INDEPENDENT EVALUATOR

Annual Report on Compliance for Wildfire Mitigation Plan Compliance Year 2024

JUNE 30, 2025

TABLE OF CONTENTS

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1. 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. Liberty's 2023-2025 WMP builds on the previous cycle by enhancing grid hardening, improving risk assessment and prioritization, and advancing situational awareness and weather monitoring capabilities. 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.

This Independent Evaluator (IE) Annual Report of Compliance (ARC) assesses Liberty'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 Liberty'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 Liberty Utilities (CalPeco Electric) LLC. (U 993-E) (referred to as 'Liberty' within the report) 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, Liberty Utilities 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 Energy Safety a report on audit findings, including deficiencies of underfunded WMP activities.
- Task 4: Draft and provide 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 September 3, 2024, for Liberty Utilities, LLC. 2024 WMP and the requirements of the Public Utilities Code (PU Code); Bureau Veritas North America, Inc. (BVNA), in partnership with C2 Group, have reviewed Liberty's 2024 WMP.

Introduction

As California continues to face the persistent threat of wildfires and their devastating consequence, the California Department of Forestry and Fire Protection (CAL FIRE) has emphasized the need for increasingly vigilant measures in the coming years. This heightened vigilance is necessary due to stressed forests resulting from droughts, bark beetle infestations, forest management challenges, and other factors that impact wildfire risk.

Liberty Utilities is a subsidiary of Alognquin Power & Utilities Corp., which was founded in 1988 and expanded into the utility business in 2001. In 2009 & 2010, Alognquin rebranded their previous utility endeavors into Liberty Utilities and acquired their first electric distribution utility located in Lake Tahoe, California.

Liberty Utilities' service area encompasses a diverse terrain, ranging from flat land in South Lake Tahoe to slopes, ridges, and canyons in the western and northern regions, combined with heavy vegetation. The entire territory is situated at an elevation of around 5,000 feet above sea level, consisting of mostly rural communities with some mixed urban centers. These factors, along with seasonal weather patterns, present unique challenges in maintaining efficient and reliable service. Due to the heavy forestation and vegetation, 93% of Liberty's territory and electrical infrastructure falls within the High Fire Threat District (HFTD) Tier 2 and Tier 3 areas.

Liberty's electrical infrastructure covers 1,482 square miles, serving 47,954 customers across seven counties. The majority of this area, 1,471 square miles, is adjacent to and surrounding Lake Tahoe, north and south of the California-Nevada border. The

infrastructure includes 24,741 poles and 2,091.55 total circuit miles of distribution and transmission lines, including overhead, underground, and secondary lines.

Over the 2023-2025 WMP cycle, Liberty's primary objective is to continue reducing the risk of wildfires through the development and implementation of new programs. This includes ongoing initiatives such as Public Safety Power Shutoff (PSPS) events, weather forecasting and risk assessment, grid hardening, vegetation management, and emergency management. The IE report intends to demonstrate Liberty's commitment to wildfire safety and compliance with the initiatives outlined in the 2024 WMP.

Independent Evaluator Review of Compliance

BVNA, in partnership with C2 group, has been selected as the IE for Liberty's 2023-2025 WMP. The IE ARC will focus on evaluating Liberty's progress in implementing the WMP during 2024, assessing the completion of proposed initiatives, analyzing the distribution of allocated funds, and verifying the effectiveness of QAQC programs. This independent evaluation aims to ensure Liberty's compliance with its wildfire mitigation commitments and targets.

The evaluation process began with an Energy Safety kick-off meeting, which served as an introduction between Liberty 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 Liberty's 2024 WMP and related publicly available documents, as listed in Section 7. This review aimed to identify Liberty'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.

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 to 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 the 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 WMP.459 Expulsion Fuse Replacement 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. The utilization of programs such as online feeds and websites like the NFRDS helps 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, are 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 considers 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

As Liberty completes its second year in the current cycle, and fifth year overall, in executing the WMP, it's evident that the EC has embraced the challenges of complying with statewide wildfire mitigation regulations set forth by Energy Safety and participation in the IE process. Liberty has met or exceeded several target goals for initiatives, demonstrating the effectiveness of its mitigation strategies.

While Liberty missed several 2024 WMP targets, this was largely due to strategic changes and the ultimate rejection of change order requests from the authority having jurisdiction. The utility provided context and explanation outlining that these unmet goals weren't simply failures, but rather a deliberate reallocation of resources to achieve comparable risk reduction through alternative means. This resource reallocation demonstrates flexible, risk-focused planning.

WMP-GDOM-AI-01 – 8.1.3.1 Detailed Inspections of Distribution Lines & Equipment, WMP-GDOM-AI-02 – 8.1.3.2 Intrusive Pole Inspections, WMP-GDOM-AI-03 – 8.1.3.3 Patrol Inspections of Distribution Electric Lines & Equipment
Liberty had both successes and misses with grid asset inspections for 2024. On both detailed distribution asset inspections and intrusive pole inspections, Liberty exceeded their target goal which ensured that any potential areas of failure or potential vegetation contact

were identified and mitigated. However, Liberty missed their goal for distribution patrol inspections citing various reasons, as identified in the detailed review.

WMP-GDOM-GH-07 – 8.1.2.7 Microgrids, WMP-GDOM-GH-09 – 8.1.2.9 Line Removal
Liberty missed their target for both the Microgrid and Line Removal projects. Liberty indicated that this was a conscious decision and was due to a revised strategic focus on accelerating its covered conductor deployment timeline, which was deemed to offer greater near-term wildfire risk reduction.

WMP-VM-VFM-02 – 8.2.3.2 Wood and Slash Management
Liberty excelled in their management and disposal of wood and slash refuse from other vegetation work and initiatives. This proper management of fuel load reduces both the risk of fire ignition and the potential for increased fire intensity demonstrating Liberty's commitment to mitigating wildfire risk.

Field Verified Initiative Key Findings:

WMP-GDOM-GH-03 – Distribution Pole Replacements and Reinforcements
Exceeded pole replacement targets by completing 823 replacements against a planned 400, substantially reducing structural wildfire risk.

WMP-GDOM-GH-07 – Microgrids
Did not achieve the microgrid installation target due to strategic realignment towards faster and more immediately impactful mitigation, specifically increased covered conductor deployments.

WMP-VM-VFM-02 – Wood and Slash Management
Excelled in fuel load management, effectively reducing wildfire ignition and propagation risks through substantial biomass removal.

Funding Verification Key Findings:

WMP-GDOM-GH-01 – Covered Conductor Installation
Strategic realignment toward covered conductor installation led to significant near-term risk reduction, despite missing original undergrounding and microgrid targets.

WMP-GDOM-GH-02 – Undergrounding Electric Lines and Equipment
Substantial underspend (99%), primarily due to permitting and contractual challenges, indicating a need for enhanced preliminary project evaluations to avoid similar delays.

WMP-GDOM-GH-07 – Microgrids

Strategic shift from planned microgrid installation to accelerated covered conductor installations demonstrated flexible risk management prioritizing immediate wildfire risk reduction outcomes.

The Liberty 2024 WMP incorporates lessons learned from the previous year's WMP, as well as the previous three-year cycle. It outlines a vision for the 2023-2025 period, focusing on enhancing risk strategies, integrating technology, and improving stakeholder engagement. The EC has consistently improved and developed programs to reduce fire risk within their territory and minimize the impact of PSPS events on customers. In this section, the IE presents key findings from their review of Liberty's 2024 WMP initiatives.

Initiatives Completed Within 5% of the WMP Targets: 40 Total Number of Initiatives (85%) Note that the total percentage of 85% excludes any noted initiatives herein identified as Not Applicable (N/A).

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-GDOM-AI-03, 8.1.3.3, Patrol Inspections of Distribution Electric Lines & Equipment	Missed Target
WMP-GDOM-GH-01, 8.1.2.1, Covered conductor installation	Missed Target
WMP-GDOM-GH-02, 8.1.2.2, Undergrounding of electric lines and/or equipment	Missed Target
WMP-GDOM-GH-07, 8.1.2.7, Microgrids	Missed Target
WMP-GDOM-GH-09, 8.1.2.9, Line Removal	Missed Target
WMP-GDOM-GH-12c, 8.1.2.12, Animal guards	Missed Target

Table 2: Initiatives with Absolute % Differences > 10%
35 Total Number of Initiatives (57%)

Initiative Number, WMP Section Number, and Name	Total Budget ($)	Total Expenditure ($)	Total Variance Between Budget and Expenditure (%)
WMP-CO-01, 8.5.2, Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management	$90,000	$112,303	25%
WMP-EP-04, 8.4.5, Preparedness and planning for service restoration	$1,437,734	$426,082	70%
WMP-EP-05, 8.4.6, Customer support in wildfire and PSPS emergencies	$105,000	$122,974	17%
WMP-GDOM-AI-01, 8.1.3.1, Detailed inspections of distribution electric lines and equipment	$125,000	$536,670	329%
WMP-GDOM-AI-02, 8.1.3.2, Intrusive pole inspections	$0	$147,642	100%
WMP-GDOM-AI-03, 8.1.3.1, Patrol inspections of distribution electric lines and equipment	$15,000	$29,629	98%
WMP-GDOM-AI-04, 8.1.3.4, Other discretionary inspections of distribution electric lines and equipment	$1,000,000	$363,867	64%
WMP-GDOM-AI-05, 8.1.3.5, Quality assurance / quality control of inspections	$10,000	$212,986	2030%
WMP-GDOM-AI-06, 8.1.3.6, Substation inspections	$10,000	$0	100%
WMP-GDOM-GH-02, 8.1.2.2, Undergrounding of electric lines and/or equipment	$8,482,680	$46,067	99%
WMP-GDOM-GH-03, 8.1.2.3, Distribution pole replacements and reinforcements	$7,413,000	$20,147,051	172%
WMP-GDOM-GH-05, 8.1.2.5, Traditional overhead hardening	$3,500,000	$1,863,709	47%
WMP-GDOM-GH-06, 8.1.2.6, Emerging grid hardening technology installations and pilot progress	$3,050,000	$0	100%
WMP-GDOM-GH-07, 8.1.2.7, Microgrids	$1,500,000	$0	100%
WMP-GDOM-GH-09, 8.1.2.9, Line removal (in HFTD)	$500,000	$0	100%
WMP-GDOM-GH-12a, 8.1.2.12, Tree attachment removals	$720,392	$928,831	29%
WMP-GDOM-GH-12b, 8.1.2.12, Expulsion fuse replacement	$0	$699,266	100%

Initiative Number, WMP Section Number, and Name	Total Budget ($)	Total Expenditure ($)	Total Variance Between Budget and Expenditure (%)
WMP-GDOM-GH-12c, 8.1.2.12, Animal guards	$100,000	$0	100%
WMP-GDOM-GH-12e, 8.1.2.12, Open wire/grey wire	$2,000,000	$1,754,773	12%
WMP-GDOM-GH-12f, 8.1.2.12, Substation Equipment Replacement	$0	$415,204	100%
WMP-GDOM-GO-01, 8.1.8.1, Equipment settings to reduce wildfire risk	$800,000	$0	100%
WMP-GDOM-GO-03, 8.1.8.3, Personnel work procedures and training in conditions of elevated fire risk	$298,088	$0	100%
WMP-GDOM-MR-01, 8.1.4, Equipment maintenance and repair	$500,000	$0	100%
WMP-SA-02, 8.3.3, Grid monitoring systems	$150,000	$421,610	181%
WMP-SA-04, 8.3.5, Weather forecasting	$0	$331,989	100%
WMP-SA-06, 6.2.2.1, Ignition likelihood calculation	$683,807	$1,224,799	79%
WMP-VM-ESG-01, 8.2.4, Vegetation Management Enterprise System	$418,185	$577,570	38%
WMP-VM-INSP-02, 8.2.2.2, Vegetation Management Inspection Program - Patrol	$257,500	$595,415	131%
WMP-VM-INSP-03, 8.2.2.3, Vegetation Management Inspection Program - LiDAR	$721,000	$563,342	22%
WMP-VM-VFM-01, 8.2.3.1, Pole Clearing	$494,400	$565,771	14%
WMP-VM-VFM-02, 8.2.3.2, Wood and Slash Management	$1,545,000	$1,267,478	18%
WMP-VM-VFM-03, 8.2.3.5, Substation Defensible Space	$20,600	$62,321	203%
WMP-VM-VFM-04, 8.2.3.7, Fire-Resilient Right-of-Ways	$262,650	$821,205	213%
WMP-VM-VFM-06, 8.2.3.4, Fall-In Mitigation	$7,982,500	$3,254,922	59%
WMP-VM-VFM-08, 8.2.3.8, Emergency Response Vegetation Management	$0	$6,445	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-GDOM-GH-01, 8.1.2.1, Covered conductor installation	Yes
2	WMP-GDOM-GH-02, 8.1.2.2, Undergrounding of electric lines and/or equipment	Yes
3	WMP-VM-VFM-06, 8.2.3.4, Fall-In Mitigation	Yes
4	WMP-GDOM-GH-03, 8.1.2.3, Distribution pole replacements and reinforcements	No
5	WMP-GDOM-GH-05, 8.1.2.5, Traditional overhead hardening	Yes
6	WMP-GDOM-GH-06, 8.1.2.6, Emerging grid hardening technology installations and pilot progress	Yes
7	WMP-GDOM-GH-12e, 8.1.2.12, Open wire/grey wire	Yes
8	WMP-VM-VFM-02, 8.2.3.2, Wood and Slash Management	Yes
9	WMP-GDOM-GH-07, 8.1.2.7, Microgrids	Yes
10	WMP-EP-04, 8.4.5, Preparedness and planning for service restoration	Yes

Recommendations

Based on the IE review findings, Liberty has demonstrated compliance with many of its WMP initiatives for the 2024 review period. However, there are some areas where improvements could be made to enhance the utility's wildfire mitigation efforts.

2. 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 in-depth analysis. These "Focus Initiatives" 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. Eleven initiatives were selected by BVNA for focused analysis and are listed in Table 4 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-GDOM-AI-01, 8.1.3.1, Detailed inspections of distribution electric lines and equipment
2	WMP-GDOM-AI-03, 8.1.3.1, Patrol inspections of distribution electric lines and equipment
3	WMP-GDOM-GH-01, 8.1.2.1, Covered conductor installation
4	WMP-GDOM-GH-03, 8.1.2.3, Distribution pole replacements and reinforcements
5	WMP-GDOM-GH-05, 8.1.2.5, Traditional overhead hardening
6	WMP-GDOM-GH-08, 8.1.2.8, Installation of system automation equipment
7	WMP-GDOM-GH-12b, 8.1.2.12, Expulsion fuse replacement
8	WMP-SA-02, 8.3.3, Grid monitoring systems
9	WMP-VM-INSP-01, 8.2.2.1, Vegetation Management Inspection Program - Detailed
10	WMP-VM-VFM-05, 8.2.3.3, Clearance
11	WMP-VM-VFM-06, 8.2.3.4, Fall-In Mitigation

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-GDOM-GH-01, 8.1.2.1, Covered conductor installation	N/A	N/A
WMP-GDOM-GH-02, 8.1.2.2, Undergrounding of electric lines and/or equipment	No Undergrounding Work was Completed by Liberty in 2024	N/A
WMP-GDOM-GH-03, 8.1.2.3, Distribution pole replacements and reinforcements	N/A	N/A
WMP-GDOM-GH-04, 8.1.2.4, Transmission pole/tower replacements and reinforcements	N/A	N/A
WMP-GDOM-GH-05, 8.1.2.5, Traditional overhead hardening	N/A	N/A
WMP-GDOM-GH-08, 8.1.2.8, Installation of system automation equipment	N/A	N/A
WMP-GDOM-GH-12b, 8.1.2.12, Expulsion fuse replacement	N/A	N/A
WMP-VM-VFM-06, 8.2.3.4, Fall-In Mitigation	N/A	N/A

Sample Location Methodology

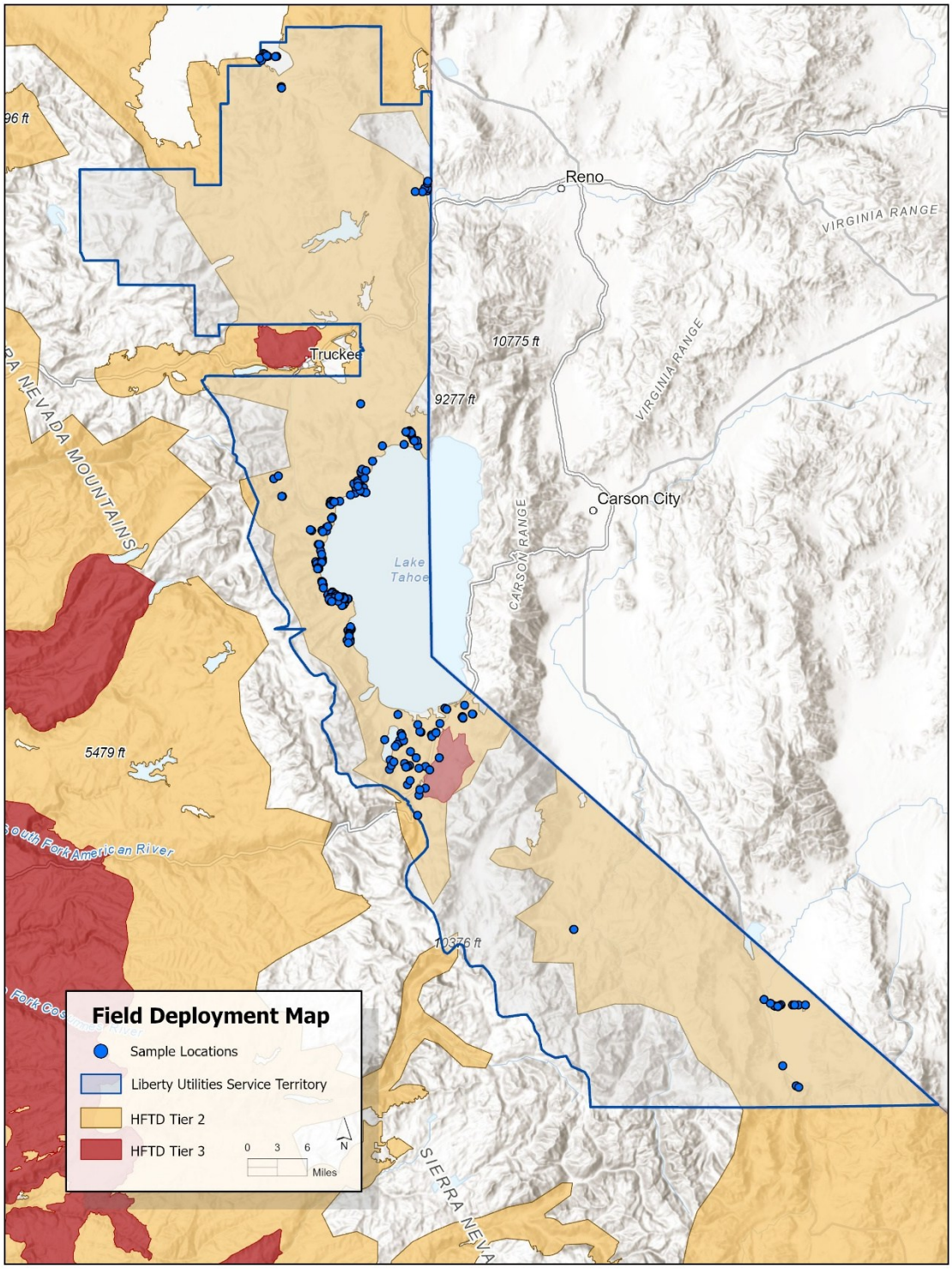
BVNA utilized random sampling for Liberty based upon a simplified version of Cochran's Sample Size Formula. The utilization of this formula helps determine the appropriate sample size required to achieve a desired level of precision and confidence in the results, ensuring that the sample is representative of the larger population. By specifying a confidence level for the EC's individual initiatives based upon historical trends and data, mainly the 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% to 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 specific 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	5	2	2	21
Vegetation Management and Inspections	1	2	0	10
Situation Awareness and Forecasting	0	1	0	6
Emergency Preparedness	0	0	0	6
Community Outreach and Engagement	0	0	0	5

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 Liberty's approved 2024 WMP filing. These planned budget figures were cross verified against Liberty's officially reported data, specifically examining the Q4 2024 QDR Table 11.

Actual Expenditure Verification: Actual financial expenditures reported by Liberty in their March 2025 ARC, specifically Table 6, "Planned and Actual WMP Expenditures in 2024," were compared against established WMP budget baselines.

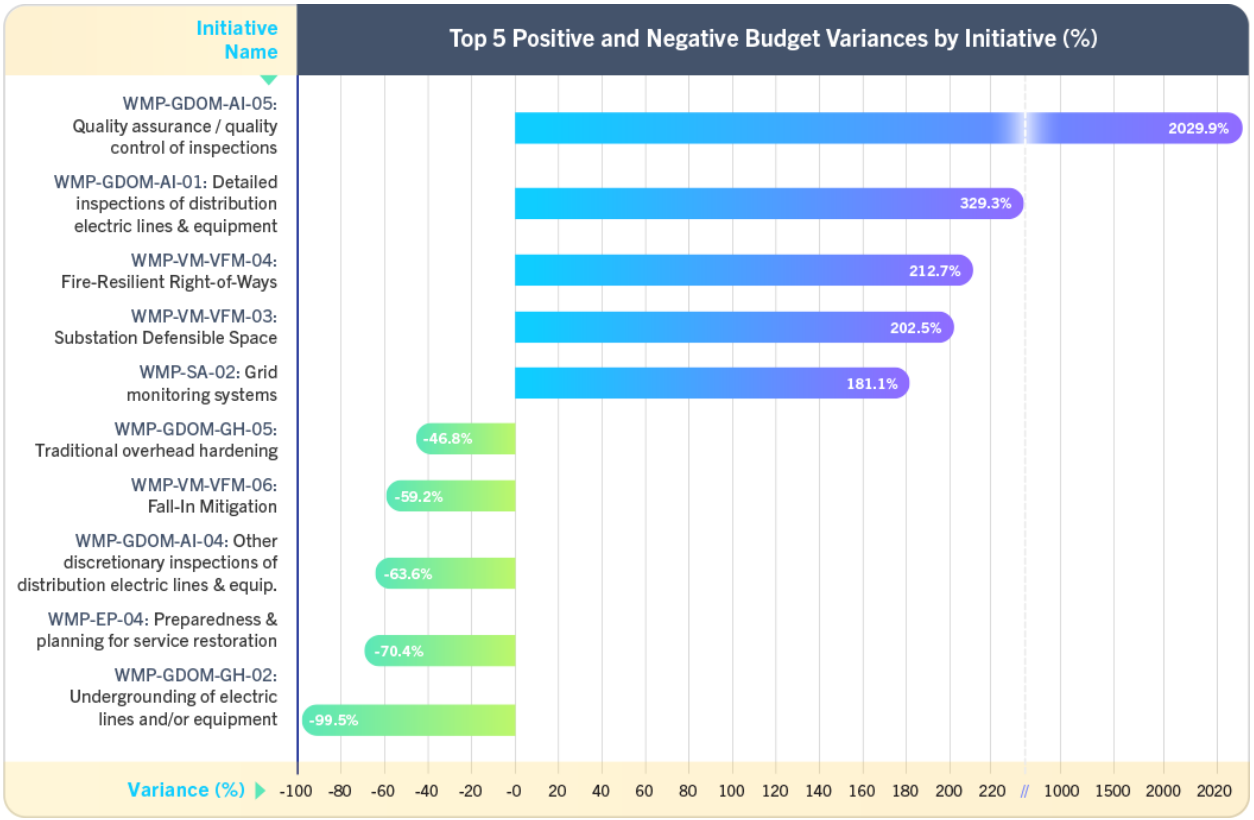
Variance Analysis: The IE calculated the absolute percent differences for each initiative by applying the formula as required by Energy Safety guidelines. These calculations were conducted for every initiative, generating detailed variance data for further review and analysis.

