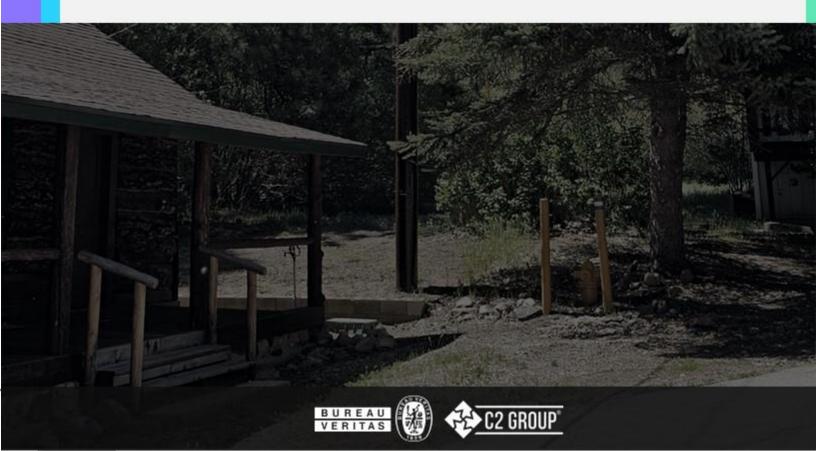




JUNE 30, 2024



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#### DISCLAIMER

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

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

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

# **1. EXECUTIVE SUMMARY**

Derived from the devastating wildfires of the past and the present, we continue to learn more about what is our task to ensure the safety of California lands as it relates to the presence of electrical infrastructure within the wildland. California Public Utilities Commission (CPUC) opened Rulemaking 18-10-007 to provide guidance on the Investor-Owned Utilities (IOU) Wildfire Mitigation Plans (WMPs). The WMP's are developed to span three (3) years, with the first cycle of WMP independent evaluation starting in 2020.

Pursuant to P.U. Code Section 8386.3(c)(2)(B)(i), (ii), (iii), and (iv), Bureau Veritas North America, Inc. (BVNA), in partnership with C2 Group, has been selected as an Independent Evaluator (IE) to review and assess Liberty Utilities (CalPeco Electric) LLC (U 933-E) (to be referred to as Liberty within the report), 2023 Wildfire Mitigation Plan (WMP), dated February 15, 2024, referred to within this report as the Plan or WMP; and provide a written report demonstrating Liberty's level of compliance with their commitments demonstrated within the Plan for initiative compliance verification for the execution of the WMP goals and targets.

In carrying out the stipulations of Resolution WSD-021, BVNA has evaluated Liberty Utilities' compliance with its Plan commitments pursuant to Public Utilities Code Section 8386, validated Liberty Utilities' initiative compliance verification for the execution of the WMP goals and targets, quality assurance and quality control (QA/QC) programs outlined for support of WMP initiatives, and reviewed its WMP funding activities.

The 2023 year of WMP is the 2nd cycle of the three (3) year planning. During the final evaluation of the first 3-year plan which ended in 2022.

In conformance with Energy Safety's requirements, Liberty Utilities executed a contract with BVNA to provide the IE assessment which include the IE responsibilities outlined in the Public Utilities Code section 8386.3(c)(5)(C) for performance of the following tasks:

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

Docket Title: 2023 to 2025 Electrical Corporation Wildfire Mitigation Plans Docket #; 2023-2025-WMPs Liberty 2023 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 2023 WMP.

### Key Findings

The Liberty 2023 WMP demonstrates lessons learned from the previous 3-year cycle of Wildfire Mitigation planning and provides a vision for their 2023-2025 plan with a focus on enhancing risk strategies, technology integration and stakeholder engagement. The IE has included a few key findings from the IE's review of the 2023 Liberty WMP initiatives in this section, including examples that exemplify the successes of Liberty's 2023 efforts to fulfill work exceeding the stated goals as well as initiatives that were in progress but not met due to various external factors as noted within this report and per Liberty's Annual Report on Compliance (ARC) and Quarterly Data Report (QDR) Q4 reporting.

• 8.1.3.2 - AI-02 - Intrusive Pole Inspections

Data was gathered to assess initiative AI-02 to WMP section 8.1.3.2 for the testing and treatment of wood poles to look for potential deterioration and degradation over time. Poles that are thoroughly inspected and/or proactively treated to extend the service life of the asset significantly reduce safety risk to the system and public. The total of completed inspections reported of 2,975 inspections exceeds the target goal of 2,876 by a total of 108 inspections.

### 8.3.3 – SA-02 – Grid Monitoring Systems

Data was gathered to assess initiative SA-02 to WMP section 8.3.3 to track the target of installing fault line indicators as part of grid monitoring improvements. Fault indicators expedite power restoration during an outage by expediting response and locating of tripped lines. The target goal for the installation of fault line indicators was listed at 10 installations. In response to data request DR049, the IE was informed that no installations were completed in 2023.

 8.1.2.2 - WMP-GDOM-GH-02 – Undergrounding of Electric Lines and/or Equipment Liberty committed to complete 1.4 miles of undergrounding in 2023. Liberty provided completion data for .1 miles of undergrounding. In the ARC for the 2023 WMP, Liberty reported that a civil contractor could not be found that would meet the project budget.

### • 8.1.2.12 - WMP-GDOM-GH-12a - Tree attachment removals

Liberty committed to removing 60 tree attachments in 2023. Liberty provided completion data for 35 of 37 reported tree attachment removals. In the ARC for the 2023 WMP, Liberty reported progress on this initiative was delayed due to challenges with easement acquisition.

# **2. INTRODUCTION**

The state of California has suffered extensively from disastrous wildfires in recent years. The California Department of Forestry and Fire Protection (CALFIRE) has indicated that due to warming it is likely that more aggressive fires are in store due to the stresses observed in

Liberty Utilities is owned by the parent company Algonquin Power & Utilities Corp. Liberty Utilities, referred to in the report as Liberty. Liberty is an IOU and is required by legislation to submit an annual WMP as part of a three (3) year cycle strategy, from 2020-2022 and was to focus on measures the EC will take to reduce the risk of, and impact from wildfire as it relates to its electrical infrastructure and equipment.

Liberty Utilities has a territory in a terrain that varies from flat land in South Lake Tahoe to slopes, ridges, and canyons in western and northern areas combined with vegetation. The entire territory is 5,000 ft. in elevation above sea level. This mountainous area consists of mostly rural communities with some mixed urban centers. These factors along with seasonal weather presents unique challenges in maintaining efficient and reliable service. Due to the heavy forestation and vegetation, Liberty's territory and electrical equipment and infrastructure lies within the HFTD Tier 2 and Tier 3 areas. This equates to 93% that fall under this classification.



Figure 1: Map of Liberty Service

The electrical infrastructure to support this environment is across 1,482 square miles servicing 49,954 customers in seven counties. Of the 1,482 square miles, 1,471 miles are adjacent and surrounding Lake Tahoe, north and south of the California split. Within the territory there are 24,728 poles and 1,047.5 total circuit miles of distribution and transmission lines.

Over the course of the 3-year cycle from 2023-2025 of the WMP, Liberty has the primary objective to continue to reduce the risk of wildfires through developing and implementing new programs. Continuing progress with initiatives such as Public Safety Power Shutoff (PSPS) events, weather forecasting and risk assessment, grid hardening, vegetation management and emergency management, Liberty's commitment to wildfire safety, the IE report intends to demonstrate compliance with initiatives as outlined by Energy Safety.

# **3. INDEPENDENT EVALUATOR REVIEW OF COMPLIANCE**

BVNA and the C2 Group have been chosen as Liberty's IE and is tasked with evaluating Liberty's 2023-2025 WMP. The following assessment outline is based upon Liberty's completion of proposed initiatives, distribution of funding, and verification of quality assurance and quality control program depicted during 2023 yearly progress. The overall approach to verify compliance included the review and assessment of the multiple WMP activities through data requests, Subject Matter Expert (SME) interviews, review of publicly available documents, and conducting field assessments within Liberty's service area to documented and validated aspects detailed and outlined in Liberty's WMP progress for 2023.

The commencement of the evaluation began with the Energy Safety kick-off meeting, an introduction meeting with Liberty representatives, BVNA/C2 staff, and assigned Energy Safety Staff. Key elements of the introductory meeting were the process and protocols of communication and documentation; and identification of the individuals who are responsible for receiving requests from the IE. The IE then initiated a review of Liberty's 2023 WMP along with publicly available documents as listed in the Appendices to identify Liberty's statements detailed within the 2023 WMP goals. Liberty's WMP elements and their fulfillment of commitments, initiatives, and metrics are included in the QA/QC provisions outlined within the WMP.

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

- Inspection and maintenance of distribution, transmission, and substation assets, including conducting system patrols and ground inspections using technological inspection tools, managing predictive and electrical preventative maintenance, conducting vegetation inspections and management, vulnerability detection such as Light Detection and Ranging (LiDAR) inspection, and geospatial and topography identification and geographic information system (GIS) mapping data. A key component is identifying collected data elements through each program and understanding how that data is used and shared to improve utility practices.
- Vegetation management, including routine preventative vegetation maintenance; corrective vegetative management and off-cycle tree work; emergency vegetation clearance, prioritized for portions of the service territory in Tier 2 and 3 HFTD; quality control processes; and resource protection plan, including animal and avian mitigation programs. Enhanced Vegetation Management (EVM) with enhanced inspections, aims to keep all aspects of trees away from power lines and to prescribe minimum clearances that exceed state standards. EVM implements frequencies of

inspection beyond the routine patrols to address dead, diseased or dying trees from power lines where they can do no harm.

- **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.
- Operational practices, including communications and executing plans under varying degrees of wildfire risk. Plans to deactivate automatic reclosers, de-energization of "at risk" area power lines based on the type of facility (overhead bare conductions, high voltage, etc.), tree and vegetation density, available dry fuel, and other factors that make specific locations vulnerable to wildfire risk.
- Situational awareness includes obtaining information from devices and sensors on the actual system, weather, and other wildfire conductivity conditions and two-way communication with agencies and key personnel. Application of risk informed, and data supported decision making. Programs such as online feeds and websites such as the National Fire Danger Rating System are utilized. Situational awareness should help achieve a shared understanding of actual conditions and serve to improve collaborative planning and decision-making.
- De-Energization actions triggered and prioritized by forecasted extreme fire weather conditions: imminent extreme fire weather conditions; validated extreme fire weather conditions; and plans for re-energization when weather subsides to safe levels. Manual or automatic capabilities exist for implementation.
- Advanced Technologies include Distribution Fault Anticipation technology, tree growth regulators, pulse control fault interrupters, oblique and hyperspectral imagery, advanced transformer fluids, advanced LiDAR, and advanced Supervisory Control and Data Acquisition (SCADA) to reduce electrical ignition while also helping to mitigate power outages and equipment damage.
- Emergency Preparedness, Outreach, and Response communications before, during, and after emergencies, including but not limited to engaging with key stakeholders that include critical facilities and served customers, local governments, critical agencies such as the California Department of Forestry and Fire Protection (CAL FIRE), local law enforcement agencies and other first responders, hospitals, local emergency planning committees, other utility providers, and California Independent System Operators. Coordination agreements such as Mutual Aid or Assistance should be leveraged. A community outreach plan should inform and engage first responders, local leaders, land managers, business owners, and others.

For those activities described in the WMP but not available within the publicly available records, BVNA's team of evaluators submitted data requests and conducted SME interviews to verify activities stated within the 2023 initiative list for the 2023-2025 WMP (See Appendix C for Data Requests Submitted and Responses). Along with the document

analysis, data requests, and SME interviews, the IE conducted field assessments within HFTP Tier 2 and Tier 3 areas to collect images and evaluate compliance with the 2023 activities or initiatives identified during the IE initial review. The analysis and key findings for each respective section are detailed further within the following sections.

# 3.1 WMP Activity Completion

WMP activities outlined in Liberty's 2023 WMP are demonstrated in the document, "Liberty\_2023\_Q4\_Tables115\_R0.xlsx". Appendix A provides a detail of the initial activities and their grouping as it pertains to Initial IE Categorization. As described above, the WMP activity includes initiatives aligned with compliance metrics developed by Energy Safety. Given the nature of Liberty's inventory, the IE assessment of activity completion is itemized in this report's following sections. The details in Section 3.1.1, and in conjunction with Appendix A, provide a comprehensive overview of the specific verifications conducted by the IE.

# 3.1.1 Sampling Methodology and Discussion

BVNA IE random sampling sizing for Liberty are based upon the North American Electric Reliability Corporation (NERC) ERO Sampling Handbook Revision 1.0 developed by the Compliance Monitoring and Oversight Process Working Group (CMPWG). The handbook was updated by a task force to provide guidance for all Compliance Enforcement Authorities. BVNA understands that sample sizing is based upon an assessor's confidence level, availability of data, data or submit type, timing, logistics and technology that affect the compliance monitoring process. Auditors and Assessors have the flexibility to sample a population as it deems necessary based upon their experience and this may include statistical sampling, non-statistical sampling, judgement sampling, or a combination thereof.

Due to timing of award of contract, assessor experience and size of field population, BVNA has utilized the ERO Sampling Handbook Revision 1.0 Appendix A – Sample Table A for determining random sample sizing. Sample selection begins by determining the lot size or population and considering the population description, work type (field verifiable, document verifiable), the inspection level and then applying the appropriate sample sizing based upon table sample selection.

For the last three (3) years BVNA's Team have been accepted and listed as an approved IE conducting the assessment of several yearly WMP's. It is from this experience that BVNA is utilizing the referenced standard for Liberty's selection of samples. The application of this method is supported by a confidence factor of 95% with a +/-10% error factor across the minimum value of the population, known as acceptable error.

### *Large Volume Quantifiable Goal/Target – Field Verifiable*

The IE applied sampling methodologies and standards to program targets to ensure the sampling quantities were statistically acceptable. When Liberty's actual quantity of completed work exceeded the amount targeted, the greater and 'actual' number was used when determining the field review sample quantities. See Table 1: Program Sampling Methodology Summary for Large Volume Quantifiable Goal/Target Field Verifiable that summarizes the individual program targets, actuals, sampling methodologies/standards, and the IE sample size/target.

The IE conducted field inspections assessing compliance for work completion, work quality, and adherence to applicable protocols and procedures. The IE field sample targets are minimums, and larger sample numbers were obtained when possible. In addition, the IE has made data requests on these program targets to review, where applicable, standards, asbuilts, and relevant QA/QC program documentation. This multi-faceted approach supports verification results extrapolated across sample populations.

The IE assessed the following four (4) items provided as part of Liberty's 2023 WMP's list of initiatives under section **3.1.2.1 Large Volume Quantifiable Goal/Target - Field Verifiable.** 

Program	Units	Sections	Sampling Standard	Liberty Target <sup>1</sup> /Actual <sup>2</sup>	IE Field Sample Target
Distribution pole replacements and reinforcements	Poles	8.1.2.3 - WMP-GDOM- GH-03	(NERC) ERO Sampling Handbook Table A	200 / 292	29
Expulsion fuse replacement	Expulsion Fuses	8.1.2.12 - WMP-GDOM- GH-12b	(NERC) ERO Sampling Handbook Table A	3,800 / 4,122	33
Vegetation Management Inspection Program - Lidar	Line Miles	8.2.2.3 - WMP-VM- INSP-03	(NERC) ERO Sampling Handbook Table A	700 / 707	29
High-Risk Species	Line Miles	8.2.3.6 - WMP-VM- VFM-07	(NERC) ERO Sampling Handbook Table A	220/313	29

# Table 1: Program Sampling Methodology Summary for,Large Volume Quantifiable Goal/Target – Field Verifiable

<sup>1</sup> Liberty's Targets reported per Liberty's 2023 Wildfire Mitigation Plan Dated February 15, 2024.

<sup>2</sup> Liberty's Actuals reported per Liberty's 2023 WMP Annual Report on Compliance (ARC) dated March 29, 2024, and Liberty's Quarterly Data reporting dated February 14, 2024.

### *Large Volume Quantifiable Goal/Target – Not Field Verifiable*

Similar to the Large Volume Quantifiable Goal/Target Field Verifiable noted previously, the IE applied the same sampling methodologies and standards to program targets to ensure the sampling quantities were statistically acceptable. When Liberty's actual quantity of completed work exceeded the amount targeted, the greater and 'actual' number was used when determining the sample quantities. See Table 2: Program Sampling Methodology Summary for Large Volume Quantifiable Goal/Target Not Field Verifiable that summarizes the individual program targets, actuals, sampling methodologies/standards, and the IE sample size/target.

The IE made initial data requests on these program targets to review the work completed and identify and request completion records for the sample size in conformance with the sampling methodology described herein. The IE has also made data requests on these program targets to review, where applicable, standards, as-builts, and relevant QA/QC program documentation.

The IE assessed the following ten (10) items provided as part of Liberty's 2023 WMP's list of initiatives under section **3.1.2.2 Large Volume Quantifiable Goal/Target - Not Field Verifiable.** 

Program	Units	Sections	Sampling Standard	Liberty Target <sup>1</sup> /Actual <sup>2</sup>	IE Sample Standard Target
Detailed inspections of distribution electric lines and equipment	Circuit Miles	8.1.3.1 - WMP- GDOM-AI- 01	(NERC) ERO Sampling Handbook Table A	40.3 / 625	29
Intrusive pole inspections	Poles	8.1.3.2 - WMP- GDOM-AI- 02	(NERC) ERO Sampling Handbook Table A	2,867 / 2,975	33

# Table 2: Program Sampling Methodology Summary,Large Volume Quantifiable Goal/Target - Not Field Verifiable

Patrol inspections of distribution electric lines and equipment	Circuit Miles	8.1.3.3 - WMP- GDOM-AI- 03	(NERC) ERO Sampling Handbook Table A	701.5 / 702	29
Vegetation Management Inspection Program - Detailed	Line Miles	8.2.2.1 - WMP-VM- INSP-01	(NERC) ERO Sampling Handbook Table A	20 / 236	29
Vegetation Management Inspection Program - Patrol	Line Miles	8.2.2.2 - WMP-VM- INSP-02	(NERC) ERO Sampling Handbook Table A	0 / 78	23
Pole Clearing	Subject Poles	8.2.3.1 - WMP-VM- VFM-01	(NERC) ERO Sampling Handbook Table A	4,900 / 4,957	33
Wood and Slash Management	Acres	8.2.3.2 - WMP-VM- VFM-02	(NERC) ERO Sampling Handbook Table A	280 / 625	29
Clearance	Line Miles	8.2.3.3 - WMP-VM- VFM-05	(NERC) ERO Sampling Handbook Table A	670.8 / 707	29
Fall-In Mitigation	Line Miles	8.2.3.4 - WMP-VM- VFM-06	(NERC) ERO Sampling Handbook Table A	220/313	29
Quality Assurance and Quality Control	Line Miles	8.2.5 - WMP-VM- QAQC-01	(NERC) ERO Sampling Handbook Table A	229 / 299.7	29

<sup>1</sup> Liberty's Targets reported per Liberty's 2023 Wildfire Mitigation Plan Dated February 15, 2024.

<sup>2</sup> Liberty's Actuals reported per Liberty's 2023 WMP Annual Report on Compliance (ARC) dated March 29, 2024, and Liberty's Quarterly Data reporting dated February 14, 2024.

### Small (less than 100 times) Volume Quantifiable Goal/Target

Similar to the Large Volume Quantifiable Goal/Target Not Field Verifiable noted previously, the IE applied the same sampling methodologies and standards to program targets to ensure the sampling quantities were statistically acceptable. When Liberty's actual quantity of



completed work exceeded the amount targeted, the greater and 'actual' number was used when determining the sample quantities. See Table 3: Program Sampling Methodology Summary for Small (less than 100 times) Volume Quantifiable Goal/Target that summarizes the individual program targets, actuals, sampling methodologies/standards, and the IE sample size/target.

The IE made initial data requests on these program targets to review the work completed and identify and request completion records for the sample size in conformance with the sampling methodology described herein. The IE has also made data requests on these program targets to review, where applicable, standards, as-builts, and relevant QA/QC program documentation.

The IE assessed the following 21 items provided as part of Liberty's 2023 WMP's list of initiatives under section **3.1.2.3 Large (less than 100 times) Volume Quantifiable Goal/Target.** 

Program	Units	Sections	Sampling Standard	Liberty Target <sup>1</sup> /Actual <sup>2</sup>	IE Sample Standard Target
Covered conductor installation	Circuit Miles	8.1.2.1 - WMP- GDOM-GH-01	(NERC) ERO Sampling Handbook Table A	5.72 / 5.65	5.65
Undergrounding of electric lines and/or equipment	Circuit Miles	8.1.2.2 - WMP- GDOM-GH-02	(NERC) ERO Sampling Handbook Table A	1.37 / 0.12	0.12
Traditional overhead hardening	Circuit Miles	8.1.2.5 - WMP- GDOM-GH-05	(NERC) ERO Sampling Handbook Table A	4 / 9.2	9
Emerging grid hardening technology installations and pilot progress	Circuit Miles	8.1.2.6 - WMP- GDOM-GH-06	(NERC) ERO Sampling Handbook Table A	N/A	N/A
Microgrids	Circuits	8.1.2.7 - WMP- GDOM-GH-07	(NERC) ERO Sampling	N/A	N/A

# Table 3: Program Sampling Methodology Summary for Small (less than 100 times) Volume Quantifiable Goal/Target

			Handbook Table A		
Installation of system automation equipment	Device	8.1.2.8 - WMP- GDOM-GH-08	(NERC) ERO Sampling Handbook Table A	8/5	5
Line removal (in HFTD)	Circuit Miles	8.1.2.9 - WMP- GDOM-GH-09	(NERC) ERO Sampling Handbook Table A	0/0.5	0
Tree attachment removals	Tree Attachments	8.1.2.12 - WMP- GDOM-GH-12a	(NERC) ERO Sampling Handbook Table A	60/37	16
Animal guards	Animal Guards	8.1.2.12 - WMP- GDOM-GH-12c	(NERC) ERO Sampling Handbook Table A	4 / 4	4
CalFIRE exempt hardware	Device	8.1.2.12 - WMP- GDOM-GH-12d	(NERC) ERO Sampling Handbook Table A	N/A	N/A
Open wire/grey wire	Miles	8.1.2.12 - WMP- GDOM-GH-12e	(NERC) ERO Sampling Handbook Table A	2.55 / 4.4	2.5
Substation Equipment Replacement	Device	8.1.2.12 - WMP- GDOM-GH-12f	(NERC) ERO Sampling Handbook Table A	N/A	N/A
Other discretionary inspections of distribution electric lines and equipment	Circuit Miles	8.1.3.4 - WMP- GDOM-AI-04	(NERC) ERO Sampling Handbook Table A	TBD / 0.1	0.1
Quality assurance / quality control of inspections	% of Detailed Inspections	8.1.3.5 - WMP- GDOM-AI-05	(NERC) ERO Sampling Handbook Table A	0.01 / 12	9
Substation inspections	Inspections	8.1.3.6 - WMP- GDOM-AI-06	(NERC) ERO Sampling	42 / 44	23

			Handbook Table A		
Equipment maintenance and repair	N/A	8.1.4 - WMP- GDOM-MR-01	(NERC) ERO Sampling Handbook Table A	N/A	N/A
Substation Defensible Space	Substation Treatments	8.2.3.5 - WMP-VM- VFM-03	(NERC) ERO Sampling Handbook Table A	12/22	16
Fire-Resilient Right-of-Ways	Line Miles	8.2.3.7 - WMP-VM- VFM-04	(NERC) ERO Sampling Handbook Table A	0/13.7	9
Environmental monitoring systems	Weather Stations	8.3.2 - WMP-SA- 01	(NERC) ERO Sampling Handbook Table A	5 / 5	5
Grid monitoring systems	Fault Line Indicators	8.3.3 - WMP-SA- 02	(NERC) ERO Sampling Handbook Table A	10/0	9
Fire detection and alarm systems	Cameras	8.3.4 - WMP-SA- 03	(NERC) ERO Sampling Handbook Table A	8/0	N/A

<sup>1</sup> Liberty's Targets reported per Liberty's 2023 Wildfire Mitigation Plan Dated February 15, 2024.

<sup>2</sup> Liberty's Actuals reported per Liberty's 2023 WMP Annual Report on Compliance (ARC) dated March 29, 2024, and Liberty's Quarterly Data reporting dated February 14, 2024.

### Sampling Distribution

The IE conducted an independent site selection process to determine sample locations for field verifications taken from the populated data for each initiative and applied Random Sampling across Liberty's territory. In all cases, sampling was targeted within HFTD Tiers 2 and 3 areas. Further, it targeted high-density areas to improve field inspection efficiency and maximize sampling quantities.

Sample sizes and their analysis were adequate for a general understanding of the reviewed items. The sample sizes over time allotments are insufficient to provide a definite accounting of item qualities or miles stated within Liberty's 2023 WMP targets. However, as requested

in the Final IE Scope of Work document, general and linear extrapolations and deductions were made from the sample size results, which were distributed as defined within this document. These included the actual installation or removal of the item (work completion), general work quality, adherence to protocols, standards, and procedures, and item location or confirming operational outputs.

See Figure 2: Overview of Areas Sampled, which provides a general overview of the locations sampled within Section 3.1.2.1 Large Volume Quantifiable Goal/Target - Field Verifiable.

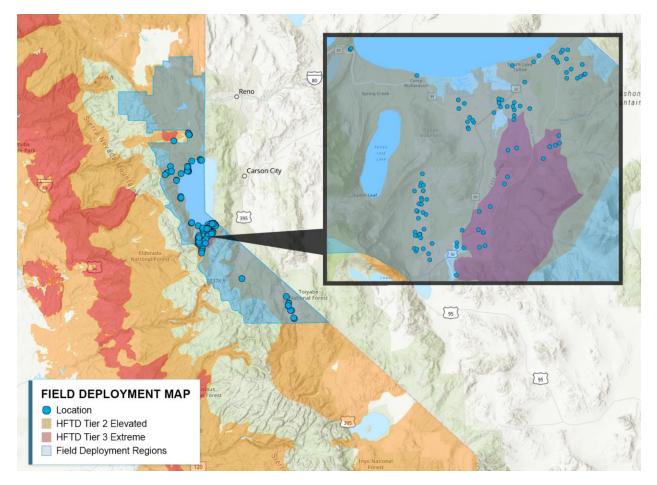


Figure 2: Overview of Areas Sampled

# 3.1.2 Review of Initiatives

# 3.1.2.1 Large Volume Quantifiable Goal/Target – Field Verifiable

The following information comprises detailed descriptions of the IE's assessments of Liberty's various initiatives categorized as Large Volume Quantifiable Field Verifiable. The approach to assessing each initiative, along with the IE's findings, are described in this section.

### 8.1.2.3 - WMP-GDOM-GH-03 - Distribution Pole Replacements and Reinforcements

Replacement and reinforcement of distribution poles reduce the risk of structural failures and contributes to the overall goal of minimizing the risk of ignition in HFTD areas. Liberty committed to replacing 200 distribution poles in Tier 2 and Tier 3 HFTD areas, per Table 8-3 Liberty Grid Design, Operations, and Maintenance Targets by Year of the 2023 WMP. Liberty's goal to replace 200 distribution poles was met and exceeded by 92 poles, replacing a total of 292 distribution poles per Liberty's self-reporting document, "Liberty Response to LIB\_DR003" spreadsheet dated May 23, 2024.

The program definition for pole replacement is defined in Section 8.1.2.3 Distribution Pole Replacements of the 2023 WMP. For illustrative examples of these observations, please refer to Figure 3: Example of Distribution Pole Replacements Field Images, provided below.

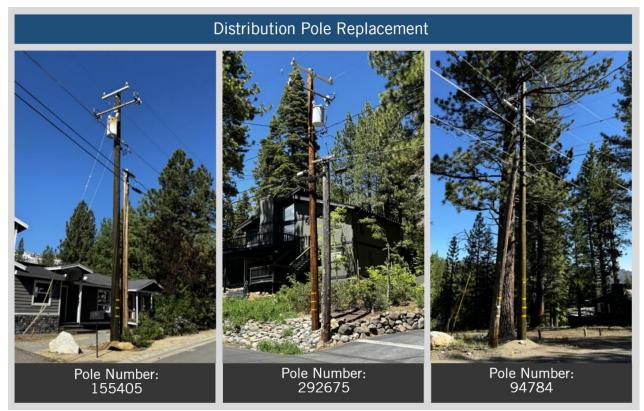


Figure 3: Example Distribution Pole Replacement Field Images

From the confidential response DR007, The IE verified a sample of 38 distribution pole replacement locations. The IE's target goal of 29 field verified locations was exceeded by 9, for a total of 38 sampled sites. All sampled locations complied with the initiative; based on the IE's verification sample and results, it appears likely that Liberty met its stated commitment to replace 200 distribution poles and exceeded 92 units for a total of 292 distribution poles replaced, as reported in Liberty's Quarterly Data reporting dated February 14, 2024.

