



August 18, 2026

Dear Stakeholders,

Enclosed is the Office of Energy Infrastructure Safety's (Energy Safety's) Annual Performance Report regarding Liberty Utilities' execution of its 2024 Wildfire Mitigation Plan.

This Annual Performance Report is published as of the date of this letter. Liberty Utilities may, if it wishes to do so, file a public response to this Annual Performance Report within 14 calendar days of the date of publication. Comments must be submitted to Energy Safety's E-Filing system in the 2024 Annual Performance Report docket.¹

Sincerely,

/s/ Patrick Doherty

Patrick Doherty

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¹ Submit responses to the [2024-APR](https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2024-APR) docket via the Office of Energy Infrastructure Safety's E-Filing system here: <https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2024-APR>.



OFFICE OF ENERGY INFRASTRUCTURE SAFETY

2024 ANNUAL PERFORMANCE REPORT

LIBERTY UTILITIES

August 2026

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Executive Summary

Energy Safety's primary objective is to ensure that electrical corporations reduce wildfire risk and adhere to their approved Wildfire Mitigation Plans (WMPs), which are annually filed pursuant to Public Utilities Code section 8385 *et seq.* Energy Safety's annual performance evaluation of Liberty Utilities (Liberty) is a comprehensive look at the implementation of its 2024 WMP and its catastrophic wildfire risk reduction initiatives.

Liberty completed 36 of 43 (84%) of its 2024 WMP initiatives. While the total number of missed initiatives in 2024 is not proportionately large in comparison to its total initiative count for the year, Liberty has a year-over-year trend of missing targets for certain initiatives. For initiatives related to undergrounding, system automation, and patrol inspections, targets were missed several times during the 2020-2023 period, in addition to being missed in 2024.

While some missed targets from 2021 were reasonable due to the Caldor Fire, the other missed targets for these initiatives suggest a more systemic issue with Liberty's implementation of its WMP work generally that should be addressed. For several of Liberty's missed 2024 WMP targets, Liberty sought reduced targets from Energy Safety through a Change Order Request. However, Energy Safety denied the requested reductions in targets in 2024, which meant that Energy Safety proactively considered, and deemed inadequate, Liberty's reasons for potentially missing targets.

By missing these targets Liberty failed to reduce risk on its system in the manner pledged to its customers and the people of California through its WMP. Further, Liberty ignored Energy Safety's determinations in the Change Order decision and the Decision on its 2023-2025 WMP, where Energy Safety identified that Liberty could not support the effectiveness in its proposed change in strategic direction. Further, in the EC ARC filed in March 2025 Liberty did not adequately explain its failure to fully execute its 2024 WMP. Liberty unilaterally made changes to its wildfire mitigation strategy that it did not demonstrate reduced risk to a similar extent than if it followed through on its 2024 WMP commitments.

In addition, Energy Safety identified several other areas for improvement:

- The impact of Liberty's Public Safety Power Shutoff (PSPS) events increased dramatically in 2024 compared to previous years where the impacts had been near zero, notwithstanding that Liberty may have had good reason to call its 2024 PSPS events. While Liberty demonstrated satisfactory work through its planning, community engagement, and successful execution of PSPS-related WMP initiatives, Liberty experienced four events (compared to prior years with zero recorded events), which impacted over 3,000 customers for around 15,000 customer hours, and about two hours for critical infrastructure.
- Liberty's data reporting accuracy and completeness requires further improvement. Although Liberty's quarterly and annual data are mostly consistent between reporting sources, Energy Safety identified important errors for accuracy of work completion or

accounting for vegetation open work orders, fuse replacements, distribution pole replacement, and substation inspections. These types of problems have persisted for many years, have been identified in prior reports, and are areas in which Liberty's performance must improve.

Going forward, Liberty must show, through consistent action, that it will honor its WMP commitments and thus meaningfully reduce wildfire risk in the manner pledged to its customers and the people of California through its WMP. Energy Safety will scrutinize Liberty's future WMP performance and continue to report on any failures by Liberty to achieve its own objectives to reduce the risk of catastrophic wildfire in California.