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 Liberty. If Liberty'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 7: Initiative Summary Table

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[1]	EC-Claimed Progress[2]	EC-Claimed Initiative Status[3]	Sample Size[4]	Sample Validation Rate (%)[5]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[6, 7]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[8]
WMP-GDOM-AI-01, 8.1.3.1, Detailed Inspections of Distribution Lines & Equipment	264.2 Circuit Miles	363.5 Circuit Miles	Exceeded Target	61 Circuit Miles	100%	List of Distribution Inspections (DR018) Inspection Reports (DR018.b)	Initiative Validated (137%)	$125,000	$536,670 (+329.3%)	No Goal Provided
WMP-GDOM-AI-02, 8.1.3.2, Intrusive Pole Inspections	2,302 Poles	2,641 Poles	Exceeded Target	18 Poles	100%	List of Intrusive Pole Inspections (DR019/.b)	Initiative Validated (144%)	$0	$147,642 (+100.0%)	No Goal Provided
WMP-GDOM-AI-03, 8.1.3.3, Patrol Inspections of Distribution Lines & Equipment	589 Circuit Miles	476.9 Circuit Miles	Missed Target	65 Circuit Miles	100%	List of Patrol Inspections (DR020) Inspection Reports (DR020.b)	Initiative Not Validated (81%)	$15,000	$29,629 (+97.5%)	No Goal Provided
WMP-GDOM-AI-04, 8.1.3.4, Other discretionary inspections of distribution electric lines and equipment	No Target	1 Mile	Target Met	1.33 Miles	100%	Records of drone inspections completion (DR039)	Initiative Validated (100%)	$1,000,000	$363,867 (-63.6%)	No Goal Provided
WMP-GDOM-AI-05, 8.1.3.5, Quality assurance / quality control of inspections	12% of Detailed Inspections	12% of Detailed Inspections	Target Met	17 Circuit Miles	100%	Records of QA completion (DR040) Records of asset inspections completion (DR018)	Initiative Validated (105%)	$10,000	$212,986 (+2029.9%)	No Goal Provided
WMP-GDOM-AI-06, 8.1.3.6, Substation Inspections	42 Substation Inspections	71 Substation Inspections	Exceeded Target	15 Substations	100%	List of Substation Inspections (DR021.b)	Initiative Validated (121%)	$10,000	$0 (-100.0%)	No Goal Provided
WMP-GDOM-GH-01, 8.1.2.1, Covered conductor installation	5.61 Circuit Miles	3.9 Circuit Miles	Target Not Met	4.06 Circuit Miles	100%	Project Shapefiles (DR041) Project As-Builts (DR041)	Initiative Not Validated (72.37%)	$8,627,427	$8,312,596 (-3.6%)	No Goal Provided
WMP-GDOM-GH-02, 8.1.2.2, Undergrounding of electric lines and/or equipment	1.25 Circuit Miles	0 Circuit Miles	Target Not Met	0 Circuit Miles	N/A	N/A	Initiative Not Validated (0%)	$8,482,680	$46,067 (-99.5%)	No Goal Provided

[1] N/A in the Initiative Target column means that the EC did not provide a target in the WMP.
[2] N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC.
[3] N/A in the Claimed Status column means that the EC did not provide a claimed status on QDR4 or the EC ARC.
[4] 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.
[5] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[6] 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.
[7] N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.
[8] Liberty's WMP provides no Risk Reduction Goal for any initiative and the EC states that they "do not currently have sufficient information to calculate" a Risk Reduction Goal.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[1]	EC-Claimed Progress[2]	EC-Claimed Initiative Status[3]	Sample Size[4]	Sample Validation Rate (%)[5]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[6,7]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[8]
WMP-GDOM-GH-03, 8.1.2.3, Distribution pole replacements and reinforcements	400 Poles	823 Poles	Target Met	82 Poles	100%	Records of pole replacements (DR043)	Initiative Validated (205.75%)	$7,413,000	$20,147,051 (+171.8%)	No Goal Provided
WMP-GDOM-GH-04, 8.1.2.4, Transmission pole/tower replacements and reinforcements	No Target	No Target	Target Met	1 Pole	100%	Records of pole replacements (DR043)	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided
WMP-GDOM-GH-05, 8.1.2.5, Traditional overhead hardening	3.5 Circuit Miles	3.5 Circuit Miles	Target Met	3.63 Circuit Miles	100%	Project Shapefiles (DR045) Project As-Builts (DR045)	Initiative Validated (104%)	$3,500,000	$1,863,709 (-46.8%)	No Goal Provided
WMP-GDOM-GH-06, 8.1.2.6, Emerging Grid Hardening Technology Installations & Pilot Process	N/A	N/A	N/A	N/A	N/A	Liberty Written Response UNR Fire Mitigation Study (DR022)	Initiative Validated (100%)	$3,050,000	$0 (-100.0%)	No Goal Provided
WMP-GDOM-GH-07, 8.1.2.7, Microgrids	1 Microgrid	0 Microgrids	Missed Target	0 Microgrids	N/A	Liberty Written Response (DR023) 2024 WMP Update Change Order Report (DR023.b)	Initiative Not Validated (0%)	$1,500,000	$0 (-100.0%)	No Goal Provided
WMP-GDOM-GH-08, 8.1.2.8, Installation of system automation equipment	8 Automatic Recloser	2 Automatic Reclosers	Target Not Met	2 Automatic Reclosers	100%	Records of automatic recloser installation (DR024)	Initiative Not Validated (25%)	$1,200,000	$1,300,520 (+8.4%)	No Goal Provided
WMP-GDOM-GH-09, 8.1.2.9, Line Removal	1.1 Circuit Miles Removed	0 Circuit Miles Removed	Missed Target	0 Circuit Miles Removed	N/A	Liberty Written Response (DR025) 2024 WMP Update Change Order Report (DR025.b)	Initiative Not Validated (0%)	$500,000	$0 (-100.0%)	No Goal Provided
WMP-GDOM-GH-10, 8.1.2.10, Other grid topology improvements to minimize risk of ignitions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-GDOM-GH-11, 8.1.2.11, Other Grid Topology Improvements to Mitigate or Reduce PSPS Events	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-GDOM-GH-12, 8.1.2.12, Other technologies and systems not listed above:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-GDOM-GH-12a, 8.1.2.12, Tree attachment removals	60 Tree Attachments	98 Tree Attachments	Target Met	20 Tree Attachments	100%	Records of tree attachment removal completion (DR048)	Initiative Validated (163%)	$720,392	$928,831 (+28.9%)	No Goal Provided
WMP-GDOM-GH-12b, 8.1.2.12, Expulsion fuse replacement	500 Fuses	750 Fuses	Target Met	87 Fuses	100%	Records of expulsion fuse replacement completion (DR049)	Initiative Validated (136.2%)[9]	$0	$699,266 (+100.0%)	No Goal Provided

[9] Validation percentage calculated from IE verified fuse replacement count of 681 provided in response to Data Request LU_DR049.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[1]	EC-Claimed Progress[2]	EC-Claimed Initiative Status[3]	Sample Size[4]	Sample Validation Rate (%)[5]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[6,7]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[8]
WMP-GDOM-GH-12c, 8.1.2.12, Animal guards	2 Animal Guards	0 Animal Guards	Target Not Met	0 Animal Guards	N/A	Confirmation of no installation (DR050)	Initiative Not Validated (0%)	$100,000	$0 (-100.0%)	No Goal Provided
WMP-GDOM-GH-12d, 8.1.2.12, CALFIRE Exempt Hardware	None Planned	N/A	N/A	N/A	N/A	Liberty Written Response (DR027)	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-GDOM-GH-12e, 8.1.2.12, Open Wire/Grey Wire	5.10 Circuit Miles Replaced	7.4 Circuit Miles Replaced	Exceeded Target	7 Circuit Miles Replaced	100%	List of Grey Wire Replacements Inspection Reports (DR028)	Initiative Validate (145%)	$2,000,000	$1,754,773 (-12.3%)	No Goal Provided
WMP-GDOM-GH-12f, 8.1.2.12, Substation Equipment Replacement	None Planned	1 Equipment Replacement	Met Target	1 Equipment Replacement	100%	Outage Correspondence to Cutover from Old to New Substation Equipment Old/New Substation Photos (DR029)	Initiative Validated (100%)	$0	$415,204 (+100.0%)	No Goal Provided
WMP-GDOM-GO-01, 8.1.8.1, Equipment settings to reduce wildfire risk	15 Circuits	15 Circuits	Target Met	15 Circuits	100%	Records of SRP enabled circuits (DR051)	Initiative Validated (100%)	$800,000	$0 (-100.0%)	No Goal Provided
WMP-GDOM-GO-02, 8.1.8.2, Grid response procedures and notifications	No Target	Procedures in place	Target Met	Overview of operational procedures	100%	Documentation of operational procedures (DR052)	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided
WMP-GDOM-GO-03, 8.1.8.3, Personnel Work Procedures & Training in Conditions of Elevated Fire Risk	N/A	N/A	N/A	N/A	N/A	Annual FPP Sign-In Sheet Annual FPP Training Smoke & Field Training Sign-In Sheet Liberty Fire Refresher 24 VM Training Fire Prevention Plan Refresher (DR030)	Initiative Validated (100%)	$298,088	$0 (-100.0%)	No Goal Provided
WMP-GDOM-GO-04, 8.1.8.1, Automatic recloser operations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-GDOM-GO-05, 8.1.5, Asset Management and Inspection Enterprise System	No Target	Enterprise system in place	Target Met	Overview of enterprise system	100%	SME Interview (DR054)	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided
WMP-GDOM-MR-01, 8.1.4, Equipment maintenance and repair	No Target	N/A	Target Met	N/A	N/A	Records of maintenance and repairs documentation (DR055)	Initiative Validated (100%)	$500,000	$0 (-100.0%)	No Goal Provided

4.1.2 Written Detail for Initiatives

4.1.2.1 Initiative Review – Findings & Method

WMP-GDOM-AI-01 – 8.1.3.1 - Detailed Inspections of Distribution Lines & Equipment – Focus & Non-Field Verifiable

WMP-GDOM-AI-01 outlines Liberty's detailed inspections of distribution lines and equipment performed in accordance with GO165 guidelines. Liberty did not provide a risk reduction goal for this initiative. This program mitigates the risk of equipment failure by identifying aging and deteriorating equipment. Equipment failure can lead to electrical system faults and has the potential to cause ignition events, this program plays a vital role in reducing that risk. Qualified electrical workers (QEWs) identify issues in the field that need repair, and subsequent work orders are generated to address the issues. These inspections run on a five (5)-year cycle where 20% of the system is inspected annually.

In 2024, Liberty exceeded its target goal of inspecting 264.2 circuit miles, according to QDR4 Table 1, Liberty claims that they inspected 363.5 circuit miles. In LU_DR018, the IE requested that Liberty provide a list of all the inspections conducted in 2024. In response, Liberty provided an itemized list containing 29 unique feeder ID numbers that totaled 372.73 circuit miles inspected. 9,107 overhead assets total and 1,315 underground assets total were inspected during all months of 2024.

In LU_DR018.b, the IE requested that Liberty provide the inspection reports themselves for a random sampling of 46 circuit miles in the HFTD Tier 3 zone, and 15 circuit miles in the HFTD Tier 2 zone. The number of underground and overhead assets for the 61 circuit miles requested totaled 2,094 individual assets, which would equate to 2,094 individual inspection reports. Liberty stated that this was not a reasonable request as the process to provide these reports was manual and not realistic in the given timeframe. The IE opted to have Liberty provide a sample inspection report for each of the unique feeder IDs originally requested, totaling fourteen (14) reports, and for Liberty to also provide an Excel list of all 2,094 assets for these feeder IDs that included the status of the asset.

Liberty was able to provide the requested documentation, and the data payload contained eleven (11) inspection reports for poles and three (3) inspection reports for pad mount transformers. The inspection report contained general asset information, including what the asset is and where it is located. Pictures of the asset and any issues were contained within each report. Reports were either marked "pass" or "fail," and information pertaining to the failure was reported. Any report that was marked with a fail included a due date for the repair based upon priority. Six (6) of the provided inspection reports were marked as fail and all but one (1) had a repair due date in 2029, the one outlier being due in 2025. The other eight (8) inspection reports all contained a pass.

Liberty also provided an itemized Excel list of all 2,094 asset inspections that occurred on the 61 circuit miles requested. This spreadsheet contained where the asset is located, the unique ID, the date the asset was inspected, the inspector, inspection type, line type, and the status of the inspection and any condition codes for a failed inspection. 1,453 inspections were marked as pass, 424 inspections were marked as fail, and 217 inspections were marked as repaired and included the repair date. Every inspection that was marked as fail contained a condition code, and further information could be found within the individual reports.

Although the documentation provided indicates a 20.24% failure rate and 69.38% pass rate (10.36% repair rate), this initiative is simply the detailed inspection of the distribution assets, not the actual repairs. Review of initiatives such as WMP-GDOM-MR-01, WMP-GDOM-GH-03/04, WMP-GDOM-GH-12b, and WMP-GDOM-AI-05 is necessary to ensure that the proper steps are being taken to mitigate the failure risk. Therefore, Liberty has adequately provided documentation that demonstrates they have met the 264.2 circuit miles inspected goal. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 8: Detailed Inspections of Distribution Lines & Equipment

2024 Target	2024 ARC	2024 Q4 QDR	DR018/.b Response	Summary
264.2 Circuit Miles Inspected	363.5 Circuit Miles Inspected	363.5 Circuit Miles Inspected	372.73 Circuit Miles Inspected	Initiative Validated

WMP-GDOM-AI-02 – 8.1.3.2 - Intrusive Pole Inspections – Non-Focus & Non-Field Verifiable

WMP-GDOM-AI-02 outlines Liberty's intrusive pole inspections, as mandated by GO165. Liberty did not provide a risk reduction goal for this initiative. This program aims to identify deteriorating poles and ensure that they are tested and treated before they fail, significantly reducing safety risks to the system itself and the public. It also helps extend the lifespan of existing poles and identify those that need to be replaced.

In response to LU_DR019, Liberty provided data on 2,641 pole inspections conducted during 2024. The IE requested individual inspection reports for fourteen (14) poles in HFTD Tier 3 and four (4) poles in HFTD Tier 2. Liberty stated, in response to LU_DR019.b, that the inspection results were provided by excel spreadsheet in the initial data request.

All fourteen (14) of the HFTD Tier 3 poles were inspected during July and August, and none were rejected. Six (6) passed but not at 100% strength, with the lowest being at 90%. One

(1) pole had animal damage but passed with a 96% strength rating, and the remaining two poles passed with a 95% and 96% strength rating. Two (2) poles were marked as needing a climbing inspection.

All four (4) of the HFTD Tier 2 poles were inspected during July, August, and September, and none were rejected. One (1) pole had a ½" slice above 8" and a strength test was conducted, resulting in a 97% strength rating. Another pole was noted to have some wood checking, and one pole was noted as being steel. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 9: Intrusive Pole Inspections

2024 Target	2024 ARC	2024 Q4 QDR	DR019/.b Response	Summary
2,302 Poles Inspected	2,641 Poles Inspected	2,641 Poles Inspected	2,641 Poles Inspected	Initiative Validated

WMP-GDOM-AI-03 – 8.1.3.3 - Patrol Inspections of Distribution Electric Lines & Equipment – Focus & Non-Field Verifiable

WMP-GDOM-AI-03 outlines Liberty's patrol inspection of distribution lines and equipment. Liberty did not provide a risk reduction goal for this initiative. These inspections are performed throughout Liberty's service territory in accordance with GO165 and occur on an annual basis. All circuits are inspected by this initiative, excluding any circuit that is undergoing a detailed inspection in the same year as outlined in initiative WMP-GDOM-AI-01. Issues with overhead structures or obvious hazards that impact the safety and reliability of the system are identified during these inspections.

In 2024, Liberty failed to meet its target goal of inspecting 589 circuit miles, according to QDR4 Table 1, Liberty claims to have inspected 476.9 circuit miles, which falls 112.1 miles short of the intended goal. In response to LU_DR020, Liberty provided documentation that verified the completion of the 476.9 miles claimed and listed the completed miles for each circuit and which HFTD the circuit resides in.

In LU_DR020.b, the IE requested inspection reports for seven (7) of the circuits inspected with 56 miles residing in a HFTD Tier 3 zone, and 16 miles residing in a HFTD Tier 2 zone. Liberty responded by providing eight (8) inspection reports, all for pole assets. The inspection report contained general asset information, including what the asset is and where it is located. Pictures of the assets and any issues were contained within each report. From the reports provided, the "event status" was either "replace" or "fail" and information

pertaining to the status was reported. The report also included a due date based on priority for the work to be completed. Seven (7) of the reports provided were marked as "replace," and one (1) was marked as "fail". Six of the reports contained a due date of January 2025, one report contained a due date of 2028, and one report was marked as "replaced" – the repair date for this report was August 2024.

Based upon the documentation provided, patrol inspections only require a report to be generated when an issue is identified by a QEW. This initiative is simply a patrol inspection of the distribution assets, not the actual repairs. Review of initiatives such as WMP-GDOM-MR-01, WMP-GDOM-GH-03/04, WMP-GDOM-GH-12b, and WMP-GDOM-AI-05 is necessary to ensure that the proper steps are being taken to mitigate the failure risk. Therefore, Liberty has adequately provided documentation that demonstrates they completed the 476.9 circuit miles claimed.

In Liberty's 2024 EC ARC, the EC states that Liberty over-completed WMP-GDOM-AI-01 to make up for the under completion of this initiative. For WMP-GDOM-AI-01, Liberty completed 363.5 miles of detailed inspections, exceeding its target of 264.2 miles, leading to an offset of 99.3 miles. Even with the over-completion of detailed inspections to offset the reduction in patrol inspections, Liberty still left 12.8 miles of inspections unaccounted for. Liberty has provided a corrective action and states that it has updated and improved its detailed and patrol asset inspection schedule for 2025-2028.

Based upon this analysis and the documentation provided, the IE can verify that Liberty has completed the 476.9 claimed amount of inspection mileage, however, this initiative is not validated due to not inspecting the remaining 12.8 (adjusted per WMP-GDOM-AI-01 over completion) circuit miles and ultimately not meeting their 2024 target.

Table 10: Patrol Inspections of Distribution Electric Lines & Equipment

2024 Target	2024 ARC	2024 Q4 QDR	DR020/.b Response	Summary
589 Circuit Miles Inspected	476.9 Circuit Miles Inspected	476.9 Circuit Miles Inspected	476.9 Circuit Miles Inspected	Initiative Not Validated

WMP-GDOM-AI-04 - 8.1.3.4 - Other discretionary inspections of distribution electric lines and equipment - Non-Focus & Non-Field Verifiable

Liberty's 2023–2025 WMP outlined plans to utilize LiDAR, infrared technology, covered conductor inspections, and drones for discretionary inspections to enhance asset management. Liberty did not specify a completion target or risk reduction goal for this initiative for 2024.

Although no targets were set, Liberty reported completing discretionary inspections on approximately 1 circuit mile of distribution lines and equipment, as summarized in the 2024 Q4 QDR. In response to Data Request DR039, Liberty provided detailed documentation of these inspections, including start and end coordinates for three inspected overhead line segments:

- Segment 1: Approximately 0.60 miles inspected by drone on December 5, 2024, in Tier 2 HFTD.
- Segment 2: Roughly 0.184 miles inspected by drone on September 18, 2024, in Tier 2 HFTD.
- Segment 3: About 0.542 miles inspected by drone on May 24, 2024, in Tier 2 HFTD.

Collectively, Liberty's drone inspections covered approximately 1.33 circuit miles within Tier 2 HFTD areas, as summarized in Table 11. The IE reviewed all provided documentation and found no issues or discrepancies. Based on the comprehensive review of the evidence, the IE validates this initiative.

Table 11: Other discretionary inspections of distribution electric lines and equipment Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR039 Response	Summary
No Target	1 mile	1 mile	1.33 miles	Initiative Validated

WMP-GDOM-AI-05 - 8.1.3.5 - Quality assurance / quality control of inspections - Non-Focus & Non-Field Verifiable

This initiative supports Liberty's objective to ensure inspection accuracy through established Quality Assurance and Quality Control (QA/QC) processes. Liberty's 2023–2025 WMP set a 2024 completion target to perform QA/QC on 12% of detailed inspections but did not specify a risk reduction goal.

Liberty reported achieving QA/QC on 12% of detailed inspections in the 2024 Q4 QDR. Documentation provided in response to Data Request DR040 included completion records for 1,644 re-inspections, representing approximately 12.6% of the total 13,063 detailed inspections completed in 2024. These inspections comprised 9,107 overhead inspections and 1,315 underground inspections under initiative AI-01 (per DR018), and an additional 2,641 inspections under initiative AI-02 (per 2024 Q4 QDR), as summarized in Table 12.

The IE reviewed a representative sample covering 17 circuit miles of the QA/QC re-inspections and identified no issues or discrepancies. Despite a slight variance of 0.6% between the totals reported in the QDR and the detailed records from DR040, the IE confirms Liberty met the 2024 target for this initiative. Based on the evidence reviewed, the IE validates this initiative.

Table 12: Quality assurance / quality control of inspections Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR040 Response	Summary
12% of Detailed Inspections	12% of Detailed Inspections	12% of Detailed Inspections	12.6% of Detailed Inspections	Initiative Validated

WMP-GDOM-AI-06 – 8.1.3.6 - Substation Inspections – Non-Focus & Non-Field Verifiable

WMP-GDOM-AI-06 outlines Liberty's substation inspection program. Liberty did not provide a risk reduction goal for this initiative. Substation inspections are conducted in accordance with the current GO174 Substation Inspection Plan. Substations that are accessible year-round are inspected on a quarterly basis, and those that are inaccessible due to weather are conducted on an annual basis. Substation inspections can help identify issues before they become a problem, primarily mitigating risk from equipment failure that leads to the ignition of nearby vegetation.

Liberty currently operates 12 substations. The Meyers Substation is the only one residing in a HFTD Tier 3 zone, there are nine (9) substations in the HFTD Tier 2 zone, and two (2) substations reside in a non-HFTD. Based upon documentation provided by Liberty in response to LU_DR021.b, the EC completed 51 inspections throughout 2024. Typically, each substation had an inspection completed during each quarter, those that did not have inspection in a quarter were due to weather conditions making the substation inaccessible.

Liberty stated a goal of 42 substation inspections for 2024 in the WMP, and according to QDR4 Table 1, they claimed to have completed 71 substation inspections in total in 2024. The documentation provided shows that 51 inspections were completed. This number was determined by analyzing the substation inspected with the inspected date from the total list provided. Liberty has provided adequate documentation to demonstrate that they achieved the target goal of 42 substation inspections.

Based upon this analysis and the documentation provided, the IE validated this initiative. In future cycles, Liberty could provide context as to how they determine the number of inspections reported, this would alleviate completion discrepancies.

Table 13: Substation Inspections

2024 Target	2024 ARC	2024 Q4 QDR	DR021/.b Response	Summary
42 Substation Inspections	71 Substation Inspections	71 Substation Inspections	51 Substation Inspections	Initiative Validated

WMP-GDOM-GH-01 - 8.1.2.1 - Covered conductor installation - Focus & Field Verifiable

Covered conductor installation mitigates ignition risks by reducing faults caused by foreign object contact with energized lines, especially in HFTD areas. Liberty's 2023–2025 WMP set a 2024 completion target of installing 5.61 circuit miles of covered conductor, although no risk reduction goal was established.

Liberty reported completing approximately 3.9 circuit miles in its 2024 Q4 QDR, as summarized in Table 14. However, detailed GIS shapefiles provided in response to Data Request DR041 documented completion of about 4.06 circuit miles across four distinct segments:

- Angora Lateral
- Fallen Leaf C
- Angora Ridge
- TAH7300 PH9

Illustrative examples of these installations can be viewed in Figure 3: Example of Covered Conductor Installation (Foot Patrol) Field Images.

Figure 3: Example of Covered Conductor Installation (Foot Patrol) Field Images

Circuit ID: TAH7300, Length 0.37 Circuit Miles

The IE performed comprehensive field verifications using foot patrols and drone-based data capture. Foot patrols involved examining every segment, capturing geo-referenced photographs and 360-degree video footage integrated with GPS telemetry data to validate headings, positions, and segment lengths. Drone flights captured high-definition video footage from above, supplemented by GPS telemetry data detailing flight paths, headings, positions, and elevations, as illustrated in Figure 4: Example of Covered Conductor Installation (Drone Capture) Field Images.

Figure 4: Example of Covered Conductor Installation (Drone Capture). Circuit ID MEY3400, Structure Number 295360.

Circuit ID: MEY3400 (Map in the Bottom Left Shows Flight Path)

For each segment inspected, the IE confirmed:

- Proper installation of covered conductor.
- Alignment of conductor lengths and locations with GIS shapefile geometry.
- Compliance with industry-standard construction practices regarding installation workmanship, hardware clearances, and phase spacing.

Field assessments specifically verified workmanship quality and accuracy relative to Liberty's WMP descriptions. No discrepancies or issues were found during field validations. Although Liberty did not meet the 2024 target of 5.61 circuit miles, the IE has validated this initiative based on the analysis, field verification, and supporting documentation provided.

Table 14: Covered Conductor Installation Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR041	Summary
5.61 Circuit Miles	3.9 Circuit Miles	3.9 Circuit Miles	4.06 Circuit Miles	Initiative Not Validated

WMP-GDOM-GH-02 - 8.1.2.2 - Undergrounding of electric lines and/or equipment - Non-Focus & Field Verifiable

Undergrounding reduces ignition risks by removing conductors and equipment from overhead to below ground, significantly decreasing the potential of ignitions caused by contact with vegetation or foreign objects in HFTDs. Liberty's 2023–2025 WMP established a 2024 completion target of installing 1.25 circuit miles of underground lines but did not identify a specific risk reduction goal.

According to Liberty's 2024 Q4 QDR, no undergrounding projects were completed during 2024, as summarized in Table 15. Liberty's 2024 ARC noted that a Change Order Request was submitted to reduce the 2024 target from 1.25 circuit miles to zero due to project delays and permitting issues. Energy Safety denied this request.

Because no undergrounding was completed, the IE did not perform field verification. Based on the review of documentation and the absence of completed work, Liberty did not meet its 2024 target, and this initiative is not validated.

Table 15: Undergrounding of electric lines and/or equipment Summary

2024 Target	2024 ARC	2024 Q4 QDR	Data Request	Summary
1.25 Circuit Miles	0 Circuit Miles	0 Circuit Miles	N/A	Initiative Not Validated

WMP-GDOM-GH-03 - 8.1.2.3 - Distribution pole replacements and reinforcements - Focus & Field Verifiable

Replacing and reinforcing distribution poles helps prevent structural failures and reduces the likelihood of wildfire ignitions in HFTDs. Liberty's 2023–2025 WMP established a 2024 completion target of 400 pole replacements but did not specify a risk reduction goal for this initiative.

According to Liberty's 2024 Q4 QDR, Liberty reported completing 823 pole replacements, as detailed in Table 16. Liberty provided completion records for 824 pole replacements in response to Data Request DR043, which included:

- Original Asset ID
- New Asset ID
- Coordinates (Latitude, Longitude) of the new asset
- Circuit ID
- HFTD Tier
- Installation Date

The IE performed field verification of 82 randomly selected pole replacement locations within Liberty's service territory. Illustrative examples are provided in Figure 5: Example of Distribution Pole Replacements Field Images.

Figure 5: Example of Distribution Pole Replacements Field Images

		
Pole ID: 295226	Pole ID: 295802	Pole ID: 297715

During field assessments, the IE verified each pole tag ID against the reported new asset ID and captured photographs at each location. Assessments were reviewed for workmanship quality and accuracy compared to the 2023–2025 WMP descriptions. The IE identified no defects in workmanship, pole installation, or overhead construction. However, minor data discrepancies were noted:

- Pole #297173: The matching pole ID refers to a guy pole, not the distribution pole.
- Pole #297774: Pole ID is off by one number.
- Pole #294334: The new pole is missing a pole tag, although the original asset ID matches the old pole.

Liberty can enhance asset record accuracy by implementing a final verification step within the pole replacement workflow. This step should require field crews to confirm and document with photographic evidence that each replacement pole has a visible and correctly numbered tag, aligning with work order details prior to closeout. Liberty met its 2024 target for pole replacements. Based on the field verification and assessments, the IE validates this initiative.

Table 16: Distribution pole replacements and reinforcements Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR043 Response	Summary
400 Poles	823 Poles	823 Poles	824 Poles	Initiative Validated

WMP-GDOM-GH-04 - 8.1.2.4 - Transmission pole/tower replacements and reinforcements - Non-Focus & Field Verifiable

Replacing and reinforcing transmission poles and towers helps prevent structural failures, thereby reducing the risk of wildfire ignitions in HFTDs. Liberty's 2023–2025 WMP includes transmission pole replacements as part of its broader pole replacement program, described in Section 8.1.2.3. However, Liberty did not set a specific 2024 completion target or risk reduction goal for transmission pole replacements.