Field assessments of the expulsion fuse replacements were reviewed for workmanship quality and accuracy of the information in alignment with the initiative description as described within the 2023 WMP. The following issues or data discrepancies were identified during the field assessment:

• The location of one (1) structure does not match the coordinates provided. The structure is approximately 130 feet to the northwest of the coordinates.

### 8.1.2.12 - WMP-GDOM-GH-12b - Expulsion Fuse Replacement

Liberty committed to replacing 3,800 expulsion fuses/cutouts identified on distribution poles in Tier 2 and Tier 3 HFTD areas in 2023. Liberty's goal to replace 3,800 expulsions

fuses was met and exceeded by 322 units, replacing 4,122 expulsion fuses, as reported in Liberty's Quarterly Data reporting dated February 14, 2024.

The program definition of removal is defined in Section 8.1.2.12 Expulsion Fuse Program of the 2023 WMP and as per the confidential response to Data Request DR018. The IE field assessment team utilized the California Power Line Fire Prevention Guide, 2021 Edition, as their ruling document to validate Exempt equipment installations (Pages 81-87, Figures B-1 through B-21) vs. Non-Exempt (Pages 54-62, Figures NE-1 through NE-18). For illustrative examples of these observations, please refer to Figure 4: Example of Expulsion Fuse Replacement Field Images, provided below.

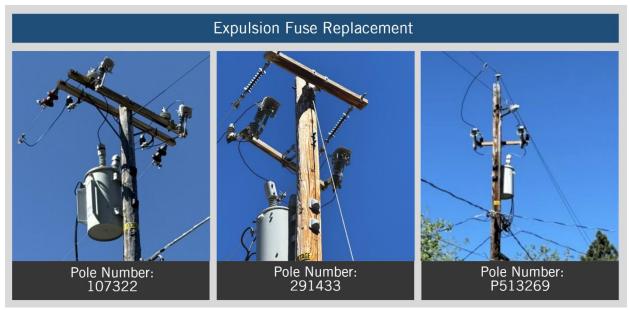


Figure 4: Example of Expulsion Fuse Replacement Field Images

From the confidential response DR018, the IE randomly sampled and verified 53 expulsion fuse replacement locations. The IE's target goal of 33 field verified locations was exceeded by 20, for a total of 53 sampled sites. All sampled locations complied with the initiative; based on the IE's verification sample and results, it appears likely that Liberty met its stated commitment to remove and replace 3,800 expulsion fuses and exceeded 322 units for a total of 4,122 expulsion fuses replaced, as reported.

Field assessments of the expulsion fuse replacements were reviewed for workmanship quality and accuracy of the information in alignment with the initiative description as described within the 2023 WMP. The following data discrepancy was identified during the field assessment:

• The location of one (1) structure does not match the coordinates provided. The structure is approximately 130 feet to the northwest of the coordinates.

### 8.2.2.3 - WMP-VM-INSP-03 - Vegetation Management Inspection Program - LiDAR

LiDAR inspections of vegetation around distribution electric lines and equipment contribute to reducing the overall risk of starting or spreading fires by identifying areas for vegetation management in Liberty's service area. Liberty has committed to inspecting and clearing 700 distribution circuit miles of vegetation, per Table 8-17 Liberty Vegetation Management Initiative Targets by Year of the 2023 WMP. Liberty's goal to inspect 700 distribution circuit miles was met and exceeded by 7 circuit miles, for a total of 707 circuit miles remediated as reported in Liberty's Quarterly Data reporting dated February 14, 2024.

The program definition for vegetation clearance is defined in 8.2.2.3 Vegetation Management Inspection Program – LiDAR Inspections of the 2023 WMP. The IE field assessment team utilized the California Power Line Fire Prevention Guide, 2021 Edition, as their ruling document for validation of pole clearances (Pages 21-22, Figures 10 through 12) as well as hazard trees/vegetation clearances (Pages 42-52). For illustrative examples of these observations, please refer to Figure 5: Example LiDAR Vegetation Management, provided below.

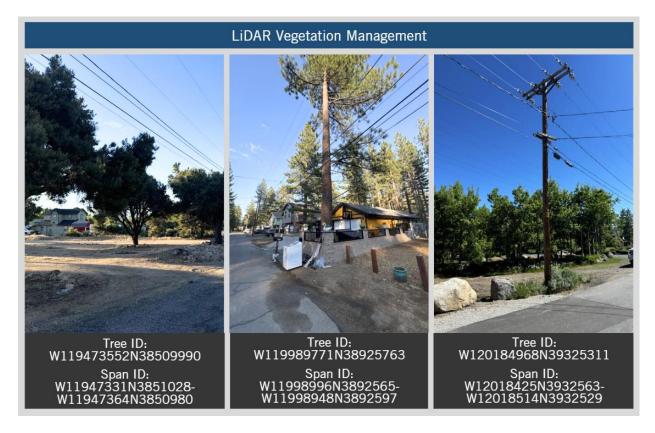


Figure 5: Example LiDAR Vegetation Management Field Images

From the confidential response DR037, the IE randomly sampled 43 distribution circuit miles reported as completed in 2023. Additionally, the IE sampled 35 individual locations for clearance verification from confidential response DR041 for work attributed to WMP-VFM-06 for Clearance Work that was derived from the Vegetation Management Inspection LiDAR Program. The IE's goal of 29 circuit miles was exceeded by 14, for a total of 43 sampled circuit miles. All 43 sampled circuit miles and 35 individual locations complied with the initiative; based on the IE's verification sample and results, it appears likely that Liberty met its commitment to inspect 707 distribution circuit miles as reported, and clear encroaching vegetation identified in this program as necessary.

Field assessments of the vegetation mitigation were reviewed for workmanship quality and accuracy of information. No issues were identified, and, based on the assessment of the LiDAR vegetation mitigation the work quality is satisfactory in alignment with the initiative description as described within the 2023 WMP.

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

Remediation of high-risk species contributes to reducing the overall risk of starting or spreading fires by assessing trees for risk and trimming or removing them as necessary within the Utility Strike Zone in Liberty's service area. Liberty has committed to remediating 220 distribution circuit miles, per Table 8-17 Liberty Vegetation Management Initiative Targets by Year of the 2023 WMP. Liberty's goal to remediate 220 circuit miles was met and exceeded by 93 circuit miles, for a total of 313 circuit miles remediated as reported in Liberty's Quarterly Data reporting dated February 14, 2024.

The program definition for remediation of high-risk species is defined in 8.2.3.4 Fall-in Mitigation of the 2023 WMP. The IE field assessment team utilized the California Power Line Fire Prevention Guide, 2021 Edition, as their ruling document for validation of pole clearances (Pages 21-22, Figures 10 through 12) as well as hazard trees/vegetation clearances (Pages 42-52). For illustrative examples of these observations, please refer to Figure 6: Example High-Risk Species Remediation Field Images, provided below.

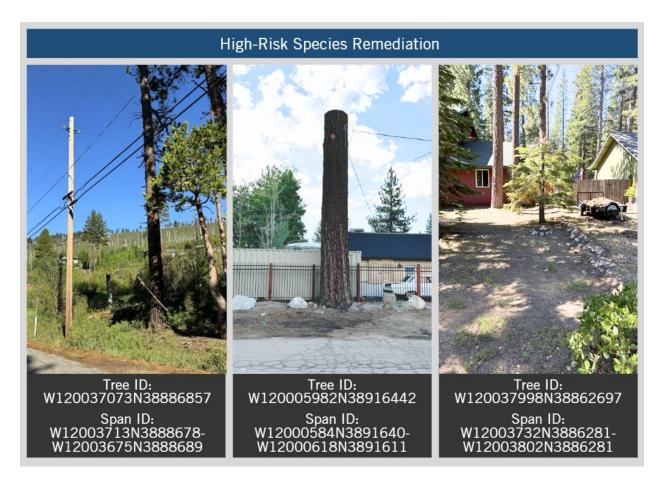


Figure 6: Example High-Risk Species Remediation Field Images

The IE field verified a sample of 29.7 line-miles of high-risk species and 41 individual locations across Liberty's service territory where mitigation activities were conducted per the confidential response to DR041. The IE utilized Handheld Cameras and a vehicle-mounted 360° camera with GPS data-logging capabilities to accurately map the selected patrol areas for comparison against historical Google Streetview imagery when available, and visual verification of work locations identified in DR041. All patrolled and individual locations assessed by the IE field team demonstrated compliance with the initiative goal/target. Based on the IE's verification sample and results, it appears likely that Liberty did meet its commitment to remediate 220 distribution circuit miles of high-risk species and exceeded by 93 miles for a total of 313 circuit miles as reported.

Field assessments of the remediation's were reviewed for workmanship for the quality of material removal, removal of vegetation litter and the accuracy of the location of work as provided in the confidential response to DR041. No issues were identified and based on the assignment of the vegetation remediation; the work quality is satisfactory in alignment with the initiative description as described within the 2023 WMP.

### Summary of Initiative Findings

In addition to the Field Reviews conducted, the IE also reviewed numerous relevant documents, such as WMP-specific initiative life cycle documentation, inspection and audit records, and various planning documents along with process flows encompassing how Liberty selects, executes, closes, and tracks specific initiatives. Liberty provided the documentation in confidentiality in response to the IE's various data requests. Table 4 summarizes the IE's findings of Liberty's program initiatives, as they were identified and reported as part of this evaluation.

Initiative Number/ID	Initiative Name	Population Size/Target	Sample Size	#,% Verified	#,% Verification Failed
WMP-GDOM- GH-03	Distribution pole replacements and reinforcements	200 EA	38 EA	38, 100%	0, 0%
WMP-GDOM- GH-12b	Expulsion fuse replacement	3,800 EA	53 EA	53, 100%	0, 0%
WMP-VM- INSP-03	Vegetation Management Inspection Program - LiDAR	700 Circuit Miles	43 Circuit Miles	43, 100%	0, 0%
WMP-VM-VFM- 07	High-Risk Species	220 Circuit Miles	29.7 Circuit Miles	29.7, 100%	0, 0%

### Table 4: Large Volume Quantifiable Goal/Target – Field Verifiable Summary Table

# 3.1.2.2 Large Volume Quantifiable Goal/Target – Not Field Verifiable

Pursuant to the Final IE Scope of Work for the Review of Compliance with 2023 WMP, Liberty provided a complete list of all 2023 WMP activities classified as Large Volume Quantifiable Goal/Target - Not Field Verifiable completed in 2023. The IE's review and evaluation of these initiatives were completed through data request documentation from Liberty completion of initiatives and publicly available documents, articles, and reports. These 2023 WMP activities identified within the Large Volume Not Field Verifiable list were reviewed and assessed within this section, and the findings are presented below for each initiative.

# <u>8.1.3.1 - WMP-GDOM-AI-01 - Detailed Inspections of Distribution Electric Lines and Equipment</u>

This initiative targets detailed inspections of distribution lines, transmission lines and equipment performed in accordance with G.O. 165 guidelines to mitigate the risk of equipment failure by identifying aging and deteriorating equipment. When a qualified electrical worker ("QEW") identifies an issue in the field that needs remediation or repair, work orders are generated to address the issue. Liberty inspects approximately 20% of its system annually, which results in the entire system being inspected every five years. (See Table 8-8)

2023 Target Goal: Table 8-4 Liberty Inspections Targets by year, page 162. 156.4 circuit miles by the end of the year, verified with QDR and GIS submissions. Liberty completed 328.6 miles of detailed asset inspections out of its target of 307.8 miles in 2022.

Table 8-1. Liberty Grid Design, Operations, and Maintenance Objectives (three-year plan), page 148: Three-year goals/target - LiDAR inspections, covered conductor inspections, infrared inspections, and drone inspections, or other discretionary inspections of assets per GO 165 standards that can be verified with WMP filings, QDR and GIS submissions.

Three-year goal/target: Intrusive pole inspections and substation inspections in asset Inspection QA/QC program and increase the percentage of QA/QC to 12% for detailed inspections per GO 165 standards that can be verified with WMP filings, QDR and GIS submissions.

Ten-year goal/target: Table 8-2. Liberty Grid Design, Operations, and Maintenance Objectives (ten-year plan), page 149: Continuous improvement of Asset Inspection programs; to include a risk analysis for prioritization of Asset Inspection Programs.

Liberty provided the following documents in support of the initiative and data request –

 xlsx spreadsheet with 1,344 inspections of poles, transformers (UG and pad), switches and risers

- xlsx spreadsheet with another 33 inspections of risers, switches, poles, UG transformers
- Thirty-two separate 2023 GO 165 Detailed Inspection Reports for poles, transformers, switches and risers.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Met.

### Table 5: Detailed Inspections of Distribution Electric Lines and Equipment Summary

Description	2023 Target	2023 Q4 QDR	DR-023 Response	Summary
Detailed inspections of distribution electric lines and equipment	40.3 Inspections	181.4 Inspections	33 Inspections	Target met

### 8.1.3.2 - WMP-GDOM-AI-02 - Intrusive Pole Inspections

Data was gathered to assess initiative AI-02 to WMP section 8.1.3.2 to for the testing and treatment of wood poles to look for potential deterioration and degradation over time. Poles that are thoroughly inspected and/or proactively treated to extend the service life of the asset significantly reduce safety risk to the system and public.

Data collected in response to requests regarding the initiative was made to evaluate progress made towards meeting the initiative targets. A list of 46 randomly chosen sample pole inspections was provided for review in the utility response to DR024, which exceeded the sample size of 33 requested. From this list, 33 inspection reports were selected for review based on a NERC sample size and detailed reviews were conducted. Poles included class 2, 3 and 4. Samples were distributed at 2% class 2, 57% class 3, and 41% class 4.

The review covered a detailed examination of the reports to ensure consistency and accuracy. Data provided documented the tracking of the inspection from inspection date, pole number, pole manufacturer, installation date, pole class, wood species and precise location. The types of inspections were provided with a yes or no response in the data field. Inspection types included visual, full/partial excavation, sound bore and fumigation among other items. Images were not included in this report.

Findings:

- All inspections included a visual inspection, no pole received a full excavation. All but 2 poles received a partial excavation.
- All poles were fumigated.
- 2 poles had no previous inspection and 2 had a previous visual inspection only.
- No poles were rejected.
- No inconsistencies or exemptions were noted.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Met.

### Table 6: Intrusive Pole Inspections Summary

Description	2023 Target	2023 Q4 QDR	DR024 Response	Summary
Intrusive pole inspections	2,867 Inspections	3,046 Inspections	46 Inspections	Target met

### 8.1.3.3 - WMP-GDOM-AI-03 - Patrol Inspections of Distribution Electric Lines and Equipment

Data was gathered to assess initiative GH-06 to WMP section 8.1.3.3 which identifies QEW patrols of the electric system to look for issues with overhead structures or obvious hazards that impact the safety and reliability of the system.

Data collected in response to requests regarding the initiative were made to evaluate progress made towards meeting the initiative targets. A list of 231 records was provided for review in the utility DR025 response and review was based on a NERC sample size to review a minimum of 29 miles. Detailed reviews were conducted targeting aerial, hiking and vehicle type inspections.

Data provided documented the tracking of the inspection from start date, mileage, status, precise location and any fail conditions noted. Mileage was generally tracked through odometer reading. The report contained multiple data fields, including record ID, inspection data, feeder ID, condition code, odometer reading, inspection type, and line type. Most records contained no data in the condition code field, but those that did had an issue requiring repair. Images were not included in this report.

Findings:

- Mileage was not made available to review for most aerial inspection and hiking mileage was limited. Vehicle miles were verified through odometer readings. From the data provided, based on the sample size, the number of claimed miles of patrol were verified.
- 20 records indicated an issue discovered that required repair and the status, such as insulators need replacing (fail), crossarm broken/split/loose (fail), and rope on phase hold down (repaired), indicating that the initiative was meeting the defined purpose.
- No inconsistencies or exemptions were noted.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Met.

### Table 7: Patrol Inspections of Distribution Electric Lines and Equipment Summary

Description	2023 Target	2023 Q4 QDR	DR025 Response	Summary
Emerging grid hardening technology installations and pilot progress	701.5 miles	702 miles	231 records exceeding sample of 29 miles	Target met

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

As described within the 2023 - 2025 WMP, Liberty's target for this initiative was to complete 220 circuit miles of detailed vegetation management inspections. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported completion of 236 circuit miles of detailed vegetation management inspections. As detailed within Liberty's response to Data Request DR035, Liberty provided completion data for 236 circuit miles of detailed vegetation management inspections. The IE reviewed the sample of 29 circuit miles of detailed vegetation management inspections. No issues were identified in the review of the sample inspection data.

### Table 8: Vegetation Management Inspection Program – Detailed Summary

Description	2023 Target	2023 Q4 QDR	DR035 Response	Summary
Vegetation Management Inspection Program - Detailed	220 Circuit Miles	236 Circuit Miles	236 Circuit Miles	Target Met / Exceeded by 16 Circuit Miles

Despite the slight discrepancy in the data for completion miles provided by Liberty in response to Data Request DR035, the total mileage completed is above the target. Therefore, the IE determined that the target was met.

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

As described within 2023 – 2025 WMP Liberty performs vegetation management patrol inspections on an as-needed basis and did not define a numerical target Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty did not report a target for this initiative but reported completion of 78-line miles of patrol vegetation management inspections. As detailed within Liberty's response to Data Request DR036, Liberty provided GIS data and a workbook of inspection data for the completed detailed vegetation management inspections. There is a discrepancy between the completed mileage listed in the GIS data (76 miles), the summary data on *Sheet2* of the workbook (78 miles), and the raw data listed on *Sheet1* of the workbook (79.5 miles). As detailed within Liberty's response to Data Request DR036.1, Liberty provided a list of detailed inspection data for approximately 23 circuit miles of sample detailed vegetation management inspections. No issues were identified in the review of the sample inspection data.

Description	2023 Target	2023 Q4 QDR	DR036 Response	Summary
Vegetation Management Inspection Program - Patrol	As Needed	78 Line Miles	79.5 Line Miles	Target Met

Table 9: Vegetation Management Inspection Program – Patrol Summary
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### 8.2.3.1 - WMP-VM-VFM-01 - Pole Clearing

As described within the 2023 - 2025 WMP, Liberty's target for this initiative was to complete pole clearing of 4,960 subject poles. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported a target of 4,900 subject poles and completion of 4,957 subject poles. As detailed within Liberty's response to Data Request DR038, Liberty confirmed the target for this initiative is 4,900 subject poles and provided a list of completion data for 4,998 cleared poles as detailed below in Table 10. As detailed within Liberty's response to Data Request DR038.1, Liberty provided further information about the sample of 33 completed locations. The IE reviewed the sample of 33 completed locations. No issues were identified in the review of the sample data.

Description	2023 Target	2023 Q4 QDR	DR038 Response	Summary
Pole Clearing	4,900 Subject Poles	4,957 Subject Poles	4,998 Subject Poles	Target Met / Exceeded by 98 Subject Poles

### Table 10: Pole Clearing Summary

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

Data was gathered to assess initiative VFM-02 to WMP section 8.2.3.2 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 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 requests regarding the initiative was evaluated to determine progress made towards meeting the initiative targets. A list of 1,203 properties provided for review in the utility response, which aligned with at least 462 acres of the total quantity of 625 declared to have been cleared in 2023. This greatly exceeded the target goal of 280 acres as referenced in the WMP. Based on this list, 29 acres were selected for review based on a NERC sample size, and detailed reviews were conducted; samples were randomly selected and distributed across the geographic areas. The documentation was in the form of two spreadsheets: Biomass Removed Tracking and a detailed, by location, vegetation management list. Before and after photo documentation also provided.

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 over 16 data fields, 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, including invoice numbers, contractor, tonnage removed and dates. The sample APNs were cross-checked for acreage and correlating address on county parcel viewer.

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. Photo documentation depicting

overgrown vegetation before work and then cleared areas following removal work corroborated the completed activity.

Findings:

- The address/GPS location, report date, work type and job identification numbers were consistent and matched the list locations.
- No inconsistencies noted.
- From data provided, 933 properties noted as "Complete" correlating to approximately 401 acres cleared. The cleared 625 acres translated into 6,452.5 tons of biomass removed to the landfill with an end use as wood chips.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Met.

Description	2023 Target	2023 Q4 QDR	DR039 Response	Summary
Wood and Slash Management	280 acres	280 acres	462 acres	Target Met

### Table 11: Wood and Slash Management Summary

### 8.2.3.3 - WMP-VM-VFM-05 – Clearance

Liberty did not report a target for vegetation clearance in the 2023 - 2025 WMP. As described within Liberty's 2023 Q4 QDR dated January 31, 2024, the target for this initiative was to maintain and inspect vegetation clearance for 670.8-line miles. Per the Q4 QDR Liberty reported completion of 707-line miles of inspection and maintenance of vegetation clearance. As detailed within Liberty's response to Data Request DR040.1, Liberty provided completion data for 707.3-line miles for the completed inspection and maintenance of vegetation clearance. The IE reviewed a sample of 29-line miles of completion data for inspection and maintenance of vegetation clearance. No issues were identified in the review of the sample completion data for inspection and maintenance.

### Table 12: Clearance Summary

Description	2023 Target	2023 Q4 QDR	DR040 Response	Summary
Clearance	670.8 Line	707.0 Line	707.3 Line	Target Met/Exceeded
	Miles	Miles	Miles	By 36.5 Line Miles

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

As described within the 2023 - 2025 WMP, Liberty's target for this initiative was to complete 220 circuit miles of removal and remediation of trees with strike potential to electric lines and equipment (fall-in mitigation). Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported completion of 313-line miles of fall-in mitigation. As detailed within Liberty's response to Data Request DR041, Liberty provided completion data for 313-line miles of fall-in mitigation. The IE field verified a sample of 29.7 line-miles of Fall-in mitigation in conjunction with initiative VFM-07 High-Risk Species described in section 3.1.2.1 Large Volume Quantifiable Goal/Target - Field Verifiable. No issues were identified in the field verification of completion of fall-in mitigation.

Description	2023 Target	2023 Q4 QDR	DR041 Response	Summary
Fall-In Mitigation	220 Circuit Miles	313 Line Miles	313 Line Miles	Target Met/Exceeded by 93 Line Miles

### Table 13: Fall-In Mitigation Summary

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

As described within the 2023 – 2024 WMP, Liberty's target for this initiative was to perform vegetation management quality control inspections for each vegetation management program. Liberty has included four (4) vegetation management programs within this initiative.

### **Completed Tree Work**

As described within the 2023 – 2025 WMP, Liberty planned to conduct QA/QC inspections for 229 circuit miles of completed tree work. Per Liberty's Q4 QDR dated January 31, 2024, Liberty reported completion of 299.7-line miles of QA/QC inspections for completed tree work. As detailed in Liberty's response to data request DR047.1, Liberty provided completion data for 299.7-line miles of QAQC inspections for completed tree work as summarized below in Table 14. The IE reviewed a sample of completion data for 37.3 circuit miles of QA/QC for completed tree work. No issues were identified in the review of QA/QC for completed tree work.

### **Detailed Inspection**

As described within the 2023 – 2025 WMP, Liberty planned to conduct QA/QC inspections for 77 Miles of detailed vegetation management inspections. Per Liberty's Q4 QDR dated

January 31, 2024, the completions for QA/QC of detailed inspections are not reported. As detailed in Liberty's response to data request DR047.1, Liberty provided completion data for 124.9 miles of QA/QC for detailed vegetation management inspections as summarized below in Table 14. The IE reviewed a sample of completion data for 23.7 miles of completion data for QA/QC of detailed vegetation management inspections. No issues were found in the review of completion data for QA/QC of detailed vegetation management inspections.

### Hazard Tree Work

As described within the 2023 – 2025 WMP, Liberty planned to conduct QA/QC inspections for 524 hazard tree work. Per Liberty's Q4 QDR dated January 31, 2024, the completions for QA/QC of hazard tree work are not reported. As detailed in Liberty's response to data request DR047, Liberty provided completion data for 632 QA/QC inspections of hazard tree work as summarized below in Table 14. The IE reviewed completion data for 29 QA/QC inspections of hazard tree work. No issues were identified in the review of QA/QC inspections of hazard tree work.

### **Pole Brushing**

As described within the 2023 – 2025 WMP, Liberty planned to conduct QA/QC inspections of pole brushing for 585 poles. Per Liberty's Q4 QDR dated January 31, 2024, the completions for QA/QC of pole brushing work are not reported. As detailed in Liberty's response to data request DR047, Liberty provided completion data for 748 QA/QC inspections of pole brushing work as summarized below in Table 14. The IE reviewed a sample of 29 QA/QC inspections for pole brushing work. No issues were identified in the review of QA/QC inspections of pole brushing work.

Description	2023 Target	2023 WMP ARC Report	DR047, DR047.1 Response	Summary
QA/QC Completed Tree Work	229 Circuit Miles	299.7 Line Miles	299.7 Circuit Miles	Target Met/Exceeded by 70.7 Circuit Miles
QA/QC Detailed Inspection	77 Miles	-	124.9 Miles	Target Met/Exceeded by 47.9 Circuit Miles
QA/QC Hazard Tree Work	524 Trees	-	632 Trees	Target Met/Exceeded by 108 Trees
QA/QC Pole Brushing	585 Poles	-	748 Poles	Target Met/Exceeded by 163 Poles

### Table 14: Quality Assurance and Quality Control Summary

Initiative Number/ID	Initiative Name	Population Size/Target		#,% Verified	#,% Verification Failed
WMP-GDOM- Al-01	Detailed inspections of distribution electric lines and equipment	40.3	29	29, 100%	0, 0%
WMP-GDOM- AI-02	Intrusive pole inspections	2,867	33	33, 100%	0, 0%
WMP-GDOM- AI-03	Patrol inspections of distribution electric lines and equipment	701.5	29	29, 100%	0, 0%
WMP-VM- INSP-01	Vegetation Management Inspection Program - Detailed	220	29	29, 100%	0, 0%
WMP-VM- INSP-02	Vegetation Management Inspection Program - Patrol	78	23	23, 100%	0,0%
WMP-VM-VFM- 01	Pole Clearing	4,900	33	33, 100%	0, 0%
WMP-VM-VFM- 02	Wood and Slash Management	280	29	29, 100%	0, 0%
WMP-VM-VFM- 05	Clearance	670	29	29, 100%	0, 0%
WMP-VM-VFM- 06	Fall-In Mitigation	220	29.7	29.7, 100%	0, 0%
WMP-VM- QAQC-01	QA/QC Completed Tree Work	229	37.3	37.3, 100%	0, 0%
WMP-VM- QAQC-01	QA/QC Detailed Inspection	77	23.7	23.7, 100%	0, 0%
WMP-VM- QAQC-01	QA/QC Hazard Tree Work	524	29	29, 100%	0, 0%
WMP-VM- QAQC-01	QA/QC Pole Brushing	585	29	29, 100%	0, 0%

 Table 15: Large Volume Quantifiable Goal/Target – Not Field Verifiable Summary Table

# 3.1.2.3 Small (less than 100 times) Volume Quantifiable Goal/Target

Pursuant to the Final IE Scope of Work for the Review of Compliance with 2023 WMP, Liberty provided a complete list of all 2023 WMP activities classified as Small (Less than 100 units) Volume Quantifiable Goal/Target that were conducted in 2023. These 2023 WMP activities identified within the Small Volume list were assessed in this section and presented below by each initiative.

### 8.1.2.1 - WMP-GDOM-GH-01 - Covered Conductor Installation

As described within the 2023 - 2025 WMP, Liberty's target for this initiative was to complete 5.72 circuit miles of covered conductor installation. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported completion of 5.65 miles of covered conductor installation. As detailed within Liberty's response to Data Request DR005, Liberty provided as-builts and GIS shapefiles for five (5) projects: Meyers Celio A, Meyers Celio B, Fallen Leaf B, Tahoe City 7300 Line Reconductor Phase 7, and Tahoe City 7300 Line Reconductor Phase 8. The GIS data indicates a total covered conductor installation of 6.15 circuit miles and the as-builts indicate a total installation of approximately 6.11 circuit miles. The slight discrepancy could be attributed to the approximate distances noted on the as-builts for primary line data. No other issues were identified for the as-builts and GIS data.

