focuses on comprehensive emergency preparedness planning and enhancing response capabilities, crucial for managing wildfire emergencies and minimizing their impacts.

Financial Performance Analysis

- Planned Spend: $18,306,000
- Actual Expenditure: $21,783,000
- Variance: +$3,477,000 (+19.0% overspend)
- SDG&E Justification: Increased costs due to higher-than-anticipated Emergency Operations Center (EOC) and Department Operations Center (DOC) activations, along with expanded field response requirements.

Operational Impact and Risk Reduction

Significant improvements, including the establishment of a new Wildfire Command and Response Center (WCRC), were achieved, enhancing overall emergency response preparedness.

Assessment and Conclusion

The overspend was adequately explained by increased operational activities necessary for robust emergency preparedness. The enhancements achieved through this initiative significantly contributed to improved wildfire response capabilities and risk management.

WMP.1009, 8.4.3.3, Mutual Aid Agreements

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.1198, Public emergency communication strategy

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.1201, 8.4.3.2, Communication Strategy with Public Safety Partners

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $0
- EC-Claimed Actual Spend ($ and % from budget): $0.00 (+0.0%)

WMP.514, 8.1.8.3.2, Crew Accompanying Ignition Prevention and Suppression Resources and Services

Strategic Overview and Risk Mitigation

This initiative involves deploying fire patrols alongside work crews during periods of elevated fire risk to immediately address ignition risks and suppress potential fires.

Financial Performance Analysis

- Planned Spend: $3,724,000
- Actual Expenditure: $4,819,000
- Variance: +$1,095,000 (+29.4% overspend)
- SDG&E Justification: Increased frequency and duration of elevated fire conditions necessitated additional patrol deployments.

Operational Impact and Risk Reduction

The increased deployment of patrol resources provided enhanced on-site risk mitigation and suppression capabilities during high-risk operational periods.

Assessment and Conclusion

The overspend is adequately explained by the responsive deployment of patrol resources during extended periods of elevated fire conditions. The initiative effectively supported its wildfire risk reduction objectives by proactively managing potential ignition sources.

WMP.563, 8.4.4, Public Emergency Communication Strategy

Although this initiative is not identified with targets in SDG&E's Q4 QDR Table 1, it was shown to be included in the financial tables from Q4 QDR Table 11. Since the initiative is not part of Q4 QDR Table 1, this initiative is not part of the IE's Focus or Not-Focus Initiative review within this report. However, since this initiative was identified in Q4 QDR Table 11 and the absolute percent difference between budgeted and actual for this item is less than 10%, the WMP Planned Spend ($) and EC-Claimed Actual Spend ($ and % from budget) are as follows:

- WMP Planned Spend ($): $18,418
- EC-Claimed Actual Spend ($ and % from budget): $18,409.00 (-0.0%)

4.4.3 Synthesis of Findings

4.4.3.1 Initiative Review

Initiatives for Emergency Preparedness are not listed in SDG&E's 2024 WMP initiatives Q4 QDR Table 1; however, a financial evaluation was completed for the reported financial planned budgets and expenditures.

4.4.3.2 Funding Verification

Budget and Expenditure Summary: The Emergency Preparedness category had a total planned budget of $40,448 with actual expenditures of $44,369, representing a 9.7% variance above budget.

Initiatives with Significant Variances: Of the 7 total initiatives in this category, 2 (29%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Increased Emergency Operations Center (EOC) and Department Operations Center (DOC) activations in the Emergency Preparedness Plan (+15.0%)

- Extended deployment of crew accompanying ignition prevention resources (+29.4%) due to increased frequency and duration of elevated fire conditions
- Additional field response requirements

Key Trends and Funding Compliance: The category's funding reflects deployment of resources based on fire conditions and operational requirements. A new Wildfire Command and Response Center (WCRC) was established during 2024. The 9.7% overspend was attributed to higher-than-anticipated emergency activations and extended fire season conditions requiring additional patrol deployments. These expenditures supported emergency response activities during high-risk periods.

4.5 COMMUNITY OUTREACH AND ENGAGEMENT

4.5.1 Initiative Summary Table

Initiatives for Community Outreach and Engagement are not listed in SDG&E's 2024 WMP initiatives Q4 QDR Table 1; however, a financial evaluation was completed for the reported financial planned budgets and expenditures.