Although there were no targets set for this initiative, Liberty completed one transmission pole replacement in 2024. In response to Data Request DR043, Liberty provided documentation for one completed transmission pole replacement, including:

- Original Asset ID
- New Asset ID
- Coordinates (Latitude, Longitude) of the new asset
- Circuit ID
- HFTD Tier
- Installation Date

The IE conducted a field verification of this single transmission pole replacement. Illustrative examples of this transmission pole replacement can be viewed in Figure 6: Example of Transmission Pole Replacement Field Images.

Figure 6: Example of Transmission Pole Replacements Field Images

Transmission Pole ID: 296516

During the field assessment, the IE confirmed that the original wood transmission pole supporting a distribution underbuild was topped, and a new distribution pole was installed adjacent to maintain proper clearance from a nearby steel transmission pole. The IE verified the pole tag ID against the reported new asset ID and documented the installation with photographs. The assessment concluded that there were no workmanship defects, data discrepancies, or other issues observed. Based on the field verification and assessment, the IE validates this initiative.

Table 17: Transmission pole/tower replacements and reinforcements Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR043 Response	Summary
No Target	N/A	N/A	1 Pole	Initiative Validated

WMP-GDOM-GH-05 - 8.1.2.5 - Traditional overhead hardening - Focus & Field Verifiable

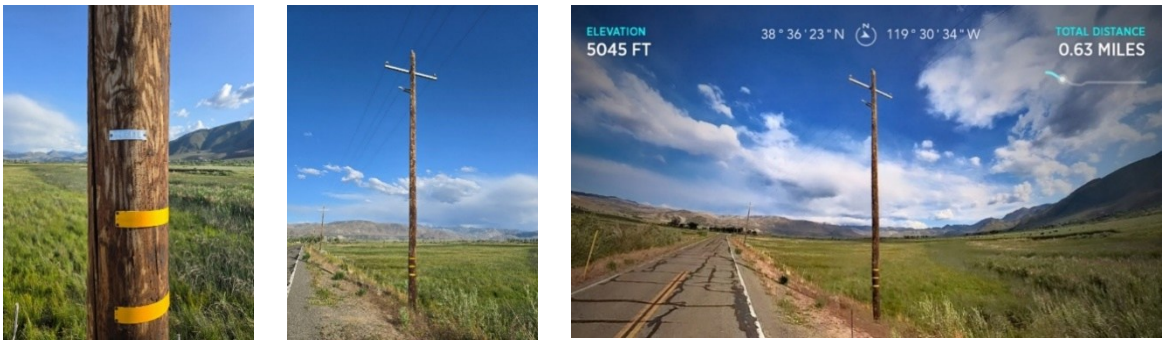
Traditional overhead hardening, including reconductoring, installing stronger poles and cross-arms, and reducing span lengths, decreases wildfire risks by minimizing mechanical failures and vegetation contact in HFTD areas. Liberty's 2023–2025 WMP established a 2024 target of completing 3.5 circuit miles of traditional overhead hardening but did not specify a risk reduction goal.

According to Liberty's 2024 Q4 QDR, the utility completed exactly 3.5 circuit miles, meeting its annual target, as summarized in Table 18. Liberty provided detailed documentation in response to Data Request DR045, including GIS shapefiles and as-built drawings, confirming completion of 3.63 circuit miles across two specific project segments:

1. Topaz Lane Tap Rebuild – Phase 1
2. Topaz Lane Tap Rebuild – Phase 2

For illustrative examples, refer to Figure 7: Examples of Traditional Overhead Hardening Field Images below.

Figure 7: Examples of Traditional Overhead Hardening. Structure 295418 – Foot patrol and 360 image capture at 0.63 miles from the west end of Topaz PH1.



Pole ID: 295418, New Pole Replacement, New Fiberglass Crossarm

The IE visually observed each hardened structure identified as complete by Liberty, capturing geo-referenced photographs and 360-degree video. During the field assessments, the IE confirmed:

- Hardened facilities matched provided as-built drawings and GIS geometry.

- Span lengths, cross-arm types, and fuse upgrades aligned with Liberty's documented hardening standards.

Field assessments verified workmanship quality and accuracy of information consistent with the initiative description provided in Liberty's 2023–2025 WMP. The IE identified no issues or discrepancies during this review. Based on the comprehensive field evidence and documentation, the IE validates this initiative.

Table 18: Traditional overhead hardening Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR045 Response	Summary
3.5 Circuit Miles	3.5 Circuit Miles	3.5 Circuit Miles	3.63 Circuit Miles	Initiative Validated

WMP-GDOM-GH-06 – 8.1.2.6 - Emerging Grid Hardening Technology Installations and Pilot Progress – Non-Focus & Non-Field Verifiable

WMP-GDOM-GH-06 outlines LU's emerging grid hardening technology installations and pilot program. Liberty did not provide a risk reduction goal for this initiative. Liberty does not list an explicit target for 2024, however, on table 8-1 of the WMP, Liberty states as an objective to "pilot the resonant grounding or "Swedish neutral" system on one substation within three years". Further, in section 8.1.2.6, Liberty states that in 2022, it installed equipment for these pilot projects: DFA, DA, and HIFD.

In response to LU_DR022, Liberty provided a study that was conducted through the University of Nevada Reno that assesses methods to reduce wildfires caused by power systems due to high impedance faults, which is directly related to the Liberty HIFD pilot program.

Liberty also provided a written response stating that the utility did not pursue the Swedish neutral technology, DFA, nor DA pilots in 2024. Liberty shifted its focus to implementing its Sensitive Relay Profile Program. In 2024, Liberty submitted a Change Order Request outlining "Liberty proposes to establish a target for Equipment Settings to reduce wildfire risk in 2024 to represent its SRP program implementation. Liberty proposes a target of 15 circuits with SRP enabled in 2024". In the 2025 WMP update on page 165, Liberty further discusses why the Swedish neutral pilot was delayed, "…to assess future cost and resource needs. Liberty is designing its substation rebuilds with provisions to potentially install Swedish neutral systems where possible if Liberty chooses to pursue this technology at a later date". Refer to initiative WMP-SA-02 for information on the SRP program.

Based upon this analysis, the documentation provided, and the Change Order Request altering the objective for this initiative, the IE has validated this initiative.

Table 19: Emerging Grid Hardening Technology Installations and Pilot Progress

2024 Target	2024 ARC	2024 Q4 QDR	DR022 Response	Summary
N/A	N/A	N/A	N/A	Initiative Validated

WMP-GDOM-GH-07 – 8.1.2.7 - Microgrids – Non-Focus & Non-Field Verifiable

The 2024 WMP initiative originally targeted the deployment of one new microgrid, building on the utility's previous success with the Sagehen Microgrid and advancing design work on the Angora Microgrid Project. Liberty did not provide a risk reduction goal for this initiative. The initiative emphasized the strategic use of microgrids to reduce wildfire risk by eliminating or de-energizing high-risk overhead distribution lines in hard-to-access terrain. However, in response to a data request, Liberty clarified that no microgrid construction occurred in 2024. This change in scope was officially documented in the May 2024 WMP update and change order request submitted to Energy Safety, which proposed adjusting the target from one microgrid to zero for the year.

Liberty's change order indicated that this adjustment was due to a revised strategic focus on accelerating its covered conductor deployment timeline, which was deemed to offer greater near-term wildfire risk reduction. The utility cited high costs and shifting priorities as the rationale for deferring the microgrid project. Although the microgrid installation goal was not met in 2024, Liberty complied with WMP governance by submitting a formal change request and providing supporting justification.

In July of 2024, Energy Safety issued a response to the change order request submitted by Liberty. In this response, Energy Safety rejected the proposed target change from 1 to 0 microgrids. Based upon this analysis, the documentation provided, and ultimately the decision to deny the change order request from Energy Safety, which would have reduced the target microgrids, the IE has not validated this initiative.

Table 20: Microgrids

2024 Target	2024 ARC	2024 Q4 QDR	DR023/.b Response	Summary
1 Microgrid	0 Microgrids	0 Microgrids	0 Microgrids	Initiative Not Validated

WMP-GDOM-GH-08 - 8.1.2.8 - Installation of system automation equipment - Focus & Field Verifiable

Installing automatic reclosers enhances sectionalizing capability and improves fault-clearing speeds, reducing the duration and geographic extent of faults in HFTD areas. Liberty's 2023–2025 WMP set a 2024 completion target of eight (8) reclosers but did not identify a risk reduction goal.

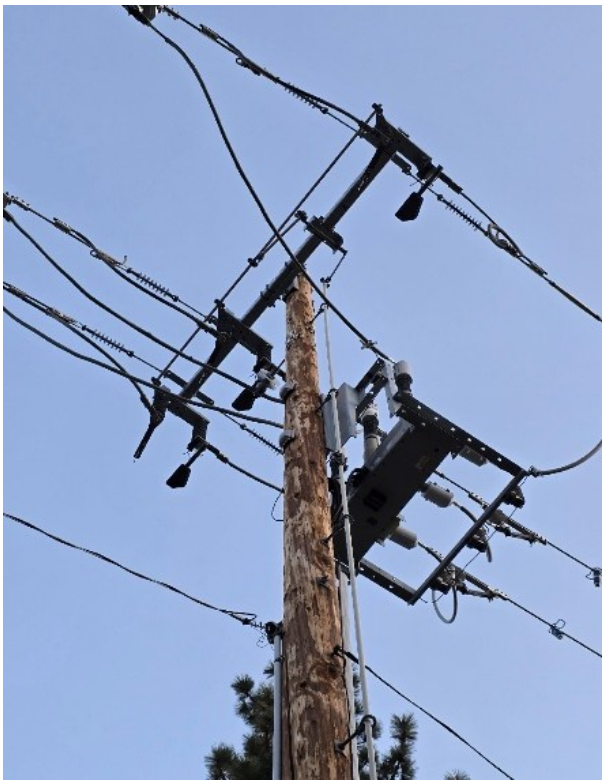
As described in Liberty's 2024 Q4 QDR, the utility reported the completion of two (2) recloser installations, as summarized in Table 21. In its 2024 ARC, Liberty noted that it requested a Change Order to reduce the 2024 recloser installation target from eight (8) to four (4), citing a Sensitive Relay Profile (SRP) study that showed diminishing value beyond five reclosers. Energy Safety denied this request. Additionally, Liberty reported that two planned installations were deferred due to site-access issues but confirmed their completion in Q1 2025.

In response to Data Request DR024, Liberty provided coordinates and test reports for the two completed installations on the following circuits:

1. MEY3400
2. TAH7300

For illustrative examples, see Figure 8: Examples of System Automation Equipment Field Images below.

Figure 8: Examples of System Automatic Equipment Field Images



MEY3400 Circuit

TAH7300 Circuit

The IE visited both recloser installation sites, capturing geo-referenced photographs, and verified that:

- An automatic recloser was installed and energized at each location.
- The installed device coordinates matched the provided data.
- Test reports confirmed correct configuration and proper operation.
- Installations complied with industry construction standards.

Field assessments verified workmanship quality and confirmed accuracy of reported information aligned with Liberty's 2023–2025 WMP descriptions. Although Liberty did not meet the 2024 target of 8 reclosers, based on the field review and supporting documentation, the IE validates the completion of the two installations reported for 2024.

Table 21: Installation of system automation equipment Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR024 Response	Summary
8 Automatic Reclosers	2 Automatic Reclosers	2 Automatic Reclosers	2 Automatic Reclosers	Initiative Not Validated

WMP-GDOM-GH-09 – 8.1.2.9 - Line Removal – Non-Focus & Non-Field Verifiable

In 2024, Liberty planned to remove 1.1 miles of distribution line within HFTD areas under the WMP initiative WMP-GDOM-GH-09. Liberty did not provide a risk reduction goal for this initiative. This removal was intended to reduce wildfire risk by eliminating vulnerable overhead infrastructure, supported by the deployment of microgrids to maintain reliable local power. However, according to the data and documentation Liberty provided in response to the WMP data requests, no line removal or microgrid scope was completed in 2024. Instead, Liberty shifted focus to a covered conductor project due to strategic realignment and higher than expected microgrid costs. This change was formally documented in a 2024 change order request submitted to Energy Safety, which reported a reduction of the planned 1.1 miles of line removal down to zero miles.

Liberty communicated a strategic shift in 2024, opting to focus on a covered conductor project instead of the originally planned 1.1 miles of microgrid-enabled line removal under the initiative. This change was driven by higher-than-expected microgrid costs, which were formally documented and submitted to Energy Safety. This documentation demonstrates transparency and coordination with the overseeing body. While no line removal occurred in 2024, the covered conductor installation still supports wildfire risk reduction efforts through enhanced infrastructure resilience.

In July of 2024, Energy Safety issued a response to the change order submitted by Liberty. In this response, Energy Safety rejected the request to decrease the 2024 target from 1.1 to 0 circuit miles. The rationale provided was that the proposed change does not reduce risk.

Based upon this analysis, the documentation provided, and ultimately the decision to deny the change order request from Energy Safety, which would have reduced the target circuit miles, the IE has not validated this initiative.

Table 22: Line Removal

2024 Target	2024 ARC	2024 Q4 QDR	DR025/.b Response	Summary
1.1 Circuit Miles of Line Removal	0 Circuit Miles of Line Removal	1.1 Circuit Miles of Line Removal	0 Circuit Miles of Line Removal	Initiative Not Validated

WMP-GDOM-GH-10 - 8.1.2.10 - Other grid topology improvements to minimize risk of ignitions - Non-Focus & Non-Field Verifiable

As reported in Liberty's 2024 Q4 QDR dated January 31, 2025, provided in the response to the Front-Loaded Data Request and confirmed by the Annual Report on Compliance for the 2024 WMP, this initiative did not have any target or work completed for 2024.

Based upon this, the IE has determined that this initiative is not applicable for the 2024 review period.

WMP-GDOM-GH-11 – 8.1.2.11 - Other Grid Topology Improvements to Mitigate or Reduce PSPS Events – Non-Focus & Non-Field Verifiable

Liberty's 2024 Wildfire Mitigation Plan (WMP) Section 8.1.2 outlines a series of grid design and hardening initiatives aimed at reducing wildfire and PSPS risks. Liberty did not provide a risk reduction goal for this initiative. These efforts include undergrounding lines, installing covered conductors, and replacing poles to enhance system resilience and mitigate ignition potential in high-fire-risk areas. Section 8.1.2.11 states that Liberty did not pursue any additional grid topology improvements in 2022 beyond the activities already documented elsewhere in Section 8.1.2. There was no specific target set for this item in 2024, and the utility confirmed no applicable data or updates.

Based upon this, the IE has determined that this initiative is not applicable for the 2024 review period.

WMP-GDOM-GH-12 - 8.1.2.12 - Other technologies and systems not listed above - Non-Focus & Non-Field Verifiable

As reported in Liberty's 2024 Q4 QDR dated January 31, 2025, provided in the response to the Front-Loaded Data Request and confirmed by the Annual Report on Compliance for the 2024 WMP, this initiative did not have any target or work completed for 2024. Based upon this, the IE has determined that this initiative is not applicable for the 2024 review period.

WMP-GDOM-GH-12a - 8.1.2.12 - Tree attachment removals - Non-Focus & Non-Field Verifiable

Removing tree attachments from distribution lines reduces ignition risks by reducing potential points of vegetation contact. Liberty's 2023–2025 WMP established a 2024 target of completing 60 tree attachment removals but did not set a risk reduction goal.

Per Liberty's 2024 Q4 QDR, Liberty reported completing 98 tree attachment removals, exceeding its original target, as summarized in Table 23. In response to Data Request DR048, Liberty provided completion records supporting the removal of 98 tree attachments. These records included:

- Pole Asset ID
- Point Coordinate
- HFTD Tier
- Tree Wire Type
- Service Type
- Removal Date

The IE reviewed a sample of completion data for 20 tree attachment removals. No issues or discrepancies were identified during the review. Based on the completion documentation reviewed, the IE validates this initiative.

Table 23: Tree attachment removals Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR048 Response	Summary
60 Tree Attachments	98 Tree Attachments	98 Tree Attachments	98 Tree Attachments	Initiative Validated

WMP-GDOM-GH-12b - 8.1.2.12 - Expulsion fuse replacement - Focus & Field Verifiable

Replacing expulsion fuses with modern current-limiting devices reduces fault-clearing times, thereby reducing ignition risks in HFTD areas. Liberty's 2023–2025 WMP established a 2024 target of replacing 500 expulsion fuses but did not specify a risk reduction goal.

According to Liberty's 2024 Q4 QDR and ARC, Liberty reported completing 750 fuse replacements, significantly exceeding the 2024 target. In response to Data Request DR049, Liberty provided detailed documentation for 681 fuse installations across 344 poles (ranging from 1 to 3 fuses per pole). Completion records included:

- Pole IDs
- Circuit IDs
- Location Coordinates
- Install Dates
- Quantity per Pole
- Fuse Type

Although the count documented in DR049 is lower than the 750 reported in the QDR and ARC, Liberty's documented total exceeds the original 2024 target of 500 fuses, as summarized in Table 24.

For illustrative examples, refer to Figure 9: Example of Expulsion Fuse Replacement Field Images below.

Figure 9: Example of Expulsion Fuse Replacement Field Images

Pole ID: 216224, Left and Right ELF Fuses

The IE conducted field verification at 87 sampled pole locations, photographing over 170 installed fuses. Field assessments confirmed that:

- Installed fuses matched Liberty's approved replacement fuse specifications.
- Pole locations and installed fuse quantities aligned with the dataset provided in DR049.
- Installation workmanship adhered to industry construction standards.

The IE identified no issues or discrepancies during the field assessment. Based on field evidence and documentation review, the IE validates this initiative.

Table 24: Expulsion fuse replacement Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR049 Response	Summary
500 Fuses	750 Fuses	750 Fuses	681 Fuses	Initiative Validated

WMP-GDOM-GH-12c - 8.1.2.12 - Animal guards - Non-Focus & Non-Field Verifiable

The installation of animal guards reduces ignition risk by preventing animal-related faults at substations. Liberty's 2023–2025 WMP established a 2024 target to install animal guards at two substations with exposed equipment, but did not identify a risk reduction goal.

According to Liberty's 2024 Q4 QDR, no animal guards were installed by the end of 2024, as summarized in Table 25. Liberty's 2024 ARC attributed the delay to issues with material procurement. In response to Data Request DR050, Liberty clarified that one animal guard was installed at the Portola Substation on April 8, 2025, and reported that the second guard installation at Stampede Substation is planned for completion by August 2025.

Liberty did not meet the 2024 target for this initiative. Based on the documentation reviewed and the absence of completed installations within the reporting year, the IE does not validate this initiative.

Table 25: Animal guards Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR050 Response	Summary
2 Animal Guards	0 Animal Guards	0 Animal Guards	0 Animal Guards	Initiative Not Validated

WMP-GDOM-GH-12d – 8.1.2.12 - CAL FIRE Exempt Hardware – Non-Focus & Non-Field Verifiable

In review of initiative WMP-GDOM-GH-12d, per table 8-3 of the WMP, Liberty states a target of "None Planned" for the 2024 review year. Liberty did not provide a risk reduction goal for this initiative. In response to LU_DR027, Liberty states that they did not make any requests for CalFire exemptions in 2024.

Based upon this analysis, the IE has determined that WMP-GDOM-GH-12d is not applicable to the 2024 review period. If Liberty plans on obtaining any CalFire exemptions in future WMP cycles, the IE will opt to review based upon implementation per a future WMP cycle.

WMP-GDOM-GH-12e – 8.1.2.12 - Open Wire/Grey Wire – Non-Focus & Non-Field Verifiable

Initiative WMP-GDOM-GH-12e is focused on replacing open wire and grey wire service lines to enhance wildfire safety. Liberty did not provide a risk reduction goal for this initiative. The target for 2024 was to replace 5.10 circuit miles of such lines, building upon the previous year's efforts. Based on a review of GIS and Quarterly Data Reports, replacements appear to have been carried out in alignment with this objective, with mapped progress confirming upgrades along specific distribution circuits previously designated as high risk.

Documentation provided by Liberty in response to DR028 shows 6.95 of circuit mile wire replaced due to this initiative. This documentation includes asset ID, circuit, GPS coordinates, and installation date. Although this documentation does not align with the total amount reported by Liberty on QDR4 or the 2024 EC ARC, it does still show that Liberty exceeded the target goal.

This activity supports Liberty's wildfire mitigation strategy by targeting conductor types that pose an elevated ignition risk, particularly during high wind events or vegetation contacts. By prioritizing the systematic removal of grey and open wire, Liberty is reducing known sources of utility-caused ignitions. The footage replaced, as tracked against the annual target, shows a clear and measurable alignment with the 2024 work plan. Given the structured scope, targeted mileage, and transparent reporting mechanisms, the IE has validated this initiative.

Table 26: Open Wire/Grey Wire

2024 Target	2024 ARC	2024 Q4 QDR	DR028 Response	Summary
5.10 Circuit Miles	7.4 Circuit Miles	7 Circuit Miles	6.95 Circuit Miles	Initiative Validated

WMP-GDOM-GH-12f – 8.1.2.12 - Substation Equipment Replacement – Non-Focus & Non-Field Verifiable

Liberty's WMP Initiative WMP-GDOM-GH-12f outlines substation equipment replacement as part of its grid hardening strategy under Section 8.1.2.12. Liberty did not provide a risk reduction goal for this initiative. No specific targets were established for 2024. This initiative

is part of a broader effort to reduce ignition risk through infrastructure upgrades not covered under other categories, including expulsion fuse replacements, tree attachment removals, open wire replacements, and animal guard installations. Substation equipment replacement specifically targets the reduction of ignition risk associated with aging or exposed components, with progress to be verified through Quarterly Data Reports (QDR) and GIS mapping.

In response to a request for documentation, Liberty submitted an internal memo detailing the planned rebuild of the Portola Substation in 2024, accompanied by three site images. While this response did not include the full QDR or GIS data referenced in the WMP, the planning memo and photographic evidence reasonably support the conclusion that Liberty is advancing its substation equipment replacement efforts. Based upon this analysis, the IE has validated this initiative.

Table 27: Substation Equipment Replacement

2024 Target	2024 ARC	2024 Q4 QDR	DR029 Response	Summary
None Planned	1 Equipment Replacement	1 Equipment Replacement	1 Equipment Replacement	Initiative Validated

WMP-GDOM-GO-01 - 8.1.8.1 - Equipment settings to reduce wildfire risk - Non-Focus & Non-Field Verifiable

Adjusting equipment settings, such as enabling Sensitive Relay Profile (SRP), reduces wildfire risk by enhancing fault detection sensitivity and responsiveness. Liberty's 2023–2025 WMP set a 2024 target to enable SRP settings on 15 circuits but did not specify a risk reduction goal.

Per Liberty's 2024 Q4 QDR, the utility reported completing SRP settings on all 15 targeted circuits, meeting its 2024 target, as summarized by Table 28. In response to Data Request DR051, Liberty provided detailed records confirming SRP implementation and fault indicator installations for the following circuits:

- GLS7400, GLS7600, HOB7700
- MEY3100, MEY3200, MEY3300, MEY3400, MEY3500
- SQV7201, SQV8200, STL3101
- TAH5201, TAH7100, TAH7200, TAH7300

The IE reviewed the completion records for all 15 circuits and identified no issues or discrepancies. Based on this documentation, the IE validates this initiative.

Table 28: Equipment settings to reduce wildfire risk Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR051 Response	Summary
15 Circuits	15 Circuits	15 Circuits	15 Circuits	Initiative Validated

WMP-GDOM-GO-02 - 8.1.8.2 - Grid response procedures and notifications - Non-Focus & Non-Field Verifiable

Effective grid response procedures enable quick and organized actions during faults, ignitions, or other grid-related issues. Liberty's 2023–2025 WMP did not set a specific completion target or risk reduction goal for this initiative in 2024.

In response to Data Request DR052, Liberty provided detailed documentation describing its operational procedures, summarized in Table 29. The documentation included:

1. A narrative explanation detailing how System Control receives "no-power" calls, logs them into the ADMS, and dispatches crews. This narrative included screenshots of the call browser interface and referenced Section 8 ("Restoration") of the Tahoe Emergency Management Plan, which outlines the prioritization process for grid response.
2. An "Outage Process Flow in ADMS" diagram illustrates each step from the initial customer "No Power" call through incident creation, device validation, crew assignment, repair completion, and final incident archival.

The IE reviewed the provided documentation and identified no issues or discrepancies with Liberty's established procedures. Although no target was set, based on the evidence reviewed, the IE validates this initiative.

Table 29: Grid response procedures and notifications Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR052 Response	Summary
No Targets	N/A	N/A	Operational procedures in place	Initiative Validated

WMP-GDOM-GO-03 – 8.1.8.3 - Personnel Work Procedures & Training in Conditions of Elevated Fire Risk – Non-Focus & Non-Field Verifiable

WMP-GDOM-GO-03 outlines Liberty's personnel work procedures and training in conditions of elevated fire risk. Liberty did not provide a risk reduction goal for this initiative. The WMP does not explicitly state a target or objective for this initiative, however, section 8.1.8.3 states that Liberty's Fire Prevention Plan (FPP) requires that employees, contractors, and consultants receive training on an annual basis. This section goes on to state that this training includes definitions of at-risk work, wildland areas, fire potential index (FPI), and a matrix that can be used to determine the minimum fire prevention requirements for at-risk activities. Liberty states that its FPP describes work restrictions for certain at-risk activities based on FPI conditions, and section 8.1.8.3 outlines each of those conditions: low fire risk, moderate fire risk, high fire risk, very high fire risk, and extreme fire risk.

In response to LU_DR030, Liberty provided several documents that demonstrate their continual implementation of the FPP. In this payload, Liberty provided documentation of the FPP itself and included a PowerPoint presentation that was implemented in the FPP training for 2024. This PowerPoint clearly follows the guidelines presented in the FPP and provides explicit training on the 5 levels of the fire risk index as outlined in both the FPP and WMP. Liberty also provided several documents demonstrating compliance with the required training of the FPP. A sign-in sheet dated 05/14/25 with the training topic "Wildfire Prevention Plan Annual Refresher Training" was provided and included trainee names, signatures, and departments. Included with this documentation was email correspondence with an agenda for the FPP annual training. Liberty also provided two subsequent FPP refresher training logs, one dated for 07/25/24 and one dated for 09/03/25 – this demonstrates that Liberty provides this training to team members as needed throughout the year.