Description	2023 Target	2023 Q4 QDR	DR005 Response	Summary
Covered Conductor Installation	5.72 Circuit Miles	5.65 Circuit Miles	6.11 Circuit Miles	Target Met / Exceeded by 0.39 Circuit Miles

### Table 16: Covered Conductor Installation Summary

The IE notes that there is a discrepancy in the completion mileage noted in the 2023 Q4 QDR, which is below the target, and the GIS data provided, which indicates the target was exceeded. Therefore, the IE determined the target was exceeded for this initiative.

### 8.1.2.2 - WMP-GDOM-GH-02 - Undergrounding of Electric Lines and/or Equipment

As described within the 2023 - 2025 WMP, Liberty's target for this initiative was to complete 1.37 circuit miles of undergrounding. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported completion of 0.12 mile of undergrounding. As detailed within Liberty's response to Data Request DR006, Liberty provided project maps and GIS shapefiles for the Cascade Pole Replacement project. The GIS data indicates that 0.12 mile of the Cascade Pole Replacement project was completed in 2023. The IE reviewed the project maps and

GIS data for the completed undergrounding. No issues were identified in the review of the project maps and GIS data for the completed undergrounding.

In the ARC for the 2023 WMP dated March 29, 2024, Liberty that a civil contractor could not be found that would meet the project budget and that "Liberty is currently working with Placer County, CalTrans, and Civil Contractors to replan the project scope and work through permitting and traffic control issues."

Description	2023 Target	2023 Q4 QDR	DR006 Response	Summary
Undergrounding of Electric Lines and/or Equipment	1.37 Circuit Miles	0.12 Circuit Miles	0.12 Circuit Miles	Target Not Met

### 8.1.2.5 - WMP-GDOM-GH-05 – Traditional Overhead Hardening

As described within the 2023 - 2025 WMP, Liberty's target for this initiative was to complete 4 miles of traditional overhead hardening in the Topaz area. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported completion of 9.2 miles of traditional overhead hardening. As detailed within Liberty's response to Data Request DR009, Liberty provided as-builts and GIS shapefiles for the following projects: Topaz 1261 – Cunningham Lateral Phase 1, Topaz 1261 – Cunningham Lateral Phase 2, Topaz 1261 Eastside Lane Tap Rbld, and Topaz 1261 Larson Lane Tap Rbld. The GIS data indicates a total traditional overhead hardening installation of 9.2 circuit miles and the as-builts indicate a total installation of approximate distances noted on the as-builts for primary line data. The IE reviewed the asbuilts and GIS data for the completed traditional overhead hardening. No issues were identified in the review of the project maps and GIS data for the completed traditional overhead hardening.

Table 18: Traditional Overhead H	Hardening Summary
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Description	2023 Target	2023 Q4 QDR	DR006 Response	Summary
Continue to rebuild or repair high priority overhead conductor in territory to address aging infrastructure and help with reliability and wildfire mitigation.	4 Circuit Miles	9.2 Circuit Miles	9.2 Circuit Miles	Target Met / Exceeded by 5.2 Circuit Miles

## <u>8.1.2.6 - WMP-GDOM-GH-06 - Emerging Grid Hardening Technology Installations and Pilot</u> <u>Progress</u>

Data was gathered to assess initiative GH-06 to WMP section 8.1.2.6 which discusses the consideration and potential implementation of new technologies for wildfire mitigation. Liberty considers new technologies for pilot projects on an ongoing basis. Liberty monitors WMP implementation at the other California IOUs, including information about implementation of new technologies for wildfire mitigation that is shared on joint IOU calls, and utilizes this information in its assessments of which technologies to consider.

The WMP described Liberty planned activity for emerging technology and pilot programs. In 2023, Liberty will test the effectiveness and risk spend efficiency of for the pilot projects DFA, DA, and HIFD to forecast the potential future use of these emerging technologies. Liberty will be expanding the 2022 Fast Trip, or SRP pilot project. Liberty will also be researching, scoping, and preparing to pilot another emerging technology, Resonant Grounding or "Swedish Neutral" system.

Liberty's response to DR010 included the "Liberty Fire Mitigation Study-Final Report 09-28-2022" and a document containing a synopsis on all pilot programs. The Fire mitigation Study details protection and control practices that utilities are using to deal with wildfire risks and assesses methods to reduce wildfires caused by power systems due to high impedance faults. Academic studies are also considered.

Findings:

- Liberty is still in the evaluation period of Distribution Fault Anticipation (DFA). Liberty utilizes its participation in the joint IOU calls to continue learning about the successes and challenges of this technology and if it will be part of Liberty's capital plans moving forward.
- Liberty is still in the evaluation period of Distribution Automation (DA). Liberty utilizes
  its participation in the joint IOU calls to continue learning about the successes and
  challenges of this technology and if it will be part of Liberty's capital plans moving
  forward.
- Liberty is still in the evaluation period of High Impedance Fault Detection (HIFD). Liberty utilizes its participation in the joint IOU calls to continue learning about the successes and challenges of this technology and if it will be part of Liberty's capital plans moving forward.
- Liberty plans to delay its pilot of the Resonant Grounding, Swedish neutral technology, in order to assess future cost and resource needs. Liberty is designing its substation rebuilds with provisions to potentially install Swedish neutral systems where possible if they choose to pursue this technology at a later date.

- Liberty did not implement its Sensitive Relay Profile (SRP) program in 2023 but plans to implement its SRP program in 2024.
- Liberty commissioned a report published September 28, 2022, "Fire Mitigation Protection System Study for Liberty Utilities". Liberty has also focused on implementing recommendations from this report and did not complete additional studies in 2023.

With the available inspection information provided by Liberty through data requests and without a target goal, the initiative has been determined to be In Progress.

Table 19: Emerging Grid Hardening Technology Installations and Pilo	ot Progress Summary
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Description	2023 Target	2023 Q4 QDR	DR010 Response	Summary
Emerging grid hardening technology installations and pilot progress	n/a	n/a	n/a	In Progress

## 8.1.2.7 - WMP-GDOM-GH-07 - Microgrids

Initiative GH-07 focuses on the implementation of microgrids as a strategy for wildfire mitigation, specifically aiming to bring new microgrids online and remove vulnerable distribution lines by 2024. Section 8.1.2.7 of the Wildfire Management Plan (WMP) outlines the utility's approach to considering and implementing microgrids, emphasizing their role in reducing wildfire risk and the necessity for line removal as a proactive measure. The targets set for this initiative include completing the Angora Microgrid and related line removals by 2024.

The data collected in response to the initiative GH-07 indicates that no work was completed in 2023, with all activities planned for 2024, including planned microgrid installations and line removal activities. The assessment of the data collected for initiative GH-07 shows that the goals outlined in the WMP are in progress and remain on track for completion by 2024.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be In Progress.

Description	2023 Target	2023 Q4 QDR	DR011 Response	Summary
Microgrids	Consider microgrids. Plan new microgrid online with line removal in 2024	Consider microgrids. Plan new microgrid online with line removal in 2024	Consider microgrids. Plan new microgrid online with line removal in 2024	

#### 8.1.2.8 - WMP-GDOM-GH-08 - Installation of System Automation Equipment

Initiative GH-08, outlined in Section 8.1.2.8 of Liberty's Wildfire Management Plan (WMP), focuses on the installation of system automation equipment to enhance grid reliability, and reduce wildfire risks. The target for this initiative from 2023 to 2025 includes the installation of 8 automatic reclosers for sectionalization and fault management. These efforts support the broader objectives of the Sensitive Relay Profile (SRP) program, improving fault detection sensitivity and reducing the chances of ignition during high fire risk days.

In response to a data request to assess the progress of initiative GH-08, Liberty provided documentation that included GPS coordinates for reclosers associated with five substation locations, a 2-page PDF design package detailing the location and specifics for recloser 22, and a set of scanned documents from a folder labeled "Stampede Sub" dated 11/10/23. The Stampede documents included various filings and log sheets, and a 3-page design package for the rebuild of recloser 23. The data compiled in the response appeared to contain both digital and physical records related to the equipment installations.

Targets outlined in Section 8.1.2.8 of the WMP were supported by the type of data reviewed. The WMP specifies the installation of 8 automatic reclosers by 2025 to enhance sectionalization and reduce wildfire risk, and the documentation showed progress for installations at five substations.

The data collected for initiative GH-08 demonstrates that Liberty is progressing to meet the goals set out in the WMP for the installation of automatic reclosers. The progress aligns with the plan's targets, contributing to enhanced grid reliability and reduced wildfire risk.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be In Progress.

Description	2023 Target (3-year target)	2023 Q4 QDR	DR012 Response	Summary
Installation of System Automation Equipment	Strategic installation of automatic reclosers and fault indicators to minimize PSPS scope and duration	Install 8 automatic reclosers	5 Recloser GPS locations, Plans for 2 Reclosers	In Progress

 Table 21: Installation of System Automation Equipment Summary

## 8.1.2.9 - WMP-GDOM-GH-09 - Line Removal (in HFTD)

The initiative WMP-GDOM-GH-09 outlined in the Wildfire Management Plan (WMP), focuses on line removal in High Fire Threat Districts (HFTD). This initiative emphasizes the role of microgrids in facilitating line removal, with the aim of eliminating potential ignition sources. Data was collected for this initiative to assess the goals specified in Section 8.1.2.9 of the WMP for 2023.

The data provided for review for initiative GH-09 included a spreadsheet detailing eight 14.4kV locations tied to circuit miles in HFTD tier 2 updated in September 2023. Additionally, a map with a GIS layer image was included showing conductor removal in 2023, north of Cascade Lake near Upper Cascade Lake Road and Emerald Bay Road. The visual evidence from the GIS layer appeared to indicate approximately half a mile of line removal identified as "LU\_ConductorRemoval\_2023". GIS source files were also submitted but were not reviewed in depth for this section, as the provided map layer image and spreadsheet was deemed sufficient for assessment purposes.

Section 8.1.2.9 of the WMP describes line removal in HFTD areas as a critical activity for reducing wildfire risk. It states that the installation of microgrids is the primary strategy enabling this line removal. The data collected for GH-09 shows that Liberty Utilities has made tangible progress in the line removal, as evidenced by the removal documented in 2023. This effort aligns with the goals of the WMP by demonstrating proactive measures to eliminate potential ignition sources through infrastructure changes in HFTD areas.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Met.

Table 22: Line Removal (in HFTD) Summary	
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Description	2023 Target	2023 Q4 QDR	DR013 Response	Summary
Line Removal (in HFTD	New microgrid and line removal in 2024	0 circuit miles	Spreadsheet and map showing removal in 2023	Target Met

#### 8.1.2.12 - WMP-GDOM-GH-12a - Tree Attachment Removals

As described within the 2023 – 2025 WMP, Liberty's target for this initiative was to complete 60 tree attachment removals. Per Liberty's Q4 QDR dated January 31, 2024, Liberty reported completion of 37 tree attachment removals. As detailed in Liberty's response to data request DR017, Liberty provided records for completion of 35 tree attachment removals as summarized below in Table 23. The IE reviewed a sample of completion data for 17 tree attachment removals. No issues were identified in the review of the completion data for tree attachment removals.

In the ARC for the 2023 WMP dated March 29, 2024, Liberty that this initiative was delayed due to challenges in acquiring customer easements, and efforts are underway to develop a streamlined process.

Description	2023 Target	2023 Q4 QDR	DR017 Response	Summary
Tree attachment	60 Tree	37 Tree	35 Tree	Target Not Met
removals	Attachments	Attachments	Attachments	

Table 23: Tree Atta	chment Removals	Summary
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#### 8.1.2.12 - WMP-GDOM-GH-12c - Animal Guards

As described within the 2023 – 2025 WMP, Liberty's target for this initiative was to install animal guards at 4 locations for exposed substation equipment. Per Liberty's Q4 QDR dated January 31, 2024, Liberty reported installation of 4 substation animal guards. As detailed in Liberty's response to data request DR017, Liberty provided installation data for 4 substation animal guards as summarized below in Table 24. The IE reviewed a sample of completion data for 4 substation animal guards. No issues were identified in the review of the installation data for substation animal guards.

#### Table 24: Animal Guards Summary

Description	2023 Target	2023 Q4 QDR	DR019 Response	Summary
Animal Guards	4 Animal Guards	4 Animal Guards	4 Animal Guards	Target Met

## 8.1.2.12 - WMP-GDOM-GH-12d - CalFIRE Exempt Hardware

Data was gathered to assess initiative GH-12d to WMP section 8.1.2.12 which discusses equipment and devices requested, approved or denied for a CAL FIRE exemption. To obtain a product exception from CAL FIRE, manufacturers must follow strict test procedures demonstrating the ability to operate without generating sparks or arcs that would otherwise occur with traditional devices.

The WMP target for this initiative stated, "none planned". The response to DR020 included a written statement and an electronic copy of the "California Power Line Fire Prevention Field Guide" (2021). The exemption section of the field guide describes where standard exemptions are allowed, as well as the CAL FIRE procedure for qualifying electrical equipment and devices for exemption from PRC 4292.

Findings:

- Liberty uses the list of approved CAL FIRE equipment and devices published in the California Power Line Fire Prevention Field Guide.
- Liberty has not utilized the CAL FIRE Procedure for qualifying electrical equipment and devices for exemption as outlined in CCR Title 14, Section 1255.

The initiative target goal was listed as N/A and Liberty has not utilized the CAL FIRE procedure for qualifying electrical equipment. This initiative is assessed as n/a.

Description	2023 Target	2023 Q4 QDR	DR020 Response	Summary
CAL FIRE exempt hardware	n/a	n/a	n/a	n/a

#### Table 25: CalFIRE Exempt Hardware Summary

## 8.1.2.12 - WMP-GDOM-GH-12e - Open Wire/Grey Wire

Initiative GH-12 in the Wildfire Management Plan (WMP) focuses on several activities aimed at reducing wildfire risk, including the removal of tree attachments and the replacement of open wire/grey wire within the utility's service territory. The specific target set for the open wire/grey wire replacement described in initiative GH-12e was 2.55 circuit miles annually, as part of an ongoing effort to improve infrastructure resilience.

In response to the request for documentation to verify the progress and completion of targets related to the replacement of open wire/grey wire, Liberty Utilities provided nine PDF files containing multi-page job order reports, including photo and written documentation. Additionally, a spreadsheet detailing 126 record IDs with coordinates, condition notes, prioritization, dates, and mile notes was submitted. The data indicates that the utility targeted 2.55 circuit miles for replacement and provided documentation supporting the progress and execution of these tasks to the total of 4.4 miles through Q4. The comprehensive documentation provided, including job order reports and detailed spreadsheets, aligns with the WMP's requirements for tracking and reporting progress.

Of the nine detailed 13-to-16-page reports reviewed, all but one noted all areas inspected as "PASS". The reports also all captured tags at each pole for identification and confirmation.

With the available inspection information provided by LIBERTY through data requests, the initiative has been determined to be Met.

Description	2023 Target	2023 Q4 QDR	DR021 Response	Summary
Open Wire/Grey Wire	Annual progress on tree attachment removal and replacing open wire	4.4 Circuit Miles	126 Job Orders tied to Circuit Miles	Target Met

## Table 26: Open Wire/Grey Wire Summary

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

The initiative WMP-GDOM-GH-12f under the Wildfire Management Plan (WMP) focuses on substation equipment replacement. This initiative is part of a broader set of activities aimed at enhancing grid resilience and mitigating wildfire risks. The WMP indicates that no specific substation equipment replacement was planned for the current cycle. This analysis

examines the data provided by Liberty Utilities to determine if their efforts align with the initiative targets and the broader goals of the WMP.

Liberty Utilities provided three plan sheets documenting the rebuild of the Stampede Substation. These documents included a site plan, vicinity map, and pole detail, along with a purchase order and email correspondence tracking a quotation for Virginia Transformer. The documentation offers a detailed account of the substation rebuild, illustrating the planning and procurement processes involved in this significant infrastructure project.

Section 8.1.2.12 of the WMP includes various initiatives such as tree attachment removals, animal guards, open wire/grey wire replacement, and substation equipment replacements. Specifically, for substation equipment replacement (WMP-GDOM-GH-12f), the WMP indicated that no specific activities were planned within the current cycle. However, the detailed documentation provided by Liberty Utilities regarding the Stampede Substation rebuild highlights a proactive approach to infrastructure improvements, which is in alignment with the WMP's broader objectives of grid hardening and wildfire risk reduction.

The data supplied by Liberty Utilities, which includes comprehensive documentation on the Stampede Substation rebuild, aligns with the overarching goals of the WMP despite the lack of specific targets for substation equipment replacement in the current cycle. The utility's efforts to enhance substation infrastructure contribute to the WMP's aim of improving system resilience and reducing wildfire risk. The analysis of the initiative confirms that progress has been made towards the WMP goals.

With the available inspection information provided by LIBERTY through data requests, the initiative has been determined to be In Progress.

Description	2023 Target	2023 Q4 QDR	DR022 Response	Summary
Substation Equipment Replacement	None Planned	None Planned	Stampede Substation Rebuild	In Progress

## Table 27: Substation Equipment Replacement Summary

## <u>8.1.3.4 - WMP-GDOM-AI-04 - Other Discretionary Inspections of Distribution Electric Lines</u> <u>and Equipment</u>

As described within the 2023 - 2025 WMP, Liberty planned to implement a pilot program to assess infrared inspections but did not set a target for this initiative. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported completion of 0.1 circuit miles of other

discretionary inspections of distribution electric lines and equipment. As detailed within Liberty's response to Data Request DR026, Liberty provided a list with pole information and latitude/longitude for three pole assets a summary of thermographic inspections for the 120Kv Potheads at STR# 228-240(A&B) 228-241(A&B) and 291-034 (A) for a total of 5 poles and 15 potheads (3 per pole). The inspections indicate operable condition and no faulty components for all equipment. The IE reviewed the data provided for completion of discretionary inspections of distribution electric lines and equipment. No issues were found in the review of the data for discretionary inspections of distribution spections of distribution electric lines and equipment.

Description	2023 Target	2023 Q4 QDR	DR026 Response	Summary
Other discretionary inspections of distribution electric lines and equipment	As Needed	0.1 Circuit Miles	0.1 Circuit Miles	Target Met

## Table 28: Other Discretionary Inspections of Distribution Electric Lines and Equipment Summary

## 8.1.3.5 - WMP-GDOM-AI-05 - Quality Assurance / Quality Control of Inspections

As described within the 2023 - 2025 WMP, Liberty's target for this initiative was to complete quality assurance/quality control (QA/QC) on 1% of detailed inspections. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported completion of QA/QC on 12% of detailed inspections. As detailed within Liberty's response to Data Request DR027, Liberty provided a list of QA/QC completed for 423 for detailed inspections along with photos equivalent to 10.2% of 4,204 detailed inspections (1,345 inspections for initiative AI-01 per response to DR027 and 2,867 inspections for initiative AI-02 per 2023 Q4 QDR). The IE reviewed a sample of 33 QA/QC reviews completed for detailed inspections. No issues were identified in the review of QA/QC reviews for detailed inspections.

Although there is a 1.8% difference between the totals for QA/QC of detailed inspections as reported in the 2023 Q4 QDR and the data provided in response to DRO27, the IE confirms that Liberty met the target for this initiative in 2023.

Description	2023 Target	2023 Q4 QDR	DR027 Response	Summary
Quality	1% of	12% of	10.2% of	Target Met/Exceeded
assurance/quality	Detailed	Detailed	Detailed	by 9.2%
control of inspections	Inspections	Inspections	Inspections	Jy J.2 /0

#### Table 29: Quality Assurance / Quality Control of Inspections Summary

## 8.1.3.6 - WMP-GDOM-AI-06 - Substation Inspections

Data was gathered to assess initiative AI-06 to WMP section 8.1.3.6 the objective of which is to conduct its substation inspections in accordance with its current G.O. 174 Substation Inspection Plan. Substation inspections can identify potentially serious issues early and reduce vegetation fires caused by catastrophic failure of equipment.

Data collected in response to requests regarding the initiative was made to evaluate progress made towards meeting the initiative target. A list of 44 substation inspections was provided for review in the utility response to DR028, which was 2 more than the target quantity referenced in the WMP. Based on this list, 23 inspection reports were selected for review. This data was received in response DR028b, and a detailed review of the spreadsheet data was conducted to verify the target to the extent possible based on the data received. The publicly available "Liberty Utilities (CalPeco Electric) LLC (U 933-E) 2022 Substation Inspection Program Summary" was used for guidance on Liberty's substation inspection program.

The review covered a detailed examination of the data to ensure consistency and accuracy. The DR028b spreadsheet captured a total of 11 data fields in text-only format; images were not included. The spreadsheet documented information associated with the inspection through the 11 fields, including precise location (latitude/longitude), inspector name, substation name, inspected date, and conditions discovered during inspection on the exterior and interior.

Findings:

- Limited data was made available that showed specific inspection issues; the DR028b spreadsheet noted okay or not okay. The DR028b inspection data spreadsheet contained some specific inspection information. Readings were noted such as Ops Counter, Non fault Ops, and elapsed time meter; no analysis of this data was provided.
- 12 substations were included on the initial data request report which appear to cover all Liberty's substations.

- Liberty's Substation Inspection Program (G.O. 174) states that the Hobart and Stampede Substations will be inspected annually in quarter two or three as weather permits. Stampede received 2 inspections: 7/28/23 and 11/27/23. Hobart received 3 inspections: 7/28/23, 9/11/23 and 11/27/23.
- Liberty's substation inspection program ((G.O. 174, 2022) details that inspections should be completed on a quarterly basis for 10 of Liberty's 12 substations: Cemetery Substation, Glenshire Substation, Kings Beach Substation, Meyers Substation, Northstar Substation, Portola Substation, Sierra Brooks Substation, Squaw Valley Substation, Stateline Substation, and Tahoe City Substation.
- The Portola Substation was inspected only 3 times: 3/23/23, 7/24/23, and 11/29/23.
- While Liberty exceeded the overall target of 42 substation inspections in 2023, the Portola substation was not inspected each of the four quarters as required by Liberty's inspection program.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Met.

Description	2023 Target	2023 Q4 QDR	DR028 Response	Summary
Substation Inspections	42	42	44	Target Met

#### 8.1.4 - WMP-GDOM-MR-01 - Equipment Maintenance and Repair

As described within the 2023 – 2025 WMP, Liberty did not set a numerical target for equipment maintenance and repair for 2023. Per Liberty's Q4 QDR dated January 31, 2024, Liberty reported that no work was completed on this initiative in 2023. As detailed in response to data request DR029 Liberty confirmed that no target had been set for this initiative in 2023 and no work had been completed for this initiative in 2023.

#### Table 31: Equipment Maintenance and Repair Summary

Description	2023 Target	2023 Q4 QDR	DR029 Response	Summary
Equipment Maintenance and Repair	-	-	-	N/A

#### 8.2.3.5 - WMP-VM-VFM-03 - Substation Defensible Space

As described within the 2023 - 2025 WMP, Liberty performs routine inspections, vegetation management, and other maintenance activities for 12 substations but does not specify a target. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty reported a target of 12 substation treatments and completion of 22 substation treatments. As detailed within Liberty's response to Data Request DR042, Liberty provided a Google Earth file with substation locations and spray areas, inspection photos, and chemical details for two spray applications – June and October. The chemical details indicate 18 spray applications/substation treatments. The IE reviewed the data provided for a sample of 9 substation defensible space treatments. No issues were identified in the review of the data provided for substation defensible space treatments.

Although there is a difference of 4 substation treatments between what was reported in the Q4 QDR and the response to DR042, the IE confirms that Liberty met the target for this initiative for 2023.

Description	2023 Target	2023 Q4 QDR	DR042 Response	Summary
Substation Defensible Space	12 Substation Treatments	22 Substation Treatments	18 Substation Treatments	Target Met

#### Table 32: Substation Defensible Space Summary

While the chemical application data provided indicates completion of 18 substation treatments, this is above the target of 12 substation treatments. Therefore, the IE concludes that the target is met for this initiative.

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

As described within the 2023 - 2025 WMP, Liberty targets encroaching and hazardous trees to preventatively remove incompatible tree species from the right-of-way but does not specify a target. Per Liberty's 2023 Q4 QDR dated January 31, 2024, Liberty completion of 13.7 line miles of fire-resilient right-of-ways. As detailed within Liberty's response to Data Request DR044, Liberty provided spreadsheets with completion details for two projects (T625 and Juniper Hills); a project map for the T625 project; a project map, photos, and project description for the Juniper Hills project; and the Liberty Resilience Corridors Project Marking and Procedural Guidelines Zones 1 & 2 document. The two project spreadsheets indicate completion of 6.47 miles for T625 and 7.26 miles for Juniper Hills for a combined total of 13.73 miles. The slight discrepancy between the completion mileage provided in the

Q4 QDR and the project spreadsheets can be attributed to rounding. The IE reviewed the data provided for fire-resilient right-of-ways. No issues were identified in the review of the data provided for fire-resilient right-of-ways.

Description	2023 Target	2023 Q4 QDR	DR044 Response	Summary
Fire-Resilient Right-of- Ways	No Target	13.7 Line Miles	13.73 Line Miles	Target Met

### Table 33: Fire-Resilient Right-of-Ways Summary

#### 8.3.2 - WMP-SA-01 - Environmental Monitoring Systems

Data was gathered to assess initiative SA-01 to WMP section 8.3.2 to track the target of installing weather stations as part of improvements in systems for monitoring environmental conditions within its service territory. Liberty's weather monitoring program provides information to operations and allows for the safe operation of the electric grid during extreme weather events.

Data collected in response to requests regarding the initiative was made to evaluate progress made towards meeting the initiative targets. A list of 5 weather stations was provided in the response to DR028. The target referenced in the WMP, table 8-36, was 4. All 5 installations were reviewed in data request response DR028b.

The DR028b spreadsheet report provided 15 data fields, including FID, serial number, date installed, station name, latitude/longitude, elevation, the HFTD designation, and a hyperlink to the Liberty Weather monitoring webpage where conditions are reported by weather station.

Findings:

- The stations identified on the report spreadsheet were verified to be active and were locatable on the interactive live map on the webpage.
- Name and location of the weather station was consistent with the data provided.
- All installation dates were within 2023.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Met.

#### Table 34: Environmental Monitoring Systems Summary

Description	2023 Target	2023 Q4 QDR	DR028 Response	Summary
Environmental Monitoring Systems	5 Installs	4 Installs	5 Installs	Target met

#### 8.3.3 - WMP-SA-02 - Grid Monitoring Systems

Data was gathered to assess initiative SA-02 to WMP section 8.3.3 to track the target of installing fault line indicators as part of grid monitoring improvements. Fault indicators expedite power restoration during an outage by expediting response and locating of tripped lines.

Data collected in response to requests regarding the initiative were made to evaluate progress made towards meeting the initiative targets. The response to DR049 was a statement by Liberty that there were no installations.

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Not Met.

Description	2023 Target	2023 Q4 QDR	DR049 Response	Summary
Grid Monitoring Systems	10	0	0	Target not met

#### 8.3.4 - WMP-SA-03 - Fire Detection and Alarm Systems

Data was gathered to assess initiative SA-03 to WMP section 8.3.4 to track the target of installing/sponsoring Alert Wildfire monitoring cameras as part of grid monitoring improvements. ALERTCalifornia and Alert Wildfire cameras in and surrounding the service territory are used to monitor incipient or developing fires.

The WMP, table 8-36, page 260, states that Liberty has a target of 8 camera installations in 2023. Additionally, Table 8-41. Liberty Planned Improvements to Fire Detection and Alarm Systems, page 273, stated Liberty will "sponsor 8 existing cameras in service territory".

Data collected in response to requests regarding the initiative was made to evaluate progress made towards meeting the initiative targets. The response to DR050 was a statement by Liberty that "Liberty did not propose new Alert Wildfire camera installations for 2023".

With the available inspection information provided by Liberty through data requests, the initiative has been determined to be Not Met.