1. Introduction

Energy Safety's primary objective is to ensure that electrical corporations reduce wildfire risk and adhere to their approved Wildfire Mitigation Plans (WMPs).¹ This Annual Performance Report (APR) presents the Office of Energy Infrastructure Safety's (Energy Safety's) statutorily mandated assessment of Liberty Utilities' (Liberty or LU) performance relative to its 2024 targets for initiatives and objectives in its 2023-2025 Base Wildfire Mitigation Plan (2023-2025 Base WMP) and approved Change Order Requests.² While the 2023-2025 Base WMP considers activities over a three- and 10-year horizon, this report only addresses targets established for initiatives and objectives to be executed in 2024. Therefore, this report uses the term "2024 WMP" to refer to portions of the 2023-2025 Base WMP and approved Change Order Requests addressed by this report.

In the sections that follow, Energy Safety describes the statutory and regulatory basis for its reporting, the 2024 WMP, the information supplied by Liberty, the independent evaluation conducted by a third-party independent evaluator that examined Liberty's implementation of its 2024 WMP, and an assessment of how Liberty implemented its 2024 WMP. Finally, Energy Safety provides its conclusions and recommendations for further actions by Liberty.

¹ Government Code Section 15475.1(a).

² On May 28, 2024, Liberty submitted a Change Order Request for seven initiatives. On July 1, 2024, Energy Safety approved two of the changes and denied the remaining five.

2. Performance Assessment Process

The statutory objective of electrical corporation wildfire mitigation planning efforts is to ensure that electrical corporations are constructing, maintaining, and operating their infrastructure in a manner that will minimize the risk of catastrophic wildfire.³

Government Code section 15475(b)(2) directs Energy Safety to develop performance metrics to achieve maximum feasible risk reduction to be used to develop the wildfire mitigation plan and evaluate an electrical corporation's performance relative to the implementation of that plan.

In this report, Energy Safety considers the totality of all performance assessments completed with respect to Liberty's 2024 WMP. This includes all inspection, audit, investigation, and data analysis work performed by Energy Safety, as well as separate electrical corporation and independent third-party evaluations of implementation.

The following is an overview of the five dimensions of performance assessed by Energy Safety:

1. Energy Safety assessed *2024 WMP attainment performance* by determining whether the electrical corporation met the 2024 WMP targets for initiatives and objectives, looking specifically at whether the electrical corporation funded and performed the work stated for each initiative, and by performing field inspections of WMP work claimed to be completed by Liberty;
2. Energy Safety assessed *ignition risk performance* by tracking ignition rates, wire down rates, and unplanned outage rates – all indicators of ignition risk;
3. Energy Safety assessed *Public Safety Power Shutoff (PSPS) performance* by tracking the frequency, scope, duration, and impact of PSPS events;
4. Energy Safety assessed *outcome metric performance* by tracking the number of acres burned, number of buildings damaged or destroyed, number of fatalities or injuries, and total value of assets lost due to wildfires ignited by Liberty's equipment; and
5. Energy Safety assessed *data accuracy and completeness performance* by crosschecking data from various utility reporting mechanisms, assessing the accuracy of data submitted by Liberty during field auditing of Liberty's WMP work, reviewing multiple reports, reviewing a formal quality assurance and quality control evaluation, and identifying issues encountered during the performance assessment process.

³ Pub. Util. Code section 8386(a).

3. Liberty 2024 Wildfire Mitigation Plan

Liberty originally submitted a Base WMP on May 5, 2023, covering a three-year term from 2023 through the end of 2025,⁴ as well as a Change Order Request on May 28, 2024.⁵

Energy Safety approved Liberty's 2023-2025 Base WMP on February 5, 2024,⁶ and published a decision on Liberty's Change Order Request on July 1, 2024.⁷ For the purpose of this report, Energy Safety refers to the Base 2023-2025 WMP, any approved Change Order Requests, as well as the 2024 targets and initiatives, collectively as the 2024 WMP.

Liberty's 2024 Change Order Request proposed changes to seven initiative targets. Five of the proposed changes involved initiative target decreases (covered conductor installation; undergrounding of electric lines; microgrids; installation of system automation equipment; and line removal in High Fire Threat Districts (HFTD)) and cited changes in strategic direction as the reason for the reductions. Liberty cited multiple changes in its strategic direction for the target reductions requested, including the prioritization of its Sensitive Relay Profile (SRP) Program.⁸ In its decision on Liberty's 2023-2025 Base WMP, Energy Safety stated that "Liberty must quantitatively demonstrate that SRP and traditional hardening mitigate risk as effectively and efficiently as covered conductor in the planned locations," and issued an area for continued improvement on SRP.^{9, 10} Energy Safety denied the proposed target decreases, stating that they would not reduce risk.¹¹ Energy Safety approved the two target increases (traditional overhead hardening and equipment settings to reduce wildfire risk) in its decision on the Change Order Request.¹²

⁴ 2023-2025 Base WMP.