Based upon this analysis and the documentation provided by Liberty, the IE has validated this initiative.

Table 30: Personnel Work Procedures & Training in Conditions of Elevated Fire Risk

2024 Target	2024 ARC	2024 Q4 QDR	DR030 Response	Summary
N/A	N/A	N/A	Continued Implementation of Work Procedures and Training in Conditions of Elevated Fire Risk	Initiative Validated

WMP-GDOM-GO-04 - 8.1.8.1 - Automatic recloser operations - Non-Focus & Non-Field Verifiable

As reported in Liberty's 2024 Q4 QDR dated January 31, 2025, provided in the response to the Front-Loaded Data Request and confirmed by the Annual Report on Compliance for the 2024 WMP, this initiative did not have any target or work completed for 2024.

Based upon this, the IE has determined that this initiative is not applicable for the 2024 review period.

WMP-GDOM-GO-05 - 8.1.5 - Asset Management and Inspection Enterprise System - Non-Focus & Non-Field Verifiable

A centralized asset-management and inspection enterprise system enables streamlined handling of inspection results and coordinates activities such as system hardening, maintenance, and remedial work. Liberty's 2023–2025 WMP did not establish a specific completion target or risk reduction goal for this initiative in 2024.

To confirm system functionality for the 2024 compliance year, the IE conducted an SME interview and live system demonstration on May 15, 2025, with Liberty representatives Kyle Wright and Matt Dalgetty, as requested by Data Request DR054 and summarized in Table X31. The demonstration showcased Liberty's Asset Management & Inspections Enterprise System (Fulcrum), including recent enhancements implemented around February 2024. These enhancements improved asset data management, inspection processes, data handling efficiency, quality assurance mechanisms, and reporting capabilities.

A detailed summary of the SME interview is provided in Appendix 7.3. While Liberty did not set a 2024 target for this initiative, the utility has demonstrated that it maintains a centralized asset management and inspections enterprise system. The IE identified no issues during the demonstration or documentation review. Based on the SME interview and demonstration, the IE validates this initiative.

Table 31: Asset Management and Inspection Enterprise System Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR054 Response	Summary
No Target	N/A	N/A	SME interview of enterprise system	Initiative Validated

WMP-GDOM-MR-01 - 8.1.4 - Equipment maintenance and repair - Non-Focus & Non-Field Verifiable

Routine equipment maintenance and timely repairs reduce wildfire ignition risks by ensuring assets remain in optimal operating condition. Liberty's 2023–2025 WMP did not specify a 2024 completion target or risk reduction goal for equipment maintenance and repairs.

Although Liberty's 2024 Q4 QDR reported no specific work for this initiative, Liberty provided detailed records in response to Data Request DR055, documenting 3,638 completed maintenance and repair activities, as summarized in Table 32. These records included asset locations, circuit IDs, completion dates, and condition codes.

The IE reviewed the maintenance and repair logs provided by Liberty and identified no issues or discrepancies. Although no formal target was established, Liberty completed equipment maintenance and repairs during the year. Based on the documentation reviewed, the IE validates this initiative.

Table 32: Equipment maintenance and repair Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR055 Response	Summary
No Target	N/A	N/A	3,638 Maintenance and Repairs	Initiative Validated

4.1.2.2 Funding Verification – Findings

WMP-GDOM-AI-01 - Detailed inspections of distribution electric lines and equipment

Strategic Overview and Risk Mitigation
This initiative forms a critical component of Liberty's comprehensive wildfire risk reduction strategy by proactively identifying and addressing equipment conditions that pose ignition risks. Detailed inspections mitigate wildfire potential through early detection and remediation of deteriorating conditions, structural defects, and potential ignition sources. This systematic approach prioritizes preventive maintenance over reactive measures, thereby enhancing infrastructure resilience.

Financial Performance Analysis
The initiative was originally budgeted at $125,000, with actual expenditures reaching $536,670, representing a variance of $411,670 (329.3%). Liberty attributes this variance to "inaccurate initial projections" for the 2024 asset inspection initiatives. The variance magnitude suggests these initial projections may have underestimated factors, including

actual cost structures, scope requirements that emerged during implementation, and field conditions that differed from planning assumptions.

Operational Impact and Risk Reduction
Despite the financial variance, operational performance significantly exceeded initial projections, completing 363.5 circuit miles of inspections compared to the planned target of 264.2 miles, representing a 37.59% increase. While no explicit individual risk score is documented for this initiative, the expanded coverage has demonstrably enhanced its effectiveness in reducing ignition risks through broader assessment and remediation of potential hazards.

Performance data confirms that operational targets for detailed inspections were successfully achieved or exceeded during the reporting period. While modest budget variances are common in field-based infrastructure programs due to evolving operational conditions, the 329.3% variance between initial planning estimates and actual implementation costs is notably substantial. This significant differential presents a valuable opportunity to incorporate operational learnings into future budget planning processes and enhance the accuracy of resource projections for subsequent program cycles.

WMP-GDOM-AI-02 - Intrusive pole inspections

Strategic Overview and Risk Mitigation
The Intrusive Pole Inspections initiative is a critical element of Liberty's comprehensive wildfire risk reduction strategy. Its primary objective is to identify internal decay or structural damage within poles, proactively mitigating the risk of failures that could lead to ignition events. Addressing these vulnerabilities enhances infrastructure resilience, significantly contributing to overall wildfire risk mitigation efforts.

Financial Performance Analysis
Initially, the intrusive pole inspection initiative was not allocated funding in Liberty's 2024 budget. However, actual expenditures totaled $147,642, fully accounting for the budget variance of this amount. This spending reflects a budgetary oversight, highlighting the necessity of comprehensive planning to ensure all critical wildfire mitigation activities are adequately funded.

Operational Impact and Risk Reduction
Despite the absence of initial budgetary provisions, Liberty effectively executed the intrusive pole inspection program, completing 2,641 inspections and surpassing the planned operational target of 2,302 inspections by 14.7%. This achievement supports the initiative's operational success, directly enhancing wildfire risk mitigation by identifying and addressing structurally compromised poles before potential failures.

While Liberty did not specify a quantifiable risk reduction target for this initiative, the program aligns with General Order 165's mandate, aiming to extend pole service life and preemptively identify poles needing replacement. This proactive approach reduces ignition risks associated with equipment failures, strengthening system safety and reliability. Industry consensus recognizes intrusive inspections as essential for preventing structural pole failures, a well-established method for reducing wildfire risk.

Assessment and Conclusion
The operational success in exceeding inspection targets indicates a positive impact on wildfire risk reduction efforts. However, the initial omission of this activity from the budget planning process highlights the need for improved financial oversight and planning mechanisms in future cycles.

WMP-GDOM-AI-03 - Patrol inspections of distribution electric lines and equipment

Strategic Overview and Risk Mitigation
This initiative targeted patrol inspections across 589 circuit miles in 2024, aiming to provide rapid, broad assessments to identify obvious line hazards. Patrol inspections are essential for quickly detecting and addressing visible risks, significantly contributing to Liberty's proactive wildfire risk reduction strategy and infrastructure safety.

Financial Performance Analysis The planned budget for this initiative was $15,000, but actual expenditures reached $29,629, resulting in a financial variance of $14,629 (97.5%). Liberty attributes this substantial variance to "inaccurate initial projections" for the asset inspection activities planned in 2024.

Operational Impact and Risk Reduction
Operationally, Liberty completed patrol inspections on 476.9 circuit miles, falling short of the 589-mile goal by roughly 19%. Liberty stated that to partially offset this shortfall, the utility exceeded its detailed inspection target, completing 363.5 circuit miles against the original goal of 264.2 miles.

However, the primary risk of falling short in patrol inspections lies in potentially undetected obvious hazards across the missed circuit miles. Patrol inspections are specifically designed for quick, broad visual assessments aimed at immediate hazard identification. Consequently, the 19% coverage shortfall diminished the efficacy of the rapid hazard detection process intended for this initiative.

Although detailed inspections exceeded targets and provided valuable, thorough evaluations for aging or deteriorating equipment, these inspections inherently lack the speed and breadth of patrol inspections. Detailed inspections operate on a five-year cycle

for comprehensive assessment, making them effective but not fully interchangeable with patrol inspections in terms of immediate hazard identification.

The incomplete patrol coverage across 112.1 miles represents a modest but measurable increase in wildfire risk. While this gap allows some readily observable hazards to persist undetected beyond planned intervals, the risk increase remains incremental due to the expanded detailed inspection program partially mitigating the overall impact.

Overall, the initiative's effectiveness in wildfire risk mitigation saw a slight reduction compared to the original objectives, but was largely maintained due to the supplementary detailed inspections.

WMP-GDOM-AI-04 - Other discretionary inspections of distribution electric lines and equipment

Strategic Overview and Risk Mitigation
The Other Discretionary Inspections initiative conducts specialized inspections using advanced technologies (including infrared and drone inspections) to identify specific risks not easily detectable through standard visual patrols or routine detailed inspections. The 2024 program established a target of 1 circuit mile for these specialized assessments.

Financial Performance Analysis
- Planned Budget: $1,000,000
- Actual Expenditure: $363,867
- Variance: -$636,133 (-63.6%)

Liberty attributes the variance to inaccurate initial projections for the 2024 asset inspection initiatives.

Operational Impact and Risk Reduction
Liberty completed 1.33 circuit mile of discretionary inspections, achieving 100% of the stated target. These specialized assessments using infrared and drone technologies provide enhanced detection capabilities for conditions not readily identifiable through standard inspection methods. The 63.6% budget variance between planned and actual expenditures suggests the resources required for the implemented inspection scope were substantially lower than initial projections.

Assessment and Conclusion
The initiative met its operational target while utilizing 36.4% of allocated budget. This performance indicates either conservative initial cost estimates for specialized inspection technologies or implementation of a more focused scope than the budget allocation anticipated. While the completed inspection mile contributes to risk reduction through

advanced detection methods, the variance between the $1 million allocation and modest operational target warrants review of planning assumptions.

WMP-GDOM-AI-05 - Quality assurance / quality control of inspections

Strategic Overview and Risk Mitigation
The Quality Assurance/Quality Control (QA/QC) initiative establishes systematic validation protocols for inspection activities, targeting a comprehensive review process to ensure the accuracy, consistency, and thoroughness of inspections performed in 2024. Specifically, it aimed to audit a significant sample of inspection activities to verify that primary inspection efforts effectively identify and document infrastructure conditions requiring remediation. By improving the reliability and accuracy of inspection data, this initiative substantially strengthens Liberty's overall wildfire risk mitigation efforts.

Financial Performance Analysis
The initiative had an initial budget allocation of $10,000, but actual expenditures surpassed this projection, totaling $212,986. This variance of $202,986, representing approximately 2029.9%, was due to initial inaccuracies in financial projections. The substantial variance reflects the expanded scale and scope of QA/QC activities performed, driven by increased audit volumes and heightened standards for inspection validation activities beyond the original planning parameters.

Operational Impact and Risk Reduction
The operational scope of this initiative expanded from an initial target of 1% in 2023 to 12% during the 2024 cycle. Initial targets were 12% of the 13,063 detailed inspections (1,567 total audit locations) with a 90% pass rate. The actual audits performed consisted of 1,644 detailed inspections, which accounted for 12.6% of the total audit locations, including overhead inspections, underground inspections, and distribution pole inspections.

This expanded audit coverage provided validation for inspection data accuracy and reliability, allowing for verification of asset conditions. It increased the identification and documentation of potential defects, strengthening data integrity. The improved inspection quality enabled more informed decision-making regarding infrastructure management and wildfire mitigation actions.

From a risk reduction standpoint, the expanded audit coverage improved Liberty's capability to mitigate wildfire ignition risks. By increasing the number and thoroughness of QA/QC inspections, the initiative reduced the probability of asset defects or hazardous conditions remaining undetected. Potential wildfire ignition risks were mitigated through more timely identification and expedited corrective actions.

The initiative did not receive a specific quantitative risk reduction assignment due to its supportive nature. QA/QC activities serve as foundational processes that validate inspection accuracy rather than directly mitigate risks through asset interventions. The risk reduction benefit from QA/QC activities is realized and integrated into the effectiveness of other direct risk-reduction initiatives, such as detailed inspections and system hardening programs. While this initiative enhances overall risk mitigation through improved inspection reliability and quality, its impact is supportive and not directly measurable as an isolated risk reduction metric.

WMP-GDOM-AI-06 - Substation inspections

Strategic Overview and Risk Mitigation
The Substation Inspections initiative constitutes an essential component of Liberty's wildfire mitigation strategy, ensuring operational integrity and reliability of substation infrastructure. These inspections adhere to protocols established in General Order 174 (GO174) Substation Inspection Plan, with the objective of proactively identifying and remediating equipment conditions that could result in failures and subsequent vegetation ignition. Liberty operates 12 substations across its service territory: one located in High Fire-Threat District (HFTD) Tier 3, nine in HFTD Tier 2, and two outside designated HFTD zones.

Operational Performance
Liberty established a 2024 target of 42 substation inspections. While the Annual Report on Compliance and Q4 Quarterly Data Report indicated 71 completed inspections, review of supporting documentation confirmed 51 inspections were completed throughout 2024. These inspections followed quarterly protocols at most facilities, with limited exceptions due to weather-related accessibility constraints. The completion of 51 inspections exceeded the established target of 42, demonstrating successful achievement of the initiative's operational goals.

Financial Performance Analysis
The initiative received an initial budget allocation of $10,000. Liberty's preliminary financial documentation reported zero actual expenditures; however, the subsequent Annual Report on Compliance reflected actual expenditures of $0, representing a variance of $0 (100%). Liberty attributes this discrepancy to inaccuracies in initial financial projections and acknowledges specific challenges in cost tracking for this initiative during 2024. As noted during the financial SME interview detailed in Appendix 7.3, Liberty initiated the transition of its financial systems from their legacy software, Great Plains, to SAP in Q4 of 2024. Due to the granularity required for WMP reporting, specific costs were inadvertently allocated to incorrect initiatives. Liberty has recognized these issues and is actively working to refine and align its SAP-based financial reporting framework. Efforts are currently underway to ensure more precise expense mapping to the correct WMP initiatives for improved accuracy and transparency in financial documentation moving into 2025.

Impact on Risk Reduction
While Liberty did not establish a quantified risk reduction target for this initiative, the inspection program directly contributes to wildfire risk mitigation through systematic identification and remediation of equipment conditions that could cause ignition events. The completion of 51 inspections, exceeding the 42-inspection target, demonstrates comprehensive oversight of substation infrastructure and enhances operational reliability and safety performance. However, the initial reporting of zero expenditures, attributed to inadequate cost tracking mechanisms, underscores the need for enhanced financial monitoring and reporting systems to ensure accurate and timely documentation of program investments.

WMP-GDOM-GH-01 - Covered conductor installation

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-GH-02 - Undergrounding of electric lines and/or equipment

Strategic Overview and Risk Mitigation
The Undergrounding initiative relocates overhead electric infrastructure underground, substantially mitigating ignition risks associated with overhead equipment in High Fire Threat District (HFTD) areas. Recognized as highly effective in wildfire risk reduction, the 2024 objective aimed to underground 1.3 circuit miles.

Financial Performance Analysis
- Planned Budget: $8,482,680
- Actual Expenditure: $46,067
- Variance: -$8,436,613 (-99.5%)

Liberty attributes the considerable variance primarily to project delays, permitting issues, and the inability to engage a suitable civil contractor within projected budget parameters, leading to a strategic deferral to 2025.

Operational Impact and Risk Reduction
Liberty completed no undergrounding miles during 2024, achieving 0% of the planned target. Consequently, the ignition risks associated with overhead infrastructure in targeted locations remained unmitigated. Liberty submitted a Change Order Request to adjust the original target, which Energy Safety formally denied. Additionally, Liberty noted procedural shortcomings, specifically the absence of a timely 2024 WMP Update submission, which further limited their ability to implement corrective actions or adjust operational targets effectively.

Assessment and Conclusion
The initiative experienced complete non-implementation, reflected by the 99.5% budget variance. Factors including contractor availability, permitting issues, and Liberty's internal procedural gaps significantly impacted project execution. The deferral of undergrounding efforts postponed critical wildfire risk mitigation, but as noted by Liberty during the financial SME interview in Appendix 7.3, Liberty shifted the spend to VMP-GDOM-GH-03 for Distribution Pole Replacements and Reinforcements for an increase in total pole replacements. However, Energy Safety's denial of Liberty's requested target modification emphasizes regulatory expectations for achieving established commitments.

WMP-GDOM-GH-03 - Distribution pole replacements and reinforcements

Strategic Overview and Risk Mitigation
The Distribution Pole Replacements and Reinforcements initiative constitutes an essential component of Liberty's wildfire mitigation strategy. The 2024 program objective established the replacement of 400 poles to address aging or damaged infrastructure, reducing the risk of wire-down incidents and associated ignition events.

Financial Performance Analysis
- Planned Budget: $7,413,000
- Actual Expenditure: $20,147,051
- Variance: $12,734,051 (171.8%)

Liberty attributes this significant budget variance to surpassing the planned pole replacement target by approximately 106%, indicating substantially greater replacement activity than initially projected. as noted by Liberty during the financial SME interview in Appendix 7.3, Liberty shifted the budget from VMP-GDOM-GH-02 Undergrounding of Electric Lines and/or Equipment for replacing more poles as part of 2024's scope of work.

Operational Impact and Risk Reduction
Liberty completed 823 pole replacements in 2024, exceeding the initial target of 400 poles by 105.75%. This accelerated replacement program strengthened the structural integrity of the distribution system and contributed to wildfire risk reduction through proactive remediation of compromised infrastructure. The expanded scope addressed a larger population of potentially hazardous poles than originally planned, advancing the timeline for system improvements.

Assessment and Conclusion
The initiative achieved wildfire risk reduction by replacing 823 poles, more than double the planned target, thereby eliminating 423 additional potential ignition sources from the distribution system. This accelerated infrastructure hardening directly reduced the probability of equipment-related wildfire events. While the 171.8% budget variance reveals

significant gaps between planning assumptions and field realities, the additional investment yielded proportional risk mitigation benefits. Future planning cycles should leverage operational data from this expanded program to develop more accurate forecasting models, ensuring budget projections align with the actual scope required to achieve optimal risk reduction outcomes.

WMP-GDOM-GH-04 - 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 7.

WMP-GDOM-GH-05 - Traditional overhead hardening

Strategic Overview and Risk Mitigation
The Traditional Overhead Hardening initiative constitutes a fundamental element of Liberty's wildfire mitigation strategy. The 2024 program targeted hardening of 3.5 circuit miles of overhead distribution lines through replacement of aging equipment with resilient components designed to minimize infrastructure failures and associated ignition risks.

Financial Performance Analysis
- Planned Budget: $3,500,000
- Actual Expenditure: $1,863,709
- Variance: -$1,636,291 (-46.8%)

Liberty reports achieving the 2024 traditional overhead hardening target at substantially lower cost than projected, indicating operational efficiency improvements in program execution.

Operational Impact and Risk Reduction
Liberty completed the full 3.5 circuit miles of traditional overhead hardening, achieving 100% of the planned target. This infrastructure hardening directly reduces wildfire ignition risk by replacing vulnerable equipment with components designed to withstand environmental stresses and operational demands. The systematic replacement of aging infrastructure addresses potential failure points before they can contribute to ignition events.

Assessment and Conclusion
The initiative successfully delivered planned risk reduction benefits while achieving significant cost savings of 46.8%. The realized savings present opportunities for reallocation to other risk reduction initiatives or expanded future hardening efforts. Future planning should analyze the specific factors contributing to these efficiencies to inform more accurate budget projections and potentially accelerate infrastructure improvements across the service territory.

WMP-GDOM-GH-06 - Emerging grid hardening technology installations and pilot progress

Strategic Overview and Risk Mitigation
The Emerging Grid Hardening Technology initiative, specifically the Swedish Neutral pilot program, was designed to evaluate advanced resonant grounding technology for rapid detection and mitigation of high-impedance faults. This technology aims to reduce wildfire ignition potential through enhanced fault management capabilities, representing a potential advancement in Liberty's risk mitigation portfolio.

Financial Performance Analysis
- Planned Budget: $3,050,000
- Actual Expenditure: $0
- Variance: -$3,050,000 (-100.0%)

Liberty reports that expenses originally allocated for the Swedish Neutral pilot were redirected to associated initiatives, specifically the Sensitive Relay Profile Program (WMP-GDOM-GH-08 and WMP-SA-02). The utility deferred the pilot to assess future requirements and incorporate design considerations into current substation rebuild projects for potential future installations.

Operational Impact and Risk Reduction
The Swedish Neutral pilot did not advance during the 2024 program cycle, resulting in no direct operational implementation or measurable risk reduction benefits from this specific technology. The deferral postponed the opportunity to evaluate and potentially integrate this emerging fault detection and mitigation technology into Liberty's wildfire risk management framework.

Assessment and Conclusion
The Swedish Neutral pilot was fully deferred in 2024, with the allocated $3,050,000 budget redirected to the Sensitive Relay Profile initiative. This reallocation resulted in no direct implementation or testing of the Swedish Neutral technology during the program cycle.

WMP-GDOM-GH-07 – Microgrids

Strategic Overview and Risk Mitigation
The Microgrids initiative targeted the installation of one microgrid system in 2024 to enhance system resilience through targeted de-energization capabilities. This technology aims to reduce the scope of Public Safety Power Shutoff (PSPS) events while maintaining power supply to critical facilities during emergency conditions.

Financial Performance Analysis
- Planned Budget: $1,500,000
- Actual Expenditure: $0

- Variance: -$1,500,000 (-100.0%)

Liberty reports no expenditures toward the microgrid installation due to a strategic decision to redirect resources to covered conductor installation. This reallocation was prompted by higher-than-anticipated costs, complexity, and extended implementation timelines for the microgrid project.

Operational Impact and Risk Reduction
Liberty completed zero microgrid installations against a target of one. The initiative's planned contributions to system resilience, targeted de-energization capabilities, and PSPS impact reduction were not implemented in 2024. Liberty submitted a Change Order Request to adjust the target from one to zero installations, which Energy Safety denied. Resources allocated for this initiative were redirected to covered conductor installations as an alternative wildfire risk mitigation measure.

Assessment and Conclusion
The deferral of the microgrid installation resulted in the planned risk reduction benefits associated with enhanced system resilience and PSPS mitigation capabilities not being implemented in 2024. The 100% budget variance reflects Liberty's strategic reallocation of resources to alternative mitigation measures. The microgrid target established in the 2024 WMP remained at one installation while Liberty's operational approach shifted to covered conductor deployment. This variance between the established program targets and actual implementation affected the specific outcomes anticipated for this initiative within the 2024 wildfire mitigation portfolio.

WMP-GDOM-GH-08 - Installation of system automation equipment

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-GH-09 - Line removal (in HFTD)

Strategic Overview and Risk Mitigation
The Line Removal initiative targeted the removal of 1.1 circuit miles of overhead distribution lines within High Fire Threat District (HFTD) areas in 2024. This initiative, typically implemented in conjunction with microgrid deployment or system reconfiguration projects, aims to eliminate energized infrastructure from high-risk areas, thereby removing potential ignition sources.

Financial Performance Analysis
- Planned Budget: $500,000
- Actual Expenditure: $0
- Variance: -$500,000 (-100.0%)

Liberty reports no expenditures for line removal activities in 2024. This variance resulted from the cancellation of the associated microgrid project due to higher-than-anticipated costs, complexity, and implementation timelines.

Operational Impact and Risk Reduction
Liberty completed zero circuit miles of line removal against the target of 1.1 miles. The anticipated risk reduction through the complete elimination of ignition sources from the targeted line segments was not implemented. Liberty submitted a Change Order Request to adjust the target from 1.1 miles to zero. The initiative did not meet validation requirements, as the proposed modification was determined not to reduce wildfire risk.

Assessment and Conclusion
The line removal initiative experienced no progress toward its 2024 objectives, resulting in a 100% budget variance and non-implementation of planned risk reduction measures. The complete deferral reflects the interdependency between this initiative and the canceled microgrid project. This outcome highlights the importance of comprehensive planning for interconnected initiatives and consideration of alternative implementation strategies when primary projects face feasibility challenges. Future planning should address contingency approaches for achieving risk reduction objectives when interdependent initiatives encounter implementation barriers.

WMP-GDOM-GH-10 - Other grid topology improvements to minimize risk of ignitions

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-GH-11 - Other grid topology improvements to mitigate or reduce PSPS events

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-GH-12 - Other technologies and systems not listed above:

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-GH-12a - Tree attachment removals

Strategic Overview and Risk Mitigation
The 2024 objective was to complete 60 tree attachment removals. Removing direct attachments of electrical equipment to trees reduces stress on both trees and equipment, thereby mitigating ignition risk.

Financial Performance Analysis

- Planned Budget: $720,392
- Actual Expenditure: $928,831
- Variance: +$208,439 (+28.9%)

Liberty reported that it "exceeded its 2024 WMP target for tree attachment removals by 63%".

Assessment of Justification

The overspend was attributed to performing more work than initially planned.

Operational Impact and Risk Reduction

Liberty completed 98 tree attachment removals, exceeding its target of 60 by 63.3%. This overachievement in removing tree attachments would enhance the intended risk reduction by addressing more potential hazards than initially planned.

Assessment and Conclusion

The initiative successfully surpassed its operational target, directly contributing to an enhanced level of wildfire risk reduction by eliminating a greater number of potential ignition sources. The associated overspend indicates an increased scope of work, which, in this context, is a positive outcome for wildfire safety.

WMP-GDOM-GH-12b - Expulsion fuse replacement

Strategic Overview and Risk Mitigation

The Expulsion Fuse Replacement initiative targeted the replacement of 500 traditional expulsion fuses in 2024. This program replaces conventional expulsion fuses with current-limiting or reduced-energy designs that minimize hot particle ejection during operation, thereby reducing potential wildfire ignition risks.

Financial Performance Analysis

- Planned Budget: $0 (indicated as "TBD" at WMP submission)
- Actual Expenditure: $699,266
- Variance: +$699,266 (+100%)

Liberty reports that projected expenditures for expulsion fuse replacements were undetermined at the time of WMP submission, resulting in no initial budget allocation for this planned activity.

Operational Impact and Risk Reduction

Liberty completed 750 expulsion fuse replacements against a target of 500, achieving 150% of the planned objective. This expanded replacement program addressed 250 additional potential ignition sources beyond initial projections, enhancing wildfire risk reduction

through the installation of safer fuse technology across a broader portion of the distribution system.