Description	2023 Target	2023 Q4 QDR	DR050 Response	Summary
Fire detection and alarm systems	8 Cameras	8 Cameras	0 Cameras	Target not met

## Table 36: Fire Detection and Alarm Systems Summary

#### Table 37: Small Volume Quantifiable Goal/Target Summary Table

Initiative Number/ID	Initiative Name	Population Size/Target	Sample Size	#,% Verified	#,% Verification Failed
WMP-GDOM- GH-01	Covered conductor installation	5.72	6.11	6.11, 100%	0, 0%
WMP-GDOM- GH-02	Undergrounding of electric lines and/or equipment	1.37	.12	.12, 100%	0, 0%
WMP-GDOM- GH-05	Traditional overhead hardening	4	9.2	9.2, 100%	0, 0%
WMP-GDOM- GH-06	Emerging grid hardening technology installations and pilot progress	n/a	n/a	n/a	n/a
WMP-GDOM- GH-07	Microgrids	n/a	n/a	n/a	n/a
WMP-GDOM- GH-08	Installation of system automation equipment	8	5	5, 100%	0, 0%
WMP-GDOM- GH-09	Line removal (in HFTD)	0	n/a	n/a	n/a
WMP-GDOM- GH-12a	Tree attachment removals	60	17	17,100%	0, 0%
WMP-GDOM- GH-12c	Animal guards	4	4	4, 100%	0, 0%
WMP-GDOM- GH-12d	CalFIRE exempt hardware	n/a	n/a	n/a	n/a

WMP-GDOM- GH-12e	Open wire/grey wire	2.55	3	3, 100%	0, 0%
WMP-GDOM- GH-12f	Substation Equipment Replacement	n/a	n/a	n/a	n/a
WMP-GDOM- AI-04	Other discretionary inspections of distribution electric lines and equipment	.1	.1	.1, 100%	0, 0%
WMP-GDOM- AI-05	Quality assurance / quality control of inspections	423	33	33, 100%	0, 0%
WMP-GDOM- AI-06	Substation inspections	42	23	23, 100%	0, 0%
WMP-GDOM- MR-01	Equipment maintenance and repair	0	0	N/A	N/A
WMP-VM- VFM-03	Substation Defensible Space	12	9	9, 100%	0, 0%
WMP-VM- VFM-04	Fire-Resilient Right-of- Ways	13.7	13.7	13.7, 100%	0, 0%
WMP-SA-01	Environmental monitoring systems	5	5	5, 100%	0, 0%
WMP-SA-02	Grid monitoring systems	10	9	9, 100%	0, 0%
WMP-SA-03	Fire detection and alarm systems	n/a	n/a	n/a	n/a

## 3.1.2.4 Qualitative Goal/Target

Pursuant to the Final IE Scope of Work for the Review of Compliance with 2023 WMP, Liberty provided a complete list of all 2023 WMP activities classified as Qualitative Goal/Target that were conducted in 2023. These 2023 WMP activities identified within the Qualitative list were assessed within this section and are presented below in tables grouped by the associated initiative category. The IE findings are defined as follows:

- Activity Validated Qualitative work on the initiative began and ended in 2023.
- Activity In Progress Qualitative work on the initiative began in 2023 and continues into 2024.
- Activity Ongoing Qualitative work on the initiative is incorporated into operations to be repeated annually.

Initiative Name	Initiative Validation	Finding
6.2.2.1 - WMP- SA-06 - Ignition likelihood calculation	<ul> <li>2024-02-15_Liberty_2023_WMP_R3.pdf</li> <li>Table 9-2 Liberty PSPS Objectives (three-year plan), page 374</li> <li>Table 9-4. Liberty PSPS Related Targets, page 377</li> <li>Effectiveness of the risk and wildfire consequence model</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity in Progress
6.2.2.2 - WMP- SA-07 - Ignition consequence calculation	<ul> <li>2024-02-15_Liberty_2023_WMP_R3.pdf</li> <li>Table 9-2 Liberty PSPS Objectives (three-year plan), page 374</li> <li>Effectiveness of the risk and wildfire consequence model</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity in Progress
8.3.5 – WMP- SA-04 - Weather forecasting	<ul> <li>Liberty utilizes the: Severe Fire Danger Index: A Forecastable Metric to Inform Firefighter and Community Wildfire Risk Management Plan</li> <li>Liberty reviews the plan annually to bolster its preparedness plan to meet compliance standards for service restoration.</li> </ul>	Activity Validated

#### Table 38: Situational Awareness & Forecasting Summary Table

	<ul> <li>Liberty utilizes outside approved weather forecasting technology that is not owned by Liberty.</li> <li>Liberty has been using these forecasting services and models since 2019 that include NWS, NOAA, and NBM.</li> <li>Forecast Data is pulled in real-time from "NOMADS" system then monitored and disseminated.</li> <li>New forecasts are generated every six hours.</li> <li>Plots and underlying data are archived for potential later use.</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	
8.3.6 – WMP- SA-05 Fire Potential Index	<ul> <li>Liberty conducts internal exercises to provide expedient and efficient operations of its Incident Management Team in response to the most prevalent threats in its service area.</li> <li>Liberty utilizes the: Severe Fire Danger Index: A Forecastable Metric to Inform Firefighter and Community Wildfire Risk Management Plan</li> <li>Liberty reviews the plan annually to bolster its preparedness plan to meet compliance standards for service restoration.</li> <li>IMT members are required to complete ICS training through the company.</li> <li>Learning Management System</li> <li>Liberty has addressed limitations in resource sufficiency through mutual aid agreements and if needed, can add additional entities in major emergencies through these agreements. Mutual assistance entities include NV Energy, Western Region Mutual Assistance Agreement ("WRMAA"), and the California Utilities Emergency Association ("CUEA").</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity Validated

Initiative Name	Initiative Validation	Finding
8.1.2.4 - WMP- GDOM-GH-04 - Transmission pole/tower replacements and reinforcements	<ul> <li>As described in the 2023 WMP Section 8.1.2.4 Overview of the Activity, "The poles being replaced or repaired on these lines are included in the overall pole replacement program discussed in Section 8.1.2.3" within WMP- GDOM-GH-03. See Section 3.1.2.1 for Large Volume Quantifiable Goal/Target – Field Verifiable WMP-GDOM-GH-03 initiative.</li> <li>Per Liberty Q4 Quarterly Data Report (QDR) Q4, 2023 dated January 31, 2024, Table 1, this initiative does not have a target or work completed for 2023.</li> </ul>	N/A
8.1.2.10 - WMP- GDOM-GH-10 - Other grid topology improvements to minimize risk of ignitions	<ul> <li>As described in the 2023 WMP Section 8.1.2.10 for initiative WMP-GDOM-GH-10, Liberty did not complete or target any additional grid topology improvements.</li> <li>Per Liberty Q4 Quarterly Data Report (QDR) Q4, 2023 dated January 31, 2024, Table 1, this initiative does not have a target or work completed for 2023.</li> </ul>	N/A
8.1.2.11 - WMP- GDOM-GH-11 - Other grid topology improvements to mitigate or reduce PSPS events	<ul> <li>2024-02-15_Liberty_2023_WMP_R3.pdf</li> <li>Liberty did not plan any other grid topology improvements (1)</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> <li>(1)WMP page 170 identifies "2022 outside of the other grid hardening initiatives discussed in Section 8.1.2."</li> </ul>	Activity in Progress
8.1.2.12 - WMP- GDOM-GH-12 - Other technologies and systems not listed above:	<ul> <li>As described in the 2023 WMP Section 8.1.2.12 WMP-GDOM-GH-12, this initiative is divided into sub-initiatives identified as WMP-GDOM- GH-12a through WMP-GDOM-GH-12f. For the IE review of the sub-initiatives, see Sections Section 3.1.4 for Small Volume WMP-GDOM- GH-12a, 12c-f initiatives, and see 3.1.2 for Large Volume WMP-GDOM-GH-12b initiative.</li> <li>Per Liberty Q4 Quarterly Data Report (QDR) Q4, 2023 dated January 31, 2024, Table 1, this</li> </ul>	N/A

## Table 39: Grid Design, Operations, and Maintenance Summary Table

	initiative does not have a target or work completed for 2023.	
8.1.5 - WMP-GDOM- GO-05 - Asset Management and Inspection Enterprise System	<ul> <li>SME Interview Conducted Per Appendix D Item No. 1.</li> </ul>	Activity Ongoing
8.1.8.1 - WMP- GDOM-GO-01 - Equipment settings to reduce wildfire risk	<ul> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Meyer 3100_Fast Tripping 09-18-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Meyer 3200_Fast Tripping 09-18-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Meyer 3500_Fast Tripping 09-17-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Meyer 3500_Fast Tripping 09-17-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Meyers 3400_Fast Tripping 06-20-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Tahoe 7300_Fast Tripping 06-04-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Tahoe 7300_Fast Tripping 06-04-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Tahoe City 5201_Fast Tripping 09-04-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Tahoe City 5201_Fast Tripping 09-04-2023.pdf</li> <li>Per Fast Tripping study provided in response to data request DR031 in attachment Liberty Report_Tahoe City 5201_Fast Tripping 12-28-2022.pdf</li> </ul>	Activity In Progress
8.1.8.1 - WMP- GDOM-GO-04 - Automatic recloser operations	<ul> <li>Per Liberty response to data request DR032 in attachment Liberty Response to Liberty_DR032.xlsx confirms that Liberty does not have an initiative for automatic recloser operation.</li> </ul>	N/A
8.1.8.2 - WMP- GDOM-GO-02 - Grid response procedures and notifications	<ul> <li>Per Liberty response to data request DR033 in attachment DR033.docx Liberty provides screenshots of call browser, link to emergency</li> </ul>	Activity Ongoing

	<ul> <li>management plan, and narrative describing restoration.</li> <li>Per Liberty response to data request DR033 in attachment Outage Process Flow.pdf Liberty provides a map of the outage process</li> </ul>	
8.1.8.3 - WMP- GDOM-GO-03 - Personnel work procedures and training in conditions of elevated fire risk	<ul> <li>The response to data request DR034 included a pdf document describing the Tailboard Briefing Checklist App, a pdf titled FPP Operating Conditions, and a PowerPoint document titled Liberty Fire Refresher 23.</li> <li>Crew members receive annual Fire Prevention Plan training which includes the FPI Operating Policy.</li> <li>The FPI operating policy outlines the activity, description of activity and stipulations for performing said activity for each risk index condition. Depending on the activity, it will be reduced to activities that reduce wildfire risks or are not allowed.</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity Validated

#### Table 40: Vegetation Management & Inspections Summary Table

Initiative Name	Initiative Validation	Finding
8.2.3.8 - WMP-VM- VFM-08 - Emergency Response Vegetation Management	<ul> <li>Per Liberty response to data request DR045 in attachment DR045.docx Liberty confirmed that Liberty did not have any fire events in 2023 and no pre or post fire patrols were conducted.</li> <li>Per Liberty response to data request DR045 in attachment VM-02_Vegetation_Management_Plan_1.0.pdf</li> <li>Per Liberty response to data request DR045 in attachment VM-03_Hazard_Tree_Plan_1.0.pdf</li> <li>Per Liberty response to data request DR045 in attachment VM-03_Hazard_Tree_Plan_1.0.pdf</li> <li>Per Liberty response to data request DR045 in attachment VM-05.2_Vegetation Threat Procedure.pdf</li> <li>Per Liberty response to data request DR045 in attachment VM-05.2_Vegetation Threat Procedure.pdf</li> <li>Per Liberty response to data request DR045 in attachment VM-05.2_Vegetation Threat Procedure.pdf</li> </ul>	Activity Ongoing
8.2.4 - WMP-VM-ESG- 01 - Vegetation	• SME Interview Conducted Per Appendix D Item No. 2.	Activity Ongoing

Management	
Enterprise System	

## Table 41: Emergency Preparedness Summary Table

Initiative Name	Initiative Validation	Finding
8.4.2 - WMP-EP-01 - Wildfire and PSPS emergency preparedness plan	<ul> <li>Liberty has developed restoration guidelines with restoration prioritizations from substation power, public safety infrastructure, down to individual residential areas.</li> <li>Liberty conducts exercises with external agencies to prepare for response to outages and enhance restoration efforts: 5/25/23 PSPS Tabletop Exercise, 6/23/23 - PSPS Functional Exercise with the following agencies: CPUC, Cal OES, CAL FIRE, Town of Truckee, Placer County, Connecting Point, Nevada County, Verizon, T Mobile, Frontier Communications, AT&amp;T, Tahoe Donner Public Utility District, North Tahoe Fire, Reax Engineering</li> <li>Liberty has addressed limitations in resource sufficiency through mutual aid agreements and if needed, can add additional entities in major emergencies through these agreements. Mutual assistance entities include NV Energy, Western Region Mutual Assistance Agreement ("WRMAA"), and the California Utilities Emergency Association ("CUEA").</li> <li>Liberty is adding additional linemen to its workforce for both day-to-day and emergency work and will utilize contractors for emergencies when necessary.</li> <li>Liberty collaborates with public safety partners on a regular basis and includes them in training, coordination, and integration in the PSPS playbook.</li> <li>Liberty 2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity Validated
8.4.3 - WMP-EP-02 - Collaboration and coordination with	<ul> <li>Liberty has developed restoration guidelines with restoration prioritizations from substation power, public safety infrastructure, down to individual residential areas.</li> </ul>	Activity Validated

public safety	<ul> <li>Liberty conducts exercises with external</li> </ul>	
partners	<ul> <li>Liberty conducts exercises with external agencies to prepare for response to outages and enhance restoration efforts: 5/25/23 PSPS Tabletop Exercise, 6/23/23- PSPS Functional Exercise with the following agencies: CPUC, Cal OES, CAL FIRE, Town of Truckee, Placer County, Connecting Point, Nevada County, Verizon, T Mobile, Frontier Communications, AT&amp;T, Tahoe Donner Public Utility District, North Tahoe Fire, Reax Engineering</li> <li>Liberty has addressed limitations in resource sufficiency through mutual aid agreements and if needed, can add additional entities in major emergencies through these agreements. Mutual assistance entities include NV Energy, Western Region Mutual Assistance Agreement</li> </ul>	
	<ul> <li>("WRMAA"), and the California Utilities Emergency Association ("CUEA").</li> <li>Liberty is adding additional linemen to its workforce for both day-to-day and emergency work and will utilize contractors for emergencies when necessary.</li> <li>Liberty collaborates with public safety partners on a regular basis and includes them in</li> </ul>	
	<ul> <li>training, coordination, and integration in the PSPS playbook.</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	
8.4.4 - WMP-EP-03 - Public notification and communication strategy	<ul> <li>Liberty data request response DR055 included Liberty Utilities Plan to Support Access and Functional Needs Populations During De- energization Events, 2023 AFN plan, Q2 2023 quarterly report, and 2023 Liberty Outreach and Communications spreadsheet.</li> <li>Data provided confirms the execution of community meetings and offers insights into attendance metrics and the intended purposes of these gatherings.</li> <li>Liberty attended 17 multi-agency events.</li> <li>Liberty has targeted customer outreach to encourage AFN self-identification, customer program enrollment, and increase awareness of AFN resources.</li> </ul>	Activity Validated

	<ul> <li>Liberty has developed a multi-faceted public notification strategy utilizing existing contact channels such as MBL Customer Communication, Everbridge alerts, CBO notifications, and critical infrastructure and facility notification.</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> <li>Liberty response to DR056, 2023 Outreach and Communications Reporting, 2023</li> </ul>	
8.4.5 - WMP-EP-04 - Preparedness and planning for service restoration	<ul> <li>Wildfires and PSPS outreach, Liberty Public Safety Partner List</li> <li>PSPS Plan supplements and enhances protocols for preparedness and service restoration.</li> <li>The "PSPS Playbook" prescribes PSPS IMT baseline positions and checklist items for each position to accomplish during each phase of the response.</li> <li>Liberty reviews the plan annually.</li> <li>IMT members are required to complete ICS training through the company.</li> <li>Learning Management System</li> <li>Liberty has developed restoration guidelines with restoration prioritizations.</li> <li>Exercises with external agencies: 5/25/23 PSPS Tabletop Exercise, 6/23/23- PSPS Functional Exercise</li> <li>Liberty has addressed limitations in resource sufficiency through mutual aid agreements and hiring.</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity Validated
8.4.6 - WMP-EP-05 - Customer support in wildfire and PSPS emergencies	<ul> <li>Response to data request DR057 included: Evaluation of TTX May 25, 2023, the PSPS exercise June 22, 2023 PowerPoint, and the PSPS Playbook_5.19.2023.</li> <li>IMT members complete ICS training through the company Learning Management System annually.</li> <li>Exercises were conducted to drill and test operations of its Incident Management Team in response to the most prevalent threats in its</li> </ul>	Activity Validated

	<ul> <li>service area. A PSPS table-top exercise was held May 25, 2023.</li> <li>After action report from May 25, 2023 table-top demonstrated that challenges were identified for each exercise objective.</li> <li>The after-action improvement plan following the May 25, 2023 exercise identified corrective actions</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty 2022, 24, Tables 115, p0 where</li> </ul>	
WMP-EP-06 - Learning after wildfire and PSPS events	<ul> <li>Liberty_2023_Q4_Tables 115_R0.xlsx</li> <li>Liberty conducts exercises with external agencies to prepare for response to outages and enhance restoration efforts: 5/25/23 PSPS Tabletop Exercise, 6/23/23- PSPS Functional Exercise with the following agencies: CPUC, Cal OES, CAL FIRE, Town of Truckee, Placer County, Connecting Point, Nevada County, Verizon, T Mobile, Frontier Communications, AT&amp;T, Tahoe Donner Public Utility District, North Tahoe Fire, Reax Engineering</li> <li>Liberty has addressed limitations in resource sufficiency through mutual aid agreements and if needed, can add additional entities in major emergencies through these agreements. Mutual assistance entities include NV Energy, Western Region Mutual Assistance Agreement ("WRMAA"), and the California Utilities Emergency Association ("CUEA").</li> <li>Liberty is adding additional linemen to its workforce for both day-to-day and emergency work and will utilize contractors for emergencies when necessary.</li> <li>Liberty did not have any PSPS events or wildfires in its service territory in 2023.</li> <li>Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity Validated

Initiative Name	Initiative Validation	Finding
8.5.2 - WMP-CO-01 - Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management	<ul> <li>Liberty Response to DR-058</li> <li>(B) 230045 – Liberty – Wildfire Messaging Awareness June 2023 Summary Report</li> <li>(B) 230178 – Liberty - Wildfire Messaging Awareness November 2023 Summary Report</li> <li>CPUC Post-Season Report</li> <li>Wildfire Awareness Survey results, AFN Annual Plan and Quarterly Reports, Liberty communications and event tracker</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity Validated
WMP-CO-02 - Public engagement in WMP decision-making process	<ul> <li>Liberty Response to DR062.xlsx</li> <li>Per Liberty's DR062 Response "Liberty does not have an initiative for public engagement in WMP decision-making process."</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity in Progress
8.5.3 - WMP-CO-03 - Engagement with AFN populations, local governments, and tribal communities	<ul> <li>R1812005 – Liberty – 2023 AFN Plan</li> <li>R1812005 – Liberty – 2024 AFN Plan</li> <li>R1812005-Liberty – Q2 2023 Quarterly report</li> <li>Liberty launched its AFN self- identification website in September 2021</li> <li>Results from 2023 wildfire and PSPS</li> <li>awareness surveys conducted by MDC research indicate 1% of AFN customers surveyed reported awareness of AFN self - ID.</li> <li>Participated in nine community events in Q2 between April 15<sup>th</sup> and June 24<sup>th</sup>, 2023.</li> <li>Liberty participated in the June 21, 2023, AFN statewide council meeting.</li> <li>Liberty Quarterly Data Report (QDR) Q4, Liberty_2023_Q4_Tables 115_R0.xlsx</li> </ul>	Activity Validated
8.5.4 - WMP-CO-04 - Collaboration on local wildfire	<ul> <li>Liberty Outreach and communication</li> <li>Liberty 2023 Wildfire and PSPS Outreach</li> <li>Liberty 2023 Wildfire safety Advisory board PSPS workshop summary</li> </ul>	Activity Validated

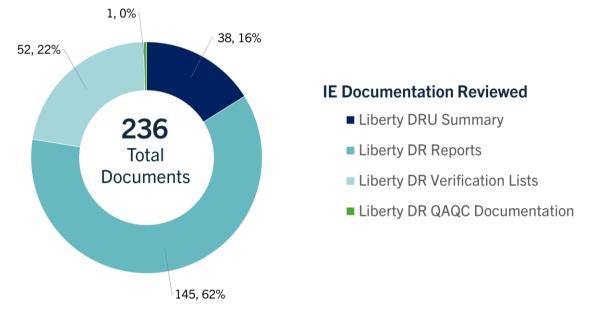
### Table 42: Community Outreach and Engagement Summary Table

mitigation and	<ul> <li>Liberty had over 200 meetings in 2023 for</li> </ul>	
planning	workshops related to wildfire mitigation and	
	Collaboration, With multiple entities.	
	<ul> <li>Most of Liberty's service territory is in Tier 2 or</li> </ul>	
	Tier 3 Fire Threat Zones	
	<ul> <li>The length of a PSPS will be determined by fire</li> </ul>	
	conditions, completion of grid safety	
	inspections, completion of needed repairs, and	
	time to restore power.	
	<ul> <li>Liberty Quarterly Data Report (QDR) Q4,</li> </ul>	
	Liberty_2023_Q4_Tables 115_R0.xlsx	
	<ul> <li>Liberty participates in the following processes</li> </ul>	
	that facilitate best practice sharing with other	
8.5.5 - WMP-CO-05 -	electric companies:	
Best practice	<ul> <li>Wildfire Risk Modeling Working Group</li> </ul>	
sharing with other electrical corporations	<ul> <li>Joint IOU Covered Conductor Working Group</li> </ul>	Activity
	<ul> <li>NV Energy collaboration meetings (1/4/2023,</li> </ul>	Validated
	2/1/2023, 3/1/202	
	<ul> <li>Wildfire Safety Advisory Board meetings</li> </ul>	
	<ul> <li>Liberty Quarterly Data Report (QDR) Q4,</li> </ul>	
	Liberty_2023_Q4_Tables 115_R0.xlsx	

## **3.1.3 Trends and Themes**

The IE team evaluated Quantifiable Goals/Targets for 35 initiatives (Large Volume Field, Large Volume Not Field, and Small Volume) and Qualitative Goals/Targets for 26 initiatives related to Liberty's 2023 WMP. The IE reviewed publicly available documents, online articles, and related published reports as referenced throughout the section and detailed in Appendix B, List of Supplemental Documents Reviewed. Concurrently, the IE submitted data requests and reviewed the Liberty provided confidential responses with various verification documentation, multiple reports that included spreadsheets, inspection logs, photos, and verification lists with a summary of received documentation below in Figure 7. Validation was also conducted through SME interviews, as listed within Appendix D.

Information reviewed during the evaluation of the initiatives demonstrates the ongoing nature of Liberty's efforts to improve the initiatives associated with the quantitative and qualitative goals/targets. Liberty has approached the quantitative and qualitative goals systematically, relying on established processes where appropriate, developing new strategies to fill in, monitoring outcomes, and refining the approach to incorporate feedback to be carried forward to future wildfire mitigation efforts. Liberty completed considerable improvements to its wildfire modeling programs, continued to conduct quality assurance inspections for transmission and distribution systems, and enhanced procedures, standards, and overall governance processes for wildfire mitigation.



#### Figure 7: IE Documentation Reviewed for Large Volume Field, Large Volume Not Field, Small Volume, and Qualitative

Note: Liberty-provided documentation included in the corresponding initiative DRs to IE Data Requests are noted as confidential.

## 3.2 Verification of Funding

The IE team conducted a comprehensive review of the funding for each initiative of the 2023 WMP to evaluate and verify alignment with planned expenditures. This year, the IE assessed the public data and augmented its assessment with data requests to obtain clarification and detailed explanations for initiatives with a total spend of less than 100 percent of planned budgets. This enhanced approach facilitated a more precise evaluation of discrepancies between actual and planned financials across the various documents and records reviewed.

The initial assessment involved a comparative analysis of public records issued by Liberty (from February 2023 to date), which the IE compared to information Liberty provided in response to the IE's data requests for financials. The review included an analysis of actual and planned spend, separated into Expense (OPEX) and Capital (CAPEX) costs, to provide a comprehensive understanding of spending trends. Table 43 - 2023 WMP Funding Verification Summary includes the details of the type of expenditure, whether Capital or Expense, the amount planned, the actual spend amount, and the explanation provided by Liberty associated with each documented underspend instance.

## 3.2.1 Summary of Underspend Instances

To evaluate Liberty's 2023 WMP, dated February 15, 2024, the IE team evaluated financial data for 62 initiatives. The IE reviewed publicly available documents and related attachments listed as Items No. 3 and 4 as detailed in Appendix B, List of Supplemental Documents Reviewed. Concurrently, the IE submitted data requests and reviewed the response Liberty provided in DR065. Following Energy Safety's direction, the IE documented all instances, a total of 20, where Liberty provided less than 100% of the funding for WMP activities and verified Liberty's explanations for these underspent amounts.