⁵ 2024 Change Order Decision

⁶ 2023-2025 WMP Decision.

⁷ 2024 Liberty Utilities Change Order.

⁸ 2024 Liberty Utilities Change Order, pages 2, 5.

⁹ 2023-2025 WMP Decision, pages 37-38, 75-76. An "area for continued improvement," or ACI, is Energy Safety's term for specific wildfire mitigation activities flagged by a WMP decision as needing further improvement before the EC's next WMP submission.

¹⁰ Though outside the scope of this report, Energy Safety continues to have concerns about the effectiveness of SRP, as demonstrated in its denial of Liberty's 2026-2028 Wildfire Mitigation Plan, published April 1, 2026, at page 11. Available at: <https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=60491&docket=2026-2028-Base-WMPs&shareable=true>. Last accessed August 11, 2026.

¹¹ The failure of a Change Order Request to lead to greater risk reduction as compared to the approved WMP was the main criterion used by Energy Safety to reject Charge Order Requests during the 2024 performance year, pursuant to the WMP Process and Evaluation Guidelines in effect at the time.

¹² 2024 Change Order Decision, pages 3-6.

Liberty's 2024 WMP highlighted past and ongoing efforts to address wildfire risk and reduce the impacts of PSPS events.¹³ The 2024 WMP described 43 initiatives, which are divided up into six categories and summarized here:

1. **Grid Design, Operations and Maintenance:** The goal of the initiatives in this category is to reduce system wide risk by "strengthening distribution, transmission and substation infrastructure."¹⁴ Relevant initiatives in this category are Covered Conductor Installation (GDOM-GH-01), Undergrounding of Electric lines and/or Equipment (GDOM-GH-02), and Distribution Pole Replacements and Reinforcements (GDOM-GH-03).
2. **Vegetation Management and Inspections:** The goal of the initiatives in this category is to reduce system wide risk through a comprehensive vegetation management plan that includes regular inspections and vegetation and fuels management.¹⁵ Relevant initiatives in this category are Fall-In Mitigation (WMP-VM-VFM-02), Wood and Slash Management (WMP-VM-VFM-02), and Vegetation Management inspection Program – Detailed (WMP-VFM-INSP-01).
3. **Situational Awareness and Forecasting:** The goal of the initiatives in this category is to identify short- and long-term objectives that will allow Liberty near real time weather and fuels-based risk assessment capability across its service territory.¹⁶ Relevant initiatives in this category are Install Weather Stations (WMP-SA-01), Grid Monitoring/Fault indicators (WMP-SA-02), and Ignition Detection Systems/AlertWildfire Cameras (WMP-SA-03).
4. **Emergency Preparedness:** The overall goal of the initiatives in this category is to develop an emergency plan that demonstrates how to respond to a wildfire or PSPS event.¹⁷ Liberty's most relevant initiatives in this category are Collaboration and Coordination with Public Safety Partners (WMP-EP-02), Customer Support in Wildfire and PSPS Emergencies (WMP-EP-05), and Learning After Wildfire and PSPS Events (WMP-EP-06).
5. **Risk Methodology:** The goal of the initiatives in this category is to develop a risk modeling and assessment program that may determine the likelihood and consequences of its equipment causing a wildfire.¹⁸ Relevant initiatives are Ignition Likelihood Calculation (WMP-SA-06) and Ignition Consequence Calculation (WMP-SA-07).

¹³ 2024 WMP, pages 1-8.

¹⁴ 2024 WMP, page 159.

¹⁵ 2024 WMP, pages 207-252.

¹⁶ 2024 WMP, pages 258-285.

¹⁷ 2024 WMP, pages 286-347.

¹⁸ 2024 WMP, pages 69-117.