Assessment and Conclusion
The initiative exceeded operational targets by 50%, delivering enhanced risk reduction through the replacement of additional high-risk expulsion fuses with safer alternatives. The absence of initial budget allocation, despite the inclusion of specific operational targets in the WMP, indicates gaps in the financial planning process. While the $699,266 expenditure enabled successful program execution and expanded risk mitigation benefits, the lack of budgetary planning at WMP submission demonstrates the need for comprehensive cost estimation for all planned activities. Future planning cycles should ensure complete financial projections accompany all operational commitments to support effective resource allocation and program accountability.

WMP-GDOM-GH-12c - Animal guards

Strategic Overview and Risk Mitigation
The Animal Guards initiative targeted the installation of two guards at substations in 2024. Animal guards prevent wildlife contact with energized equipment, reducing both service interruptions and potential ignition events caused by animal-related electrical faults.

Financial Performance Analysis
- Planned Budget: $100,000
- Actual Expenditure: $0
- Variance: -$100,000 (-100.0%)

Liberty reports that the 2024 animal guard target was not achieved due to delays in material procurement.

Operational Impact and Risk Reduction
Liberty installed zero animal guards against a target of two. The initiative did not progress during the 2024 program cycle, with the associated risk reduction benefits from preventing animal-related electrical faults not implemented. Liberty indicates corrective actions are planned for 2025 to complete the deferred installations.

Assessment and Conclusion
The animal guard installations did not advance in 2024 due to material procurement delays, resulting in a 100% budget variance and non-implementation of planned risk mitigation measures. While the utility has identified corrective actions for subsequent program years, the 2024 risk reduction objectives for this initiative were not achieved.

WMP-GDOM-GH-12d - CalFIRE exempt hardware

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-GH-12e - Open wire/grey wire

Strategic Overview and Risk Mitigation
The Open Wire/Grey Wire replacement initiative targeted the replacement of 5.10 circuit miles in 2024. This program upgrades aging, minimally insulated conductors to modern standards, reducing electrical fault potential and associated wildfire ignition risks.

Financial Performance Analysis
- Planned Budget: $2,000,000
- Actual Expenditure: $1,754,773
- Variance: -$245,227 (-12.3%)

Liberty reports completing the open wire/grey wire replacement program under budget while exceeding operational targets.

Operational Impact and Risk Reduction
Liberty replaced 7.36 circuit miles of open/grey wire against a target of 5.10 miles, achieving 144.3% of the planned objective. This expanded replacement program addressed 2.26 additional circuit miles of vulnerable infrastructure beyond initial projections, extending wildfire risk reduction benefits across a larger portion of the distribution system.

Assessment and Conclusion
The initiative exceeded operational targets by 44.3% while achieving cost savings of 12.3%. This performance delivered enhanced risk mitigation through the replacement of additional high-risk conductor segments at lower per-mile costs than projected. The additional infrastructure upgrades achieved within the allocated budget demonstrate effective resource utilization in advancing wildfire mitigation objectives.

WMP-GDOM-GH-12f - Substation Equipment Replacement

Strategic Overview and Risk Mitigation
The 2024 objective for this initiative was one substation equipment replacement. This initiative addresses risks identified through substation inspections, aiming to mitigate potential ignition sources.

Financial Performance Analysis
- Planned Budget: $0
- Actual Expenditure: $415,204
- Variance: +$415,204 (+100.0%)

Liberty stated that it "did not project costs for substation equipment replacement as the work associated with this WMP initiative is determined by the results of substation inspections in the WMP compliance year".

Assessment of Justification
While the reactive nature of this work is understandable, not allocating any budget for anticipated corrective maintenance derived from a planned inspection program (WMP-GDOM-AI-06) is a potential planning deficiency. Some level of corrective work should be anticipated and budgeted.

Operational Impact and Risk Reduction
Liberty completed one substation equipment replacement, thereby meeting its target. Meeting the target for substation equipment replacement, funded by unbudgeted expenditure, would have a positive impact on risk reduction by addressing identified equipment issues.

Assessment and Conclusion
The successful completion of the substation equipment replacement target positively contributed to wildfire risk reduction by addressing critical infrastructure vulnerabilities. However, the complete absence of initial budgeting for this foreseeable corrective work represents a potential planning deficiency. This situation highlights the need for more comprehensive financial planning.

WMP-GDOM-GO-01 - Equipment settings to reduce wildfire risk

Strategic Overview and Risk Mitigation
The Sensitive Relay Profile (SRP) Program targeted the implementation of enhanced protective device settings on 15 circuits in 2024. SRP technology improves fault detection sensitivity, enabling faster response to electrical anomalies and reducing the duration of fault conditions that could lead to ignition events.

Financial Performance Analysis
- Planned Budget: $800,000
- Actual Expenditure: $0
- Variance: -$800,000 (-100.0%)

Liberty reports no expenditures recorded under this initiative, with associated implementation costs captured under alternative WMP initiative categories (WMP-GDOM-GH-08 and WMP-SA-02).

Operational Impact and Risk Reduction
Liberty successfully enabled SRP settings on 15 circuits, achieving 100% of the planned target. This implementation enhanced the distribution system's ability to detect and

respond to fault conditions, providing the intended risk reduction benefits through improved protective device sensitivity. The operational objective was fully met despite the variance in financial reporting.

Assessment and Conclusion
The initiative achieved its operational targets, implementing enhanced protective settings across the planned 15 circuits. While the SRP deployment delivered the intended wildfire risk mitigation benefits through improved fault detection capabilities, the 100% budget variance reflects cost allocation to alternative initiative categories rather than direct expenditure under this program. This financial reporting structure indicates opportunities for enhanced alignment between operational activities and their associated cost tracking to improve transparency in future WMP financial reporting.

WMP-GDOM-GO-02 - Grid response procedures and notifications

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-GO-03 - Personnel work procedures and training in conditions of elevated fire risk

Strategic Overview and Risk Mitigation
This initiative focuses on ensuring Liberty personnel receive comprehensive training and procedural guidance for operations during elevated wildfire risk conditions. While no quantitative targets were specified, the program establishes qualitative objectives to enhance workforce preparedness and operational safety during high-risk periods.

Financial Performance Analysis
- Planned Budget: $298,088
- Actual Expenditure: $0
- Variance: -$298,088 (-100.0%)

Liberty reports no expenditures recorded under this initiative. According to Data Request Response LU_DR005, costs associated with WMP-GDOM-GO-03 were previously tracked in the Wildfire Mitigation Plan Memo Account (WFMP-Expense). Following Liberty's most recent General Rate Case and the implementation of the SAP enterprise system, the company discontinued use of the legacy WFMP-Expense account. These costs are now captured and reported under the Emergency Preparedness initiative (WMP-EP-04), utilizing the Emergency Preparedness Work Breakdown Structure (WBS) within SAP. This transition provides improved alignment with Liberty's operational and financial reporting structure. All associated costs are documented in Table 11 of Liberty's 2024 Q4 Quarterly Data Report.

Operational Impact and Risk Reduction
Liberty's Fire Prevention Plan mandates annual training for employees, contractors, and consultants on Fire Potential Index (FPI) conditions and associated operational procedures. Documentation confirms active implementation of training protocols throughout 2024, including initial and refresher sessions delivered at multiple intervals. Despite the financial reporting transition, operational training objectives were achieved, ensuring personnel readiness for elevated fire risk conditions.

Assessment and Conclusion
The initiative met its operational objectives through documented delivery of required training programs, enhancing personnel capability to respond appropriately during elevated fire risk conditions. The 100% budget variance reflects the transition from legacy accounting methods to the new SAP-based reporting structure, with actual costs now consolidated under WMP-EP-04. While this accounting transition improves overall financial system integration, it creates challenges for year-over-year initiative cost tracking and comparison. Future WMP reporting should clearly document such accounting transitions to maintain transparency in program cost evolution and ensure accurate assessment of resource allocation across wildfire mitigation activities.

WMP-GDOM-GO-04 - Automatic recloser operations

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-GO-05 - Asset Management and Inspection Enterprise System

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 7.

WMP-GDOM-MR-01 - Equipment maintenance and repair

Strategic Overview and Risk Mitigation
The Equipment Maintenance and Repair initiative encompasses maintenance activities to prevent equipment failures that could lead to ignition events. No specific quantitative targets were established for this general maintenance category in 2024.

Financial Performance Analysis
- Planned Budget: $500,000
- Actual Expenditure: $0
- Variance: -$500,000 (-100.0%)

Liberty reports in Data Request Response LU_DR005 that costs were not tracked under this initiative in 2024. The utility clarifies that WMP-GDOM-MR-01 was intended to capture

incremental repair costs identified during detailed asset inspections that are not tracked under other asset-specific initiatives. In practice, repair costs are captured within asset-specific programs such as pole repairs (WMP-GDOM-GH-03) and substation equipment replacement (WMP-GDOM-GH-12f).

Operational Impact and Risk Reduction
Equipment maintenance and repair activities were executed through asset-specific initiatives, with associated risk reduction benefits reflected in programs such as pole replacements (WMP-GDOM-GH-03) and substation equipment replacements (WMP-GDOM-GH-12f). The absence of expenditures under this general category reflects the allocation of maintenance costs to specific asset programs rather than cessation of maintenance activities.

Assessment and Conclusion
The 100% budget variance indicates that the intended function of this initiative as a repository for incremental repair costs was not utilized in 2024. Liberty's clarification reveals that maintenance and repair expenditures were comprehensively captured within asset-specific categories, ensuring operational activities and their associated risk mitigation benefits were properly executed and documented. However, the presence of an unutilized budget allocation highlights opportunities for refining the WMP financial structure to eliminate redundant categories and enhance clarity in cost tracking and reporting.

4.1.3 Synthesis of Findings

4.1.3.1 Initiative Review

Liberty's performance across its 2024 Wildfire Mitigation Plan initiatives presents a mixture of compliance and strategic adaptation. While the utility generally met or exceeded targets in areas such as detailed inspections and intrusive pole examinations, it fell short in patrol inspections and planned microgrid deployments. The primary reasons for missed targets were strategic shifts in priorities, particularly toward accelerating covered conductor deployment at the expense of other initiatives. This adaptive approach, while potentially beneficial for overall risk reduction, led to non-compliance in some areas due to unapproved changes by Energy Safety. The level of wildfire risk reduction achieved appears substantial, evidenced by comprehensive inspection programs and grid hardening measures, though quantification varied across initiatives.

Liberty's recordkeeping and data management were generally in-depth, providing detailed reports and asset lists. However, some inconsistencies in reporting methods and discrepancies in inspection numbers highlight areas for improvement in data accuracy and reporting clarity. The utility demonstrated a willingness to adjust strategies based on cost-effectiveness and near-term risk reduction potential, as seen in the shift towards the

Sensitive Relay Profile Program. Looking forward, Liberty has identified several areas for enhancement, including improved inspection scheduling and continued evaluation of emerging technologies.

To strengthen future performance, the utility should focus on developing more consistent risk reduction metrics across initiatives, ensuring alignment between strategic shifts and regulatory expectations, and improving the clarity and substantiation of reported figures. Overall, while Liberty showed progress in many areas of wildfire mitigation, balancing adaptive strategies with regulatory compliance remains an important aspect of future WMP planning.

4.1.3.2 Funding Verification

Budget and Expenditure Summary

The Grid Design, Operations, and Maintenance category had a total planned budget of $39,851,587 with actual expenditures of $36,758,811, representing a 7.8% variance below budget. The category's overall expenditure remained within 10% of the planned budget allocation.

Initiatives with Significant Variances

Of the 30 total initiatives in this category, 20 (67%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Inaccurate initial projections for asset inspection activities, resulting in overruns for detailed inspections (+329.3%) and QA/QC inspections (+2029.9%)
- Reallocation of resources from undergrounding (-99.5%), microgrids (-100%), and line removal (-100%) to covered conductor deployment and pole replacements
- Transition to new financial tracking systems (SAP implementation in Q4 2024) resulting in cost allocation challenges across multiple initiatives.

Key Trends and Funding Compliance

The distribution pole replacement initiative exceeded both operational targets (205.75%) and budget (171.8% variance), addressing aging infrastructure to reduce the risk of wire-down incidents and associated ignition events. Several initiatives achieved operational targets while utilizing less funding than planned, including traditional overhead hardening (-46.8%) which reduces wildfire ignition risk by replacing vulnerable equipment with resilient components. The category's funding patterns reflect Liberty's focus on proactive identification and remediation of equipment conditions that pose ignition risks, with asset inspections and grid hardening measures forming critical components of the comprehensive wildfire risk reduction strategy.

4.2 VEGETATION MANAGEMENT AND INSPECTIONS

4.2.1 Initiative Summary Table

Table 33: Initiative Summary Table

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[10]	EC-Claimed Progress[11]	EC-Claimed Initiative Status[12]	Sample Size[13]	Sample Validation Rate (%)[14]	Verification Method[15]	IE Finding on Initiative (Initiative Validation Rate)[16, 17]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[18]
WMP-VM-ESG-01, 8.2.4, Vegetation Management Enterprise System	No Target	N/A	Target Met	Overview of enterprise system	100%	SME Interview (DR056)	Initiative Validated (100%)	$418,185	$577,570 (+38.1%)	No Goal Provided
WMP-VM-INSP-01, 8.2.2.1, Vegetation Management Inspection Program - Detailed	220 Line Miles	258 Line Miles	Target Met	72 Line Miles	100%	Records of detailed VM inspections (DR057)	Initiative Validated (117.93%)	$813,515	$763,520 (-6.1%)	No Goal Provided
WMP-VM-INSP-02, 8.2.2.2, Vegetation Management Inspection Program - Patrol	No Target	136.4 Line Miles	Target Met	20 Line Miles	100%	Records of VM patrol inspections (DR058)	Initiative Validated (100%)	$257,500	$595,415 (+131.2%)	No Goal Provided
WMP-VM-INSP-03, 8.2.2.3, Vegetation Management Inspection Program - LiDAR	700 Line Miles	700 Line Miles	Target Met	23 Line Miles	100%	Records of VM LiDAR inspections (DR058)	Initiative Validated (100%)	$721,000	$563,342 (-21.9%)	No Goal Provided
WMP-VM-QAQC-01, 8.2.5, Quality Assurance and Quality Control	229 Line Miles	229 Line Miles	Target Met	22 Line Miles	100%	Records of QA completion (DR060)	Initiative Validated (102.3%)	$515,000	$542,653 (+5.4%)	No Goal Provided
WMP-VM-VFM-01, 8.2.3.1, Pole Clearing	4,960 Poles	5,084 Poles	Target Met	23 Poles	100%	Records of pole clearing completion (DR061)	Initiative Validated (102.5%)	$494,400	$565,771 (+14.4%)	No Goal Provided
WMP-VM-VFM-02, 8.2.3.2, Wood and Slash Management	280 Acres	349.5 Acres	Exceeded Target	17 Acres	100%	2024 Fuel Management List 2024 Fuel Management Tracking Project Summaries (DR038)	Initiative Validated (124%)	$1,545,000	$1,267,478 (-18.0%)	No Goal Provided
WMP-VM-VFM-03, 8.2.3.5, Substation Defensible Space	No Target	23 Substations	Target Met	13 Substations	100%	Records of substation clearing completion (DR062)	Initiative Validated (100%)	$20,600	$62,321 (+202.5%)	No Goal Provided
WMP-VM-VFM-04, 8.2.3.7, Fire-Resilient Right-of-Ways	No Target	13.2 Line Miles	Target Met	13.2 Line Miles	100%	Records of right-of-way clearing completion (DR063)	Initiative Validated (100%)	$262,650	$821,205 (+212.7%)	No Goal Provided

[10] N/A in the Initiative Target column means that the EC did not provide a target in the WMP.
[11] N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC.
[12] N/A in the Claimed Status column means that the EC did not provide a claimed status on QDR4 or the EC ARC.
[13] 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.
[14] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[15] N/A in the Verification Method column means that the initiative was not reviewed.
[16] 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.
[17] N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.
[18] Liberty's WMP provides no Risk Reduction Goal for any initiative and the EC states that they "do not currently have sufficient information to calculate" a Risk Reduction Goal.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[10]	EC-Claimed Progress[11]	EC-Claimed Initiative Status[12]	Sample Size[13]	Sample Validation Rate (%)[14]	Verification Method[15]	IE Finding on Initiative (Initiative Validation Rate)[16, 17]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[18]
WMP-VM-VFM-05, 8.2.3.3, Clearance	No Targets	702.1 Line Miles	Target Met	83 Line Miles	100%	Records of VM inspections and maintenance completion (DR064)	Initiative Validated (100%)	$913,507	$996,357 (+9.1%)	No Goal Provided
WMP-VM-VFM-06, 8.2.3.4, Fall-In Mitigation	220 Line Miles	364 Line Miles	Target Met	88.4 Line Miles	100%	Field Inspections Records of fall-in mitigation completion (DR065.c)	Initiative Validated (165.46%)	$7,982,500	$3,254,922 (-59.2%)	No Goal Provided
WMP-VM-VFM-07, 8.2.3.6, High-Risk Species	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-VM-VFM-08, 8.2.3.8, Emergency Response Vegetation Management	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$0	$6,445 (+100.0%)	No Goal Provided

4.2.2 Written Detail for Initiatives

4.2.2.1 Initiative Review – Findings & Method

WMP-VM-ESG-01 - 8.2.4 - Vegetation Management Enterprise System - Non-Focus & Non-Field Verifiable

A centralized vegetation management enterprise system streamlines the tracking and management of inspections, trimming, and tree removal activities, helping reduce wildfire risks related to vegetation contact. Liberty's 2023–2025 WMP did not set a 2024 completion target or risk reduction goal for this initiative.

To confirm system functionality for the 2024 compliance year, the IE conducted an SME interview and live demonstration on May 14, 2025, with Liberty representatives Peter Stoltman, Eric Oiler, and Matthew Dalgetty, as documented in Data Request DR056 and summarized in Table 34. During the demonstration, Liberty showcased the Vegetation Management Enterprise System (Fieldnote), highlighting how all vegetation management data, including inspections, tree work, pole clearing, and LiDAR imports are collected in Fieldnote and automatically integrated into a SQL database. This centralized database provides stored procedures, archived views, and reporting dashboards, replacing previous spreadsheet-based tracking methods.

A detailed summary of the SME interview is provided in Appendix 7.3. While Liberty did not set a 2024 target for this initiative, the utility has demonstrated that it maintains a centralized VM enterprise system. The IE identified no issues during the demonstration or documentation review. Based on the SME interview and demonstration, the IE validates this initiative.

Table 34: Vegetation Management Enterprise System Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR056 Response	Summary
No Target	N/A	N/A	SME interview for enterprise system	Initiative Validated

WMP-VM-INSP-01 - 8.2.2.1 - Vegetation Management Inspection Program - Detailed - Focus & Non-Field Verifiable

Detailed vegetation management inspections proactively identify vegetation risks near electric lines, reducing ignition potential. Liberty's 2023–2025 WMP established a 2024

target of completing 220-line miles of detailed VM inspections but did not specify a risk reduction goal.

As reported by Liberty's 2024 Q4 QDR, the utility completed 258-line miles, exceeding its annual target. Liberty provided a detailed CSV file in response to Data Request DR057, documenting each inspected segment with circuit identifiers, mileage, inspection dates, and work-order references, totaling 259.45-line miles, as summarized in Table 35. A small variance of 1.45 miles (0.56%) existed between the QDR-reported total and the DR057 documentation.

The IE performed a desktop review and randomly selected 72-line miles (approximately 28% of reported miles) for detailed verification. Sampled data was cross-checked for accuracy of circuit identifiers, mileage, and inspection dates against QDR totals, with no discrepancies identified.

Based on the documentation reviewed, the IE validates Liberty's reported completion of detailed VM inspections for 2024.

Table 35: Vegetation Management Inspection Program Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR057 Response	Summary
220 Line Miles	258 Line Miles	258 Line Miles	259.45 Line Miles	Initiative Validated

WMP-VM-INSP-02 - 8.2.2.2 - Vegetation Management Inspection Program - Patrol & Non-Focus - Non-Field Verifiable

Patrol vegetation management inspections support wildfire risk mitigation by providing assessments of vegetation conditions along utility lines. Liberty's 2023–2025 WMP did not establish a completion target or risk reduction goal for VM patrol inspections in 2024.

Although no target was set, Liberty reported completing 136.4 line miles of VM patrol inspections, as summarized in Table 36. Liberty further provided detailed records documenting 136.47 line miles of completed patrol inspections in response to Data Request DR058.

The IE reviewed a sample of 20 line miles from the patrol inspection records. No issues or discrepancies were identified during this review. Based on the documentation reviewed, the IE validates this initiative.

Table 36: Vegetation Management Inspection Program - Patrol Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR058 Response	Summary
No Target	136.4 Line Miles	136.4 Line Miles	136.47 Line Miles	Initiative Validated

WMP-VM-INSP-03 - 8.2.2.3 - Vegetation Management Inspection Program - LiDAR & Non-Focus - Non-Field Verifiable

LiDAR-based vegetation management inspections enhance vegetation risk assessment through precise and detailed data collection, supporting targeted mitigation efforts. Liberty's 2023–2025 WMP established a 2024 target of completing 700-line miles of VM LiDAR inspections but did not set a risk reduction goal.

As reported by Liberty's 2024 Q4 QDR, Liberty completed 700-line miles of LiDAR VM inspections, meeting its annual target. Liberty provided additional records documenting 701.33-line miles of completed inspections in response to Data Request DR059, as summarized in Table 37.

The IE reviewed a sample of 23-line miles from the LiDAR inspection records. No issues or discrepancies were identified during this review. Based on the documentation reviewed, the IE validates this initiative.

Table 37: Vegetation Management Inspection Program - LiDAR Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR059	Summary
700 Line Miles	700 Line Miles	700 Line Miles	701.33 Line Miles	Initiative Validated

WMP-VM-QAQC-01 - 8.2.5 - Quality Assurance and Quality Control - Non-Focus & Non-Field Verifiable

Quality assurance and quality control (QA/QC) inspections validate vegetation management activities, ensuring adherence to standards and enhancing program effectiveness. Liberty's 2023–2025 WMP established 2024 targets for QA/QC inspections across four vegetation management programs but did not identify risk reduction goals.

Completed Tree Work

Liberty set a 2024 target of performing QA/QC inspections on 229-line miles of completed tree work. According to Liberty's Q4 QDR, the utility completed 234.3-line miles of QA/QC inspections, exceeding its target, as summarized in Table 38. Liberty provided detailed completion records confirming these inspections in response to Data Request DR060.b. The IE reviewed a sample of 22-line miles from these inspections and identified no issues or discrepancies.

Detailed Inspection
Liberty's 2024 target for QA/QC inspections of detailed vegetation management inspections was 77-line miles. Although Liberty's Q4 QDR did not report completion for this category, Liberty provided documentation in response to DR060.b confirming the completion of 113.52-line miles, exceeding the original target, as summarized in Table 38. The IE reviewed these completion records and identified no issues or discrepancies.

Hazard Tree Work
Liberty established a 2024 target of completing QA/QC inspections for 524 hazard tree removals. While the Q4 QDR did not report completion for this category, Liberty's documentation provided through DR060.b reported the completion of 665 QA/QC inspections, exceeding its target, as summarized in Table 38. The IE reviewed these completion records and found no issues.

Pole Brushing
Liberty's 2024 target for QA/QC inspections of pole brushing was 585 poles. Although the Q4 QDR did not report completion for this initiative, Liberty provided records documenting 608 completed QA/QC inspections for pole brushing in response to DR060.b, exceeding its target, as summarized in Table 38. The IE reviewed these inspection records and identified no issues or discrepancies.

Based on the comprehensive documentation reviewed for each vegetation management QA/QC category, the IE validates this initiative.

Table 38: Quality Assurance and Quality Control Summary

Description	2024 Target	2024 ARC	2024 Q4 QDR	DR060.b Response	Summary
QA/QC Completed Tree Work	229 Line Miles	229 Line Miles	229 Line Miles	234.3 Line Miles	Initiative Validated
QA/QC Detailed Inspection	77 Line Miles	N/A	N/A	113.52 Line Miles	Initiative Validated
QA/QC Hazard Tree Work	524 Trees	N/A	N/A	665 Trees	Initiative Validated

Description	2024 Target	2024 ARC	2024 Q4 QDR	DR060.b Response	Summary
QA/QC Pole Brushing	585 Poles	N/A	N/A	608 Poles	Initiative Validated

WMP-VM-VFM-01 - 8.2.3.1 - Pole Clearing - Non-Focus & Non-Field Verifiable

Pole clearing reduces wildfire ignition risks by removing vegetation around utility poles, preventing contact and potential faults. Liberty's 2023–2025 WMP set a 2024 target to clear vegetation around 4,960 poles but did not specify a risk reduction goal.

Per Liberty's 2024 Q4 QDR, the utility completed clearing activities around 5,084 poles, exceeding its annual target, as summarized in Table 39. In response to Data Request DR061, Liberty provided detailed records confirming completion data for all 5,084 poles, including:

- Pole Asset ID
- Circuit ID
- Point Coordinates
- Status
- Completion Date

The IE reviewed a sample of 23 pole-clearing records and identified no issues or discrepancies. Based on the documentation reviewed, the IE validates this initiative.

Table 39: Pole Clearing Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR061 Response	Summary
4,960 Poles	5,084 Poles	5,084 Poles	5,084 Poles	Initiative Validated

WMP-VM-VFM-02 – 8.2.3.2 - Wood and Slash Management – Non-Focus & Non-Field Verifiable

Data was gathered to assess initiative VFM-02 to review Liberty's goal to reduce the accumulation of bio debris by removing wood and treating brush and slash after vegetation maintenance is performed. Liberty did not provide a risk reduction goal for this initiative. Liberty conducts Vegetation Management inspection and maintenance activities to improve the reliability of its transmission and distribution systems and to comply with regulatory

requirements. Management of fuel load reduces both the risk of fire ignition and the potential for increased fire intensity.

Data collected in response to LU_DR038 was evaluated to determine progress made towards meeting the initiative target. A list of 1,085 properties was provided for review in the utility response and totaled 293.80 acres reported. Further documentation provided by Liberty broke down acres treated by quarter and reported a total of 349.54 acres treated. Although there is a discrepancy here, both documents provided show that Liberty exceeded the target goal of 280 acres, as referenced in the WMP. Documentation was in the form of two spreadsheets: Biomass Removed Tracking and a detailed, by location, vegetation management list.