4.5.2 Written Detail for Initiatives

4.5.2.1 Initiative Review – Findings & Method

Initiatives for Community Outreach and Engagement are not listed in SDG&E's 2024 WMP initiatives Q4 QDR Table 1; however, a financial evaluation was completed for the reported financial planned budgets and expenditures.

4.5.2.2 Funding Verification – Findings

WMP.1337 Collaboration on Local Wildfire Mitigation Planning

Strategic Overview and Risk Mitigation This initiative emphasizes collaboration with local stakeholders on wildfire mitigation planning and educational outreach efforts.

Financial Performance Analysis

- Planned Spend: $622,256
- Actual Expenditure: $450,000
- Variance: -$172,256 (-27.7% underspend)
- SDG&E Justification: Achieved cost efficiencies while successfully meeting educational outreach objectives.

Operational Impact and Risk Reduction

Educational goals were met, though survey work was delayed, partially impacting comprehensive stakeholder engagement.

Assessment and Conclusion

The financial variance is adequately justified by cost optimization. While educational objectives were achieved, delayed survey activities resulted in a negligible overall impact on planned risk reduction efforts.

4.5.3 Synthesis of Findings

4.5.3.1 Initiative Review

Initiatives for Community Outreach and Engagement are not listed in SDG&E's 2024 WMP initiatives Q4 QDR Table 1; however, a financial evaluation was completed for the reported financial planned budgets and expenditures.

4.5.3.2 Funding Verification

Budget and Expenditure Summary: The Community Outreach and Engagement category had a total planned budget of $4,509 with actual expenditures of $4,408, representing a 2.2% variance below budget.

Initiatives with Significant Variances: Of the 5 total initiatives in this category, 1 (20%) had an absolute percent difference exceeding 10%. The variance was attributed to:

- Collaboration on Local Wildfire Mitigation Planning achieving cost reductions (-27.7%) while completing educational outreach objectives
- Delayed survey work affecting some stakeholder engagement activities

Key Trends and Funding Compliance: The category maintained expenditures close to planned budget levels. The 27.7% cost reduction in the collaboration initiative was achieved while SDG&E reported meeting its educational goals. The 2.2% overall underspend resulted from operational cost reductions with SDG&E indicating that community education and engagement objectives were achieved. This funding pattern shows delivery of community outreach programs within budget parameters.

Note: There is a discrepancy in the document. Section 4.1.3.2 of the document shows Grid Design, Operations, and Maintenance with a planned budget of $39,851,587 and actual expenditures of $36,758,811, while the data table shows $612,541 and $515,031 (in thousands). The summaries above use the data table figures as requested.

5. EVALUATION OF QA/QC PROGRAMS

Quality Assurance and Quality Control (QA/QC) are essential in ensuring the thoroughness and reliability of an EC's operations. This section presents a comprehensive assessment of SDG&E QA/QC program, utilizing a structured approach based on five key dimensions:

- Roles and Responsibilities
- Quality Culture
- Quality Management System (QMS)
- Quality Inspections and Audits
- QA/QC Technology Adoption

By examining these critical areas, the IE aims to provide a holistic view of the EC's quality practices, highlighting areas of strength, identifying industry-leading best practices, and pinpointing opportunities for enhancement. Each category was evaluated on a 0-4 scale, reflecting the EC's maturity in implementing QA/QC processes: 0 – Not Implemented; 1 – Initiated; 2 – Applied; 3 – Routine; 4 – Mastered. This scale indicates the progression from no implementation to complete mastery of QA/QC practices. The evaluation framework allows a thorough analysis of how quality is integrated into the EC's structure, culture, systems, and processes.

Roles and Responsibilities

SDG&E received a score of '3 – Routine' for Roles and Responsibilities, demonstrating clearly defined and thoroughly implemented roles across various aspects of the QA/QC process. At the core of SDG&E's operation is the Portfolio and Project Management QA/QC Team which implements construction QA/QC control across SDG&E projects which includes WMP initiatives. This team provides oversight through the implementation of QAQC Construction Advisors, Supervisors, and Technical Coordinators who specialize by facility type such as distribution and transmission assets.