Initiative Category	2023 Initiative Number/ ID	Initiative Name	Expense or Capital	2023 WMP Proposed Spend Amt.	Actual Spend Amt.	Detail on Funding Discrepancy	Satisfied Risk Reduction Goal
Grid Design, Operations, and Maintenance	WMP- GDOM- Al-03	Patrol inspections of distribution electric lines and equipment	Expense	\$15	\$0	Patrol inspection costs captured in WMP- GDOM-AI-01.	Yes

# Table 43: 2023 WMP Funding Verification Summary(Thousands of Dollars)

Initiative Category	2023 Initiative Number/ ID	Initiative Name	Expense or Capital	2023 WMP Proposed Spend Amt.	Actual Spend Amt.	Detail on Funding Discrepancy	Satisfied Risk Reduction Goal
Grid Design, Operations, and Maintenance	WMP- GDOM- AI-04	Other discretionary inspections of distribution electric lines and equipment	Expense	\$1,000	\$85	In 2023, Liberty did not record asset inspection costs at the WMP initiative level, and thus asset inspection WMP initiative costs are both forecasted and estimated as a percentage of overall inspection costs. In its 2023 cost projection for this initiative, Liberty included projected costs from repairs and replacements resulting from its 2020 system survey. However, Liberty did not track costs associated with those repairs and replacements within this WMP initiative in 2023.	Yes
Grid Design, Operations, and Maintenance	WMP- GDOM- AI-05	Quality assurance / quality control of inspections	Expense	\$10	\$0	In 2023, Liberty did not record asset inspection costs at the WMP initiative level, and thus asset inspection WMP initiative costs are both forecasted and estimated as a percentage of overall inspection costs. In its 2023 cost projection for this initiative, Liberty included projected costs for its asset inspection QA/QC program. However, Liberty tracked asset inspection QA/QC costs within its detailed asset inspection WMP initiative, as those	Yes

Initiative Category	2023 Initiative Number/ ID	Initiative Name	Expense or Capital	2023 WMP Proposed Spend Amt.	Actual Spend Amt.	Detail on Funding Discrepancy	Satisfied Risk Reduction Goal
						detailed inspection results were being quality checked and assured.	
Grid Design, Operations, and Maintenance	WMP- GDOM- AI-06	Substation	Expense	\$10	\$0	In 2023, Liberty did not record asset inspection costs at the WMP initiative level, and thus asset inspection WMP initiative costs are both forecasted and estimated as a percentage of overall inspection costs. In its 2023 cost projection for this initiative, Liberty included projected costs for substation inspections. However, Liberty did not report substation inspection costs within this WMP initiative as they were tracked in Liberty's overall substation maintenance O&M account.	Yes
Grid Design, Operations, and Maintenance	WMP- GDOM- GH-02	Undergrounding of electric lines and/or equipment	Capital	\$7,693	\$171	Liberty only completed 0.1 miles of targeted 1.4 miles due to project rescoping.	No
Grid Design, Operations, and Maintenance	WMP- GDOM- GH-05	Traditional overhead hardening	Capital	\$4,962	\$4,228	Liberty targeted 4 miles of traditional overhead hardening and completed 9.2 miles in 2023.	Yes
Grid Design, Operations, and Maintenance	WMP- GDOM- GH-06	Emerging grid hardening technology installations and pilot progress	Capital	\$150	\$0	No additional costs for DFA, DA, and HIFD as these pilot projects are being evaluated.	Yes

Initiative Category	2023 Initiative Number/ ID	Initiative Name	Expense or Capital	2023 WMP Proposed Spend Amt.	Actual Spend Amt.	Detail on Funding Discrepancy	Satisfied Risk Reduction Goal
Grid Design, Operations, and Maintenance	WMP- GDOM- GO-01	Equipment settings to reduce wildfire risk	Capital	\$150	\$2	SRP related costs forecasted in this initiative are captured in WMP-SA-02.	Yes
Grid Design, Operations, and Maintenance	WMP- GDOM- GO-03	Personnel work procedures and training in conditions of elevated fire risk	Expense	\$284	\$5	In its 2023 cost projection for this initiative, Liberty included projected labor costs. However, Liberty did not track these costs within this WMP initiative in 2023 and all of Liberty's labor costs for Emergency Management are not captured in its 2023 WMP reporting.	Yes
Grid Design, Operations, and Maintenance	WMP- GDOM- MR-01	Equipment maintenance and repair	Expense	\$500	\$0	This was a new WMP initiative in 2023 and Liberty did not track its equipment maintenance costs within this WMP initiative in 2023.	Yes
Vegetation Management & Inspections	WMP- VM- ESG-01	Vegetation Management Enterprise System	Expense	\$406	\$353	Liberty's actual spend was less than forecasted in 2023. This initiative captures costs for Liberty's Enterprise VM System as well as other expenses related to environmental compliance and permitting.	Yes
Vegetation Management & Inspections	WMP- VM- INSP-03	Vegetation Management Inspection Program - LiDAR	Expense	\$700	\$377	Actual spend is less than projected due to an invoice from 2023 being posted in 2024.	Yes
Vegetation Management & Inspections	WMP- VM- QAQC- 01	Quality Assurance and Quality Control	Expense	\$500	\$440	Liberty's actual spend was less than forecasted in 2023. 2023 planned spend was based on	Yes

Initiative Category	2023 Initiative Number/ ID	Initiative Name	Expense or Capital	2023 WMP Proposed Spend Amt.	Actual Spend Amt.	Detail on Funding Discrepancy	Satisfied Risk Reduction Goal
Vegetation Management & Inspections	WMP- VM- VFM-01	Pole Clearing	Expense	\$480	\$392	<ul> <li>2022 actuals plus anticipated rate</li> <li>escalation and</li> <li>contingency for potential added costs.</li> <li>2023 planned spend</li> <li>was based on 2022</li> <li>actuals. 2023 actuals</li> <li>were less than 2022</li> <li>actuals to complete the</li> <li>same amount of work.</li> </ul>	Yes
Vegetation Management & Inspections	WMP- VM- VFM-02	Wood and Slash Management	Expense	\$1,500	\$998	Actual spend is less than projected due to invoices from 2023 being posted in 2024.	Yes
Vegetation Management & Inspections	WMP- VM- VFM-06	Fall-In Mitigation	Expense	\$7,750	\$3,823	Actual spend is less than planned due to less work generated from inspections than forecasted.	Yes
Situational Awareness & Forecasting	WMP- SA-06	Ignition likelihood calculation	Expense	\$1,154	\$882	Wildfire and PSPS risk modeling costs were lower than projected.	Yes
Emergency Preparedness	WMP- EP-04	Preparedness and planning for service restoration	Expense	\$1,369	\$223	In its 2023 cost projection for this initiative, Liberty included projected labor costs. However, Liberty did not track these costs with this WMP initiative in 2023 and all of Liberty's labor costs for Emergency Management are not captured in its 2023 WMP reporting.	Yes
Emergency Preparedness	WMP- EP-05	Customer support in wildfire and PSPS emergencies	Expense	\$100	\$55	Lower than expected costs.	Yes

Initiative Category	2023 Initiative Number/ ID	Initiativa Nama	Expense or Capital	2023 WMP Proposed Spend Amt.	Actual Spend Amt.	Detail on Funding Discrepancy	Satisfied Risk Reduction Goal
Community Outreach and Engagement	WMP- CO-01	Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management	Expense	\$90	\$87	Liberty's actual spend of \$87,000 is within a reasonable divergence from its \$90,000 projected spend for this WMP initiative.	Yes

#### Trends in Expense and Capital Underspend

In addition to the detailed review and analysis documented in Table 43, the IE team has visualized the underspend instances across various WMP categories in the following graphs titled "Breakdown of Expense for IE Underspend Categories (Thousands of Dollars)" and "Breakdown of Capital for IE Underspend Categories (Thousands of Dollars)." This graph provides a clear representation of the underspend instances and the concentrations observed in the 2023 WMP initiatives, categorizing the underspend amounts across different expenditure ranges.

#### Trends of Expense Breakdown Shown in Figure 8

The "Breakdown of Expense for IE Underspend Categories" graph highlights significant underspend across multiple categories, with the most notable discrepancies in Vegetation Management and Inspections, and Emergency Preparedness, and Grid Design, Operations, and Maintenance.

- 1. **\$0K \$5K Range**: All categories show minimal underspend, indicating better alignment of planned and actual expenditures for smaller budget initiatives.
- \$10K \$50K Range: Emergency Preparedness (\$45K) across one (1) initiative and Grid Design, Operations, and Maintenance (\$35K) across three (3) different initiatives.
- \$50K \$100K Range: Vegetation Management and Inspection (\$200K) across three (3) initiatives
- 4. **\$100K \$500K Range:** Gird Design, Operations, and Maintenance (\$279K) across one (1) initiative, Situational Awareness and Forecasting (\$273K) across one (1)

initiative, and Vegetation Management and Inspections (\$323K) across one (1) initiative.

- \$500K \$1M Range: Grid Design, Operations, and Maintenance (\$1.4M) across two (2) different initiatives, and Vegetation Management and Inspections (\$502K) across one (1) initiative.
- 6. **\$1M \$5M Range:** Vegetation Management and Inspection (\$3.9M) across one (1) initiative and Emergency Preparedness (\$1.1M) across one (1) initiative.

#### Trends of Capital Breakdown Shown in Figure 9

The "Breakdown of Capital for IE Underspend Categories" graph provides insights into the capital expenditure underspend across various WMP categories. The data is categorized into different expenditure ranges, highlighting significant trends in financial discrepancies for capital projects.

- 1. **\$100K \$500K Range:** Gird Design, Operations, and Maintenance (\$298K) across two (2) different initiatives.
- 2. **\$500K \$1M Range:** Grid Design, Operations, and Maintenance (\$734K) across one (1) initiative.
- 3. > **\$5M Range:** Grid Design, Operations, and Maintenance (\$7.5M) across one (1) initiative.



## Figure 8: Breakdown of Expense for IE Underspend Categories (Thousands of Dollars)



Figure 9: Breakdown of Capital for IE Underspend Categories (Thousands of Dollars)

Grid Design, Operations, and Maintenance

#### 3.3 Verification of QA/QC Programs

Pursuant to the Final IE Scope of Work for the Review of Compliance with 2023 WMP, Liberty provided a complete list of all 2023 WMP activities with corresponding quality assurance and quality control (QA/QC) programs per response to DR002 and assessed herein.

Initiative Name	Initiative Validation	Finding
6.2.2.1 - WMP-SA- 06 - Ignition likelihood calculation	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
6.2.2.2 - WMP-SA- 07 - Ignition consequence calculation	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.2.1 - WMP- GDOM-GH-01 - Covered conductor installation	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.2.2 - WMP- GDOM-GH-02 - Undergrounding of electric lines and/or equipment	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.2.3 - WMP- GDOM-GH-03 - Distribution pole replacements and reinforcements	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.2.4 - WMP- GDOM-GH-04 - Transmission pole/tower replacements and reinforcements	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.2.5 - WMP- GDOM-GH-05 - Traditional	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A

#### Table 44: 2023 QA/QC Initiative Verification Summary Table

overhead hardening		
8.1.2.6 - WMP-		
GDOM-GH-06 - Emerging grid hardening technology installations and pilot progress	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.2.7 - WMP- GDOM-GH-07 - Microgrids	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.2.8 - WMP- GDOM-GH-08 - Installation of system automation equipment	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.2.9 - WMP- GDOM-GH-09 - Line removal (in HFTD)	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.2.10 - WMP- GDOM-GH-10 - Other grid topology improvements to minimize risk of ignitions	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.2.11 - WMP- GDOM-GH-11 - Other grid topology improvements to mitigate or reduce PSPS events	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.2.12 - WMP- GDOM-GH-12 - Other technologies and systems not listed above:	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.2.12 - WMP- GDOM-GH-12a - Tree attachment removals	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A

8.1.2.12 - WMP- GDOM-GH-12b - Expulsion fuse replacement	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.2.12 - WMP- GDOM-GH-12c - Animal guards	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.2.12 - WMP- GDOM-GH-12d - CalFIRE exempt hardware	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.2.12 - WMP- GDOM-GH-12e - Open wire/grey wire	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.2.12 - WMP- GDOM-GH-12f - Substation Equipment Replacement	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.3.1 - WMP- GDOM-AI-01 - Detailed inspections of distribution electric lines and equipment	<ul> <li>Documented per data response DR002 Asset_Inspection_QA-QC_2023-Final.pdf</li> <li>SME interview conducted 6/7 per Appendix D Item No. 4</li> </ul>	Activity validated
8.1.3.2 - WMP- GDOM-AI-02 - Intrusive pole inspections	<ul> <li>Documented per data response DR002 Asset_Inspection_QA-QC_2023-Final.pdf</li> <li>SME interview conducted 6/7 per Appendix D Item No. 4</li> </ul>	N/A
8.1.3.3 - WMP- GDOM-AI-03 - Patrol inspections of distribution electric lines and equipment	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.3.4 - WMP- GDOM-AI-04 - Other discretionary inspections of distribution electric	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A

[		
lines and		
equipment		
8.1.3.5 - WMP- GDOM-AI-05 - Quality assurance / quality control of inspections	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.3.6 - WMP- GDOM-AI-06 - Substation inspections	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.1.4 - WMP- GDOM-MR-01 - Equipment maintenance and repair	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.5 - WMP- GDOM-GO-05 - Asset Management and Inspection Enterprise System	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.8.1 - WMP- GDOM-GO-01 - Equipment settings to reduce wildfire risk	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.8.1 - WMP- GDOM-GO-04 - Automatic recloser operations	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.8.2 - WMP- GDOM-GO-02 - Grid response procedures and notifications	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.1.8.3 - WMP- GDOM-GO-03 - Personnel work procedures and training in conditions of elevated fire risk	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A

8.2.2.1 - WMP-VM-	<ul> <li>Documented in Liberty's response to DR002 in</li> </ul>	
INSP-01 - Vegetation Management Inspection Program - Detailed	<ul> <li>attachment Liberty QA Field Guide - 6_26_23pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QA Proposal (1).pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QC Inspection Work Order Field Guide - 2_23_23pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QC WC LiDAR Work Order Field Guide - 4_04_22pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty VMQC Pole Brushing Field Guide DRAFT - 8_12_21.pdf</li> <li>Documented in Liberty's response to DR002 in attachment Quality_Control_Spec_20210424.docx</li> <li>Documented in Liberty's response to DR002 in attachment Quality_Control_Spec_10210424.docx</li> <li>Documented in Liberty's response to DR002 in attachment VM- 04_Post_Work_Verification_1.1_Revision_Draft.docx</li> </ul>	Activity Validated
8.2.2.2 - WMP-VM- INSP-02 - Vegetation Management Inspection Program - Patrol	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.2.2.3 - WMP-VM- INSP-03 - Vegetation Management Inspection Program - LiDAR	<ul> <li>Documented in Liberty's response to DR002 in attachment Liberty QA Field Guide - 6_26_23pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QA Proposal (1).pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QC Inspection Work Order Field Guide - 2_23_23pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QC WC LiDAR Work Order Field Guide - 4_04_22pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty VMQC Pole Brushing Field Guide DRAFT - 8_12_21.pdf</li> <li>Documented in Liberty's response to DR002 in attachment Quality_Control_Spec_20210424.docx</li> <li>Documented in Liberty's response to DR002 in attachment Quality_Control_Spec_10210424.docx</li> <li>Documented in Liberty's response to DR002 in attachment VM- 04_Post_Work_Verification_1.1_Revision_Draft.docx</li> </ul>	Activity Validated

8.2.3.1 - WMP-VM- VFM-01 - Pole Clearing	<ul> <li>Documented in Liberty's response to DR002 in attachment Liberty QA Field Guide - 6_26_23pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QA Proposal (1).pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QC Inspection Work Order Field Guide - 2_23_23pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QC WC LiDAR Work Order Field Guide - 4_04_22pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty VMQC Pole Brushing Field Guide DRAFT - 8_12_21.pdf</li> <li>Documented in Liberty's response to DR002 in attachment Quality_Control_Spec_20210424.docx</li> <li>Documented in Liberty's response to DR002 in attachment Quality_Control_Spec_20210424.docx</li> <li>Documented in Liberty's response to DR002 in attachment VM- 04_Post_Work_Verification_1.1_Revision_Draft.docx</li> </ul>	Activity Validated
8.2.3.2 - WMP-VM- VFM-02 - Wood and Slash Management	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
8.2.3.3 - WMP-VM- VFM-05 - Clearance	<ul> <li>Per Liberty's response to data request DR002</li> </ul>	N/A
8.2.3.4 - WMP-VM- VFM-06 - Fall-In Mitigation	<ul> <li>Documented in Liberty's response to DR002 in attachment Liberty QA Field Guide - 6_26_23pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QA Proposal (1).pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QC Inspection Work Order Field Guide - 2_23_23pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty QC WC LiDAR Work Order Field Guide - 4_04_22pdf</li> <li>Documented in Liberty's response to DR002 in attachment Liberty VMQC Pole Brushing Field Guide DRAFT - 8_12_21.pdf</li> <li>Documented in Liberty's response to DR002 in attachment Quality_Control_Spec_20210424.docx</li> <li>Documented in Liberty's response to DR002 in attachment Quality_Control_Spec_20210424.docx</li> <li>Documented in Liberty's response to DR002 in attachment VM- 04_Post_Work_Verification_1.1_Revision_Draft.docx</li> </ul>	Activity Validated

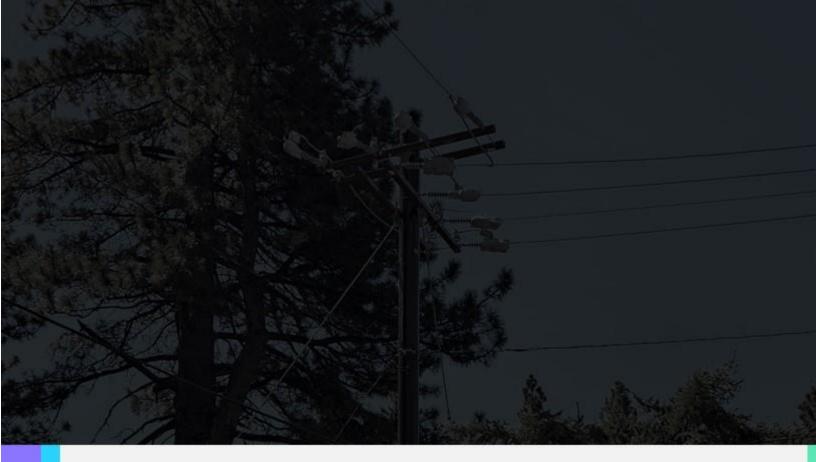
8.2.3.5 - WMP-VM- VFM-03 -			<b>N</b> 1 ( 0
Substation Defensible Space	•	Per Liberty's response to data request DR002	N/A
8.2.3.6 - WMP-VM- VFM-07 - High-	•	Per Liberty's response to data request DR002	N/A
Risk Species			
8.2.3.7 - WMP-VM- VFM-04 - Fire- Resilient Right-of- Ways	•	Per Liberty's response to data request DR002	N/A
8.2.3.8 - WMP-VM- VFM-08 - Emergency	•	Per Liberty's response to data request DR002	N/A
Response Vegetation Management			
8.2.4 - WMP-VM- ESG-01 -			
Vegetation	-	Per Liberty's response to data request DR002	N/A
Management			1 1/7 1
Enterprise System			
8.2.5 - WMP-VM-			
QAQC-01 - Quality	-	Per Liberty's response to data request DR002	N/A
Assurance and Quality Control			·
8.3.2 - WMP-SA-01			
- Environmental		Per Liberty's response to data request DR002	N/A
monitoringsystems			,
8.3.3 - WMP-SA-02			
- Grid monitoring systems	•	Per Liberty's response to data request DR002	N/A
8.3.4 - WMP-SA-03			
- Fire detection and	•	Per Liberty's response to data request DR002	N/A
alarm systems			
8.3.5 - WMP-SA-04	_	Der Libertu's response to data request DD000	NI / A
- Weather forecasting	-	Per Liberty's response to data request DR002	N/A
8.3.6 - WMP-SA-05			
- Fire Potential	-	Per Liberty's response to data request DR002	N/A
Index			-

8.4.2 - WMP-EP-01 - Wildfire and PSPS emergency preparedness plan	er data response DR002 Asset_Inspection_QA- C_2023-Final.pdf, this was not listed.	N/A				
8.4.3 - WMP-EP-02 - Collaboration and coordination with public safety partners	Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.					
8.4.4 - WMP-EP-03 - Public notification and communication strategy	er data response DR002 Asset_Inspection_QA- C_2023-Final.pdf, this was not listed.	N/A				
8.4.5 - WMP-EP-04 - Preparedness and planning for service restoration	er data response DR002 Asset_Inspection_QA- C_2023-Final.pdf, this was not listed.	N/A				
8.4.6 - WMP-EP-05 - Customer support in wildfire and PSPS emergencies	er data response DR002 Asset_Inspection_QA- C_2023-Final.pdf, this was not listed.	N/A				
8.5.2 - WMP-CO- 01 - Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management	er data response DR002 Asset_Inspection_QA- C_2023-Final.pdf, this was not listed.	N/A				
8.5.3 - WMP-CO- 03 - Engagement with AFN populations, local governments, and tribal communities	er data response DR002 Asset_Inspection_QA- C_2023-Final.pdf, this was not listed.	N/A				
8.5.4 - WMP-CO- 04 - Collaboration on local wildfire	er data response DR002 Asset_Inspection_QA- C_2023-Final.pdf, this was not listed.	N/A				

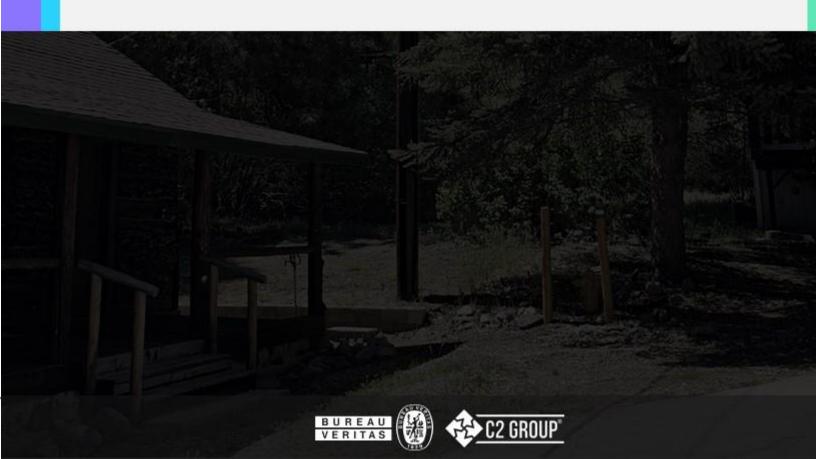
mitigation and planning		
8.5.5 - WMP-CO- 05 - Best practice sharing with other electrical corporations	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
- WMP-EP-06 - Learning after wildfire and PSPS events	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A
- WMP-CO-02 - Public engagement in WMP decision- making process	<ul> <li>Per data response DR002 Asset_Inspection_QA- QC_2023-Final.pdf, this was not listed.</li> </ul>	N/A

# **4. CONCLUSION**

Liberty's 2023 to 2025 WMP builds on the previous cycle by focusing efforts to improve situational awareness tools, risk modeling, grid hardening initiatives and collaborating with the community it serves by promoting outreach and education in regards to PSPS events. Throughout the 2024 Independent Evaluator process, Liberty's participated in a professional manner with punctual and complete responses to IE data requests, SME interviewing processes and regularly conducted meetings with the IE staff. Based on the overall evaluation of the Independent Evaluator process with in-depth reviews of Liberty's 2023 WMP list of initiatives, we have determined that Liberty has significantly met their 2023 WMP goals of reducing the risk of wildfires in the communities it serves.



# APPENDICES



#### **APPENDICES**

Appendix A – List of 2023 WMP Activities	86
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Appendix A - List of 2023 WMP Activities

SOW Category	2023 WMP Activities	WMP Category	2023 Initiative No.	Initiative Tracking ID	Utility Initiative Name	Initiative Activity
WMP Activity Completion	a. Large Volume Quantifiable Goal/Target - Field Verifiable	Grid Design, Operations, and Maintenance	8.1.2.3	WMP-GDOM-GH-03	Distribution pole replacements and reinforcements	Distribution pole replacements and reinforcements
WMP Activity Completion	a. Large Volume Quantifiable Goal/Target - Field Verifiable	Grid Design, Operations, and Maintenance	8.1.2.12	WMP-GDOM-GH-12b	Expulsion fuse replacement	Expulsion fuse replacement
WMP Activity Completion	a. Large Volume Quantifiable Goal/Target - Field Verifiable	Vegetation Management & Inspections		WMP-VM-INSP-03	Vegetation Management Inspection Program - LiDar	Vegetation Management Inspection Program - LiDar
WMP Activity Completion	a. Large Volume Quantifiable Goal/Target - Field Verifiable	Vegetation Management & Inspections		WMP-VM-VFM-07	High-Risk Species	High-Risk Species

WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Grid Design, Operations, and Maintenance	8.1.3.1	WMP-GDOM-AI-01	Detailed inspections of distribution electric lines and equipment	Detailed inspections of distribution electric lines and equipment
WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Grid Design, Operations, and Maintenance	8.1.3.2	WMP-GDOM-AI-02	Intrusive pole inspections	Intrusive pole inspections
WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Grid Design, Operations, and Maintenance	8.1.3.3	WMP-GDOM-AI-03	Patrol inspections of distribution electric lines and equipment	Patrol inspections of distribution electric lines and equipment
WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Vegetation Management & Inspections		WMP-VM-INSP-01	Vegetation Management Inspection Program - Detailed	Vegetation Management Inspection Program - Detailed
WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Vegetation Management & Inspections		WMP-VM-INSP-02	Vegetation Management Inspection Program - Patrol	Vegetation Management Inspection Program - Patrol

WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Vegetation Management & Inspections	8.2.3.1	WMP-VM-VFM-01	Pole Clearing	Pole Clearing
WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Vegetation Management & Inspections		WMP-VM-VFM-02	Wood and Slash Management	Wood and Slash Management
WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Vegetation Management & Inspections	8.2.3.3	WMP-VM-VFM-05	Clearance	Clearance
WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Vegetation Management & Inspections		WMP-VM-VFM-06	Fall-In Mitigation	Fall-In Mitigation
WMP Activity Completion	b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Vegetation Management & Inspections	8.2.5	WMP-VM-QAQC-01	Quality Assurance and Quality Control	Quality Assurance and Quality Control



WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.1	WMP-GDOM-GH-01	Covered conductor installation	Covered conductor installation
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.2	WMP-GDOM-GH-02	Undergrounding of electric lines and/or equipment	Undergrounding of electric lines and/or equipment
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.5	WMP-GDOM-GH-05	Traditional overhead hardening	Traditional overhead hardening
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.6	WMP-GDOM-GH-06	Emerging grid hardening technology installations and pilot progress	Emerging grid hardening technology installations and pilot progress
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.7	WMP-GDOM-GH-07	Microgrids	Microgrids



WMP Activity	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.8	WMP-GDOM-GH-08	Installation of system automation equipment	Installation of system automation equipment
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.9	WMP-GDOM-GH-09	Line removal (in HFTD)	Line removal (in HFTD)
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.12	WMP-GDOM-GH-12a	Tree attachment removals	Tree attachment removals
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.12	WMP-GDOM-GH-12c	Animal guards	Animal guards
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.12	WMP-GDOM-GH-12d	CalFIRE exempt hardware	CalFIRE exempt hardware



IWMP	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.12	WMP-GDOM-GH-12e	Open wire/grey wire	Open wire/grey wire
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.12	WMP-GDOM-GH-12f	Substation Equipment Replacement	Substation Equipment Replacement
IWMP	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.3.4	WMP-GDOM-AI-04	Other discretionary inspections of distribution electric lines and equipment	Other discretionary inspections of distribution electric lines and equipment
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.3.5	WMP-GDOM-AI-05	Quality assurance / quality control of inspections	Quality assurance / quality control of inspections
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.3.6	WMP-GDOM-AI-06	Substation inspections	Substation inspections



WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Grid Design, Operations, and Maintenance	8.1.4	WMP-GDOM-MR-01	Equipment maintenance and repair	Equipment maintenance and repair
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Vegetation Management & Inspections		WMP-VM-VFM-03	Substation Defensible Space	Substation Defensible Space
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Vegetation Management & Inspections		WMP-VM-VFM-04	Fire-Resilient Right-of-Ways	Fire-Resilient Right-of-Ways
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Situational Awareness & Forecasting	8.3.2	WMP-SA-01	Environmental monitoring systems	Environmental monitoring systems
WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Situational Awareness & Forecasting	8.3.3	WMP-SA-02	Grid monitoring systems	Grid monitoring systems

WMP Activity Completion	c. Small (less than 100 items) Volume Quantifiable Goal/Target	Situational	8.3.4	WMP-SA-03	Fire detection and alarm systems	Fire detection and alarm systems
WMP Activity Completion	d. Qualitative Goal/Target	Situational Awareness & Forecasting	6.2.2.1	WMP-SA-06	Ignition likelihood calculation	Ignition likelihood calculation
WMP Activity Completion	d. Qualitative Goal/Target	Situational Awareness & Forecasting	6.2.2.2	WMP-SA-07	Ignition consequence calculation	Ignition consequence calculation
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.4	WMP-GDOM-GH-04	Transmission pole/tower replacements and reinforcementsTransmission pole/tower replacements and reinforcements	
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.10	WMP-GDOM-GH-10	Other grid topology improvements to minimize risk of ignitions	Other grid topology improvements to minimize risk of ignitions
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.11	WMP-GDOM-GH-11	Other grid topology improvements to mitigate or reduce PSPS events	Other grid topology improvements to mitigate or reduce PSPS events
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design, Operations, and Maintenance	8.1.2.12	WMP-GDOM-GH-12	Other technologies and systems not listed above:	Other technologies and systems not listed above:
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design, Operations,	8.1.5	WMP-GDOM-GO-05	Asset Management and Inspection Enterprise System	Asset Management and Inspection Enterprise System

		and Maintenance				
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design,	8.1.8.1	WMP-GDOM-GO-01	Equipment settings to reduce wildfire risk	Equipment settings to reduce wildfire risk
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design, Operations, and Maintenance	8.1.8.1	WMP-GDOM-GO-04	Automatic recloser operations	Automatic recloser operations
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design, Operations, and Maintenance	8.1.8.2	WMP-GDOM-GO-02	Grid response procedures and notifications	Grid response procedures and notifications
WMP Activity Completion	d. Qualitative Goal/Target	Grid Design, Operations, and Maintenance	8.1.8.3	WMP-GDOM-GO-03	Personnel work procedures and training in conditions of elevated fire risk	Personnel work procedures and training in conditions of elevated fire risk
WMP Activity Completion	d. Qualitative Goal/Target	Vegetation Management & Inspections		WMP-VM-VFM-08	Emergency Response Vegetation Management	Emergency Response Vegetation Management
WMP Activity Completion	d. Qualitative Goal/Target	Vegetation Management & Inspections		WMP-VM-ESG-01	Vegetation Management Enterprise System	Vegetation Management Enterprise System
WMP Activity Completion	d. Qualitative Goal/Target	Situational Awareness & Forecasting	8.3.5	WMP-SA-04	Weather forecasting	Weather forecasting
WMP Activity Completion	d. Qualitative Goal/Target	Situational Awareness & Forecasting	8.3.6	WMP-SA-05	Fire Potential Index	Fire Potential Index