The review covered a detailed examination of the reports, ensuring consistency and accuracy. The report containing the detailed by location vegetation management list documented the work, including location by circuit, work type, contractor assigned, exact location address/APN/longitude latitude, job identification number, and notation of work status. The Biomass Removed Tracking sheet provided detailed tracking information.

The findings demonstrated that reporting maintained uniform formatting and language throughout documents. Each of the sampled locations matched APNs, lot size, and address when matched against county property record databases. The address/GPS location, report date, work type, and job identification numbers were consistent and matched the list of locations. From the data provided, 350 properties were noted as “Complete,” correlating to approximately 280 acres recorded as a target goal. The cleared 350 acres translated into 3,996.82 tons of biomass removed and 50.68-line miles cleared.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 40: Wood and Slash Management

2024 Target	2024 ARC	2024 Q4 QDR	DR038 Response	Summary
280 Acres	349.5 Acres	350 Acres	349.5 Acres	Initiative Validated

WMP-VM-VFM-03 - 8.2.3.5 - Substation Defensible Space - Non-Focus & Non-Field Verifiable

Maintaining defensible space around substations reduces wildfire risks by eliminating vegetation that could ignite or fuel a fire near critical facilities. Liberty’s 2023–2025 WMP did not specify a 2024 completion target or risk reduction goal for substation defensible

space treatments but indicated routine inspections and maintenance for 12 substations, requiring at least two site visits per substation per year.

Per Liberty's 2024 Q4 QDR, the utility completed 23 defensible space treatments across 12 substations during 2024, as summarized in Table 41. Liberty provided detailed completion records in response to Data Request DR062, including documentation of personnel performing vegetation clearing, post-treatment reports, and substation photographs.

The IE reviewed a sample of 13 defensible space treatments from the records provided and identified no issues or discrepancies. Although no formal target was established, Liberty completed defensible space work during the year. Based on the documentation reviewed, the IE validates this initiative.

Table 41: Substation Defensible Space Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR062 Response	Summary
No Targets	N/A	23 Substation Treatments	23 Substation Treatments	Initiative Validated

WMP-VM-VFM-04 - 8.2.3.7 - Fire-Resilient Right-of-Ways - Non-Focus & Non-Field Verifiable

Creating fire-resilient rights-of-way reduces wildfire risks by proactively removing incompatible and hazardous tree species that encroach on power lines. Liberty's 2023–2025 WMP did not establish a specific completion target or risk reduction goal for this initiative in 2024.

As reported by Liberty's 2024 Q4 QDR, the utility completed 13.2-line miles of fire-resilient right-of-way treatments, as summarized in Table 42. Liberty provided detailed completion records in response to Data Request DR063, documenting 13.24-line miles across three specific project areas: Martis Peak, Fallen Leaf, and Angora.

The IE reviewed the documentation provided for all fire-resilient right-of-way projects and identified no issues or discrepancies. Although no formal target was set, Liberty completed proactive right-of-way work during the year. Based on the documentation reviewed, the IE validates this initiative.

Table 42: Fire-Resilient Right-of-Ways Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR063 Response	Summary
No Target	N/A	13.2 Line Miles	13.24 Line Miles	Initiative Validated

WMP-VM-VFM-05 - 8.2.3.3 - Clearance - Focus & Non-Field Verifiable

Vegetation clearance inspection and maintenance activities mitigate wildfire risks by ensuring proper clearance around electric lines. Liberty's 2023–2025 WMP did not establish a specific completion target or risk reduction goal for vegetation clearance in 2024.

Reported by Liberty's 2024 Q4 QDR, the utility completed 702.1-line miles of vegetation clearance inspection and maintenance, as summarized in Table 43. Liberty provided detailed completion records in response to Data Request DR064, documenting attributes including Circuit ID, Circuit Segment Number, Segment Length, Completion Length, Vegetation Count by Circuit Segment, Work Type, and Completion Date.

The IE reviewed a sample of 83-line miles of clearance inspection and maintenance records, cross-checking for consistency in circuit IDs, segment lengths, completion dates, and alignment with the QDR aggregate mileage. No issues or discrepancies were identified during this review. Based on the documentation reviewed, the IE validates this initiative.

Table 43: Clearance Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR064 Response	Summary
No Target	N/A	702.1 Line Miles	702.1 Line Miles	Initiative Validated

WMP-VM-VFM-06 - 8.2.3.4 - Fall-In Mitigation - Focus & Field Verifiable

Trimming or removing "fall-in" trees near electric lines reduces wildfire ignition risk by preventing vegetation-caused faults within HFTD areas. Liberty's 2023–2025 WMP set a 2024 target to complete fall-in mitigation treatments for 220 circuit miles but did not specify a risk reduction goal.

As reported by Liberty's 2024 Q4 QDR, the utility completed fall-in mitigation on 364 circuit miles, exceeding its annual target, as summarized in Table 44. Liberty provided detailed completion data in response to Data Requests DR065.b and DR065.c, including line-

segment lengths totaling 364 circuit miles and point coordinates with 563 mitigation locations. These records included attributes such as coordinates, circuit IDs, species/treatment type (trim or removal), treatment dates, and HFTD tiers.

The IE performed field observations at 90 randomly selected mitigation points, covering approximately 88.4 circuit miles within Liberty's service area. For illustrative examples, refer to Figure 10: Examples of Fall-In Mitigation Field Images.

Figure 10: Examples of Fall-In Mitigation Field Images

		
Trimming Example	Removal Example	OH Line Example

Field assessments included confirmation of coordinates, vegetation condition documentation, and site photography. The IE observed minor discrepancies during the review, noting several instances where trees showed evidence of topping or trimming instead of full removal. In these cases, sufficient clearance was still achieved to effectively mitigate fall-in risk. No significant workmanship issues were identified.

Based on the field verification and assessment of documentation provided, the IE validates this initiative.

Table 44: Fall-In Mitigation Summary

2024 Target	2024 ARC	2024 Q4 QDR	DR065.b & DR065.c Response	Summary
220 Line Miles	364 Line Miles	364 Line Miles	364 Line Miles	Initiative Validated

WMP-VM-VFM-07 - 8.2.3.6 - High-Risk Species - Non-Focus & Non-Field Verifiable

This initiative is not appliable as all targets, completion, and spend for initiative VFM-07 is tracked and recorded under VFM-06, as confirmed by Liberty in DR066.

WMP-VM-VFM-08 - 8.2.3.8 - Emergency Response Vegetation Management - Non-Focus & Non-Field Verifiable

As reported in Liberty's 2024 Q4 QDR dated January 31, 2025, provided in the response to the Front-Loaded Data Request and confirmed by the Annual Report on Compliance for the 2024 WMP, this initiative did not have any target or work completed for 2024. Based upon this, the IE has determined that this initiative is not applicable for the 2024 review period.

4.2.2.2 Funding Verification – Findings

WMP-VM-ESG-01 - Vegetation Management Enterprise System

Strategic Overview and Risk Mitigation
The Vegetation Management Enterprise System initiative implements a comprehensive digital infrastructure to support vegetation management operations. This system enhances data collection, tracking, and prioritization capabilities for vegetation-related wildfire mitigation activities. No specific quantitative targets were established for 2024.

Financial Performance Analysis

- Planned Budget: $418,185
- Actual Expenditure: $577,570
- Variance: $159,385 (38.1%)

Liberty attributes the budget variance to inaccurate initial projections for Enterprise System implementation in 2024.

Operational Impact and Risk Reduction
The initiative remains in progress, consistent with typical enterprise system implementation timelines. While specific quantitative outcomes were not reported for 2024, system development

supports enhanced vegetation management capabilities through improved data accuracy, work prioritization, and operational tracking. These enhancements contribute to more effective vegetation management practices and associated wildfire risk reduction.

Assessment and Conclusion
The 38.1% budget variance reflects the potential underestimation of system development, licensing, or implementation requirements. The additional expenditure supported continued system deployment and capability development. Enterprise system implementation advances long-term improvements in vegetation management efficiency and effectiveness, supporting Liberty's wildfire mitigation objectives.

WMP-VM-INSP-01 - Vegetation Management Inspection Program – Detailed

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 33.

WMP-VM-INSP-02 - Vegetation Management Inspection Program – Patrol

Strategic Overview and Risk Mitigation
The Vegetation Management Inspection Program - Patrol conducts routine assessments to identify emergent vegetation hazards across the distribution system. This initiative targets the identification of vegetation conditions that pose immediate wildfire risk, enabling timely mitigation activities. The 2024 program patrols are completed on an as-needed basis with no established yearly target.

Financial Performance Analysis
- Planned Budget: $257,500
- Actual Expenditure: $595,415
- Variance: $337,915 (131.2%)

Liberty reports that expanded patrol inspection work was performed due to increased tree mortality conditions encountered in the field.

Operational Impact and Risk Reduction
Liberty completed 136.4-line miles of patrol inspections, achieving 175% more than 2023 WMP completions of 78-line miles. The expanded inspection scope addressed 58 additional line miles beyond the previous year. The increased coverage was implemented in response to elevated tree mortality rates, enabling the identification and documentation of vegetation hazards across a broader portion of the service territory.

Assessment and Conclusion
The initiative exceeded operational targets with a corresponding budget variance of 131.2%. The additional expenditure supported expanded inspection activities necessitated by field

conditions, specifically increased tree mortality rates. This responsive adjustment to environmental conditions enhanced wildfire risk mitigation through the identification of vegetation hazards beyond the initially planned scope. The variance between planned and actual requirements reflects the variable nature of vegetation-related risks.

WMP-VM-INSP-03 - Vegetation Management Inspection Program – LiDAR

Strategic Overview and Risk Mitigation
The Vegetation Management LiDAR Inspection Program utilizes advanced remote sensing technology to collect high-resolution spatial data for vegetation clearance analysis. This initiative provides precise measurements of vegetation proximity to electrical infrastructure, enabling data-driven prioritization of vegetation management activities. The 2024 program established a target of 700 circuit miles for LiDAR inspections.

Financial Performance Analysis

- Planned Budget: $721,000
- Actual Expenditure: $563,342
- Variance: -$157,658 (-21.9%)

Liberty reports achieving cost savings through vendor collaboration to develop optimized specifications for deliverables.

Operational Impact and Risk Reduction
Liberty completed 701.3-line miles of LiDAR inspections, achieving 100% of the planned target. The initiative delivered comprehensive vegetation clearance data across the targeted circuit miles while realizing operational efficiencies. The LiDAR data collection provides detailed spatial analysis capabilities for identifying vegetation encroachment risks and prioritizing mitigation activities.

Assessment and Conclusion
The initiative met operational targets while achieving cost savings of 21.9% through vendor engagement and specification optimization. This performance demonstrates effective contract management and technical requirement definition. The successful completion of 701.3-line miles of LiDAR inspections ensures the planned wildfire risk reduction benefits were fully realized through the comprehensive identification of vegetation encroachment hazards across the targeted infrastructure. The cost reduction was accomplished without compromising data quality or coverage, maintaining the initiative's effectiveness in supporting vegetation management decisions that directly reduce ignition risks.

WMP-VM-QAQC-01 - Quality Assurance and Quality Control

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 33.

WMP-VM-VFM-01 - Pole Clearing

Strategic Overview and Risk Mitigation
The Pole Clearing initiative establishes defensible space around distribution poles through targeted vegetation removal. This program directly reduces wildfire ignition risk by eliminating combustible materials in proximity to electrical infrastructure. The 2024 program established a target of clearing vegetation around 4,960 subject poles.

Financial Performance Analysis

- Planned Budget: $494,400
- Actual Expenditure: $565,771
- Variance: $71,371 (14.4%)

Liberty reports utilizing a second vendor to complete pole-clearing work, which resulted in increased costs.

Operational Impact and Risk Reduction
Liberty cleared vegetation around 5,084 subject poles against a target of 4,960, achieving 102.5% of the planned objective. The expanded clearing program addressed 124 additional poles beyond initial projections, creating defensible space around a broader population of infrastructure assets. This additional vegetation removal directly enhances wildfire risk mitigation by reducing potential ignition sources and fuel loads adjacent to electrical equipment.

Assessment and Conclusion
The initiative exceeded operational targets by 2.5% with a corresponding budget variance of 14.4%. The additional expenditure, attributed to engagement of a second vendor, supported completion of vegetation clearing activities beyond the planned scope. The variance may reflect capacity constraints with the primary contractor or acceleration of work schedules to address field conditions. The expanded pole clearing directly contributes to enhanced wildfire risk reduction through creation of additional defensible space around utility infrastructure.

WMP-VM-VFM-02 - Wood and Slash Management

Strategic Overview and Risk Mitigation
The Wood and Slash Management initiative addresses the proper disposal of vegetation debris generated from tree trimming and removal activities. This program reduces fuel loads in and around utility corridors, minimizing both wildfire ignition potential and fire intensity should an ignition occur. The 2024 program established a target of managing 280 acres of wood and slash materials.

Financial Performance Analysis

- Planned Budget: $1,545,000
- Actual Expenditure: $1,267,478
- Variance: -$277,522 (-18.0%)

Liberty attributes the budget variance to inaccurate initial projections for the 2024 Wood and Slash Management Program.

Operational Impact and Risk Reduction

Liberty managed 349.54 acres of wood and slash materials against a target of 280 acres, achieving 124.8% of the planned objective. This expanded program addressed 69.54 additional acres beyond initial projections, removing combustible materials from a larger area than originally planned. The enhanced fuel load reduction directly contributes to decreased wildfire risk by eliminating potential ignition sources and reducing fire intensity potential across the expanded acreage. Additionally, per the financial SME interview noted in Appendix 7.3, Liberty noted that this work was done in partnership with Truckee Fire which increased the footprint of this initiative with lowered costs.

Assessment and Conclusion

The initiative exceeded operational targets by 24.8% while achieving cost savings of 18.0%. This performance indicates improved operational efficiency in slash management activities, with lower per-acre costs than initially projected. The combination of expanded acreage treatment and reduced expenditure demonstrates effective resource utilization and program execution. The additional fuel load reduction achieved through management of 69.54 acres beyond target directly enhances wildfire risk mitigation outcomes.

WMP-VM-VFM-03 - Substation Defensible Space

Strategic Overview and Risk Mitigation

The Substation Defensible Space initiative establishes and maintains protective vegetation buffers around critical substation infrastructure through routine management activities. This program reduces wildfire risks by ensuring adequate clearances and eliminating combustible materials near essential electrical facilities. The 2024 program required at least two annual site visits per substation for vegetation management and inspections, though no specific numerical target was established for total treatments.

Financial Performance Analysis

- Planned Budget: $20,600
- Actual Expenditure: $62,321
- Variance: $41,721 (202.5%)

Liberty attributes the budget variance to inaccurate initial projections for the 2024 Substation Defensible Space program. As noted during the financial SME interview in Appendix 7.3, Liberty indicated that when the projects were developed Liberty based the projections on only half of a year's work rather than a full year showing the inaccurate initial projects as noted in Liberty's ARC.

Operational Impact and Risk Reduction
Liberty completed 23 defensible space treatments across 12 substations, meeting the requirement for bi-annual site visits at each facility. The vegetation management activities removed combustible materials and maintained clearances around critical infrastructure, reducing both ignition potential and wildfire exposure risks. These protective buffers help ensure continued operational capability of essential electrical facilities during wildfire events.

Assessment and Conclusion
The initiative achieved vegetation management at 12 substations with a budget variance of 202.5%. This variance reflects substantial underestimation of per-site treatment costs in initial planning. The completed work met operational requirements for bi-annual inspections while providing wildfire protection for critical infrastructure across the service territory. The variance between projected and actual costs indicates the need for enhanced cost estimation methodologies based on historical data and comprehensive site assessments. Despite the budget variance, the program delivered the intended risk reduction benefits through systematic vegetation management at substation facilities.

WMP-VM-VFM-04 - Fire-Resilient Right-of-Ways

Strategic Overview and Risk Mitigation
The Fire-Resilient Right-of-Ways initiative establishes fuel breaks and reduces vegetation fuel loads along utility corridors to limit the potential for wildfire spread. These measures slow the progression of fires and create defensible positions for firefighting operations. The 2024 Quarterly Data Report established an initial target of 0 line miles for this initiative.

Financial Performance Analysis
- Planned Budget: $262,650
- Actual Expenditure: $821,205
- Variance: $558,555 (212.7%)

Liberty attributes the variance to inaccurate initial budget projections for Fire-Resilient ROW activities. As noted during the financial SME interview in Appendix 7.3, Liberty confirmed this initiative is in partnership with the National Forest Foundation and the Forest Service where costs were developed anticipating an even split of actuals across three years.

However, Liberty indicated that there were increased in upfront costs for the planning of the project required than initially anticipated to be shared across years.

Operational Impact and Risk Reduction
Liberty completed 13.2 line miles of fire-resilient right-of-way treatments in 2024, despite the zero-mile target. The implemented vegetation management created fuel breaks and strategic barriers, reducing fire intensity potential and enhancing wildfire mitigation capabilities along utility corridors. These treatments provide defensible zones within the service territory.

Assessment and Conclusion
While the treatments delivered wildfire risk reduction benefits through strategic fuel breaks, the 212.7% budget variance reveals gaps in initial planning processes, where anticipated costs would have to be front-loaded rather than split evenly across years.

WMP-VM-VFM-05 – Clearance

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 33.

WMP-VM-VFM-06 - Fall-In Mitigation

Strategic Overview and Risk Mitigation
The Fall-In Mitigation initiative addresses trees located outside standard right-of-way boundaries, focusing on high-risk species with increased susceptibility to structural failure. This program proactively removes or modifies trees that could come into contact with electrical infrastructure during storm events or due to natural mortality. The 2024 program established a target of 220 circuit miles for fall-in risk mitigation activities.

Financial Performance Analysis
- Planned Budget: $7,982,500
- Actual Expenditure: $3,254,922
- Variance: -$4,727,578 (-59.2%)

Liberty attributes the variance to initial budget projections that exceeded actual field mitigation requirements. While vegetation inspection targets were maintained, the required mitigation work was lower than projected based on field conditions encountered during inspections.

Operational Impact and Risk Reduction
Liberty completed fall-in mitigation along 364 line miles against a target of 220 miles, achieving 165.5% of the planned objective. This expanded coverage addressed fall-in risks along 144 additional circuit miles through removal or modification of hazardous trees. The

mitigation activities reduced potential tree-related outages and associated ignition risks across a broader portion of the service territory.

Assessment and Conclusion
The initiative exceeded operational targets by 65.5% while achieving cost savings of 59.2%. The variance between expanded mileage coverage and reduced costs suggests opportunities for refined budget planning based on actual hazard tree encounter rates.

WMP-VM-VFM-07 - High-Risk Species

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 33.

WMP-VM-VFM-08 - Emergency Response Vegetation Management

Strategic Overview and Risk Mitigation
The Emergency Response Vegetation Management initiative provides reactive vegetation management capabilities to address unforeseen conditions that pose immediate wildfire risks. This program enables rapid response for urgent vegetation removal or modification outside planned maintenance cycles. No quantitative targets were established for 2024 due to the reactive nature of emergency response activities.

Financial Performance Analysis
- Planned Budget: $0
- Actual Expenditure: $6,445
- Variance: $6,445 (+100%)

Liberty reports that costs were not projected for this initiative, as emergency work requirements cannot be determined at the time of WMP submission.

Operational Impact and Risk Reduction
The initiative recorded minimal activity with expenditures of $6,445, indicating limited emergency vegetation management requirements in 2024. The program maintained operational readiness to address emergent vegetation hazards throughout the year.

Assessment and Conclusion
The minimal expenditure aligns with the contingency-based design of this initiative. While limited quantifiable risk reduction metrics were generated due to low emergency activation, the program's availability ensures response capability for unexpected vegetation hazards. The zero-budget approach reflects the unpredictable nature of emergency work, though establishing a nominal contingency allocation could enhance financial planning transparency for potential emergency response requirements in future cycles.

4.2.3 Synthesis of Findings

4.2.3.1 Initiative Review

Liberty's 2024 Vegetation Management portfolio showed strong execution and verification across the board. All 11 active VM initiatives were validated by the IE, and every program with a 2024 quantitative target met or exceeded it: detailed inspections (INSP-01) completed 259 line miles against a 220-mile target, LiDAR inspections (INSP-03) covered 701 line miles compared to the 700-mile target, pole clearing (VFM-01) treated 5,084 poles versus 4,960 planned, and fall-in mitigation (VFM-06) addressed 364 line miles, 65 % above its 220-mile target. Initiatives without explicit targets, such as patrol inspections, substation defensible space, and the VM enterprise system, still produced verifiable work or system demonstrations through the data request process that led to initiative validation.

Data quality and QA/QC controls were generally in place. Liberty provided geocoded CSVs, work-order logs, and SME demonstrations that the IE could trace directly to QDR and ARC totals. Sample validations were performed with no material discrepancies. One mismatch that was identified was a 1.45 line mile (0.56%) difference between the QDR claimed completion and the records of completion for detailed inspections (INSP-01), which did not affect initiative validation.

Taken together, Liberty delivered a comprehensive, well-documented Vegetation Management program in 2024, meeting or exceeding operational commitments and demonstrating adequate QA/QC oversight.

4.2.3.2 Funding Verification

Budget and Expenditure Summary

The Vegetation Management and Inspections category had a total planned budget of $13,943,857 with actual expenditures of $10,016,550, representing a 28.2% variance below budget. The category achieved or exceeded operational targets despite the underspend.

Initiatives with Significant Variances

Of the 12 initiatives in this category, 9 (75%) had absolute percent differences exceeding 10%. The most common reasons for variances included:

- Expanded patrol inspection work due to increased tree mortality conditions, resulting in 131.2% budget variance
- Cost savings through vendor collaboration and specification optimization for LiDAR inspections (-21.9%)

- Lower than projected mitigation requirements for fall-in mitigation, achieving 165.5% of target miles at 59.2% below budget

Key Trends and Funding Compliance

The wood and slash management initiative exceeded targets by 24.8% while achieving 18.0% cost savings, directly reducing both the risk of fire ignition and the potential for increased fire intensity through proper fuel load management. Fire-resilient right-of-ways experienced a 212.7% budget variance due to higher upfront planning costs with the National Forest Foundation and Forest Service, but established fuel breaks to limit wildfire spread potential. The category's underspend combined with achievement of operational targets demonstrates Liberty's vegetation management program effectively mitigated wildfire risks by ensuring proper clearance around electric lines and removing vegetation that could ignite or fuel fires.

4.3 SITUATIONAL AWARENESS AND FORECASTING

4.3.1 Initiative Summary Table

Table 45: Initiative Summary Table

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[19]	EC-Claimed Progress[20]	EC-Claimed Initiative Status[21]	Sample Size[22]	Sample Validation Rate (%)[23]	Verification Method[24]	IE Finding on Initiative (Initiative Validation Rate)[25, 26]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[27]
WMP-SA-01, 8.3.2 Install Weather Stations	Unknown	N/A	In Progress	N/A	N/A	Liberty Written Response (DR031)	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-SA-02, 8.3.3, Fault Indicators	10 Fault Indicators	15 Fault Indicators	Exceeded Target	15 Fault Indicators	100%	FI Installation List (DR032) FI Past Orders FI 2024 PO NLT FI Install Work Order 2024 (DR032.b)	Initiative Validated (150%)	$150,000	$421,610 (+181.1%)	No Goal Provided
WMP-SA-03, 8.3.4, Alert Wildfire Cameras	Unknown	N/A	In Progress	N/A	N/A	Liberty Written Response (DR033)	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-SA-04, 8.3.5, Weather Forecasting	N/A	N/A	In Progress	N/A	N/A	N/A	N/A	$0	$331,989 (+100.0%)	No Goal Provided
WMP-SA-05, 8.3.6, Fire Potential Index	N/A	N/A	Completed	N/A	N/A	N/A	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-SA-06, N/A, Ignition Likelihood Calculation	Model Enhancements	N/A	In Progress	N/A	N/A	WMP Model Documentation Reax Liberty PSPS Threshold Exceedance Analysis Phase 2 Risk Preliminary Risk Circuits (DR036)	Initiative Validated (100%)	$683,807	$1,224,799 (+79.1%)	No Goal Provided

[19] N/A in the Initiative Target column means that the EC did not provide a target in the WMP.
[20] N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC.
[21] N/A in the Claimed Status column means that the EC did not provide a claimed status on QDR4 or the EC ARC.
[22] 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.
[23] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[24] N/A in the Verification Method column means that the initiative was not reviewed.
[25] 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.
[26] N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.
[27] Liberty's WMP provides no Risk Reduction Goal for any initiative and the EC states that they "do not currently have sufficient information to calculate" a Risk Reduction Goal.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[19]	EC-Claimed Progress[20]	EC-Claimed Initiative Status[21]	Sample Size[22]	Sample Validation Rate (%)[23]	Verification Method[24]	IE Finding on Initiative (Initiative Validation Rate)[25, 26]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[27]
WMP-SA-07, N/A, Ignition Consequence Calculation	Model Enhancements	N/A	In Progress	N/A	N/A	N/A	Refer to SA-06	$0	$0 (+0.0%)	No Goal Provided

4.3.2 Written Detail for Initiatives

4.3.2.1 Initiative Review – Findings & Method

WMP-SA-01 - 8.3.2 - Install Weather Stations – Non-Focus & Non-Field Verifiable

In review of initiative WMP-SA-01, per table 8-36 of the WMP, Liberty states a target of "unknown" for the 2024 review year. Liberty did not provide a risk reduction goal for this initiative. Section 8.3.2 contains the tracking ID for this initiative, but no narrative is given for objectives, goals, or targets. In response to LU_DR031, Liberty states that they did not target any weather station installations in 2024.

Based upon this analysis, the IE has determined that WMP-SA-01 is not applicable to the 2024 review period. If Liberty plans any installations of weather stations in future WMP cycles, the IE will opt to review based upon implementation per a future WMP cycle.

WMP-SA-02 – 8.3.3 - Fault Indicators – Focus & Non-Field Verifiable

WMP-SA-02 outlines Liberty's efforts to build out a Sensitive Relay Profile (SRP) to reduce ignition risk. Liberty did not provide a risk reduction goal for this initiative. The EC aims to accomplish this by installing reclosers to help with sectionalization and fault indicators to help with reliability. Section 8.3.3.1 states that fault indicators are set to trip at a predetermined value when a fault current is reached on that specific circuit. Referenced in Table 8-36 of the WMP, Liberty had a goal of installing fault indicators on ten (10) circuits during 2024.