SDG&E clearly defines their roles and responsibilities through documented processes and are reinforced through interdepartmental Service Level Agreements (SLAs). Transmission Construction & Maintenance (TCM) is the team responsible for conducting patrols and inspections on the Electric Transmission System. The roles and responsibilities are formally outlined in SDG&E's Compliance Maintenance Program document family.

The utility has clearly defined roles for both internal personnel as well as external personnel such as contractors. The Vegetation Management (VM) Audit Area Forester has the primary responsibility for QAQC processes across VM WMP activities. Third-Party contractors are also utilized to conduct QAQC field audits for all VM activities where data is gathered and

findings are reported. The QAQC roles are formally documented in contractor service agreements, Standard Operating Procedures, the activity manual, and training manuals.

Quality Culture

SDG&E received a score of '3 – Routine' in Quality Culture, demonstrating a strong commitment to QA/QC importance across the utility. SDG&E reinforces QA/QC as a core value through various programs and departments embedded across grid design, asset inspections, and maintenance activities. The PPM QAQC Team perform quality activities for WMP initiatives and projects. Communication of QA/QC expectations is reinforced through audits and assessments conducted by supervisors and QA/QC advisors. Clearly defined feedback loops that include audit results, root cause analysis, and retraining when necessary are leveraged to outline quality expectations.

Leadership is actively involved in QA/QC implementation. Quality expectations are consistently reinforced by leadership's active participation in QA/QC planning, reviewing key performance indicators (KPIs), and ensuring that quality is embedded in the culture and execution of WMP activities. Through this commitment to quality culture, SDG&E maintains an overall goal to empower people, processes, and culture to achieve excellence through quality. This is operationalized through qualified personnel providing oversight, mentorship, and technical support through a project life cycle.

This reinforcement of quality culture is not just applied to internal staff, SDG&E focuses on the quality aspects of contractors as well. Vendor service agreements clearly outline and define the contractor's performance expectations and recurring meetings are held to review audit results and work performance, assuring quality and compliance standards are maintained. SDG&E also hosts Supplier Relationship Meetings which are attended by leadership to review contractor work status and performance.

Quality Management System (QMS)

SDG&E received a score of '3 – Routine' for Quality Management System. The utility utilizes an asset and work management database that tracks supervisor fielding. Findings from inspections and audits are maintained within TCM. QA/QC data is centralized in the WMP central repository which is used for reporting metrics. These databases take advantage of dashboard reporting to easily track and record findings to allow for risk-based decision-making.

VM utilizes CityWorks as a work management system to create QA/QC work orders. In the field, QA/QC mobile data collection is made and recorded via the EpochField database. This database includes all VM assets that are within the SDG&E service territory and allows

detailed information to be displayed in real-time. All data associated with activity audits is captured and stored in this database. The work management system also provides reporting of QA/QC data and findings. In 2024, SDG&E implemented a new work order and mapping functionality within CityWorks which electronically tracks the progression of audit activities.

Quality Inspections and Audits

SDG&E received a score of '3 – Routine' for Quality Inspections and Audits. SDG&E conducts regular internal and external inspections and audits for different asset types within their operation. Asset inspections undergo a QA/QC process where inspectors find field conditions and report to supervisors. Any required maintenance discovered during this process is performed through the TCM compliance program. Practices and policies are closely monitored by federal agencies, state codes such as GO95 and GO128 delineate CPUC expectations. Additionally, CAISO assesses the overall condition of the system via annual audits.

VM incorporates an audit activity upon the completion of pre-inspection, tree trimming, and pole brushing activities. Findings from these audit activities are tracked and recorded electronically where detailed and summary findings are reported to SDG&E and respective contractors. The goal of the findings is to identify trends and opportunities for improvement. Any audit that identifies a failure has a corrective action attached to it which is also tracked and recorded. VM QA/QC audits are almost exclusively performed by a 3rd party which adds a layer of accountability and minimizes the risk of potential conflicts of interest. These contractors perform internal audits on their workforce to ensure safety, quality, and compliance are upheld.