6. Community Outreach: The goal of the initiatives in this category is to document engagement with the communities within its service territory before, during, and after a wildfire.¹⁹ Relevant initiatives are Public Outreach and Education Awareness Program (WMP-CO-01), Engagement with Access and Functional Needs Populations (WMP-CO-03), and Best Practice Sharing with Other Electrical Corporations (WMP-CO-05).

The 2024 WMP also contained three- and ten-year objectives.

Selected three-year objectives include:²⁰

- Complete vegetation risk modeling (Clearance WMP-VFM-05 & Fall-In Mitigation WMP-VFM-06).
- Continue to install covered conductor while gathering better data on the risk spend efficiency of this program (WMP-GDOM-01).
- Continue to build a PSPS risk and wildfire consequence model (WMP-SA-06 and WMP-SA-07).

Selected ten-year objectives include:²¹

- Continue to underground conductor in high fire risk areas where economically feasible (WMP-GDOM-02).
- Implement new technologies if available to identify ignitions more quickly (WMP-SA-03).
- Evaluate Sensitive Relay Program (SRP) program for reduction of ignition potential and adjust PSPS zones and/or thresholds, if possible, to reduce PSPS impacts (WMP-SA-02 and WMP-GDOM-01).

Of particular importance are the following objectives which have targets or goals for 2024:

- Covered Conductor installation (WMP-GDOM-01).
- Fall-In Mitigation and High-Risk Species (VFM-06).
- Intrusive Pole Inspections (WMP-AI-02).

Descriptions of the activities and objectives of the programs and initiatives contained in Liberty's 2023-2025 Base WMP and the approved Change Order Request are listed in the table in Appendix A.

¹⁹ 2024 WMP, pages 347-372.

²⁰ 2024 WMP, pages 209, 150 and 260.

²¹ 2024 WMP, pages 150 and 260.

4. Liberty Annual Report on Compliance

Public Utilities Code section 8386.3(b)(1) directs electrical corporations to file a self-evaluation report addressing the electrical corporation's implementation of its approved plan during the prior calendar year. This document is known as the Electrical Corporation Annual Report on Compliance (EC ARC).

Energy Safety's Compliance Guidelines outlined the requirements for an EC ARC prepared to address the 2024 calendar year and filed by the electrical corporation in early 2025. The EC ARC was required to detail the electrical corporation's self-assessment of its performance with the 2024 WMP during 2024.²²

Liberty submitted its EC ARC to Energy Safety on March 31, 2025.²³ In its EC ARC, Liberty listed seven initiatives it was unable to complete. Liberty stated this was due to the disapproval of a Change Order Request filed by Liberty on May 28, 2024, which proposed reduced targets for some of those initiatives.²⁴ Although it did not achieve all of the approved 2024 WMP targets, Liberty stated that it believed the intended risk reduction was achieved.²⁵

The EC ARC is considered by Energy Safety as well as by the independent evaluator in its assessment of Liberty's WMP performance. For a summary of the EC ARC information on initiative completion and actual spending, see the table in Appendix A.

5. Independent Evaluator ARC for Liberty

Energy Safety, in consultation with the Office of the State Fire Marshal, annually publishes a list of entities qualified to serve as independent evaluators of WMP compliance.²⁶ Each electrical corporation is then required to hire an independent evaluator (IE) from the list of approved evaluators to perform an annual independent WMP performance evaluation.²⁷

²² 2024 Compliance Guidelines.

²³ EC ARC.

²⁴ EC ARC, pages 23-26.

²⁵ EC ARC, page 2. However, Energy Safety noted in its denial of the proposed reduced targets in 2024 that it believed the reduced targets would not reduce risk on Liberty's system as much as the existing targets. See 2024 Change Order Decision at pages 3-4.

²⁶ Pub. Util. Code Section 8386.3(b)(2)(A).

²⁷ Pub. Util. Code Section 8386.3(b)(2)(B)(i).

The IE reviews and evaluates the electrical corporation's performance with its approved WMP. As part of its evaluation, the IE must investigate instances of large deviation in actual expenditure greater than 10% as compared to the proposed expenditure amount in the associated WMP.

The 2024 Independent Evaluator Annual Report on Compliance (IE ARC) for Liberty was prepared by Bureau Veritas. The IE ARC included a review of the wildfire mitigation initiatives and activities implemented in 2024, and an accounting of whether Liberty met its performance targets, deviated from its budget, and followed its quality assurance and quality control (QA/QC) processes.