In response to LU_DR032, Liberty provided documentation that outlines the ten (10) circuits where fault indicators were installed during 2024. This data request asked for Liberty to "provide reports for any new fault indicators (Fis) installed in 2024." In QDR4 Table 1, Liberty claims to have installed FIs on fifteen (15) circuits, however, based upon the documentation provided, the IE can only confirm the installation of FIs on ten (10) circuits. The documentation showing the installation of FIs on these ten (10) circuits does confirm that Liberty met their 2024 goal as outlined in the WMP. The documentation also outlined the placement of these FIs downstream of the identified poles, and a pole number as well as GPS coordinates were provided.

LU_DR032.b requested that the EC provide the work order and purchase order/invoice verifying the installation of the FIs on the indicated circuits. In response to this request, Liberty provided a purchase order (PO), work order, and FI past orders. The PO was dated January 21, 2025, and contained an itemized list of materials needed to install the FIs and highlighted the FIs specifically. A total of 30 EA 700A Delayed indicators by Horstmann were ordered, and delivery was verified. The work order provided was titled "NLT Fault Indicator

Install 2024" and had a start date of 05/07/24 and an end date of 06/06/24 – priority 30 days (3) was listed. An area marked "long text" on the order stated that the "date marked as complete is 07/12/24." The order contained 46 operations, which aligns with the number of poles identified in the documentation provided in the initial data request.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 46: Fault Indicators

2024 Target	2024 ARC	2024 Q4 QDR	DR032/.b Response	Summary
10 Circuits	15 Circuits	15 Circuits	10 Circuits	Initiative Validated

WMP-SA-03 – 8.3.4 - Alert Wildfire Cameras – Non-Focus & Non-Field Verifiable

In review of initiative WMP-SA-03, per table 8-36 of the WMP, Liberty states a target of "unknown" for the 2024 review year. Liberty did not provide a risk reduction goal for this initiative. Section 8.3.1 contains the tracking ID for this initiative, but no narrative is given for objectives, goals, or targets. In response to LU_DR033, Liberty states that they did not target any AlertWildfire Camera installations in 2024.

Based upon this analysis, the IE has determined that WMP-SA-03 is not applicable to the 2024 review period. If Liberty plans any installations of AlertWildfire Cameras in future WMP cycles, the IE will opt to review based upon implementation per a future WMP cycle.

WMP-SA-04 – 8.3.5 - Weather Forecasting – Non-Focus & Non-Field Verifiable

Liberty did not outline WMP-SA-04 "Weather Forecasting" in the WMP. No data for this initiative is listed in QDR4 Table 1. Liberty did not provide a risk reduction goal for this initiative. Based upon this, the IE has determined that WMP-SA-04 is not applicable for the 2024 review period.

WMP-SA-05 – 8.3.6 - Fire Potential Index – Non-Focus & Non-Field Verifiable

Liberty provides some information regarding WMP-SA-05 "Fire Potential Index" in the WMP. Liberty did not provide a risk reduction goal for this initiative. However, no objectives or explicit targets for 2024 are listed. No data for this initiative is listed in QDR4 Table 1, and this initiative is not mentioned in Liberty's 2024 ARC. Based upon this, the IE has determined that WMP-SA-05 is not applicable for the 2024 review period.

WMP-SA-06 – N/A - Ignition Likelihood Calculation – Non-Focus & Non-Field Verifiable

WMP-SA-06 is one of two initiatives focused on WMP risk modeling, mainly ignition, PSPS likelihood, and consequence. Liberty did not provide a risk reduction goal for this initiative. Table 9-4 of the WMP states a 2024 target of "model enhancements – refer to Section 6" and Section 6 outlines risk methodology and assessment. There is no other section that contains a "Utility Initiative Tracking ID" for WMP-SA-06 nor outlines explicitly what this initiative aims to do. On page 121 of the WMP, Table 6-7 outlines Liberty's Risk Assessment Improvement Plan and provides four (4) assessment areas and proposed improvements that take place from 2023-2025. Each of the Key Risk Areas contains a timeframe and key milestones, as outlined below:

- RA-1: 2023 – evaluate Direxyon's decision models, risk models, degradation models, and cost models
- RA-2: 2024 – expand minimal viable product following 2024 in-production
- RA-3: 2024 Direxyon Risk Assessment Tool (DRAT) in production
- RA-4: 2023-2025 – develop an integrated dashboard for management to make informed decisions based on risk. Implement Direxyon's analytics dashboard utilizing Technosylva's outputs

In response to LU_DR036, Liberty provided several documents that outline the steps and improvements taken to improve their risk modeling and achieve the milestones listed above. The first document is from Technosylva and outlines the technical documentation, substantiation ,and data governance of the models used in risk calculations as implemented in Liberty's WMP. Liberty also provided documentation from Direxyon, which details a project currently being implemented (June 2024) to develop an advanced fire risk model that aims to bridge gaps in Liberty's risk modeling capabilities. This document also outlines how the Direxyon model will utilize data provided by Technosylva, mainly but not limited to the Probability of Ignition (POI).

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 47: Ignition Likelihood Calculation

2024 Target	2024 ARC	2024 Q4 QDR	DR036 Response	Summary
Model Enhancements	N/A	N/A	Model Enhancements	Initiative Validated

WMP-SA-07 – N/A - Ignition Consequence Calculation – Non-Focus & Non-Field Verifiable

As referenced in the WMP, SA-07 is aligned with SA-06 as listed on table 9-2 and 9-4 and no explicit difference in objectives or 2024 target is provided. Liberty did not provide a risk reduction goal for this initiative. Based upon this, refer to the initiative WMP-SA-06 for review.

4.3.2.2 Funding Verification – Findings

WMP-SA-01 - Environmental monitoring systems

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 45.

WMP-SA-02 - Grid monitoring systems

Strategic Overview and Risk Mitigation
The Grid Monitoring Systems initiative deploys fault indicators to enhance real-time monitoring capabilities across the distribution system. These devices enable rapid fault localization, accelerating restoration times and supporting identification of potential ignition events. The 2024 program established a target of installing fault indicators on 10 circuits.

Financial Performance Analysis
- Planned Budget: $150,000
- Actual Expenditure: $421,610
- Variance: $271,610 (181.1%)

Liberty reports exceeding the 2024 fault indicator target by 50%, with costs higher than initially projected.

Operational Impact and Risk Reduction
Liberty installed fault indicators on 15 circuits against a target of 10, achieving 150% of the planned objective. The expanded deployment enhanced system monitoring capabilities across five additional circuits beyond initial projections. These installations improve fault detection and localization, reducing response times and enabling faster identification of conditions that could lead to ignition events.

Assessment and Conclusion
The initiative exceeded operational targets by 50% with a corresponding budget variance of 181.1%. The additional expenditure supported expanded deployment of monitoring technology, enhancing situational awareness and fault response capabilities across a broader portion of the distribution system. While the variance indicates underestimation of

per-unit installation costs or implementation complexity, the investment delivered proportional risk reduction benefits through improved fault detection and response capabilities. The expanded monitoring coverage directly supports wildfire mitigation objectives by enabling rapid identification and remediation of fault conditions that could contribute to ignition events.

WMP-SA-03 - Fire detection and alarm systems

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 45.

WMP-SA-04 - Weather forecasting

Strategic Overview and Risk Mitigation
The Weather Forecasting initiative enhances meteorological monitoring and predictive capabilities to support wildfire risk assessment and operational decision-making. Improved forecasting enables a proactive response to high-risk conditions and informed deployment of mitigation resources. No quantitative targets were established for 2024 due to the continuous improvement nature of weather monitoring systems.

Financial Performance Analysis
- Planned Budget: $0
- Actual Expenditure: $331,989
- Variance: $331,989 (+100%)

Liberty reports costs not forecasted at WMP submission, including weather station maintenance and calibration, and implementation costs for Liberty's weather dashboard.

Operational Impact and Risk Reduction
Liberty enhanced forecasting capabilities through procurement of Technosylva Wildfire Analyst tools and weather dashboard implementation. These investments improved Liberty's ability to anticipate and respond to elevated wildfire conditions. Expenditures supported critical maintenance and calibration of weather monitoring infrastructure, ensuring accuracy and reliability of risk assessments during high-risk periods.

Assessment and Conclusion
The $331,989 expenditure supported essential enhancements to weather forecasting infrastructure and analytical capabilities, directly contributing to situational awareness and wildfire risk mitigation. The absence of budget allocation for predictable operational requirements such as weather station maintenance and system improvements indicates gaps in financial planning processes.

WMP-SA-05 - Fire Potential Index

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 45.

WMP-SA-06 - Ignition likelihood calculation

Strategic Overview and Risk Mitigation
The Ignition Likelihood Calculation initiative enhances wildfire and PSPS risk modeling through the implementation of advanced analytical tools. This program deploys quantitative modeling capabilities using Direxyon's Risk Assessment Tool (DRAT) and Technosylva Wildfire Analyst to assess ignition probabilities and consequence analysis. No specific quantitative targets were established for 2024, reflecting the initiative's continuous improvement approach to risk modeling frameworks.

Financial Performance Analysis
Planned Budget: $683,807

Actual Expenditure: $1,224,799

Variance: $540,992 (79.1%)

Liberty attributes the variance to expanded scope and increased complexity in wildfire and PSPS risk modeling efforts, resulting in higher resource requirements than initially projected.

Operational Impact and Risk Reduction
The Quarterly Data Report indicates implementation remains ongoing. The additional expenditure supported integration of advanced analytical frameworks, enhancing Liberty's capacity to identify high-risk conditions and deploy targeted mitigation strategies. The improved modeling capabilities strengthen operational decision-making during elevated wildfire risk periods.

Assessment and Conclusion
The 79.1% budget variance reflects the expanded scope and complexity encountered during implementation of advanced risk modeling systems. The additional investment supported successful deployment of sophisticated analytical tools that enhanced ignition probability assessments and consequence modeling capabilities. These improvements strengthen Liberty's data-driven approach to wildfire risk management and enable more refined PSPS deployment decisions, directly contributing to reduced wildfire ignition risks through improved identification of high-risk conditions and targeted allocation of mitigation resources.

WMP-SA-07 - Ignition consequence calculation

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 45.

4.3.3 Synthesis of Findings

4.3.3.1 Initiative Review

The Situational Awareness category for Liberty in 2024 shows compliance with implementation and risk reduction efforts for initiatives that outlined a target goal. Liberty successfully met its target for fault indicator installations, contributing to significant wildfire risk reduction through improved sectionalization and reliability. However, several initiatives had no specific targets or activities for 2024, indicating a potential gap in Liberty's comprehensive approach to situational awareness. Data management inconsistencies were noted, where reported figures didn't align with provided documentation, however, the outlined targets were still met based upon the provided documentation. Despite these concerns, Liberty demonstrates a commitment to enhancing its risk assessment capabilities through the implementation of advanced modeling tools and collaboration with Technosylva and Direxyon to develop and continually upgrade sophisticated risk models. This forward-looking approach suggests potential improvements in situational awareness and decision-making processes for future wildfire mitigation efforts. In the future, Liberty should focus on developing clear objectives and targets for all initiatives to support a comprehensive approach to wildfire risk mitigation in future WMP cycles.

4.3.3.2 Funding Verification

Budget and Expenditure Summary

The Situational Awareness and Forecasting category had a total planned budget of $833,807 with actual expenditures of $1,978,398, representing a 137.3% variance above budget. This overspend reflects expanded implementation of monitoring and analytical systems.

Initiatives with Significant Variances

Of the 7 initiatives in this category, 3 (43%) had absolute percent differences exceeding 10%. The primary reasons for variances included:

- Grid monitoring systems (fault indicators) exceeded targets by 50% with corresponding 181.1% budget variance, enhancing real-time monitoring for rapid fault localization and identification of potential ignition events
- Weather forecasting systems required $331,989 in unbudgeted expenditures for weather station maintenance, calibration, and dashboard implementation to support wildfire risk assessment
- Ignition likelihood calculation experienced 79.1% budget variance due to expanded scope and complexity in implementing quantitative modeling capabilities for ignition probability assessment

Key Trends and Funding Compliance:

The category's overspend supported Liberty's objective to gather real-time information for comprehensive understanding of current conditions and wildfire conductivity assessment. Additional investments in analytical frameworks through Direxyon's Risk Assessment Tool and Technosylva Wildfire Analyst enhanced Liberty's capacity to achieve shared understanding of actual conditions among stakeholders, improving collaborative planning and decision-making. The funding allocations directly supported the category's risk mitigation objectives by enabling rapid identification and response to conditions that could lead to ignition events.

4.4 EMERGENCY PREPAREDNESS

4.4.1 Initiative Summary Table

Table 48: Initiative Summary Table

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[28]	EC-Claimed Progress[29]	EC-Claimed Initiative Status	Sample Size[30]	Sample Validation Rate (%)[31]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[32]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[33]
WMP-EP-01, 8.4.2, Wildfire and PSPS Emergency Preparedness Plan	N/A	N/A	Completed	N/A	N/A	CERP Fireland Incident Response Guide PSPS Playbook (DR011)	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided
WMP-EP-02, 8.4.3, Collaboration and coordination with public safety partners	Conduct emergency drills. Continue engagement with local stakeholders, meet with Community Advisor Board	Engaged with stakeholders through participation in 16 community council and working group meetings	Met Target	N/A	N/A	Meeting Notes (DR012)	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided
WMP-EP-03, 8.4.4, Public Notification & Comm. Strategy	N/A	N/A	Completed	N/A	N/A	Liberty WCAB Attendance PSPS Playbook (DR013)	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided
WMP-EP-04, 8.4.5, Preparedness and planning for service restoration	N/A	N/A	Completed	N/A	N/A	Corporate Emergency Management Plan (DR014)	Initiative Validated (100%)	$1,437,734	$426,082 (-70.4%)	No Goal Provided
WMP-EP-05, 8.4.6, Customer Support in Wildfire & PSPS Emergencies	Conduct incident command training, hold a virtual PSPS tabletop exercise. Continue implementation of AFN Plan.	2024 PSPS took place 4/4/24; Tabletop conducted on 5/23/24. IMT training completed in Q4	Met Target	N/A	N/A	2024 Liberty ICS Training 2024 Functional Exercise Folder 2024 Tabletop Exercise Folder (DR015)	Initiative Validated (100%)	$105,000	$122,974 (+17.1%)	No Goal Provided
WMP-EP-06, N/A, Learning After Wildfire & PSPS Events	After action report for each event	N/A	In Progress	N/A	N/A	De-Energization Improvement Items PSPS Meeting Events for Nov. (DR016)	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided

[28] N/A in the Initiative Target column means that the EC did not provide a target in the WMP.
[29] N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC.
[30] 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.
[31] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[32] 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.
[33] Liberty's WMP provides no Risk Reduction Goal for any initiative and the EC states that they "do not currently have sufficient information to calculate" a Risk Reduction Goal.

4.4.2 Written Detail for Initiatives

4.4.2.1 Initiative Review – Findings & Method

WMP-EP-01 – 8.4.2 - Wildfire and PSPS Emergency Preparedness Plan – Non-Focus & Non-Field Verifiable

WMP-EP-01 outlines Liberty's efforts to update workforce training on the Incident Command System (ICM). Liberty did not provide a risk reduction goal for this initiative. Section 8.4.2 provides detail that this initiative provides compliance with CPUC R. 15-06-009, D. 21-05-019 and GO166 by developing the sixth revision of its Corporate Emergency Management Plan (CEMP). Liberty's Incident Management Team and CEMP procedures are supplemented by the procedures outlined in the PSPS Playbook. The WMP states no target goal for 2024, and Table 8-42 has a completion date of June 2023 for this initiative – the Liberty 2024 ARC confirms that this initiative was completed in 2023.

In response to LU_DR053, Liberty provided documentation to confirm that they remain in compliance with this initiative. Liberty provided the PSPS playbook as well as their Corporate Emergency Plan. Based on Liberty's CEMP, a Liberty IMT is activated in "serious impact events" where 10,000 to 19,000 customers are impacted, and the estimated full restoration will be greater than 24 hours. In addition, an IMT is activated in any PSPS event. Service restoration is unique to each emergency, and restoration prioritization is influenced by several factors, including safety, accessibility, availability of repair parts, and availability of personnel.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

WMP-EP-02 – 8.4.3.1 - Collaboration and Coordination with Public Safety Partners – Non-Focus & Non-Field Verifiable

WMP-EP-02 outlines Liberty's collaboration and coordination with public safety partners. Liberty did not provide a risk reduction goal for this initiative. Table 8-44 states a 2024 target to conduct emergency drills, continue engagement with local stakeholders and PSPS to prepare for and respond to fire-related events, and meet with community advisory boards.

The documentation provided by Liberty in LU_DR010 shows that they have developed restoration guidelines that are shared with the public through multiple platforms such as radio, social media, and email. Liberty held sixteen (16) community councils and working groups during 2024 and conducted four in-depth interviews with community-based organizations throughout the year. As outlined in other Community Outreach initiatives,

Liberty actively collaborates with public safety partners regularly and includes them in training, coordination, and planning with the PSPS Playbook.

In response to DR012, Liberty provided documentation that demonstrated participation in 13 community councils and working groups for 2024. The meetings ranged from Community Action Councils to Joint IOU and Statewide Councils. Given that only 13 meeting notes were submitted to the IE, verification of participation in 16 meetings cannot be verified. However, due to this initiative containing no explicit target and only an objective of continued engagement with community stakeholders, Liberty has met the target goal. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 49: Collaboration and Coordination with Public Safety Partners

2024 Target	2024 ARC	2024 Q4 QDR	DR012 Response	Summary
Conduct emergency drills. Continue engagement with local stakeholders, meet with Community Advisor Board	Engaged with stakeholders through participation in 5 community councils and working group meetings	Engaged with stakeholders through participation in 16 community council and working group meetings	Participation in 13 community council and working group meetings	Initiative Validated

WMP-EP-03 – 8.4.4 - Public Notification and Communication Strategy – Non-Focus & Non-Field Verifiable

WMP-EP-03 outlines Liberty's continued engagement with local stakeholders to prepare for a response to fire-related events. Liberty did not provide a risk reduction goal for this initiative. Section 8.4.4 elaborates that Liberty maintains year-round communication and outreach efforts to increase community resiliency to wildfire and educate customers about PSPS events and how to prepare. The overall objective of this initiative is to increase awareness and community resiliency to wildfire and PSPS events, however, Liberty states no explicit target for 2024.

In response to LU_DR013, Liberty provided a copy of the PSPS Playbook that they implement and educate various stakeholders on. Liberty also included an attendance sheet for WCAB, however, the document was blank. Cross-referencing documentation provided in other Data Requests related to community outreach, such as LU_DR006, LU_DR008, and LU_DR010, the conclusion can be drawn that Liberty is actively maintaining its commitment to this initiative. Refer to WMP-CO-01, WMP-CO-03, and WMP-CO-05 for specific efforts Liberty is taking to implement community outreach.

Based upon this analysis and documentation provided in multiple Data Requests, the IE has validated this initiative.

WMP-EP-04 – 8.4.5.1 - Preparedness and Planning for Service Restoration – Non-Focus & Non-Field Verifiable

WMP-EP-04 outlines Liberty's program to keep enhanced documentation and utilize lessons learned to make changes to the Corporate Emergency Management Plan (CEMP). Liberty did not provide a risk reduction goal for this initiative. Section 8.4.5.1 elaborates on what Liberty's service restoration plan is, the CEMP, and addresses that service restoration is unique for each emergency event and restoration prioritization is influenced by several factors such as safety, accessibility, availability of repair parts, availability of personnel, and more. The CEMP identifies general restoration prioritization guidelines but allows for the Incident Commander to alter priorities according to specific circumstances of the emergency. Table 8-43 nor Section 8.4.5.1 outline an explicit target for 2024 related to this initiative.

Liberty provided a copy of the CEMP in response to DR014. Page 21 of the document includes the revision history and the last revision to the CEMP was done in May of 2025. The revisions were made "throughout" the CEMP and updated the plan to reflect a single EOC and Incident Management Team (IMT) for emergency events throughout the service territory rather than separate EOCs for North and South Lake. Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 50: Preparedness and Planning for Service Restoration

2024 Target	2024 ARC	2024 Q4 QDR	DR014 Response	Summary
N/A	N/A	N/A	Updated CEMP	Initiative Validated

WMP-EP-05 – 8.4.6 - Customer Support in Wildfire and PSPS Emergencies – Non-Focus & Non-Field Verifiable

WMP-EP-05 outlines Liberty's customer support in wildfire and PSPS emergencies. Liberty did not provide a risk reduction goal for this initiative. After extreme weather conditions are forecasted, Liberty begins to coordinate with local government agencies, community-based organizations, and public safety partners prior to the event. The goal in these communications is to drive traffic to Liberty's social media and/or dedicated PSPS landing page for more information and real-time situation updates. In 2024, Liberty outlined a goal to conduct Incident Command Training and hold a virtual PSPS Tabletop exercise; as well

as the continued implementation of the 2022 AFN plan, and continued maintenance of emergency response plans.

In response to LU_DR015, Liberty provided documentation to demonstrate their compliance with the 2024 targets. On June 27, 2024, Liberty held a PSPS Functional Exercise that included five (5) drills surrounding potential PSPS events. An After-Action Report/Improvement Plan was also provided and analyzed Liberty's ability to perform objectives during the exercise and provided an improvement plan based upon this analysis. On May 23, 2024, Liberty held a PSPS Table Top Exercise – an agenda of the exercise and an After-Action Report/Improvement plan was also provided for this exercise.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 51: Customer Support in Wildfire and PSPS Emergencies

2024 Target	2024 ARC	2024 Q4 QDR	DR015 Response	Summary
Conduct incident command training, hold a virtual PSPS tabletop exercise. Continue implementation of AFN Plan.	2024 PSPS took place 4/4/24; Tabletop conducted on 5/23/24. IMT training completed in Q4	2024 PSPS took place 4/4/24; Tabletop conducted on 5/23/24. IMT training completed in Q4	2024 PSPS took place 4/4/24; Tabletop conducted on 5/23/24. IMT training completed in Q4	Initiative Validated

WMP-EP-06 – N/A - Learning After Wildfire and PSPS Events – Non-Focus & Non-Field Verifiable

WMP-EP-06 outlines Liberty's commitment to conduct and provide an after-action report for each wildfire and PSPS event. Liberty did not provide a risk reduction goal for this initiative. The target for 2024 was to provide this report for any qualifying event during the year.

In response to LU_DR016, Liberty provided an After-Action Report (AAR) for four separate PSPS events that occurred in November of 2024. The AAR addresses areas of what went well, what went wrong, and where improvement could be made. The AAR is concise and contains immediate actions as well as future actions, it also aligns with the Liberty PSPS Playbook. Liberty also provided a "De-Energization Improvement Items" list that outlined observations, the consequences observed, and most importantly, the correct action needing to be taken. In response to LU_DR011, Liberty provided the Post-Event Report for all four of the PSPS Events that were presented to CPUC.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 52: Learning After Wildfire and PSPS Events

2024 Target	2024 ARC	2024 Q4 QDR	DR016 Response	Summary
After Action Report for Each Event	N/A	N/A	After Action Report for Each Event	Initiative Validated

4.4.2.2 Funding Verification – Findings

WMP-EP-01 - Wildfire and PSPS emergency preparedness plan

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 48.

WMP-EP-02 - Collaboration and coordination with public safety partners

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 48.

WMP-EP-03 - Public notification and communication strategy

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 48.

WMP-EP-04 - Preparedness and planning for service restoration

Strategic Overview and Risk Mitigation
The Preparedness and Planning for Service Restoration initiative maintains Emergency Response Plans and incorporates operational lessons learned to enhance response capabilities. This program aims to reduce service restoration times during wildfire and PSPS events through systematic plan updates and integration of field experiences. The 2024 objectives focused on plan maintenance and structured incorporation of operational improvements.

Financial Performance Analysis
- Planned Budget: $1,437,734
- Actual Expenditure: $426,082
- Variance: -$1,011,652 (-70.4%)

Liberty attributes the variance to the consolidation of emergency management operations from separate North and South Lake teams into a unified Emergency Operations Center (EOC) and Incident Management Team (IMT), reducing anticipated resource requirements.

Operational Impact and Risk Reduction
The Quarterly Data Report and Annual Report on Compliance indicate successful completion of this initiative. Emergency response documentation was maintained and updated with operational insights from previous events. The consolidation to a unified EOC and IMT streamlined operational structures while maintaining response preparedness capabilities. Explicit quantitative targets were not established, limiting measurable performance assessment.

Assessment and Conclusion
The initiative achieved completion status while utilizing 29.6% of allocated budget. The 70.4% variance resulted from operational streamlining through consolidation of previously separate emergency management functions. Documentation updates and operational improvements were successfully implemented through the unified structure. The substantial cost savings demonstrate efficiency gains from organizational consolidation while maintaining emergency response capabilities.

WMP-EP-05 - Customer support in wildfire and PSPS emergencies

Strategic Overview and Risk Mitigation
The Customer Support in Wildfire and PSPS Emergencies initiative provides comprehensive support services during emergency events, with emphasis on vulnerable populations. The 2024 program included Incident Command Training, PSPS exercises, and continued implementation of Liberty's Access and Functional Needs (AFN) Plan. Liberty conducted both Incident Command Training and a virtual PSPS tabletop exercise, alongside ongoing AFN implementation to minimize customer impacts during wildfire and de-energization events.

Financial Performance Analysis

- Planned Budget: $105,000
- Actual Expenditure: $122,974
- Variance: $17,974 (17.1%)

Liberty attributes the variance to experiencing its first actual PSPS event in 2024, resulting in higher-than-anticipated operational costs.

Operational Impact and Risk Reduction
Liberty completed comprehensive emergency preparedness activities including Incident Management Team training, a virtual PSPS Tabletop Exercise on May 23, 2024, and a Full-

scale Functional Exercise on June 27, 2024. These exercises involved extensive coordination with public safety and community partners including Cal OES, CPUC, CAL FIRE, and AFN Community advocates. The additional expenditure supported activation of customer support services during Liberty's first PSPS event, directly mitigating customer hardship during the emergency.

Assessment and Conclusion
The initiative met its operational objectives with a 17.1% budget variance attributed to Liberty's first actual PSPS event in 2024. The additional expenditure of $17,974 supported customer support operations during the emergency event. Training activities were completed as planned, including Incident Management Team training and tabletop exercises conducted in May and June 2024. The program demonstrated implementation of customer support protocols during both planned exercises and the actual PSPS event, with particular focus on Access and Functional Needs populations. These customer support activities directly reduced wildfire-related risks to public safety by ensuring vulnerable populations received necessary resources and information during de-energization events, minimizing potential health and safety impacts.