SDG&E also utilizes substantial completion as a key inspection milestone, where an SDG&E representative will inspect the completed activity to validate compliance and quality expectations. Depending on facility type, this SDG&E representative may be a Qualified Electric Worker (QEW), structural inspector, or other special inspector to validate quality and compliance expectations. Findings are documented in QA/QC deliverables and transmitted to responsible parties for remediation. These findings are categorized into severity levels that possess complementary timeframes for tracking and scheduling of remediations activities.

SDG&E's QA/QC Plan and complementary support documents are updated, as needed, to reflect updates and enhancements to processes, as well as codes, standards, and specifications.

QA/QC Technology Adoption

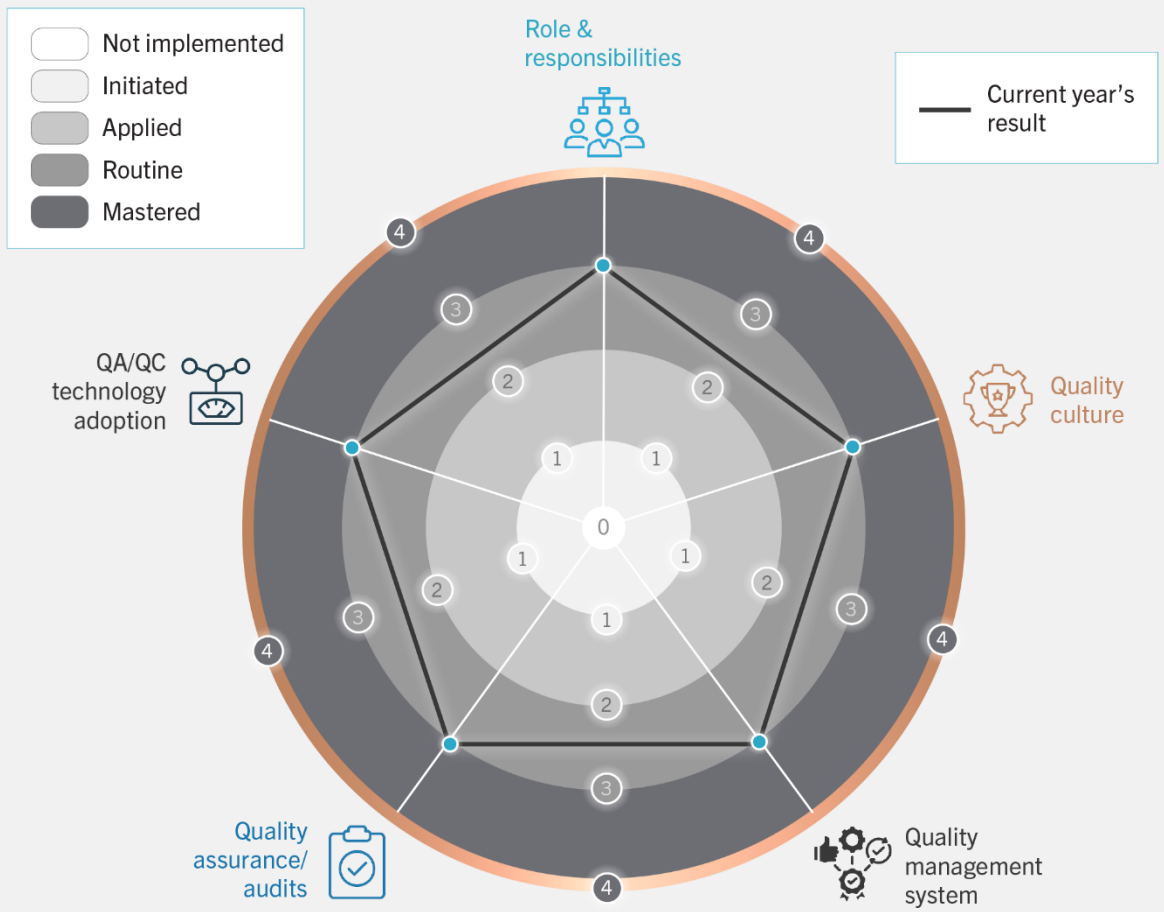
SDG&E received a score of '3 – Routine' for QA/QC Technology Adoption. SDG&E utilizes various databases to compile QAQC. A notable management system that SDG&E utilizes is

CityWorks and EpochField. CityWorks allows for the seamless creation of QA/QC work order for activities across VM. EpochField allows inspectors to view data and information related to any asset in SDG&E's service territory in real-time. The integration of these two platforms and the recent update to CityWorks to electronically track the progression of audit activities underscores SDG&E's commitment to new technologies in advancement of QA/QC processes.