The IE utilized a variety of techniques to analyze Liberty's progress toward meeting its 2024 WMP commitments, such as inspecting a sample of Liberty's field-verifiable 2024 WMP initiatives, performing desk reviews of non-field verifiable initiatives, interviewing selected utility staff, and reviewing the 2024 WMP and 2024 EC ARC.²⁸ In the IE ARC, the IE referenced that it validated a total of 47 initiatives.²⁹ The IE's initiative count was higher than the number of 2024 WMP initiatives listed in the 2024 WMP itself due to its work in validating additional initiatives without targets or objectives for 2024. For example, although Liberty's 2024 WMP did not include a target for transmission pole or tower replacements, the IE obtained information indicating that this type of work was conducted. The IE then proceeded to inspect the work in the field, and considered it validated.³⁰ Examples of the additional evaluation included references to reporting discrepancies and Liberty completing work based on inspections. The IE ARC includes sample verification statistics, an opinion on initiative completions, and actual expenditures for each initiative.³¹

The IE ARC identified seven of the 47 evaluated 2024 WMP initiatives as incomplete (15%). The IE ARC findings are summarized by initiative in Appendix A. The IE concluded that Liberty demonstrated a strong commitment to the WMP program, and while Liberty did not meet a small number of its 2024 WMP targets, the shortfall was primarily attributed to strategic adjustments and the rejection of proposed change orders by Energy Safety. The IE stated that these strategic adjustments were aimed at achieving comparable level of risk reduction through alternative means.³²

The IE ARC identified the same seven initiatives with missed targets as the EC ARC:

1. Covered conductor installation – GDOM-GH-01: four circuit miles were completed out of the targeted 5.61 circuit miles (71%).
2. Undergrounding of electric lines – GDOM-GH-02: zero miles were completed out of the targeted one mile (0%).

²⁸ IE ARC, page 7.

²⁹ IE ARC, pages 21-23.

³⁰ IE ARC, pages 35-36.

³¹ IE ARC Liberty 2024 IE ARC Appendix.

³² IE ARC, pages 124-125.

3. Microgrids - GDOM-GH-07: zero microgrids were completed out of the target of one microgrid (0%).
4. Installation of system automation - GDOM-GH-08: two reclosers were installed out of a target of eight reclosers (25%).
5. Line removal - GDOM-GH-09: zero circuit miles of line were removed out of a target of one circuit mile (0%).
6. Animal Guards - GDOM-GH-12c: zero guards out of a target of two guards were completed (0%).
7. Patrol inspections of distribution electric lines and equipment - GDOM-AI-03: 477 circuit miles were completed out of the target 589 circuit miles (81%).

As a result of the evaluation conducted, the IE provided observations for Liberty in certain areas:

- Target setting: the IE's summary of Liberty's Situational Awareness initiatives recommended that Liberty develop "clear objectives and targets for all initiatives to support a comprehensive approach to wildfire risk mitigation in future WMP cycles."³³ The IE made similar observations regarding Liberty's Emergency Planning and Preparedness initiatives.³⁴
- Data management: the IE noted that "some inconsistencies in reporting methods and discrepancies in inspection numbers highlight areas for improvement."³⁵
- Record keeping: the IE noted that Liberty had "detailed documentation of PSPS events and after-action reports but some instances of incomplete or unverifiable data and missing meeting notes."³⁶

Finally, the IE reviewed Liberty's QA/QC processes, assigning scores from 0 to 4 for five QA/QC Maturity Model metrics (Figure 1). For a full description of the QA/QC Maturity Model, see the IE ARC Outline and the IE ARC.^{37, 38}

In the IE ARC, the IE concluded that Liberty had a well-developed and documented QA/QC process for WMP initiative completion. The IE evaluated Liberty's QA/QC programs through five metrics. Three of the metrics (Roles and Responsibilities, Quality Culture, and Quality Inspections and Audits) received scores of three out of four, considering these metrics as "routine" for Liberty. The other two metrics (Quality Management Systems and QA/QC Technology Adoption) received scores of two out of four, considering these metrics as "applied [but not yet mastered]."

³³ IE ARC, page 101.

³⁴ IE ARC, page 110.

³⁵ IE ARC, page 70.