WMP Activity Completion	d. Qualitative Goal/Target	Emergency Preparedness	8.4.2	WMP-EP-01	Wildfire and PSPS emergency preparedness plan	Wildfire and PSPS emergency preparedness plan
WMP Activity Completion	d. Qualitative Goal/Target	Emergency Preparedness	8.4.3	WMP-EP-02	Collaboration and coordination with public safety partners	Collaboration and coordination with public safety partners
WMP Activity Completion	d. Qualitative Goal/Target	Emergency Preparedness	8.4.4	WMP-EP-03	Public notification and communication strategy	Public notification and communication strategy
WMP Activity Completion	d. Qualitative Goal/Target	Emergency Preparedness	8.4.5	WMP-EP-04	Preparedness and planning for service restoration	Preparedness and planning for service restoration
WMP Activity Completion	d. Qualitative Goal/Target	Emergency Preparedness	8.4.6	WMP-EP-05	Customer support in wildfire and PSPS emergencies	Customer support in wildfire and PSPS emergencies
WMP Activity Completion	d. Qualitative Goal/Target	Community Outreach and Engagement	8.5.2	WMP-CO-01	Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management	Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management
WMP Activity Completion	d. Qualitative Goal/Target	Community Outreach and Engagement	8.5.3	WMP-CO-03	Engagement with AFN populations, local governments, and tribal communities	Engagement with AFN populations, local governments, and tribal communities
WMP Activity Completion	d. Qualitative Goal/Target	Community Outreach and Engagement	8.5.4	WMP-CO-04	Collaboration on local wildfire mitigation and planning	Collaboration on local wildfire mitigation and planning
WMP Activity Completion	d. Qualitative Goal/Target	Community Outreach and Engagement	8.5.5	WMP-CO-05	Best practice sharing with other electrical corporations	Best practice sharing with other electrical corporations

	d. Qualitative Goal/Target	Emergency Preparedness		0	Learning after wildfire and PSPS events
WMP Activity Completion		Community Outreach and Engagement		00	Public engagement in WMP decision-making process

## Appendix B – List of Documents Reviewed

Item No.	Documents Reviewed - Public	Document Date
1	LIBERTY UTILITIES (CALPECO ELECTRIC) LLC'S (U 933-E) PUBLIC SAFETY POWER SHUTOFF 2023 POST-SEASON REPORT	3/1/2024
2	Liberty Utilities (CalPeco Electric) LLC (U 933-E) 2022 Substation Inspection Program Summary	6/30/2023
3	Liberty's 2023 WMP Annual Report on Compliance (ARC)	3/29/24
4	Liberty's Quarterly Data reporting including Wildfire Mitigation Data Tables Template Tables1-15 (2023 Q4 QDR) File Name: TN13715_20240214T082650_Liberty_2023_Q4_Tables115_R0	2/15/24

# Appendix $\mathbf{C}-\mathbf{D}\text{ata}$ Log, Data and Interview Requests

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR001	5/9/2024	BV		5/14/2024		DR001	Liberty Response to LIB_DR001-BV_05132024 Liberty Utilities - Data Request LIB_DR001- BV - Initiative List
DR002	5/9/2024	BV		5/14/2024		DR002	Asset Inspection QAQC Docs VM QAQC Docs Liberty Utilities - Data Request LIB_DR002- BV - QA- QC Programs
DR002.b	6/5/2024	BV		6/10/2024		DR002.b	Liberty Utilities - Data Request LIB_DR002.b- BV - QA-QC Progarms
DR003	5/21/2024	BV		5/23/2024		DR003	Liberty Response to LIB_DR003-BV_05232024 Liberty Utilities - Data Request LIB_DR003
DR003.b	5/24/2024	BV		5/28/2024		DR003.b	2023 Liberty Initiatives List 05-24-24
DR_004	Not used	BV	6.2.2.2 - WMP- SA-07 - Ignition consequence calculation	NA	6.2.2.2 – WMP-SA-07	DR_004	NA
DR_005	6/3/2024	C2	8.1.2.1 - WMP- GDOM-GH-01 - Covered conductor installation	6/5/2024	8.1.2.1 – WMP-GDOM- GH-01	DR_005	100% Design8800-0120-0389- WMP_Covered_Cond_Fallen_Leaf_B-Tree Wire annotations 1 100%_Map-7300_Ph7_8800-0218-0360-signed 7300 - Phase 8 8800-0222-0729 LU_CoveredConductor_2023.CPG LU_CoveredConductor_2023.dbf LU_CoveredConductor_2023.prj LU_CoveredConductor_2023.sbn

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
							LU_CoveredConductor_2023.sbx LU_CoveredConductor_2023.shp LU_CoveredConductor_2023.shp LU_CoveredConductor_2023.shx Redlined Celio_A As-built 10-23-23 8800-0121- 0420 Redlined Celio_B As-built 10-23-23 8800-0121- 0421
DR_006	6/3/2024	C2	8.1.2.2 - WMP- GDOM-GH-02 - Undergrounding of electric lines and/or equipment	6/5/2024	8.1.2.2 – WMP-GDOM- GH-02	DR_006	LU_Undergrounding_2023.cpg LU_Undergrounding_2023.dbf LU_Undergrounding_2023.prj LU_Undergrounding_2023.sbn LU_Undergrounding_2023.shx LU_Undergrounding_2023.shp LU_Undergrounding_2023.shx Map-Cascade_P_Repl-8800-0118-0117-IFC - 10-4- 22-signed
DR_007	5/28/2024	C2	8.1.2.3 - WMP- GDOM-GH-03 - Distribution pole replacements and reinforcements	5/31/2024	8.1.2.3 – WMP-GDOM- GH-03	DR_007	LU_PoleReplacements_2023.cpg LU_PoleReplacements_2023.dbf LU_PoleReplacements_2023.prj LU_PoleReplacements_2023.sbn LU_PoleReplacements_2023.sbx LU_PoleReplacements_2023.shp LU_PoleReplacements_2023.shp LU_PoleReplacements_2023.shx
DR_008	NA	C2	8.1.2.4 - WMP- GDOM-GH-04 -	NA	8.1.2.4	DR_008	NA



Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
			Transmission pole/tower replacements and reinforcements		WMP-GDOM- GH-04		
DR_009	6/3/2024	C2	8.1.2.5 - WMP- GDOM-GH-05 - Traditional overhead hardening	6/5/2024	8.1.2.5 – WMP-GDOM- GH-05	DR_009	8800-0122-TPZCUN - PH2 - 03.08.23-signed DESIGN - 8800-0122-TPZCUN - PH1 - 04.05.23- signed DESIGN - 8800-0123-TPZESL - Eastside OH Rbld - 4- 27-23-signed DESIGN - 8800-0123-TPZLAR - 5-1-23-signed LU_TraditionalHardening_2023.cpg LU_TraditionalHardening_2023.dbf LU_TraditionalHardening_2023.spn LU_TraditionalHardening_2023.sbn LU_TraditionalHardening_2023.shp LU_TraditionalHardening_2023.shp LU_TraditionalHardening_2023.shp LU_TraditionalHardening_2023.shp LU_TraditionalHardening_2023.shp LU_TraditionalHardening_2023.shp LU_TraditionalHardening_2023.shp.LUSLT3ZSZDK3 .18300.57204.sr.lock LU_TraditionalHardening_2023.shp.LUSLT3ZSZDK3 .41640.57204.sr.lock LU_TraditionalHardening_2023.shp.LUSLT3ZSZDK3 .42168.57204.sr.lock LU_TraditionalHardening_2023.shp.LUSLT3ZSZDK3 .55276.57204.sr.lock LU_TraditionalHardening_2023.shp.LUSLT3ZSZDK3 .55276.57204.sr.lock

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_010	5/28/2024	BV	8.1.2.6 - WMP- GDOM-GH-06 - Emerging grid hardening technology installations and pilot progress	6/3/2024	8.1.2.6 – WMP-GDOM- GH-06	DR_010	Liberty Fire Mitigation Study-Final Report 09-28- 2022 Liberty Response to Data Request_DR010
DR_011	5/29/2024	BV	8.1.2.7 - WMP- GDOM-GH-07 - Microgrids	6/3/2024	8.1.2.7 – WMP-GDOM- GH-07	DR_011	Liberty Response to Data Request_DR011
DR_012	5/29/2024	BV	8.1.2.8 - WMP- GDOM-GH-08 - Installation of system automation equipment	6/12/2024	8.1.2.8 – WMP-GDOM- GH-08	DR_012	2023 Recloser Installs Drawing - 8800-RECLOSER22 10-10-22-signed STAMPEDE SUB_REBLD 23_(T)751420 (T)751209
DR_013	5/29/2024	BV	8.1.2.9 - WMP- GDOM-GH-09 - Line removal (in HFTD)	6/3/2024	8.1.2.9 – WMP-GDOM- GH-09	DR_013	DR013_ConductorRemoval_2023
DR_014	Not used	C2	8.1.2.10 - WMP- GDOM-GH-10 - Other grid topology improvements to minimize risk of ignitions	NA	8.1.2.10 – WMP-GDOM- GH-10	DR_014	NA

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_015	Not used	BV	8.1.2.11 - WMP- GDOM-GH-11 - Other grid topology improvements to mitigate or reduce PSPS events	NA	8.1.2.11 – WMP-GDOM- GH-11	DR_015	NA
DR_016	Not used	C2	8.1.2.12 - WMP- GDOM-GH-12 - Other technologies and systems not listed above:	NA	8.1.2.12 – WMP-GDOM- GH-12	DR_016	NA
DR_017	5/28/2024	C2	8.1.2.12 - WMP- GDOM-GH-12a - Tree attachment removals	5/31/2024	8.1.2.12 – WMP-GDOM- GH-12a	DR_017	LU_TreeAttachmentRemovals_2023.CPG LU_TreeAttachmentRemovals_2023.dbf LU_TreeAttachmentRemovals_2023.prj LU_TreeAttachmentRemovals_2023.sbn LU_TreeAttachmentRemovals_2023.sbx LU_TreeAttachmentRemovals_2023.shp LU_TreeAttachmentRemovals_2023.shp LU_TreeAttachmentRemovals_2023.shx
DR_018	5/28/2024	C2	8.1.2.12 - WMP- GDOM-GH-12b - Expulsion fuse replacement	5/30/2024	8.1.2.12 – WMP-GDOM- GH-12b	DR_018	DR_018 REQUEST_LIBERTY_DR018 - C2 - WMP-GDOM-GH- 12b

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_019	5/28/2024	C2	8.1.2.12 - WMP- GDOM-GH-12c - Animal guards	5/31/2024	8.1.2.12 – WMP-GDOM- GH-12c	DR_019	Animal Guards Locations Cemetery Substation Glenshire Substation Hobart Mills Substation Installation Details Sierra Brooks Substation
DR_020	5/28/2024	BV	8.1.2.12 - WMP- GDOM-GH-12d - CalFIRE exempt hardware	5/30/2024	8.1.2.12 – WMP-GDOM- GH-12d	DR_020	2021-power-line-fire-prevention-field-guide DR020
DR_021	5/29/2024	BV	8.1.2.12 - WMP- GDOM-GH-12e - Open wire/grey wire	6/3/2024	8.1.2.12 – WMP-GDOM- GH-12e	DR_021	IE DR Open-Grey Wire Reports open_wire_grey_wire_circuit_miles
DR_022	5/29/2024	BV	8.1.2.12 - WMP- GDOM-GH-12f - Substation Equipment Replacement	6/3/2024	8.1.2.12 – WMP-GDOM- GH-12f	DR_022	Design-DCA.0000047.CE.0001-Stampede Substation Rebuild 23 Job Created 8800-0222-STMPSUB - Stampede Substation Rebuild Virginia Transformer PO Stampede
DR_023	5/24/2024	BV	8.1.3.1 - WMP- GDOM-AI-01 - Detailed inspections of distribution electric lines and equipment	5/28/2024	8.1.3.1 – WMP-GDOM- Al-01	DR_023	LIBERTY - Data Request_DR_023 - WMP-GDOM-AI- 01 Liberty Response_Data Request_DR_023 - WMP- GDOM-AI-01_05282024

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_023-B	5/30/2024	BV	8.1.3.1 - WMP- GDOM-AI-01 - Detailed inspections of distribution electric lines and equipment	6/3/2024	8.1.3.1 - WMP-GDOM- Al-01	DR_023-B	LIBERTY - Data Request_DR_023-B - Attach - WMP- GDOM-AI-01 LIBERTY - Data Request_DR_023-B - WMP-GDOM- AI-01
DR_023-C	6/5/2024	BV	8.1.3.1 - WMP- GDOM-AI-01 - Detailed inspections of distribution electric lines and equipment	6/6/2024	8.1.3.1 - WMP-GDOM- Al-01	DR_023-C	SQV8200Riser_pole_number_278458Riser- _2023-07-20
DR_024	5/28/2024	BV	8.1.3.2 - WMP- GDOM-AI-02 - Intrusive pole inspections	5/30/2024	8.1.3.2 - WMP-GDOM- Al-02	DR_024	2023 Liberty Pole Data Invoice Circuit SLK257
DR_025	5/28/2024	BV	8.1.3.3 - WMP- GDOM-AI-03 - Patrol inspections of distribution electric lines and equipment	5/30/2024	8.1.3.3 - WMP-GDOM- AI-03	DR_025	DR_025_RESPONSE REQUEST_LIBERTY_DR025 - C2 - WMP-GDOM-AI- 03
DR_026	6/3/2024	C2	8.1.3.4 - WMP- GDOM-AI-04 - Other	6/5/2024	8.1.3.4 - WMP-GDOM- Al-04	DR_026	Liberty_Thermal_POTHEADS Other Discretionary Inspections_2023 locations



Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
			discretionary inspections of distribution electric lines and equipment				
DR_027	6/3/2024	C2	8.1.3.5 - WMP- GDOM-AI-05 - Quality assurance / quality control of inspections	6/5/2024	8.1.3.5 - WMP-GDOM- AI-05	DR_027	DR027-C2 Response Files (ZIP File) liberty_qaqc_go_95_checklist
DR_028	5/28/2024	BV	8.1.3.6 - WMP- GDOM-AI-06 - Substation inspections	5/31/2024	8.1.3.6 - WMP-GDOM- Al-06	DR_028	2023 Sub Inspections Condensed
DR_028.b	6/3/2024	BV	8.1.3.6 - WMP- GDOM-AI-06 - Substation inspections	6/11/2024	8.1.3.6 - WMP-GDOM- Al-06	DR_028.b	Liberty Response_LIBERTY DR028 -2023 Sub Inspections SAMPLES REQUESTED
DR_029	6/3/2024	C2	8.1.4 - WMP- GDOM-MR-01 - Equipment maintenance and repair	6/6/2024	8.1.4 - WMP- GDOM-MR- 01	DR_029	Liberty Response to Data Request LIBERTY_DR029 - C2
DR_030	5/28/2024	C2	8.1.5 - WMP- GDOM-GO-05 - Asset Management and	NA	8.1.5 - WMP- GDOM-GO- 05	DR_030	We have also completed the following data requests by scheduling the three SME interviews for Monday, 6/3:



Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
			Inspection Enterprise System				DR030 DR046 DR051.b
DR_031	5/28/2024	C2	8.1.8.1 - WMP- GDOM-GO-01 - Equipment settings to reduce wildfire risk	6/3/2024	8.1.8.1 - WMP-GDOM- GO-01	DR_031	Liberty Report_Meyer 3100_Fast Tripping 09-18- 2023 Liberty Report_Meyer 3200_Fast Tripping 09-18- 2023 Liberty Report_Meyer 3500_Fast Tripping 09-17- 2023 Liberty Report_Meyers 3400_Fast Tripping 06-20- 2023 Liberty Report_Tahoe 7300_Fast Tripping 06-04- 2023 Liberty Report_Tahoe City 5201_Fast Tripping 09- 04-2023 Liberty Report_TOPAZ 1261_Fast Tripping 12-28- 2022
DR_032	5/28/2024	C2	8.1.8.1 - WMP- GDOM-GO-04 - Automatic recloser operations	5/30/2024	8.1.8.1 - WMP-GDOM- GO-04	DR_032	Liberty Response to LIBERTY_DR032
DR_033	5/28/2024	C2	8.1.8.2 - WMP- GDOM-GO-02 - Grid response procedures and notifications	5/31/2024	8.1.8.2 - WMP-GDOM- GO-02	DR_033	DR033 Outage Process Flow

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_034	5/28/2024	BV	8.1.8.3 - WMP- GDOM-GO-03 - Personnel work procedures and training in conditions of elevated fire risk	5/30/2024	8.1.8.3 - WMP-GDOM- GO-03	DR_034	DR034 FPP Operating Conditions Liberty Fire Refresher 23
DR_035	5/28/2024	C2	8.2.2.1 - WMP- VM-INSP-01 - Vegetation Management Inspection Program - Detailed	6/3/2024	8.2.2.1 - WMP-VM- INSP-01	DR_035	2023_Q1-Q4_Span_Inspections LU_DetailedInspections_2023.dbf LU_DetailedInspections_2023.prj LU_DetailedInspections_2023.sbn LU_DetailedInspections_2023.sbx LU_DetailedInspections_2023.shp LU_DetailedInspections_2023.shp LU_DetailedInspections_2023.shx
DR_035.1	6/3/2024	C2	8.2.2.1 - WMP- VM-INSP-01 - Vegetation Management Inspection Program - Detailed	6/5/2024	8.2.2.1 - WMP-VM- INSP-01	DR_035.1	DR035.1 Detailed Inspection Records
DR_036	5/28/2024	C2	8.2.2.2 - WMP- VM-INSP-02 - Vegetation Management	5/31/2024	8.2.2.2 - WMP-VM- INSP-02	DR_036	2023_Q1-Q4_Span_Inspections LU_VegetationPatrolInspections_2023.cpg LU_VegetationPatrolInspections_2023.dbf LU_VegetationPatrolInspections_2023.prj LU_VegetationPatrolInspections_2023.sbn

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
			Inspection Program - Patrol				LU_VegetationPatrolInspections_2023.sbx LU_VegetationPatrolInspections_2023.shp LU_VegetationPatrolInspections_2023.shp LU_VegetationPatrolInspections_2023.shx
DR_036.1	6/3/2024	C2	8.2.2.2 - WMP- VM-INSP-02 - Vegetation Management Inspection Program - Patrol	6/5/2024	8.2.2.2 - WMP-VM- INSP-02	DR_036.1	DR036.1 Patrol Inspection Records
DR_037	5/28/2024	C2	8.2.2.3 - WMP- VM-INSP-03 - Vegetation Management Inspection Program - LiDar	5/30/2024	8.2.2.3 - WMP-VM- INSP-03	DR_037	LiDAR Inspections
DR_038	5/28/2024	C2	8.2.3.1 - WMP- VM-VFM-01 - Pole Clearing	5/31/2024	8.2.3.1 - WMP-VM- VFM-01	DR_038	REQUEST_LIBERTY_DR038 - C2 - WMP-VM-VFM-01 RESPONSE_DR_038.1 RESPONSE_DR_038.2
DR_038.1	6/3/2024	C2	8.2.3.1 - WMP- VM-VFM-01 - Pole Clearing	6/5/2024	8.2.3.1 - WMP-VM- VFM-01	DR_038.1	DR038.1 Completed Pole Clearing Report
DR_039	5/28/2024	BV	8.2.3.2 - WMP- VM-VFM-02 - Wood and Slash Management	5/31/2024	8.2.3.2 - WMP-VM- VFM-02	DR_039	DR_039_Biomass_Removed Juniper Hills TFPD-1 Juniper Hills TFPD-2 REQUEST_LIBERTY_DR039 - C2 - WMP-VM-VFM-02 RESPONSE_DR_039

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_040	5/28/2024	C2	8.2.3.3 - WMP- VM-VFM-05 - Clearance	5/31/2024	8.2.3.3 - WMP-VM- VFM-05	DR_040	2023 LiDAR Plan Clearance Work Q1_QDR_VM_Work Complete Q2 QDR Work Complete 2023_Q3_QDR_Work Complete
DR_040	5/28/2024	C2	8.2.3.3 - WMP- VM-VFM-05 - Clearance	6/3/2024	8.2.3.3 - WMP-VM- VFM-05	DR_040	2023 LiDAR Plan Clearance Work 2023_Q3_QDR_Work Complete LU_ClearanceMitigation_2023.cpg LU_ClearanceMitigation_2023.dbf LU_ClearanceMitigation_2023.spn LU_ClearanceMitigation_2023.sbx LU_ClearanceMitigation_2023.shp LU_ClearanceMitigation_2023.shp LU_ClearanceMitigation_2023.shp LU_ClearanceMitigation_2023.shp LU_ClearanceMitigation_2023.shx Q1_QDR_VM_Work Complete Q2 QDR Work Complete
DR_040.1	6/3/2024	C2	8.2.3.3 - WMP- VM-VFM-05 - Clearance	6/5/2024	8.2.3.3 - WMP-VM- VFM-05	DR_040.1	2022 LiDAR TreeTops_Structures_Spans.gdb (ZIP File) DR040 - 2023 Complete Clearance Records
DR_041	5/28/2024	C2	8.2.3.4 - WMP- VM-VFM-06 - Fall- In Mitigation	6/3/2024	8.2.3.4 - WMP-VM- VFM-06	DR_041	2023 Maintenance Plan - Fall In mitigation 2023_Q3_QDR_Work Complete 2023_Q4_VM Work Complete Q1_QDR_VM_Work Complete Q2 QDR Work Complete

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_041	5/28/2024	C2	8.2.3.4 - WMP- VM-VFM-06 - Fall- In Mitigation	6/3/2024	8.2.3.4 - WMP-VM- VFM-06	DR_041	2023 Maintenance Plan - Fall In mitigation 2023_Q3_QDR_Work Complete 2023_Q4_VM Work Complete LU_FallInMitigation_2023.cpg LU_FallInMitigation_2023.dbf LU_FallInMitigation_2023.prj LU_FallInMitigation_2023.sbx LU_FallInMitigation_2023.shp LU_FallInMitigation_2023.shp LU_FallInMitigation_2023.shx Q1_QDR_VM_Work Complete Q2 QDR Work Complete
DR_041.1	6/3/2024	C2	8.2.3.4 - WMP- VM-VFM-06 - Fall- In Mitigation	6/5/2024	8.2.3.4 - WMP-VM- VFM-06	DR_041.1	DR041 - 2023 Completed Fall In Mitigation Records
DR_042	6/3/2024	C2	8.2.3.5 - WMP- VM-VFM-03 - Substation Defensible Space	6/5/2024	8.2.3.5 - WMP-VM- VFM-03	DR_042	Liberty Chem Use Reports June 2023 Liberty Pre-Emergent Application Photos Fall 2023 Liberty Sub Footprints Final.kmz Liberty Utilities Chem Report Pre-Emergent Fall 2023 Pages from Liberty Substations June 2023- Pages from Liberty Substations June 2023-2 Pages from Liberty Substations June 2023-3 Pages from Liberty Substations June 2023-4 Pages from Liberty Substations June 2023-6 Pages from Liberty Substations June 2023-7

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_043	5/28/2024	C2	8.2.3.6 - WMP- VM-VFM-07 - High-Risk Species	5/30/2024	8.2.3.6 - WMP-VM- VFM-07	DR_043	DR043
DR_044	6/3/2024	C2	8.2.3.7 - WMP- VM-VFM-04 - Fire- Resilient Right-of- Ways	6/6/2024	8.2.3.7 - WMP-VM- VFM-04	DR_044	625 Contract Overview 625 FRC Mech 2023 Photos (ZIP File) Attachment B Liberty_Resilience_Corridor_marking_guide_5Apr20 22 Juniper Hills Fuel Management Project SOW Juniper Hills Project Photo Comparison Juniper_Hills_Fuels_Mgmt_Project_Map Juniper_Hills_TFD_Project_2023_Spans T625_Spans_FRC_Mech_Treatment_Spans_2023
DR_045	5/28/2024	C2	8.2.3.8 - WMP- VM-VFM-08 - Emergency Response Vegetation Management	5/30/2024	8.2.3.8 - WMP-VM- VFM-08	DR_045	DR045 VM-02_Vegetation_Management_Plan_1.0 VM-03_Hazard_Tree_Plan_1.0 VM-05.2_Vegetation Threat Procedure VM-07_Vegetation_Inspection_Manual_1.0
DR_046	5/28/2024	C2	8.2.4 - WMP-VM- ESG-01 - Vegetation Management Enterprise System	6/4/2024	8.2.4 - WMP- VM-ESG-01	DR_046	DR046 - Liberty Response We have also completed the following data requests by scheduling the three SME interviews for Monday, 6/3: DR030 DR046 DR051.b

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_047	5/28/2024	C2	8.2.5 - WMP-VM- QAQC-01 - Quality Assurance and Quality Control	5/31/2024	8.2.5 - WMP- VM-QAQC- 01	DR_047	2023 Liberty Work Complete QC Report Example REQUEST_LIBERTY_DR047 - C2 - WMP-VM-QAQC- 01 RESPONSE_DR_047
DR_047.1	6/3/2024	C2	8.2.5 - WMP-VM- QAQC-01 - Quality Assurance and Quality Control	6/4/2024	8.2.5 - WMP- VM-QAQC- 01	DR_047.1	QAQC_Project_Tracking_2023
DR_047.2	6/4/2024	C2	8.2.5 - WMP-VM- QAQC-01 - Quality Assurance and Quality Control	6/5/2024	8.2.5 - WMP- VM-QAQC- 01	DR_047.2	2023_hazard_tree_qc 2023_liberty_inspection_qc 2023_liberty_pole_brushing_qc 2023_liberty_qa_app 2023_liberty_work_complete_qc QA_Span_Inspection_Report_Example QC_Completed_Hazard_Tree_Report_Example QC_Completed_Pole_Clearing_Report_Example QC_Completed_Pruning_Report_Example QC_Completed_Pruning_Report_Example
DR_048	5/28/2024	BV	8.3.2 - WMP-SA- 01 - Environmental monitoring systems	5/31/2024	8.3.2 - WMP- SA-01	DR_048	LU_GIS_Submission_Docs LU_WeatherStationAdditions_2023.cpg LU_WeatherStationAdditions_2023.dbf LU_WeatherStationAdditions_2023.prj LU_WeatherStationAdditions_2023.sbn LU_WeatherStationAdditions_2023.sbx LU_WeatherStationAdditions_2023.shp

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
							LU_WeatherStationAdditions_2023.shp LU_WeatherStationAdditions_2023.shx
DR_048.b	6/3/2024	BV	8.3.2 - WMP-SA- 01 - Environmental monitoring systems	6/11/2024	8.3.2 - WMP- SA-01	DR_048.b	DR048.b
DR_049	5/28/2024	BV	8.3.3 - WMP-SA- 02 - Grid monitoring systems	5/30/2024	8.3.3 - WMP- SA-02	DR_049	Liberty Response - Data Request_DR049 - SA-02 - 8.3.3
DR_050	5/28/2024	BV	8.3.4 - WMP-SA- 03 - Fire detection and alarm systems		8.3.4 - WMP- SA-03	DR_050	DR050
DR_051	5/28/2024	BV	8.3.5 - WMP-SA- 04 - Weather forecasting	5/30/2024	8.3.5 - WMP- SA-04	DR_051	DR051 SFDI Paper
DR_051.b SME	5/30/2024	BV	8.3.5 - WMP-SA- 04 - Weather forecasting	NA	8.3.5 - WMP- SA-04	DR_051.b SME	We have also completed the following data requests by scheduling the three SME interviews for Monday, 6/3: DR030 DR046 DR051.b
DR_052	5/28/2024	BV	8.3.6 - WMP-SA- 05 - Fire Potential Index	5/30/2024	8.3.6 - WMP- SA-05	DR_052	DR051 SFDI Paper



Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_053	5/28/2024	BV	8.4.2 - WMP-EP- 01 - Wildfire and PSPS emergency preparedness plan	5/30/2024	8.4.2 - WMP- EP-01	DR_053	Liberty Response to DR053
DR_054	5/28/2024	BV	8.4.3 - WMP-EP- 02 - Collaboration and coordination with public safety partners	5/30/2024	8.4.3 - WMP- EP-02	DR_054	Corporate Emergency Management Plan Liberty Response to DR054 Liberty Wildland-Fire-Incident Response Guide Final PSPS Playbook_5.19.2023 (1)
DR_055	5/28/2024	BV	8.4.4 - WMP-EP- 03 - Public notification and communication strategy	5/31/2024	8.4.4 - WMP- EP-03	DR_055	2023 Liberty Outreach and Communications Reporting 2023 Wildfire and PSPS Outreach R1812005 Liberty Q3 2023 Quarterly Update to Plan to Address AFN Populations During De-energization Events R1812005-Liberty's 2023 AFN Plan R1812005-Liberty's 2024 AFN Plan R1812005-Liberty's Q1 2023 Plan to Support AFN Populations During De-energization Events R1812005-Liberty's Q2 2023 Quarterly Rpt Plan to Support AFN
DR_056	5/28/2024	BV	8.4.5 - WMP-EP- 04 - Preparedness and planning for service restoration	5/31/2024	8.4.5 - WMP- EP-04	DR_056	2023 Liberty Outreach and Communications Reporting 2023 Wildfire and PSPS Outreach Liberty Public Safety Partner List Liberty Response to DR056