SDG&E QA/QC activities and KPIs are tracked, stored, supported, and presented by several platforms such as SharperShape CORE, SAP, and other systems of record. Another highlight of SDG&E's QA/QC processes is the centralization of all QA/QC related data in the WMP repository. This allows for ease of access, data analysis, and compilation for decision-making, as well as making data accessible to various departments across SDG&E's operation.

SDG&E utilizes various technologies on their systems such as early fault detection devices, sectionalizing devices, and fault indicators. The implementation of drones started in 2020, and SDG&E continues to utilize this technology. This technology increases the ability to reveal potential risks on hard-to-reach infrastructure. SDG&E outlines drone inspections to take place on all overhead distribution assets.

Figure 18: QA/QC Maturity Sunburst Chart



6. CONCLUSION

Throughout the 2025 Independent Evaluator process, SDG&E demonstrated a strong commitment to the WMP program. They participated with professionalism and cooperation, working diligently to provide the IE with the necessary data for a successful evaluation process. SDG&E continues to build up and implement the objectives and goals outlined in the 2024 WMP.

Although SDG&E did not meet a small number of its 2024 WMP targets, this outcome should be viewed in context. 2024 is the second year in the WMP review cycle but is the first year that the general rate case (GRC) took effect. The GRC decision was issued in December of 2024 and provided authorization for funding and work to be completed. This decision resulted in much less work to be performed by the utility than SDG&E was approved to do according to their 2024 WMP. In anticipation of this decision, SDG&E, through 2024, reduced the amount of work pertaining to certain initiatives anticipating the GRC decision. Due to this, several initiatives appear out of alignment with the target goal outlined in the 2024 WMP. SDG&E filed a change order request in January, and then again in April.

These requests eventually transitioned into a "Petition to Amend" which they are still awaiting a response on. SDG&E provided comprehensive contextual information demonstrating that these unmet objectives were not simply failures but rather reflected a conscious decision to reallocate resources. This reallocation was aimed at achieving comparable levels of risk reduction through alternative means, showcasing the utility's ability to adapt its strategy in response to changing circumstances and regulatory decisions. While the original targets were not met, SDG&E's adjusted approach still aligns with the fundamental goal of reducing wildfire ignition risks, thus supporting the overarching objectives of the WMP.

Historically, grid hardening efforts and vegetation management have proven to be highly effective in mitigating wildfire risk, and SDG&E has exceeded in several areas related to these categories. The utility has demonstrated its commitment to grid maintenance through actions such as an 80% over completion in PSPS Sectionalizing through the installation of switches and a 50% over completion in transmission overhead detailed inspections which helps identify ignition risk on associated lines and equipment. In vegetation management, SDG&E accomplished a 10% over completion in pole clearing efforts by including poles originally not identified to fall under this initiative as an extra effort in reducing wildfire ignition risk.

SDG&E has demonstrated a strong commitment to the WMP and has made significant progress in achieving the objectives and goals outlined for 2024. Through their actions and evidence provided, SDG&E has shown that they are dedicated to mitigating wildfire risk

through their implementation of initiatives across several categories of the WMP. The utility's ability to exceed many of the established targets, while providing reasonable explanations for missed goals, underscores their diligence and strategic approach to wildfire risk reduction. SDG&E's continued efforts to build upon and implement the WMP objectives will be crucial in ensuring the safety and resilience of the communities they serve.

7. ATTACHMENTS

The attachments listed below can be found on a separate Microsoft Excel file titled “SDG&E 2025 IE ARC Appendix.”

7.1 CATALOG OF INITIATIVES

7.2 DATA REQUESTS

7.3 SME INTERVIEWS

7.4 LIST OF “FAIL-TO-FUND” INITIATIVES

7.5 PICTURES OF NON-CONFORMANCE (N/A)