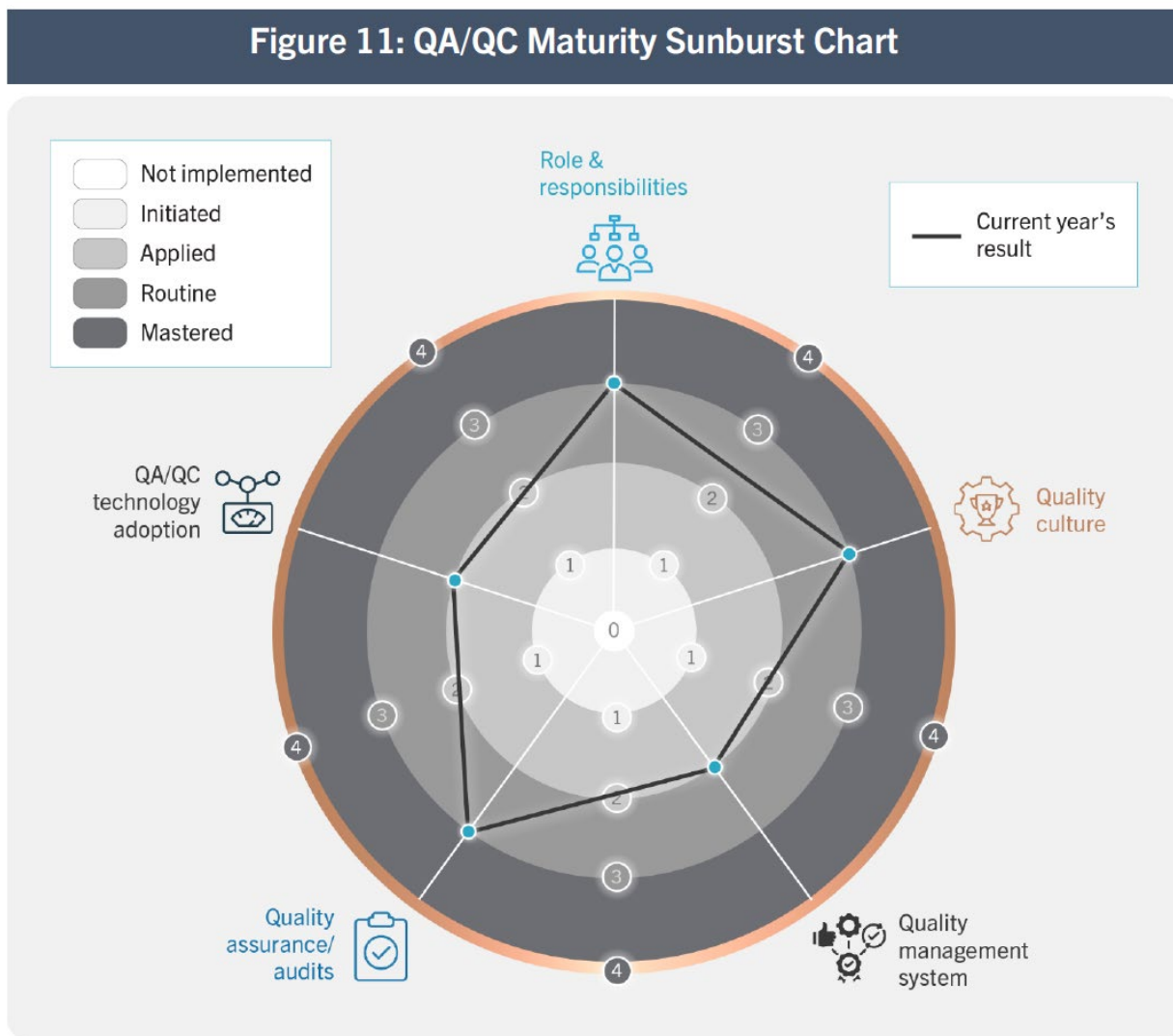
³⁶ IE ARC, page 110.

³⁷ IE ARC Outline, page 14.

³⁸ IE ARC, page 120-123.

The IE also noted, specifically for Liberty’s Quality Management System (QMS) for Vegetation Management and Grid Operations performance and contractors’ quality assurance inspections, that the QMS “appears well structured, data driven and capable of supporting the organization’s QA/QC objectives effectively.”³⁹

Figure 1. Sunburst Chart of QA/QC Maturity Model for Liberty from IE ARC⁴⁰



³⁹ IE ARC, page 121.