WMP-EP-06 - Learning after wildfire and PSPS events

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 48.

4.4.3 Synthesis of Findings

4.4.3.1 Initiative Review

Liberty's Emergency Planning and Preparedness initiatives demonstrate a comprehensive approach to wildfire risk management, although there is room for improvement in target setting and data management. While the company generally met its stated objectives, the lack of explicit, quantifiable targets in several initiatives makes it challenging to definitively assess performance. Liberty's recordkeeping shows both strengths and areas for improvement, with detailed documentation of PSPS events and after-action reports but some instances of incomplete or unverifiable data, such as several missing meeting notes. Liberty's commitment to stakeholder engagement and public communication during emergencies is noteworthy. The company demonstrates a commitment to continuous improvement through after-action reports and improvement plans, as well as ongoing efforts to streamline and enhance emergency response capabilities.

4.4.3.2 Funding Verification

Budget and Expenditure Summary

The Emergency Preparedness category had a total planned budget of $1,542,734 with actual expenditures of $549,056, representing a 64.4% variance below budget. This underspend resulted from operational consolidation and organizational changes.

Initiatives with Significant Variances

Of the 6 initiatives in this category, 2 (33%) had absolute percent differences exceeding 10%. The reasons for variances included:

- Preparedness and planning for service restoration achieved 70.4% cost savings through consolidation of separate North and South Lake emergency operations into a unified EOC and IMT structure, while maintaining capabilities to reduce service restoration times during wildfire events
- Customer support in wildfire and PSPS emergencies exceeded budget by 17.1% due to Liberty experiencing its first actual PSPS event in 2024, directly mitigating customer hardship during the emergency

Key Trends and Funding Compliance

The consolidation supported Liberty's objective to engage key stakeholders including critical facilities, customers, and essential agencies such as CAL FIRE. Liberty completed emergency preparedness activities that minimize potential health and safety impacts during de-energization events, with particular focus on Access and Functional Needs populations. The category's funding patterns reflect implementation of communication protocols and execution of specific plans designed to minimize fire danger while maintaining strong coordination with first responders and local emergency planning committees.

4.5 COMMUNITY OUTREACH AND ENGAGEMENT

4.5.1 Initiative Summary Table

Table 53: Initiative Summary Table

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[34]	EC-Claimed Progress[35]	EC-Claimed Initiative Status	Sample Size[36]	Sample Validation Rate (%)[37]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[38, 39]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[40]
WMP-CO-01, 8.5.2 Public Outreach & Edu. Awareness for Wildfire, PSPS, Outages from Protective Equipment	2 Wildfire & PSPS Outreach Surveys	33 in-person events, 26 virtual events, and 57 rounds of emails, website posts, and social media posts. 4 sets of direct mails and bill inserts.	Met Target	N/A	N/A	June '24 Summary Report December '24 Summary Report Liberty 2025 Plan to Address AFN Pop. (DR006)	Initiative Validated (100%)	$90,000	$112,303 (+24.8%)	No Goal Provided
WMP-CO-02, N/A, Public Engagement in WMP Decision-Making Process	N/A	N/A	In Progress	N/A	N/A	Liberty Written Response (DR007)	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-CO-03, 8.5.3, Engagement w/ AFN Pop. Local Gov., & Tribal Communities	Target Not Set	N/A	In Progress	N/A	N/A	June '24 Summary Report December '24 Summary Report Liberty 2025 Plan to Address AFN Pop. (DR008)	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided
WMP-CO-04, N/A, Collaboration on Local Wildfire Mitigation & Planning	N/A	N/A	In Progress	N/A	N/A	Liberty Written Response (DR009)	N/A	$0	$0 (+0.0%)	No Goal Provided
WMP-CO-05, 8.5.5 Best Practice Sharing w/ Other ECs	Participation in Working Groups and Joint IOU Councils	N/A	In Progress	N/A	N/A	Statewide Council Meeting Notes Collab Council Meeting Notes Q2 Joint IOU AFN Meeting Notes Q2 Joint IOU AFN Statewide Council Meeting Notes Q3 Joint IOU AFN Collaborative Council Meeting Q3 Joint IOU AFN Statewide Council Meeting Q4 Statewide Council Meeting Notes	Initiative Validated (100%)	$0	$0 (+0.0%)	No Goal Provided

[34] N/A in the Initiative Target column means that the EC did not provide a target in the WMP.
[35] N/A in the Claimed Progress column means that the EC did not provide any claimed progress on QDR4 or the EC ARC.
[36] 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.
[37] N/A in the Sample Validation column means that no sampling was reviewed; therefore, no validation rate was applied.
[38] 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.
[39] N/A in the Initiative Validation column means that the initiative was not reviewed and therefore could not be validated/invalidated.
[40] Liberty's WMP provides no Risk Reduction Goal for any initiative and the EC states that they "do not currently have sufficient information to calculate" a Risk Reduction Goal.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target[34]	EC-Claimed Progress[35]	EC-Claimed Initiative Status	Sample Size[36]	Sample Validation Rate (%)[37]	Verification Method	IE Finding on Initiative (Initiative Validation Rate)[38, 39]	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?[40]
						Q4 Collaborative Council Notes (DR010)				

4.5.2 Written Detail for Initiatives

4.5.2.1 Initiative Review – Findings & Method

WMP-CO-01 – 8.5.2 - Public Outreach & Education Awareness for Wildfire, PSPS, Outages from Protective Equipment – Non-Focus & Non-Field Verifiable

WMP-CO-01 outlines Liberty's community outreach efforts to provide a presence in all communities served by the utility. Liberty did not provide a risk reduction goal for this initiative. They accomplish this through various methods, including general community events, health fairs, smaller presentations to groups, presentations to senior centers, and various collaborative events. The goal is to spread awareness of PSPS preparedness, Liberty's notification system, customer assistance programs, maintaining updated contact info, and AFN self-identification. Liberty's target for 2024 was to conduct two wildfire and PSPS outreach surveys and analyze the results.

In response to LU_DR006, Liberty provided two PowerPoint presentations that summarized the findings of an analysis of the surveys they provided for 2024. Liberty's goal was to not only provide community outreach but also measure customer's ability to recall specific messaging such as ability to recall and understand PSPS and evaluate the sources customers are likely to turn to for information about PSPS. The target audience was Liberty residential and business customers in CA and Liberty critical customers. In the June survey analysis, 220 total surveys were completed, including six (6) from critical customers. In the December survey analysis, 460 total surveys were completed. The June report found that 47% of respondents were aware of wildfire safety communications, whereas the December report found 62% of respondents were aware, up significantly. Other major findings were that 75% recall hearing of PSPS, which was up from 45% in June. Both reports provide recommendations for the EC to implement or continue to implement.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 54: Public Outreach & Education Awareness for Wildfire, PSPS, Outages from Protective Equipment

2024 Target	2024 ARC	2024 Q4 QDR	DR006 Response	Summary
2 Wildfire & PSPS Outreach Surveys	33 in-person events, 26 virtual events, and 57 rounds of emails, website posts, and social media posts. 4 sets of direct mail and bill inserts.	7 in-person events, 12 Virtual events, and 19 rounds of emails, website posts, and social media post	2 Wildfire & PSPS Outreach Surveys	Initiative Validated

WMP-CO-02 – N/A - Public Engagement in WMP Decision-Making Process – Non-Focus & Non-Field Verifiable

Liberty did not outline WMP-CO-02 "Public engagement in WMP Decision-Making Process" in the WMP. Liberty did not provide a risk reduction goal for this initiative. No data for this initiative is listed in QDR4 Table 1, and this initiative is not mentioned in the Liberty 2024 ARC. Based upon this, the IE has determined that WMP-CO-02 is not applicable for the 2024 review period. Although not directly related to the WMP decision-making process, initiatives WMP-CO-01, WMP-CO-03, and WMP-CO-05 reference Liberty's engagement with stakeholders.

WMP-CO-03 – 8.5.3 - Engagement with AFN Populations, Local Government, and Tribal Communities – Non-Focus & Non-Field Verifiable

WMP-CO-03 outlines Liberty's effort to engage with AFN populations, local governments, and tribal communities. Liberty did not provide a risk reduction goal for this initiative. Table 8-62 of the WMP lists a 2024 target goal of "target not yet set." Liberty outlines several 3-year objectives for this initiative such as implement planned communication channels, expand network contacts in Liberty's service territory, work collaboratively with several different groups, support bilingual outreach, support AFN outreach, and encourage self-identification of AFN customers.

In response to LU_DR008, Liberty provided two research reports on their Wildfire Messaging Awareness provided by MDC Research. These reports adequately show that Liberty made efforts in achieving the goals outlined in WMP-CO-03. The reports analyze data provided in survey results that polled Liberty customers on the effectiveness of the utility outreach programs related to AFN populations, PSPS events, bilingual customers, and more. For more details regarding these reports, please reference WMP-CO-01. Liberty also provided a copy of the 2025 AFN Plan that was presented to the Public Utilities Commission of the State of California. This document outlines Liberty's plan to support populations with access and functional needs (AFN) during PSPS events.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 55: Engagement with AFN Populations, Local Government, and Tribal Communities

2024 Target	2024 ARC	2024 Q4 QDR	DR008 Response	Summary
Target Not Yet Set	N/A	N/A	N/A	Initiative Validated

WMP-CO-04 – N/A - Collaboration on Local Wildfire Mitigation and Planning – Non-Focus & Non-Field Verifiable

Liberty did not outline WMP-CO-04 "Collaboration on Local Wildfire Mitigation and Planning" in the WMP. Liberty did not provide a risk reduction goal for this initiative. No data for this initiative is listed in QDR4 Table 1, and this initiative is not mentioned in the Liberty 2024 ARC. Based upon this, the IE has determined that WMP-CO-04 is not applicable for the 2024 review period. Although not directly related to this initiative, WMP-CO-01, WMP-CO-03, and WMP-CO-05 reference Liberty's engagement with stakeholders.

WMP-CO-05 – 8.5.5 - Best Practice Sharing with Other Electrical Corporations – Non-Focus & Non-Field Verifiable

WMP-CO-05 outlines Liberty's commitment to best-sharing practices with other electrical corporations. Liberty did not provide a risk reduction goal for this initiative. In Table 8-62 of the WMP, Liberty states a 2024 target of participation in working groups and joint IOU councils but does not provide a specific number to accomplish in 2024.

In response to LU_DR010, Liberty provided meeting correspondence and meeting minutes for Joint IOU AFN Statewide Council meetings held in all four quarters of 2024. As detailed in the email correspondence provided, involvement from many different entities, including but not limited to PG&E, SDG&E, BVES, CPUC, 211, and several more, are noted. Actionable items from the meeting minutes include but are not limited to discussion on the latest PSPS resource refinement, joint IOU covered conductor workshops, hazard response planning, a blueprint for best practices, and updates on Prepare for Power Down marketing campaigns.

Based upon this analysis and the documentation provided, the IE has validated this initiative.

Table 56: Best Practice Sharing with Other Electrical Corporations

2024 Target	2024 ARC	2024 Q4 QDR	DR010 Response	Summary
Participation in Working Groups & Joint IOU Councils	N/A	N/A	Participated in Working Groups & Joint IOU Councils	Initiative Validated

4.5.2.2 Funding Verification – Findings

WMP-CO-01 - Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management

Strategic Overview and Risk Mitigation
The Community Outreach initiative conducts public education and stakeholder engagement to enhance community resilience and wildfire preparedness. The 2024 program objectives focused on delivering outreach through multiple channels including in-person events, virtual engagement, and digital communications to increase public awareness of wildfire risks and mitigation strategies.

Financial Performance Analysis
- Planned Budget: $90,000
- Actual Expenditure: $112,303
- Variance: $22,303 (24.8%)

Liberty attributes the variance to additional labor costs not initially forecasted in the 2024 WMP.

Operational Impact and Risk Reduction
Liberty conducted comprehensive outreach activities, including 33 in-person events, 26 virtual sessions, and 57 digital communication efforts encompassing emails, website updates, and social media outreach. These extensive engagement efforts increased community awareness regarding wildfire risks, preparedness strategies, and utility mitigation programs. The broadened scope of community interaction directly supported improved public safety and emergency response readiness, enhancing the overall effectiveness of wildfire risk reduction measures.

Assessment and Conclusion
The initiative exceeded operational objectives with a 24.8% budget variance attributed to additional labor requirements. The increased expenditure supported expanded outreach activities beyond initial projections, delivering enhanced community engagement across multiple platforms. This comprehensive outreach directly contributes to wildfire risk reduction by improving public awareness, emergency preparedness, and community understanding of safety protocols.

WMP-CO-02 - Public engagement in WMP decision-making process

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 53.

WMP-CO-03 - Engagement with AFN populations, local governments, and tribal communities

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 53.

WMP-CO-04 - Collaboration on local wildfire mitigation and planning

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 53.

WMP-CO-05 - Best practice sharing with other electrical corporations

Since the absolute percent difference between budgeted and actual for this item is less than 10%, please refer to Table 53.

4.5.3 Synthesis of Findings

4.5.3.1 Initiative Review

Liberty has met or exceeded its stated targets for the initiatives in Community Outreach and Engagement. The overall level of wildfire risk reduction achieved is significant, as evidenced by the EC's community outreach efforts, engagement with various populations such as the AFN population, local governments, and tribal communities, as well as its collaboration with other electrical corporations. The initiatives within this category have contributed to improving customer awareness and preparedness around wildfire and PSPS events, as shown by the increasing number of customers who recall receiving and understanding Liberty's messaging on these topics.

The recordkeeping and data management practices are strong, with detailed survey reports and meeting minutes provided to verify compliance with the initiatives. No major recommendations for improvements in data collection, accuracy, or management were identified.

Furthermore, Liberty continuously evaluates and improves its community outreach and engagement efforts, using data-driven approaches to enhance its performance. The increasing customer awareness metrics and the implementation of recommended actions from the survey analyses show that Liberty is committed to enhancing its future performance in these areas.

Overall, Liberty is making significant strides in its community engagement and outreach efforts, with a focus on improving wildfire preparedness and PSPS awareness among its

customers, including vulnerable populations. The documentation provided supports the IE's determination of the EC's compliance covered within this category.

4.5.3.2 Funding Verification

Budget and Expenditure Summary

The Community Outreach and Engagement category had a total planned budget of $90,000 with actual expenditures of $112,303, representing a 24.8% variance above budget. This overspend supported expanded outreach activities beyond initial projections.

Initiatives with Significant Variances

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

- Public outreach and education awareness exceeded budget by 24.8% due to additional labor costs supporting the objective to increase community resiliency to wildfire and educate customers about PSPS events

Key Trends and Funding Compliance

Liberty conducted outreach activities including 33 in-person events, 26 virtual sessions, and 57 digital communication efforts, directly contributing to improved customer awareness and preparedness around wildfire and PSPS events. The increased expenditure supported Liberty's community outreach plan objectives to inform and engage various stakeholders, achieving increasing customer awareness metrics as demonstrated by survey analyses showing awareness of wildfire safety communications increased from 47% to 62% during 2024. The category's funding allocation supported risk mitigation through enhanced public awareness, emergency preparedness, and community understanding of safety protocols during elevated fire risk conditions.

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 Liberty's 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

Liberty received a score of '3 – Routine' for Roles and Responsibilities. In response to DR001, Liberty clearly outlined the personnel, applicable title, and verified the role's relevance to the QA/QC process. In the provided documentation "Asset Inspection QA/QC" Liberty further details the asset inspection responsibilities but elaborating more on the requirements fulfilled by key personnel. This document also includes the requirements needed to be held by contracted personnel that perform work related to this scope.

In the provided documentation "VM Post Work Verification" Liberty provides the requirements needed to be held by contracted personnel that perform work related to this scope. The document also outlines the internal and external personnel that are responsible for various aspects of the QA/QC implementation related to vegetation management (VM). Processes, protocols, and responsibilities outlined in both the Grid Operations and the VM documents provide mechanisms that ensure accountability for QA/QC.

The documents provided align with WMP sections 8.1.6 and 8.2.5 for qualifications needed for contracted personnel and provide further details pertaining to the specific roles and responsibilities for the various QA/QC designated roles. Communication regarding QA/QC is exemplified by Liberty holding bi-weekly meetings for Grid Operations and monthly meetings

for VM; QA/QC review is conducted during these meetings. Leadership regularly provides discussion and feedback as to why QA/QC is important to the success of the company and ways it can be improved.

Quality Culture

Liberty received a score of '3 – Routine' in Quality Culture. Liberty appears to embrace quality culture by reinforcing the expectations of why QA/QC is important. Team meetings are held with both Grid Operations and VM where the quality of work is discussed and analyzed. The discussions include the reinforcement as to why QA/QC is such an important part of the EC's process and why it is important to the success of the company. For external entities, Liberty shares results from their audits to help them improve their processes and ultimately align and meet the expectations that Liberty upholds.

Bi-weekly meetings with Grid Operations and monthly meetings with VM are held where QA/QC review is discussed both with the internal staff and contractors. Asset Inspection QA/QC and VM Post Work Verification documents clearly outline the expectations and requirements needed by both internal staff and contractors to perform duties related to QA/QC duties. These documents also outline the reporting process for issues related to QA/QC operations.

Quality Management System (QMS)

Liberty received a score of '2 – Applied' for Quality Management System. Liberty Utilities has implemented a QMS that spans both VM and Grid Operations, demonstrating a strong commitment to QA/QC across its operational areas. The VM Enterprise System and the Asset Management Enterprise System showcase Liberty's efforts to standardize processes and data management, utilizing tools like Fieldnote and the Fulcrum App to streamline activities ranging from inspections and tree work to asset tracking and repair processes. This standardization has led to sustainable improvements and consistency in performance across both scopes of work, as evidenced by the elimination of manual spreadsheet creation, improved data accuracy, and enhanced real-time visibility into operations. The QMS supports QA/QC efforts, implementing features such as dashboards for tracking key performance indicators, and third-party quality assurance measures. Standardization further emphasizes QA/QC efforts by the utilization of mandatory form logic, auto-filled asset attributes, and a separate vendor process for independent auditing. The emphasis on data-driven decision-making capabilities in both systems further demonstrates Liberty's commitment to utilizing data for operational improvements. Liberty's QMS appears well-structured, data-driven, and capable of supporting the organization's QA/QC objectives effectively.

Quality Inspections and Audits

Liberty received a score of '3 – Routine' for Quality Inspections and Audits. Liberty has implemented comprehensive QA/QC programs for both its VM and Grid Design Operations, demonstrating a systematic and multilayered approach to quality inspections and audits. Both programs employ a detailed oversight strategy, utilizing multiple layers of oversight including post-work verifications, 3rd party quality control inspections, and compliance audits for VM, and post-inspection verifications, third-party field inspections, and managerial reviews for Asset Inspection. This multi-tiered approach ensures thorough scrutiny of work performed and maintains independence and objectivity in the quality control process. The programs demonstrate a commitment to regular and effective inspections, with sampling structures matching what is outlined in the WMP. Both programs utilize quantitative metrics such as Acceptable Quality Levels (AQL) and Conformance Rates (CR) to assess performance and identify areas for improvement, facilitating performance trending and providing a data-driven basis for enhancements.

The QA/QC programs also demonstrate mechanisms for implementing changes to improve operational effectiveness, including provisions for timely reporting and immediate notification of significant issues. Clear oversight strategies with defined roles and responsibilities ensure accountability and facilitate the implementation of necessary changes. Additional strengths of these programs include the use of independent contractors for certain inspection levels, enhancing objectivity; processes for maintaining data accuracy through inventory reconciliation and desktop reviews; and proactive planning through annual QC inspection and Compliance Audit plans. Liberty Utilities' QA/QC programs demonstrate a comprehensive and systematic approach to quality control. The multi-layered inspection strategy, use of statistical sampling, implementation of clear performance metrics, and mechanisms for reporting and addressing issues collectively contribute to a thorough system for identifying areas of improvement and ensuring consistent quality standards. These programs appear well-structured, providing a solid foundation for continuous improvement in operational effectiveness.

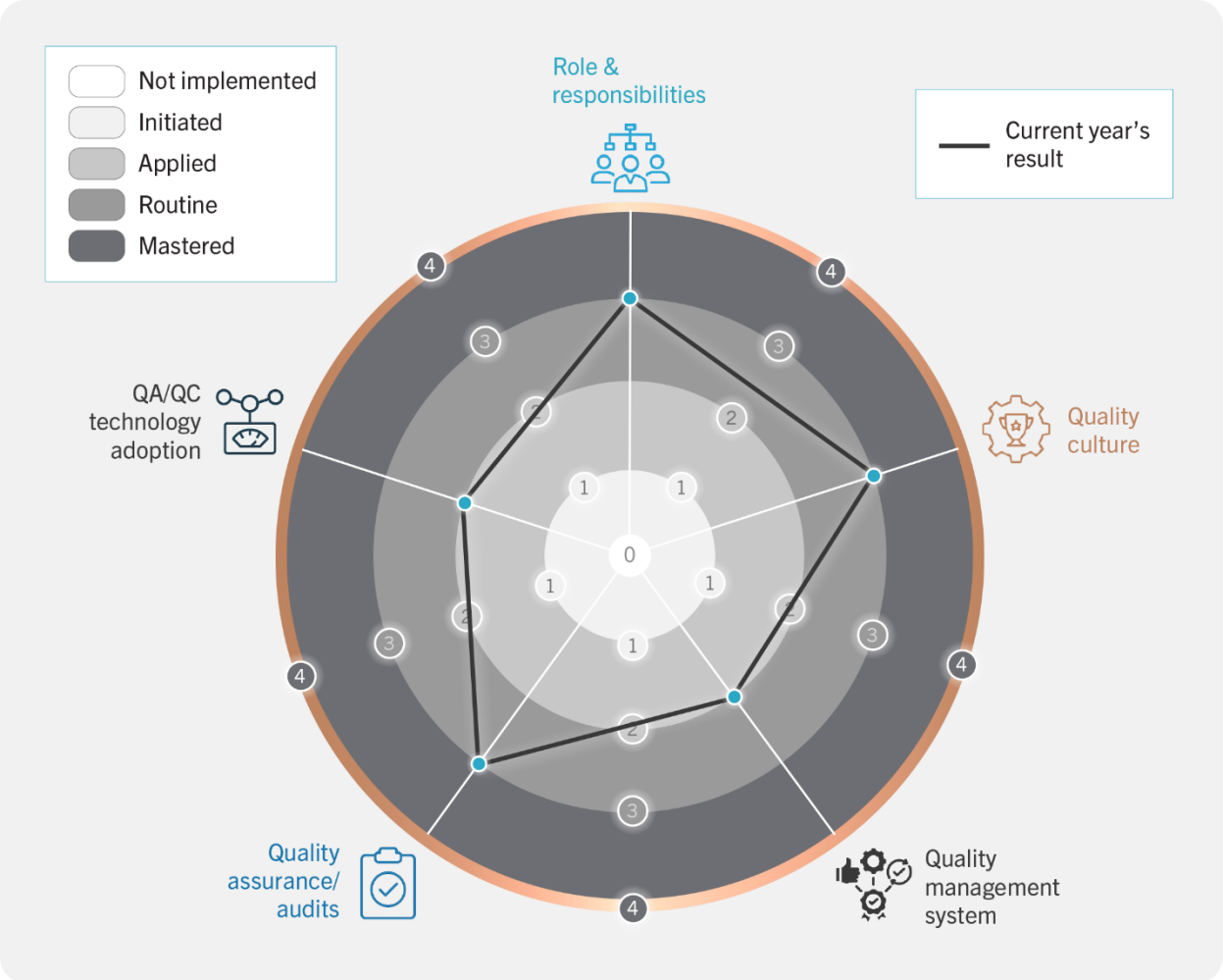
QA/QC Technology Adoption

Liberty received a score of '2 – Applied' for QA/QC Technology Adoption. Documentation across various initiatives demonstrates the implantation of automation devices, including fault indicators and automatic reclosers. Liberty utilizes LiDAR for vegetation management and conducts updates annually.

Additionally, Liberty employs Fieldnote and Fulcrum to conduct QA/QC audits on Grid Design and Operations, as well as VM. These databases served as centralized repositories for all inspection and related QC audits within their respective departments, facilitating east access to specific asset information. In 2024, Liberty built APIs to streamline Fieldnote data

into a SQL database which replaced the reliance on Fieldnote's web application for analysis. The SQL layer now powers dashboards and regulatory reports. This SQL data model can be joined with risk-management datasets, enabling dashboards that correlate with VM work and circuit risk metrics.

Figure 11: QA/QC Maturity Sunburst Chart



6. CONCLUSION

Throughout the 2025 Independent Evaluator process, Liberty 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. Liberty continues to build up and implement the objectives and goals outlined in the 2024 WMP.

Although Liberty did not meet a small number of its 2024 WMP targets, this outcome should be viewed in context. The utility's shortfall was primarily attributed to strategic adjustments and the rejection of proposed change orders by the relevant regulatory authority. Liberty 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.

Historically, grid hardening efforts and vegetation management have proven to be highly effective in mitigating wildfire risk, and Liberty has exceeded in several areas related to these categories. The utility has demonstrated its commitment to grid maintenance through actions such as a ~38% over-completion rate for detailed inspections on the EC's distribution lines and equipment and a ~15% over-completion rate on intrusive pole inspections. For vegetation management, Liberty accomplished a 25% over-completion rate for wood and slash management, ensuring the proper measures were taken to dispose of potential wildfire ignition fuel.

Liberty did experience four separate PSPS events in November due to extreme weather conditions that could have led to ignition risk. In alignment with WMP objectives and goals, Liberty provided after-action reports detailing what happened, and what went well, what went wrong, and what could be improved upon. Related to PSPS and emergency events, Liberty conducted several community outreach events, including working groups and councils, as well as a full-scale emergency response exercise and a separate tabletop exercise. To ensure that community engagement efforts were successful, Liberty conducted a bi-annual survey and subsequent survey analysis that provided vital insight into various metrics for customers' reception, which further enables Liberty to identify areas where messaging is successful and areas where improvements could be made.

Liberty 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 the evidence provided, Liberty has shown that they are dedicated to mitigating wildfire risk through their implementation of initiatives across all five 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. Liberty's continued efforts to build upon and implement the WMP objectives will be crucial in ensuring the safety and resilience of the community they serve.

7. ATTACHMENTS

The attachments listed below can be found on a separate Microsoft Excel file titled “Liberty 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)