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Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_057	5/28/2024	BV	8.4.6 - WMP-EP- 05 - Customer support in wildfire and PSPS emergencies	5/31/2024	8.4.6 - WMP- EP-05	DR_057	Functional Exercise June 22, 2023 Table Top Exercise May 25, 2023
DR_058	5/28/2024	BV	8.5.2 - WMP-CO- 01 - Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management	5/30/2024	8.5.2 - WMP- CO-01	DR_058	DR058 {B} 230045 - Liberty - Wildfire Messaging Awareness June 2023 Summary Report
DR_059	5/28/2024	BV	8.5.3 - WMP-CO- 03 - Engagement with AFN populations, local governments, and tribal communities	5/31/2024	8.5.3 - WMP- CO-03	DR_059	2023 Liberty Outreach and Communications Reporting 2023 Wildfire and PSPS Outreach R1812005 Liberty Q3 2023 Quarterly Update to Plan to Address AFN Populations During De-energization Events R1812005-Liberty's 2023 AFN Plan R1812005-Liberty's 2024 AFN Plan R1812005-Liberty's Q1 2023 Plan to Support AFN Populations During De-energization Events



Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
							R1812005-Liberty's Q2 2023 Quarterly Rpt Plan to Support AFN
DR_060	5/28/2024	BV	8.5.4 - WMP-CO- 04 - Collaboration on local wildfire mitigation and planning	5/31/2024	8.5.4 - WMP- CO-04	DR_060	2023 Liberty Outreach and Communications Reporting 2023 Wildfire and PSPS Outreach 2023 Wildfire Safety Advisory Board PSPS Workshop Summary
DR_061	5/28/2024	BV	8.5.5 - WMP-CO- 05 - Best practice sharing with other electrical corporations		8.5.5 - WMP- CO-05	DR_061	2023 Wildfire Safety Advisory Board PSPS Workshop Summary Joint IOU CC_Recorded Effectiveness Workstream Liberty Response to DR061 RMWG Conference
DR_062	5/28/2024	BV	- WMP-CO-02 - Public engagement in WMP decision- making process	5/31/2024	WMP-CO-02	DR_062	Liberty Response to DR062
DR_063	5/28/2024	BV	- WMP-EP-06 - Learning after wildfire and PSPS events	5/30/2024	WMP-EP-06	DR_063	Liberty Response to DR063
DR_064	Not used	BV	6.2.2.1 - WMP- SA-06 - Ignition likelihood calculation	NA	6.2.2.1 - WMP-SA-06	DR_064	NA

Liberty Data Req. # Tracking Number	Date Sent	From	Subject	Date Received	Section	Liberty DR No.	File Name
DR_065	6/3/2024	C2	8.2.3.7 - WMP-VM- VFM-04 - Fire- Resilient Right-of- Ways	6/6/2024	8.2.3.7 - WMP-VM- VFM-04	DR_065	Liberty Response to LIBERTY_DR065-C2



#### DATA REQUEST

#### Data Request Number: Liberty\_DR001

Name: Barbara Tomajic WMP Category: Initiative List and Goals Company: BVNA Data Request Date: 05/09/24 Due Date: 05/14/24 Email: barbara.tomajic@bureauveritas.com Phone #: (916)514-4511 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
NA	NA	2023 Wildfire Mitigation Plan	NA	NA		Please provide the Complete Initiative List with Categorization



### DATA REQUEST

#### Data Request Number: Liberty\_DR002

Name: Barbara Tomajic WMP Category: Initiative List and Goals Company: BVNA Data Request Date: 05/09/24 Due Date: 05/14/24 Email: barbara.tomajic@bureauveritas.com Phone #: (916)514-4511 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
NA	NA	2023 Wildfire Mitigation Plan	NA	NA		Please provide the set of documents for the QA/QC program



#### DATA REQUEST

#### Data Request Number: Liberty\_DR002

Name: Barbara Tomajic WMP Category: QA/QC Program Company: BVNA Data Request Date: 06/5/24 Due Date: 06/10/24 Email: barbara.tomajic@bureauveritas.com Phone #: (916)514-4511 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
NA	NA	2023 Wildfire Mitigation Plan	NA	NA		Please provide a SME interview for the QAQC program for clarifications.



### DATA REQUEST

#### Data Request Number: Liberty\_DR003

Name: Barbara Tomajic

WMP Category:

Company: BVNA

Data Request Date: 05/21/24 Due Date: 05/24/24 Email: barbara.tomajic@bureauveritas.com Phone #: (916)514-4511 Preferred Point of Contact: Email

Program Target	I Inite	Sections	Target	Actual	Method	Data Request
NA	NA	2023 Wildfire Mitigation Plan Initiative List	NA		Document Review	Please provide a revised initiative list and include target goals and actual quantities for quantitative initiatives. Please provide this as an Excel spreadsheet format.



#### DATA REQUEST

#### Data Request Number: Liberty\_DR003.b

Name: Barbara Tomajic

WMP Category:

Company: BVNA

Data Request Date: 05/24/24 Due Date: 05/30/24 Email: barbara.tomajic@bureauveritas.com Phone #: (916)514-4511 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
NA	NA	2023 Wildfire Mitigation Plan Initiative List	NA	NA		DR003B Requesting Clarification on Large Initiatives In the DR003 response, Liberty identified that all quantifiable initiatives are shown as field verifiable including small initiatives (See Attached Columns H thru J). Since Liberty has not identified any Large Not Field 2023 initiatives, we are requesting confirmation if some of the Large Field initiatives can be classified as Large Not Field in alignment with previous year's categorizations such as initiative WMP-VM-QAQC-01 Quality Assurance and Quality Control (See Attached Column O for "Proposed IE Categorizations"). Since no designation was separated for Large Volume Quantifiable Field vs Non-Field items, we are requesting confirmation that all Large Items are to be categorized as "Large Volume Quantifiable Goal/Target – Field Verifiable" and that there are no "Large Volume Quantifiable Goal/Target – Not Field Verifiable" initiatives or if the IE categorizations in Column O are acceptable.



### Data Request Number: Liberty\_DR005

Name: Tatiana Friesen WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group Data Request Date: 06/03/2024 Due Date: 6/6/2024

Email: tatianaf@c2group.us

Phone #: (858) 231-1961

Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
• • •	Circuit Miles	8.1.2.1 - WMP- GDOM-GH-01 - Covered conductor installation	5.72	5.65	Documentation	<ol> <li>Please clarify the difference in the annual target for this initiative identified in the WMP Table 8-7, page 162, as approximately 5.85 circuit miles for planned covered conductor projects for 2023 and identified in the QDR Table 1 as 5.72 circuit miles.</li> <li>Please provide the list of locations of the covered conductor, including the circuit name, HFTD designation, length of hardened line, identification if the line was replaced or removed and completion date, and include associated as-builts of completed hardening work.</li> </ol>



#### DATA REQUEST

#### Data Request Number: Liberty\_DR006

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group

#### Data Request Date: 06/03/2024 Due Date: 6/6/2024

Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance	Circuit Miles	8.1.2.2 - WMP- GDOM-GH-02 - Undergrounding of electric lines and/or equipment	1.37	0.12	Documentation	1. Please provide the list of locations of the completed lines and/or equipment, including the circuit name, HFTD designation, length of underground lines, and completion date, and include associated as-builts of completed underground work.



### DATA REQUEST

#### Data Request Number: Liberty\_DR007

Name: Tatiana Friesen

WMP Category: Large Volume Qauntifiable Goal/Target - Field Verifiable Company: C2 Group

Data Request Date: 05/28/2024 Due Date: 05/31/2024 Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance		8.1.2.3 - WMP- GDOM-GH-03 - Distribution pole replacements and reinforcements		292	Documentation	Please provide the pole numbers and the latitude/longitude locations in excel of distribution poles that were replaced per this initiative, including the date of replacement.



#### DATA REQUEST

#### Data Request Number: Liberty\_DR009

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group

#### Data Request Date: 06/03/2024 Due Date: 6/6/2024

Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance		8.1.2.5 - WMP- GDOM-GH-05 - Traditional overhead hardening	4	9.2	Documentation	1. Please provide the list of locations of the system hardened conductor, including the circuit name, HFTD designation, length of hardened line, identification if the line was replaced or removed and completion date, and include associated as-builts of completed hardening work.



### DATA REQUEST

#### Data Request Number: Liberty\_DR\_010

Name: Angie Shook WMP Category: 8.1 Grid Design, Operations, and Maintenance Company: BVNA Data Request Date: 05/28/2024 Due Date: 05/31/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
d. Qualitative Goal/Target	n/a	8.1.2.6 - WMP- GDOM-GH-06 - Emerging grid hardening technology installations and pilot progress	n/a	n/a	Document review	Please provide progress reports on pilot projects, including but not limited to DFA, DA, HIFD, and Resonant Grounding. Additionally, provide data on any new emerging technologies that Liberty is pursuing for pilot projects.



### Data Request Number: Liberty\_DR011

Name: 8.1.2.7 Microgrids WMP Category: Grid Design, Operations and Maintenance Company: BVNA Data Request Date: 05/29/2024 Due Date: 06/03/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small volume quantifiable goal/target	Distribution Miles	8.1.2.7 Microgrids	0.7	TBD		Please provide progress and completion of specific targets related to the microgrid installations project. Please provide any of the documentation listed below for the Microgrid Project project. If no documentation below is available, please provide a written response indicating why documentation is not available. Microgrid Project Documentation: Timeline for the Angora Microgrid Project. Feasibility study reports for the microgrid projects. Progress reports, including milestones achieved to date. Documentation confirming the planned and actual construction of 0.7 miles of distribution line associated with the microgrid project. Details of the technology and infrastructure used in the microgrid to minimize wildfire risk.



#### **DATA REQUEST**

#### Data Request Number: Liberty\_DR012

Name: 8.1.2.8 Installation of System Automation Equipment WMP Category: Grid Design, Operationsm and Maintenance Company: BVNA Data Request Date: 05/29/2024 Due Date: 06/03/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small volume quantifiable goal/target	Reclosers	8.1.2.8 Installation of System Automation Equipment	8	5	Quantitative	Please provide data and documentation specifically related to the installation of 8 automatic reclosers: Excel spreadsheet or PDF Documentation: A summary of the 8 automatic reclosers targeted from 2022 to 2025. Installation dates for each recloser installed in 2023 Specific locations (including GPS coordinates) of each recloser. Associated distribution lines and connected substations. PDF Documentation: Installation or commissioning reports for each recloser installed in 2023.





### Data Request Number: Liberty\_DR013

Name: 8.1.2.9 Line Removal (in HFTD) WMP Category: Grid Design, Operations and Maintenance Company: BVNA Data Request Date: 05/29/2024 Due Date: 06/03/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small volume quantifiable goal/target	Distribution	8.1.2.9 Line Removal (in HFTD)		TBD	Quantitative	Please provide progress and completion of specific targets related to the line removal projects. Please provide any of the documentation listed bleow for the Line removal. If no documentation is available, please provide a written response indicating why documentation is not available. Line Removal and De-Energization: Maps and geographic information system (GIS) data showing the exact locations of the lines removed or de-energized. Confirmation of any completed line removal or de- energization, including before and after photographs, other visual documentation, or reports.



#### DATA REQUEST

#### Data Request Number: Liberty\_DR017

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group

#### Data Request Date: 05/28/2024 Due Date: 05/31/2024

Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design Operations, and Maintenanc	Tree Attachments	8.1.2.12 - WMP- GDOM-GH-12a - Tree attachment removals		37	Documentation	Please provide the latitude/longitude locations in excel where the tree attachments were replaced per this initiative, including the date of removal, and provide any photos and as-builts of the completed removals.



#### DATA REQUEST

#### Data Request Number: Liberty\_DR018

Name: Tatiana Friesen

WMP Category: Large Volume Qauntifiable Goal/Target - Field Verifiable Company: C2 Group

Data Request Date: 05/28/2024 Due Date: 05/31/2024 Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance	Expulsion	8.1.2.12 - WMP- GDOM-GH-12b - Expulsion fuse replacement		4,122	Documentation	Please provide the latitude/longitude locations in excel where expulsion fuses were replaced per this initiative, including the date of replacement.



### DATA REQUEST

#### Data Request Number: Liberty\_DR019

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group Data Request Date: 05/28/2024 Due Date: 05/31/2024

Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance	Animal	8.1.2.12 - WMP- GDOM-GH-12c - Animal guards	4	4	Documentation	Please provide the latitude/longitude locations in excel where the animal guards were installed at the substation per this initiative, including the date of installation, and provide any photos and as-builts of the completed installation.



#### **DATA REQUEST**

### Data Request Number: LIBERTY\_DR\_020

Name: Angie Shook WMP Category: 8.1 Grid Design, Operations, and Maintenance Company: BVNA Data Request Date: 05/28/2024 Due Date: 05/31/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
d. Qualitative Goal/Target	n/a	8.1.2.12 - WMP- GDOM-GH-12d - CalFIRE exempt hardware	n/a	n/a	Document review	Provide updates and any available supporting documents (i.e. approval letters, applications) for CAL FIRE equipment and devices requested, approved or denied for exemption. Include whether exemption is temporary or permanent.



#### DATA REQUEST

### Data Request Number: Liberty\_DR021

Name: 8.1.2.12 Other Technologies and Systems, Open wire/grey wire WMP-GDOM-GH-12e WMP Category: Grid Design, Operations and Maintenance

Company: BVNA

Data Request Date: 05/29/2024 Due Date: 06/03/2024 Email: Phone #: Preferred Point of Contact:

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small volume quantifiable goal/target	Circuit	8.1.2.12 Other Technologies and Systems, Open wire/grey wire WMP- GDOM-GH-12e	2.5	4	Quantitative	Please provide documentation to verify the progress and completion of specific targets related to the replacement of open wire/grey wire within Liberty Utilities' service territory. Provide as many of the following documents as are available. If none of these documents are available, please provide a written response indicating why the information is not available. Documentation requested: Completion dates for each segment of the replacement project. Locations of the 2.5 or more circuit miles of open wire/grey wire replaced in 2023, Coordinates

	and/or GIS Map. Progress reports detailing the number of circuit miles replaced specifically in 2023. Inspection and quality assurance reports verifying that the new service wire meets all required specifications and/or before and after
	specifications and/or before and after photographs or visual documentation of the replaced sections.



### DATA REQUEST

### Data Request Number: Liberty\_DR022

Data Request Date: 05/29/2024 Due Date: 06/03/2024

Name: 8.1.2.12 Other Technologies and Systems, Substation Equipment Replacement
WMP-GDOM-GH-12f
WMP Category: Grid Design, Operationsm and Maintenance
Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small volume quantifiable goal/target	Circuit	8.1.2.12 Other Technologies and Systems, Substation Equipment Replacement WMP-GDOM- GH-12f	2.0	TBD	Quantitative	Please provide documentation to verify the progress and completion of Substation Equipment Replacement within Liberty Utilities' service territory. Provide as many of the following documents as are available. If none of these documents are available, please provide a written response indicating why the information is not available. Documentation requested: Schedule for the substation equipment replacements targeted for 2023. Completion dates for each replacement project. Substation locations where equipment replacements were performed in 2023.

	Before and after photographs or visual documentation of the replaced substation equipment.
	Progress reports detailing the specific equipment replaced in 2023.
	Inspection or quality assurance reports verifying that the new substation equipment meets specifications.



### Data Request Number: Liberty\_DR023

Data Request Date: 05/24/2024 Due Date: 05/30/2024

Name: Andrew Reiwitch WMP Category: Grid Design, Operations, & Maintenance Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Large Volume Quantifiable Goal/Target – Not Field Verifiable	Inspections	8.1.3.1 - WMP- GDOM-AI-01 - Detailed inspections of distribution electric lines and equipment	40	181		Please provide list of 181 distribution line, transmission line and equipment inspection reports (referenced in WMP Targets 8.1.1.2, Tables 8-3, 8-4, 8-8 and 8-9 as outlined in Section 8.1.3.1) available for review in excel format with threat district, risk area, and utility region provided for each report line.



### Data Request Number: Liberty\_DR023b

Data Request Date: 05/30/2024 Due Date: 06/04/2024

Name: Andrew Reiwitch WMP Category: Grid Design, Operations, & Maintenance Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Large Volume Quantifiable Goal/Target – Not Field Verifiable	Inspections	8.1.3.1 - WMP- GDOM-AI-01 - Detailed inspections of distribution electric lines and equipment	40	181	Document Review	Please provide the 33 Detailed inspection reports [(8) in HFTD Tier 2, (25) in HFTD Tier 3] of distribution electric lines and equipment identified in the attachment spreadsheet file named "LIBERTY - Data Request_DR_023-B - Attach - WMP- GDOM-AI-01" as individual PDF documents for review including all pictures coordinated with each separate inspection.



### Data Request Number: Liberty\_DR023c

Name: Andrew Reiwitch WMP Category: Grid Design, Operations, & Maintenance Company: BVNA

Data Request Date: 06/5/2024 Due Date: 06/10/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
Large Volume Quantifiable Goal/Target – Not Field Verifiable	Inspections	8.1.3.1 - WMP- GDOM-AI-01 - Detailed inspections of distribution electric lines and equipment	40	181	Document Review	In response duplication error in the sampling of 33 and only 32 were provded, please provide (1) additional detailed inspection report of distribution electric lines and equipment identified in the attachment highlighted in yellow on the spreadsheet file named "LIBERTY - Data Request_DR_023-C - Attach - WMP- GDOM-AI-01" as individual PDF document for review including all pictures coordinated with the inspection.



#### **DATA REQUEST**

### Data Request Number: LIBERTY\_DR\_025

Name: Angie Shook WMP Category: 8.1 Grid Design, Operations, and Maintenance Company: BVNA Data Request Date: 05/28/2024 Due Date: 05/31/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
b. Large Volume Quantifiable Goal/Target – Not Field Verifiable	Circuit miles	8.1.3.3 - WMP- GDOM-AI-03 - Patrol inspections of distribution electric lines and equipment	702	702	Patrol	Please provide documentation to support of a minimum of 29 miles of patrol inspections. Documentation should include dated dispatched route, and reports of noted hazards discovered during patrol.



#### DATA REQUEST

#### Data Request Number: Liberty\_DR026

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group

#### Data Request Date: 06/03/2024 Due Date: 6/6/2024

Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance		8.1.3.4 - WMP- GDOM-AI-04 - Other discretionary inspections of distribution electric lines and equipment	TBD	0.1	Documentation	1. Please provide the latitude and longitude locations of Liberty structures that represent the start and stop sections of the completed discretionary inspections of distribution lines and equipment, including the equipment inspected, the type of inspection (e.g., LiDAR, infrared, drone), miles completed, and inspection completion date.



#### DATA REQUEST

#### Data Request Number: Liberty\_DR027

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group

#### Data Request Date: 06/03/2024 Due Date: 6/6/2024

Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Operations,	% of Detailed Inspections	accuranco /	0.01	12	Documentation	1. Please provide the latitude and longitude of the area of Liberty structures that represent the start and stop sections of the completed QA/QC of inspections, including a description of the type of work audited, the audit completion date, the completed audit inspection reports, findings, and photos.





## DATA REQUEST

## Data Request Number: LIBERTY\_DR\_028

Name: Angie Shook WMP Category: 8.1 Grid Design, Operations, and Maintenance Company: BVNA Data Request Date: 05/28/2024 Due Date: 05/31/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small (less than 100 items) Volume Quantifiable Goal/Target	# of Substations	8.1.3.6 Substation inspections	42	44	Detailed	Please provide inspection reports for substation inspections completed in 2023.



### **DATA REQUEST**

## Data Request Number: LIBERTY\_DR\_028.b

Name: Angie Shook WMP Category: 8.1 Grid Design, Operations, and Maintenance Company: BVNA Data Request Date: 06/03/2024 Due Date: 06/06/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small (less than 100 items) Volume Quantifiable Goal/Target	# of Substations	8.1.3.6 - AI-06 - Substation inspections	42	44	Detailed	Provide 23 QDRs/detailed individual inspection reports for substation inspections completed in 2023 as listed in attachment LIBERTY DR028- 2023 Sub Station Inspections Samples Requested.



## DATA REQUEST

#### Data Request Number: Liberty\_DR029

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group Data Request Date: 06/03/2024 Due Date: 6/6/2024 Email: tatianaf@c2group.us

Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance	N/A	8.1.4 - WMP- GDOM-MR-01 - Equipment maintenance and repair	N/A	N/A	Documentation	As shown in the 2023_Q4_Tables115_R0 shows no units, annual targets, or actuals for initiative WMP-GDOM-MR-01. Supplemental Table 11 per Liberty_2023_Q4_Table11_Supplemental indicates there is Capex spend for this initiative: 1. Please provide the annual targets and actuals completed for WMP-GDOM-MR-01. 2. Please provide the list of locations where equipment repair and maintenance were performed, including the equipment requiring maintenance or repair, miles completed, descriptions of work performed, and date of equipment maintenance or repair.



#### Data Request Number: Liberty\_DR030

Name: Tatiana Friesen WMP Category: Qualitative Goal/Target Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance	N/A	8.1.5 - WMP- GDOM-GO-05 - Asset Management and Inspection Enterprise System	N/A	N/A	SME Interview	Please schedule a SME interview for a live demonstration of the Asset Management and Inspection Enterprise System, as described in Section 8.1.5 of the 2023 WMP to review the SQL database and Fulcrum database connection, Python and SQL scripts used to maintain the schemas and to supplement QDR.



#### Data Request Number: Liberty\_DR031

Name: Tatiana Friesen WMP Category: Qualitative Goal/Target Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance	N/A	8.1.8.1 - WMP- GDOM-GO-01 - Equipment settings to reduce wildfire risk	-	N/A	Documentation or SME Interview	Please provide documentation of the expanded collaborative research with UNR and the 12 additional feeders and associated devices included in the Fast Trip program completed in 2023. If detailed documentation is not available or easily transmittable, please schedule a SME interview to review and discuss the progress on this initiative.



#### Data Request Number: Liberty\_DR032

Name: Tatiana Friesen WMP Category: Qualitative Goal/Target Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance	N/A	8.1.8.1 - WMP- GDOM-GO-04 - Automatic recloser operations	N/A	N/A	Documentation	Per the 2023 WMP dated May 19, 2023, and the 2023 WMP Dated February 15, 2024, the initiative WMP-GDOM-GO-04 has no activity description. In the 2023 ARC Report Dated March 29, 2024, WMP-GDOM-GO-04 is shown with zero costs associated with this initiative. Please provide clarification if this initiative was performed in 2023, and if so, please provide the initiative description activity and supporting documentation of the activity in 2023.





## DATA REQUEST

#### Data Request Number: Liberty\_DR033

Name: Tatiana Friesen WMP Category: Qualitative Goal/Target Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Grid Design, Operations, and Maintenance	N/A	8.1.8.2 - WMP- GDOM-GO-02 - Grid response procedures and notifications	N/A	N/A	Documentation	Please provide documentation samples (process flows, call logs, system screenshots) of the customer calls indicating an outage or witnessing an abnormal event, the process for reviewing and prioritizing grid response, samples of the calls to System Control to quickly de- energize a circuit, and dispatch operations tracking of personnel in the field.



### **DATA REQUEST**

## Data Request Number: LIBERTY\_DR\_034

Name: Angie Shook WMP Category: 8.1 Grid Design, Operations, and Maintenance Company: BVNA Data Request Date: 05/28/2024 Due Date: 05/31/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
d. Qualitative Goal/Target	n/a	8.1.8.3 - WMP- GDOM-GO-03 - Personnel work procedures and training in conditions of elevated fire risk	n/a	In/a	Document review	Provide FPI Operating Conditions policy. Provide documentation to show that employees, contractors, and consultants who conduct activities in the wildland areas of the service territory received Operating Conditions training in 2023. Provide documentation of training received. Provide documentation of any implementations of the FPI Operating policy.



## DATA REQUEST

#### Data Request Number: Liberty\_DR035

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Line	8.2.2.1 - WMP- VM-INSP-01 - Vegetation Management Inspection Program - Detailed	220	236	Documentation	Please provide the latitude and longitude locations of Liberty structures that represent the start and stop sections of the completed detailed inspections of distribution lines and equipment, including the equipment inspected, miles completed, and inspection completion date.



Data Request Number: Liberty\_DR035.1

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Progra Targe		nits	Sections	Target	Actual	Method	Data Request
Vegetatio Managem & Inspect	nent Mile	e es	8.2.2.1 - WMP- VM-INSP-01 - Vegetation Management Inspection Program - Detailed	220	236	Documentation	Please provide the documentation (Photos, Reports, Asbuilts) for completed Detailed Vegetation Management Inspections per attachment labeled "Liberty DRU_035.1 Sample - 2023_Q1- Q4_Span_Inspections."





#### Data Request Number: Liberty\_DR036

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Line Miles	8.2.2.2 - WMP- VM-INSP-02 - Vegetation Management Inspection Program - Patrol	-	78	Documentation	Please provide the latitude and longitude locations of Liberty structures that represent the start and stop sections of the completed Patrol inspections of distribution lines and equipment, including the equipment inspected, miles completed, and inspection completion date.



## DATA REQUEST

#### Data Request Number: Liberty\_DR036.1

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Line Miles	8.2.2.2 - WMP- VM-INSP-02 - Vegetation Management Inspection Program - Patrol	-	78	Documentation	Please provide the documentation (Photos, Reports, Asbuilts) for completed Patrol Vegetation Management Inspections per attachment labeled "Liberty DRU_036.1 Sample - 2023_Q1- Q4_Span_Inspections."



#### Data Request Number: Liberty\_DR037

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Line Miles	8.2.2.3 - WMP- VM-INSP-03 - Vegetation Management Inspection Program - LiDar	700	707	Documentation	Please provide the latitude and longitude locations of the Liberty structures that represent the start and stop sections of the LiDAR inspections, line miles completed by circuit, and the dates of the completed inspections.



#### Data Request Number: Liberty\_DR038

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Poles	8.2.3.1 - WMP- VM-VFM-01 - Pole Clearing	4,900	4,957	Documentation	<ol> <li>Please provide the latitude and longitude Poles with completed pole clearing activies and the date of the pole clearing.</li> <li>The 2023_Q4_Tables115_R0 for pole clearing was identified as 4,900 Annual Targets. However, in the 2023 WMP Dated May 19, 2023 and 2023 WMP dated February 15, 2024, the annual target was identified as 4,960. Please confirm the 2023 WMP Annual Target for this initiative.</li> </ol>



## DATA REQUEST

#### Data Request Number: Liberty\_DR038.1

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Poles	8.2.3.1 - WMP- VM-VFM-01 - Pole Clearing	4,900	4,957	Documentation	Please provide the documentation (Photos, Reports) for completed Pole Clearing per attachment labeled "Liberty DRU_038.1 Sample - RESPONSE_DR_038.1."



## Data Request Number: Liberty\_DR039

Data Request Date: 05/28/24 Due Date: 05/31/24

Name: Trampas Shook WMP Category: Vegetation Management and inspections Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Large Volume Quantifiable/Field Verifiable	Sample size 29	VFM-02 8.2.3.2 Woodland slash management	280000 acres	625,400 acres	Document Review	Please provide all supporting job tags/completion. Inspections forms/available pictures etc for the woodland slash management. Please include dates of work order and any supporting documentation for review.



#### Data Request Number: Liberty\_DR040

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Line Miles	8.2.3.3 - WMP- VM-VFM-05 - Clearance	670.8	707	Documentation	Please provide the latitude and longitude locations of Liberty structures that represent the start and stop sections of the completed vegetation management around lines and equipment, including the equipment inspected, miles completed, describe clearing completed, and date of clearing completed for 2.4 kV, 12 kV to 25 kV, and 60 kV or greater lines/equipment.



#### Data Request Number: Liberty\_DR040.1

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Milos	8.2.3.3 - WMP-VM- VFM-05 - Clearance	670.8	707	Documentation	<ol> <li>Per the DR040 Supplemental data response, the total completed circuit miles is shown as 542.7 per the LU_ClearanceMitigation_2023.shp file received (See attachment labeled "Liberty DR040.1 ClearanceMitigation_2023 Extract Total Circuit Miles"). Per DR003 Response, the actuals were indicated to be 707 Line Miles. Please provide a conversion file showing the total 707 line miles completed, similar to the shape file provided in circuit miles.</li> <li>Please provide the documentation (Photos, Reports) for the completed Vegetation Clearance per the attachment labeled "Liberty DR040.1 Sample _ClearanceMitigation_2023 Extract."</li> </ol>





#### Data Request Number: Liberty\_DR041

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Line Miles	8.2.3.4 - WMP- VM-VFM-06 - Fall-In Mitigation	220	313	Documentation	Please provide the latitude and longitude locations of Liberty structures that represent the start and stop sections of the tree assessments completed, including the level of assessment (1 or 2), miles completed, work priority conditions identified, and mitigation actions completed (tree removal, facility protect, monitoring).



#### Data Request Number: Liberty\_DR041.1

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Line Miles	8.2.3.4 - WMP-VM- VFM-06 - Fall-In Mitigation	220	313	Documentation	<ol> <li>Per the DR041 Supplemental data response, the total completed circuit miles is shown as 314.7 per the LU_FallInMitigation_2023.shp file received (See attachment labeled "Liberty DR041.1 _LU_FallInMitigation_2023 Extract Total Circuit Miles"). Per DR003, the actuals were indicated to be 313 Line Miles. Please provide a conversion file showing the total 313 line miles completed, similar to the shape file provided in circuit miles.</li> <li>Please provide the documentation (Photos, Reports) for the completed Vegetation Fall-in Mitigation per the attachment labeled "Liberty DR041.1 Sample _LU_FallInMitigation_2023 Extract."</li> </ol>



### DATA REQUEST

#### Data Request Number: Liberty\_DR042

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group

#### Data Request Date: 06/03/2024 Due Date: 6/6/2024

Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Substation Treatments	8.2.3.5 - WMP- VM-VFM-03 - Substation Defensible Space		22	Documentation	1. Please provide the latitude/longitude locations of substations where defensible space inspections, vegetation management, and other maintenance activities were performed, copies of inspection records, detailed evidence of the control method used at each substation (manual, mechanical, chemical) and a record of completion.



## Data Request Number: Liberty\_DR043

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	N/A	8.2.3.6 - WMP- VM-VFM- 07 - High- Risk Species	N/A	N/A	Documentation	As noted in the 2023 WMP in Section 8.2.3.6 High-Risk Species, "Liberty's methodology of addressing high-risk species does not differ from that described in Initiative 8.2.3.4 Fall-in Mitigation." The 2023_Q4_Tables115_R0 shows no units, annual targets, or actuals for initiative WMP-VM-VFM-07. 1. Please confirm if WMP-VM-VFM-07 completed work is within WMP-VM-VFM-06 initiative. 2. If WMP-VM-VFM-06 initiative. 2. If WMP-VM-VFM-06, please provide the units, 2023 annual target, and 2023 actual targets for WMP-VM-VFM-07. Please also provide the latitude and longitude locations of Liberty structures that represent the start and stop sections of the tree assessments completed, including the level of assessment (1 or 2), miles completed, work priority conditions identified, and mitigation actions completed (tree removal, facility protect, monitoring).



### DATA REQUEST

#### Data Request Number: Liberty\_DR044

Name: Tatiana Friesen

WMP Category: Small (less than 100 items) Volume Quantifiable Goal/Target Company: C2 Group

#### Data Request Date: 06/03/2024 Due Date: 6/6/2024

Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	Line Miles	8.2.3.7 - WMP- VM-VFM-04 - Fire-Resilient Right-of-Ways		13.7	Documentation	<ol> <li>Please provide the list of locations of the enhanced right-of-way maintenance projects, including the circuit name, HFTD designation, length of line, detailed evidence of maintenance activities, and completion date.</li> </ol>



#### Data Request Number: Liberty\_DR045

Name: Tatiana Friesen WMP Category: Qualitative Goal/Target Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	N/A	8.2.3.8 - WMP- VM-VFM-08 - Emergency Response Vegetation Management	N/A	N/A	Documentation	Please provide samples of the patrol reports conducted in advance of fire weather and post-fire event inspections consisting of Level 1 and Level 2 assessments per ANSI A300 Part 9. Please also provide PDF copies of the Vegetation Management Plan (VM-02), Hazard Tree Management Plan (VM-03), Vegetation Threats Procedure (VM-05), and Vegetation Management Inspection Manual (VM-07).



#### Data Request Number: Liberty\_DR046

Name: Tatiana Friesen WMP Category: Qualitative Goal/Target Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections	N/A	8.2.4 - WMP-VM- ESG-01 - Vegetation Management Enterprise System	N/A	N/A		Please schedule a SME interview for a live demonstration of the Vegetation Management Enterprise System, as described in Section 8.2.4 of the 2023 WMP, to review the integration of the tree inventories and asset information derived from LiDAR inspections and enterprise GIS data and the attribute fields (location data, vegetation data, work order data).



#### Data Request Number: Liberty\_DR047

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections		8.2.5 - WMP-VM- QAQC-01 - Quality Assurance and Quality Control		299.7	Documentation	Please provide the latitude and longitude of the area of Liberty structures that represent the start and stop sections of the completed vegetation QAQC, including a description of the type of work audited (Activity, Category, Type of Review), the audit completion date, the completed audit inspection reports, findings, and photos.



## DATA REQUEST

#### Data Request Number: Liberty\_DR047.1

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Management & Inspections		8.2.5 - WMP-VM- QAQC-01 - Quality Assurance and Quality Control		299.7	Documentation	As discussed during the SME interview call on 06/03/24, please provide the corresponding "QAQC Project Tracker" that indicates the completed line miles to the qaqc work orders completed.



## DATA REQUEST

#### Data Request Number: Liberty\_DR047.2

Name: Tatiana Friesen WMP Category: Large Volume Company: C2 Group

Program Target	Units	Sections	Target	Actual	Method	Data Request
Vegetation Manageme & Inspectio	nt Line Miles	8.2.5 - WMP-VM- QAQC-01 - Quality Assurance and Quality Control		299.7	Documentation	Please provide the documentation records (photos, reports) for the completed vegetation QAQC per the attachment labeled "Liberty_DR047.2 Sample _ QAQC_Project_Tracking_2023."



## Data Request Number: Liberty\_DR\_048

Data Request Date: 05/28/2024 Due Date: 05/31/2024

Name: Angie Shook WMP Category: 8.3 Situational Awareness & Forecasting Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small (less than 100 items) Volume Quantifiable Goal/Target	Weather stations	8.3.2 - WMP-SA- 01 - Environmental monitoring systems	5	5	Document review	Please provide data for the 5 weather station installations targeted for 2023. Data may be in the form of a field verification report or QDR.



## Data Request Number: Liberty\_DR\_048.b

Name: Angie Shook WMP Category: 8.3 Situational Awareness & Forecasting Company: BVNA Data Request Date: 06/03/2024 Due Date: 06/06/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small (less than 100 items) Volume Quantifiable Goal/Target	Weather	8.3.2 - WMP-SA- 01 - Environmental monitoring systems	5	5	Document review	Please provide pdf format reports confirming completion and/or commissioning for each of the 5 weather station installations targeted for 2023.



## Data Request Number: Liberty\_DR\_049

Data Request Date: 05/28/2024 Due Date: 05/31/2024

Name: Angie Shook WMP Category:8.3 Situational Awareness & Forecasting Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small (less than 100 items) Volume Quantifiable Goal/Target	Circuits with Fault	8.3.3 - WMP-SA- 02 - Grid Monitoring Systems	10	0	Documents	Please provide reports for any new fault indicators installed in 2023 or document stating that none were installed.



## Data Request Number: Liberty\_DR\_050

Name: Angie Shook WMP Category: 8.3 Situational Awareness & Forecasting Company: BVNA Data Request Date: 05/28/2024 Due Date: 05/31/2024

Program Target	Units	Sections	Target	Actual	Method	Data Request
Small (less than 100 items) Volume Quantifiable Goal/Target	Camera installations	8.3.4 - WMP-SA- 03 - Fire detection and alarm systems	8	unknown	Document review	Please provide invoices and QDRs for Alert Wildfire camera installations proposed for 2023. Documentation should include location, date installed and methodology for the integration of new ignition detection cameras, as well as monitoring program information.



## Data Request Number: Liberty\_DR051

Name: Trampas Shook WMP Category: Situational Awareness Company: BVNA Data Request Date: 05/28/24 Due Date: 05/31/24

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative/ Goal / Target	NA	SA-04 8.3.5 - Weather Forecasting	NA	NA	Document Boview	SA-04 Provide All information on Weather forecasting and situational awareness program. Please include all Communities targeted and Information used.





Data Request Number: Liberty DR051.b SME

Name: Trampas Shook

WMP Category: Situational Awareness SA-04 Company: BVNA Data Request Date: 05/30/24 Due Date: 06/04/24

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative/ Goal / Target	NA	8.3.5- Weather Forecasting	NA	NA	SME Interview	SA-04 Please make available a time for teams meeting with Weather forecasting SME to walk through the program and process for Weather forecasting and how it works with Liberty WMP initiative 8.3.5



### Data Request Number: Liberty DR052

Name: Trampas Shook WMP Category: Situational Awareness Company: BVNA Data Request Date: 05/28/24 Due Date: 5/31/24

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative/ Goal / Target	NA	SA-05 8.3.6 - Situational Awareness & Forecasting	NA	NA	Document Review	Provide all information on potenential forcasting and situational awareness progrom. Please include all communities targeted and information used.





## Data Request Number: Liberty DR053

Name: Trampas Shook WMP Category: Emergency Preparedness Company: BVNA Data Request Date: 05/28/24 Due Date: 05/31/24

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative Goal/Target	land	8.4.2- EP-01 PSPS	NA	NA	Document Review	Provide documentation for EP-01 PSPS emergencies. Please include geographic location shown, and if outreach was completed. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.)



#### Data Request Number: Liberty DR054

Name: Trampas Shook WMP Category: Emergency Preparedness Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative Goal/Target	•	8.4.3- EP-02 Wildfire and PSPS Emergency Preparedness plan	NA	NA	Document Review	Provide documentation for EP-02 PSPS and wildfire emergency plan. please include geographic location shown, and if outreach was completed. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.)



### Data Request Number: Liberty DR055

Name: Trampas Shook WMP Category: Emergency Preparedness Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative	outreach and	8.4.4- EP-03 Public notification and communication strategy	NA	NA	Document Review	Provide tabular list of communities that were targeted per WMP section 8.4.4 public notification and communication strategy please include geographic location shown, and if outreach was completed. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.



#### Data Request Number: Liberty DR056

Name: Trampas Shook WMP Category: Emergency Preparedness Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative	outreach	8.4.5- EP-04 Collaboration and coordination with public safety partners		NA	Document Review	Provide documentation for EP-04 - collaboration and coordination with public safety partners. please include partner list and supportive documentation in regards to collaboration and coordination with all public safety partners, and if outreach was completed and by what means web, in person, training. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.)





#### Data Request Number: Liberty DR057

Name: Trampas Shook WMP Category: Emergency Preparedness Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative	•	8.4.6- EP-05 Customer suport in wildfire and PSPS emergencies	NA	NA	Document Review	Provide tabular list of communities that were targeted per WMP section 8.4.6 customer support during wildfire and PSPS emergencies. please include geographic location shown, and if outreach was completed. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.



#### Data Request Number: Liberty DR058

Name: Trampas Shook WMP Category: Community Outreach Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative Goal/Target	land	8.5.2 WMP CO- 01, Public outreach and educations awareness for wildfires, PSPS	NA	NA	Document Review	Provide documentation for CO-01 Wildfire and PSPS events and outages from protective equipment for Public Outreach. Include means of communication and communities targeted and if outreach was completed. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.





#### Data Request Number: Liberty DR059

Name: Trampas Shook WMP Category: Community Outreach Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative	# of public outreach and education events	8.5.3 WMP CO- 03 Engagement with AFN populations, local governments, and tribal communities.	NA	NA	Document Review	Provide documentation for CO-03 Engagement with AFN, local governments, and tribal communities. Include means of communication and supporting documentation to show means of engagement and list of areas targeted. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.



#### Data Request Number: Liberty DR060

Name: Trampas Shook WMP Category: Community Outreach Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative Goal/Target	outreach and education	8.5.4 WMP CO- 04 Collaboration on local wildfire mitigation and planning	NA	NA	Document Review	Provide documentation for CO-04 - Collaboration on local wildfire mitigation and planning. Include means of communication and supporting documentation to show means of engagement and list of areas targeted. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.



Data Request Number: Liberty DR061

Name: Trampas Shook WMP Category: Community Outreach Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative	and	8.5.5 WMP CO- 05, Best practice sharing with other EC's	NA	NA	Document Review	Provide documentation for CO-05 Best practice sharing with other electric companies. Include means of communication and what means used to communicate best practice. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.



Data Request Number: Liberty DR062

Name: Trampas Shook WMP Category: Community Outreach Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative	# of public outreach and education events	8.5 WMP CO-02 Public engagement in WMP decision making process	NA	NA	Document Review	Provide documentation for CO-02. Public Engagement in WMP decision making process. Include means of communication and supporting documentation to show means of engagement and list of areas targeted. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.



Data Request Number: Liberty DR063

Name: Trampas Shook WMP Category: Emergency Preparedness Company: BVNA

Program Target	Units	Sections	Target	Actual	Method	Data Request
Qualitative Goal/Target	outreach	8.4 EP-06 Learning after wildfire and PSPS events	NA	NA	Document Review	DR1. Provide documentation for EP-06 Learning after Wildfire and PSPS events. Provide pre and post season analystist . Please include partner list and supportive documentaion in regards to learning after wildfire and PSPS events, and if outreach was completed. This can include a list of targets and completion for each survey, and may be supported by digital correspondences where available.



#### Data Request Number: Liberty\_DR065

Name: Tatiana Friesen WMP Category: Verification of Funding Company: C2 Group Data Request Date: 06/03/2024 Due Date: 6/6/2024 Email: tatianaf@c2group.us Phone #: (858) 231-1961 Preferred Point of Contact: Email

Program Target	Units	Sections	Target	Actual	Method	Data Request
Verification of Funding	N/A	All WMP Initiatives	N/A	N/A	Document	IE is requesting additional information from Liberty for the initiatives listed below and shown in the attached document named: Liberty - Data Request LIBERTY_DR065_Attach - C2. 1. IE is requesting further clarification and a more detailed explanation for the following initiatives, which show the Expense Actual and Capital Actual being less than 100 percent of the planned budget and a reference to a specific initiative number and name where the costs were captured. The explanation shown in the ANNUAL REPORT ON COMPLIANCE dated March 29, 2024, under the "Explanation of Differential (variance greater than 20%)" column was not clear. Please note that a separate explanation is requested for Expense underspend and Capital understand.

						<ul> <li>WMP-GDOM-AI-04: Other discretionary inspections of distribution electric lines and equipment</li> <li>WMP-GDOM-AI-05: Quality assurance / quality control of inspections</li> <li>WMP-GDOM-AI-06: Substation inspections</li> <li>WMP-GDOM-MR-01: Equipment maintenance and repair</li> <li>WMP-GDOM-GO-03: Personnel work procedures and training in conditions of elevated fire risk</li> <li>WMP-EP-04: Preparedness and planning for service restoration</li> </ul>
Verification of Funding	N/A	All WMP Initiatives	N/A	N/A	Document	IE is requesting additional information from Liberty for the initiatives listed below and shown in the attached document named: Liberty - Data Request LIBERTY_DR065_Attach - C2. 2. IE is requesting a detailed explanation for the following initiatives, which show the Expense Actual and Capital Actual spending being less than 100 percent of the planned budget. Please note that a separate explanation is requested for Expense underspend and Capital understand. - WMP-GDOM-GH-05: Traditional overhead hardening - WMP-VM-VFM-01: Pole Clearing - WMP-VM-ESG-01: Vegetation Management Enterprise System - WMP-CO-01: Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management

Item No.	2022 WMP Activities	Initiative Category	Initiative Name	SME Name, Title	Interview Date	Summary
1	Grid Design, Operations and Maintenance	8.1.5-WMP- GDOM-GO-05	Asset Management and Inspection Enterprise System	Kyle Wright; Data Analytics, Assets	06/03/24	Liberty provided a demonstration of the asset management and inspection enterprise system including architectural diagrams of the data pipelines identifying the process from data collection through transformation and storage to reporting. Liberty provided detail on the components that make up the enterprise system including Fulcrum for data collection and storage, python and SQL scripts used for the ETL pipeline to a SQL database, and PowerBI used for dashboards. A live demonstration was provided of the asset management and inspection enterprise system showing how data was represented in each part of the process. The presentation demonstrated the input for asset management and inspections into aa consolidated system for retrieval and reporting.

# Appendix D – SME Interview Summary

2	Vegetation Management & Inspections	8.2.4 - W-P-VM- ESG-01	Vegetation Management Enterprise System	Peter Stoltman; Senior Manager, Wildfire Prevention Eric Oiler; Manager, Vegetation Management	06/03/24	Liberty provided a live demonstration of the Vegetation management enterprise system. The vegetation management data pipeline was described beginning with LiDAR data capture by a vendor, analysis of the LiDAR data by liberty, upload of findings into FieldNote app, and creation of work orders. Screen share of the FieldNote app with vegetation management data elaborated on the visualization of the vegetation management findings from LiDAR data capture, work management process, and storage of vegetation management photos.
3	Situational Awareness and Forecasting	8.3.5 - SA-04	Weather Forecasting	Peter Stoltman; Senior Manager, Wildfire Prevention Chris Lautenberger, Vendor Consultant	06/03/24	Based on DR051.b - Weather Forecasting Situational Awareness Overview Chris presented the dashboard platform of the Fire Potential Index showing weather models and fire potentials, discussing how data monitoring, weather stations. Peter discussed PSPS notifications and processes.
4	QA/QC Programs	NA	QA/QC Programs	Peter Stoltman; Senior Manager, Wildfire Prevention Bob Novembri; Blaine Ladd;	06/07/24	Based on DR002.b - Overview of the QA/QC program response received. Bob's role is for the QA sampling of assets and was presented and explained; Blaine has an engineering role in the process; Kyle Wright handles the data analytics for assets

		Kyle Wright; Data Analytics, Assets	and reviewed the process of the interaction with Fulcrum.

Initiative Category	2023 Initiative Number	Initiative Name	2023 O&M Planned	2023 O&M Actual	2023 O&M Variance	2023 O&M Change (%)	-	2023 Cap. Actual	2023 Cap. Variance	2023 Cap. Change (%)		2023 Total Actual	2023 Total Change (%)
Grid Design, Operations, and Maintenance	WMP-GDOM-AI- 01	Detailed inspections of distribution electric lines and equipment	\$20	\$59	\$39	194%	\$0	\$0	\$0		\$20	\$59	\$39
Grid Design, Operations, and Maintenance	WMP-GDOM-AI- 02	Intrusive pole inspections	\$0	\$209	\$209		\$0	\$0	\$0		\$0	\$209	\$209
Grid Design, Operations, and Maintenance	WMP-GDOM-AI- 03	Patrol inspections of distribution electric lines and equipment	\$15	\$0	-\$15	-100%	\$0	\$0	\$0		\$15	\$0	-\$15
Grid Design, Operations, and Maintenance	WMP-GDOM-AI- 04	Other discretionary inspections of distribution electric lines and equipment	\$1,000	\$85	-\$915	-92%	\$0	\$0	\$0		\$1,000	\$85	-\$915
Grid Design, Operations, and Maintenance	WMP-GDOM-AI- 05	Quality assurance / quality control of inspections	\$10	\$0	-\$10	-100%	\$0	\$0	\$0		\$10	\$0	-\$10
Grid Design, Operations, and Maintenance	WMP-GDOM-AI- 06	Substation inspections	\$10	\$0	-\$10	-100%	\$0	\$0	\$0		\$10	\$0	-\$10
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-01	Covered conductor installation	\$0	\$0	\$0		\$3,285	\$10,788	\$7,503	228%	\$3,285	\$10,788	\$7,503
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-02	Undergrounding of electric lines and/or equipment	\$0	\$0	\$0		\$7,693	\$171	-\$7,522	-98%	\$7,693	\$171	-\$7,522
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-03	Distribution pole replacements and reinforcements	\$0	\$0	\$0		\$10,970	\$16,592	\$5,622	51%	\$10,970	\$16,592	\$5,622
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-04	Transmission pole/tower replacements and reinforcements	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-05	Traditional overhead hardening	\$0	\$0	\$0		\$4,962	\$4,228	-\$734	-15%	\$4,962	\$4,228	-\$734
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-06	Emerging grid hardening technology installations and pilot progress	\$0	\$5	\$5		\$150	\$0	-\$150	-100%	\$150	\$5	-\$145
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-07	Microgrids	\$0	\$42	\$42		\$0	\$116	\$116	,	\$0	\$158	\$158
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-08	Installation of system automation equipment	\$0	\$0	\$0		\$1,200	\$1,512	\$312	26%	\$1,200	\$1,512	\$312
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-09	Line removal (in HFTD)	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-10	Other grid topology improvements to minimize risk of ignitions	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0

# Appendix E – 2023 WMP Funding Verification Summary

Initiative Category	2023 Initiative Number	Initiative Name	2023 O&M Planned	2023 O&M Actual	2023 O&M Variance	2023 O&M Change (%)		2023 Cap. Actual	2023 Cap. Variance	2023 Cap. Change (%)	2023 Total Planned	2023 Total Actual	2023 Total Change (%)
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-11	Other grid topology improvements to mitigate or reduce PSPS events	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-12	Other technologies and systems not listed above:	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-12a	Tree attachment removals	\$0	\$0	\$0		\$701	\$899	\$198	28%	\$701	\$899	\$198
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-12b	Expulsion fuse replacement	\$0	\$0	\$0		\$0	\$6,338	\$6,338		\$0	\$6,338	\$6,338
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-12c	Animal guards / Avian Protection	\$0	\$0	\$0		\$40	\$263	\$223	556%	\$40	\$263	\$223
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-12d	CalFIRE exempt hardware	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-12e	Open wire/grey wire	\$0	\$0	\$0		\$1,000	\$8,093	\$7,093	709%	\$1,000	\$8,093	\$7,093
Grid Design, Operations, and Maintenance	WMP-GDOM- GH-12f	Substation Equipment Replacement	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- GO-01	Equipment settings to reduce wildfire risk	\$0	\$0	\$0		\$150	\$2	-\$148	-99%	\$150	\$2	-\$148
Grid Design, Operations, and Maintenance	WMP-GDOM- GO-02	Grid response procedures and notifications	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- GO-03	Personnel work procedures and training in conditions of elevated fire risk	\$284	\$5	-\$279	-98%	\$0	\$0	\$0		\$284	\$5	-\$279
Grid Design, Operations, and Maintenance	WMP-GDOM- GO-04	Automatic recloser operations	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- GO-05	Asset Management and Inspection Enterprise System	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Grid Design, Operations, and Maintenance	WMP-GDOM- MR-01	Equipment maintenance and repair	\$500	\$0	-\$500	-100%	\$0	\$35	\$35		\$500	\$35	-\$465
Vegetation Management & Inspections	N/A	Vegetation Management - Discretionary Inspections	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Vegetation Management & Inspections	WMP-VM-ESG- 01	Vegetation Management Enterprise System	\$406	\$353	-\$53	-13%	\$0	\$0	\$0		\$406	\$353	-\$53
Vegetation Management & Inspections	WMP-VM-INSP- 01	Vegetation Management Inspection Program - Detailed	\$790	\$983	\$193	24%	\$0	\$0	\$0		\$790	\$983	\$193
Vegetation Management & Inspections	WMP-VM-INSP- 02	Vegetation Management Inspection Program - Patrol	\$250	\$432	\$182	73%	\$0	\$0	\$0		\$250	\$432	\$182
Vegetation Management & Inspections	WMP-VM-INSP- 03	Vegetation Management Inspection Program - LiDAR	\$700	\$377	-\$323	-46%	\$0	\$0	\$0		\$700	\$377	-\$323

Initiative Category	2023 Initiative Number	Initiative Name	2023 O&M Planned	2023 O&M Actual	2023 O&M Variance	2023 O&M Change (%)	-	2023 Cap. Actual	2023 Cap. Variance	2023 Cap. Change (%)	2023 Total Planned	2023 Total Actual	2023 Total Change (%)
Vegetation Management & Inspections	WMP-VM- QAQC-01	Quality Assurance and Quality Control	\$500	\$440	-\$60	-12%	\$0	\$0	\$0		\$500	\$440	-\$60
Vegetation Management & Inspections	WMP-VM-VFM- 01	Pole Clearing	\$480	\$392	-\$88	-18%	\$0	\$0	\$0		\$480	\$392	-\$88
Vegetation Management & Inspections	WMP-VM-VFM- 02	Wood and Slash Management	\$1,500	\$998	-\$502	-33%	\$0	\$0	\$0		\$1,500	\$998	-\$502
Vegetation Management & Inspections	WMP-VM-VFM- 03	Substation Defensible Space	\$20	\$33	\$13	65%	\$0	\$0	\$0		\$20	\$33	\$13
Vegetation Management & Inspections	WMP-VM-VFM- 04	Fire-Resilient Right-of-Ways	\$255	\$776	\$521	204%	\$0	\$0	\$0		\$255	\$776	\$521
Vegetation Management & Inspections	WMP-VM-VFM- 05	Clearance	\$887	\$1,361	\$474	53%	\$0	\$0	\$0		\$887	\$1,361	\$474
Vegetation Management & Inspections	WMP-VM-VFM- 06	Fall-In Mitigation	\$7,750	\$3,823	-\$3,927	-51%	\$0	\$0	\$0		\$7,750	\$3,823	-\$3,927
Vegetation Management & Inspections	WMP-VM-VFM- 07	High-Risk Species	\$0	\$507	\$507		\$0	\$0	\$0		\$0	\$507	\$507
Vegetation Management & Inspections	WMP-VM-VFM- 08	Emergency Response Vegetation Management	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Situational Awareness & Forecasting	WMP-SA-01	Environmental monitoring systems	\$0	\$217	\$217		\$0	\$0	\$0		\$0	\$217	\$217
Situational Awareness & Forecasting	WMP-SA-02	Grid monitoring systems	\$0	\$0	\$0		\$150	\$754	\$604	403%	\$150	\$754	\$604
Situational Awareness & Forecasting	WMP-SA-03	Fire detection and alarm systems	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Situational Awareness & Forecasting	WMP-SA-04	Weather forecasting	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Situational Awareness & Forecasting	WMP-SA-05	Fire Potential Index	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Situational Awareness & Forecasting	WMP-SA-06	Ignition likelihood calculation	\$1,154	\$882	-\$273	-24%	\$0	\$0	\$0		\$1,154	\$882	-\$273
Situational Awareness & Forecasting	WMP-SA-07	Ignition consequence calculation	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Emergency Preparedness	WMP-EP-01	Wildfire and PSPS emergency preparedness plan	\$0	\$9	\$9		\$0	\$0	\$0		\$0	\$9	\$9
Emergency Preparedness	WMP-EP-02	Collaboration and coordination with public safety partners	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Emergency Preparedness	WMP-EP-03	Public notification and communication strategy	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Emergency Preparedness	WMP-EP-04	Preparedness and planning for service restoration	\$1,369	\$223	-\$1,147	-84%	\$0	\$0	\$0		\$1,369	\$223	-\$1,147

Initiative Category	2023 Initiative Number	Initiative Name	2023 O&M Planned	2023 O&M Actual		2023 O&M Change (%)		2023 Cap. Actual		2023 Cap. Change (%)		2023 Total Actual	2023 Total Change (%)
Emergency Preparedness	WMP-EP-05	Customer support in wildfire and PSPS emergencies	\$100	\$55	-\$45	-45%	\$0	\$0	\$0		\$100	\$55	-\$45
Emergency Preparedness	WMP-EP-06	Learning after wildfire and PSPS events	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Community Outreach and Engagement	WMP-CO-01	Public outreach and education awareness for wildfires, PSPS, outages from protective equipment and device settings, and vegetation management	\$90	\$87	-\$3	-3%	\$0	\$0	\$0		\$90	\$87	-\$3
Community Outreach and Engagement		Public engagement in WMP decision-making process	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Community Outreach and Engagement	WMP-CO-03	Engagement with AFN populations, local governments, and tribal communities	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Community Outreach and Engagement	WMP-CO-04	Collaboration on local wildfire mitigation and planning	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0
Community Outreach and Engagement		Best practice sharing with other electrical corporations	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0