⁴⁰ IE ARC, page 123.

6. WMP Initiative Attainment Performance

Energy Safety's assessment of Liberty's performance in 2024 indicates that Liberty attained 36 (84%) of its 43 targets for its 2024 WMP initiative activities. The subsections below further describe Energy Safety's assessment of Liberty's execution of its 2024 WMP.

Section 6.1 provides an overview of the 2024 WMP initiatives assessed for attainment by Energy Safety. Section 6.2 describes the vegetation management assessments performed by Energy Safety. Section 6.3 provides an overview of Energy Safety's field inspection of both grid hardening and vegetation management activities related to Liberty's 2024 WMP work, including inaccuracies in Liberty's data regarding completed WMP work. Section 6.4 summarizes the initiatives with missed targets, if any, and provides three perspectives on the impact of Liberty's failure to meet some of its 2024 WMP targets: percentage of completion, budget impacts, and risk reduction impacts. Section 6.5 provides an overview of the 2024 WMP proposed expenditures and compares them to the actual expenditures. Finally, Section 6.6 summarizes the findings of Section 6 of this report. Altogether, Section 6 characterizes Liberty's performance with respect to its 2024 WMP initiative attainment. Additional performance assessments beyond initiative attainment appear in Sections 7 through 10.

6.1 Liberty 2024 WMP Initiative Activities Assessed by Energy Safety

Energy Safety assessed WMP attainment performance on 43 wildfire mitigation initiative activities from the 2024 WMP.⁴¹ The initiatives are grouped into five main categories:

1. Grid Design, Operation, and Maintenance with 19 initiative activities assessed and an associated proposed expenditure of \$36 million.
2. Vegetation Management and Inspection with 15 initiative activities assessed and a proposed expenditure of \$14 million. Of the 15 initiative activities, 12 initiatives were assessed in the Vegetation Management Audit (VMA) Report (Section 6.2).⁴²
3. Situational Awareness and Forecasting with two initiative activities assessed and a proposed expenditure of \$834,000.

⁴¹ 2024 WMP, pages 148-372.

⁴² The VMA Report organizes initiative analysis by initiatives. This APR organizes initiative analyses by activity and Tracking ID. Several initiatives have multiple activities.

4. Emergency Preparedness with four initiative activities assessed and a proposed expenditure of \$1.5 million.
5. Community Outreach and Engagement with three initiative activities assessed and a proposed expenditure of \$90,000.

A complete list of initiatives along with expenditure information appears in the table in Appendix A.

The initiative performance assessment process included comparing the actual initiative completion as reported by Liberty in its quarterly data report (QDR) to Energy Safety and in its EC ARC, and as reported by the IE in the IE ARC.⁴³ The information from each of these sources is summarized along with the final assessment of performance for each initiative in the table in Appendix A. In some cases, Energy Safety issued data requests to answer specific questions. If data request information is used in the assessment, a citation for the particular instance is provided. Statistics and findings from Energy Safety field audits of 2024 WMP work are also considered. Finally, the Energy Safety VMA Report also contributed to Energy Safety's APR assessment.⁴⁴

6.2 Energy Safety's Vegetation Management Audit Report

Each performance year Energy Safety completes an audit of the vegetation management work performed by an electrical corporation as described in its approved WMP (the Vegetation Management Audit (VMA)).⁴⁵ In the VMA, Energy Safety assesses completeness of each qualitative commitment and quantitative target associated with each initiative from the electrical corporation's approved WMP. The VMA issues findings on the initiative level, as defined in Appendix A of the 2023-2025 Wildfire Mitigation Plan Technical Guidelines.⁴⁶ An EC's successful completion of its vegetation management activities indicates a greater likelihood that the EC understands and manages the risk of catastrophic fire from both equipment failures and the contact between vegetation and its facilities.

The VMA is sent to the electrical corporation, which then has the opportunity to provide Energy Safety with a corrective action plan (CAP) to address any deficiency identified in the VMA. Energy Safety analyzes the CAP and issues a VMA Report that documents any outstanding deficiencies and describes the electrical corporation's overall program performance for that year.

⁴³ 2024 Q4 QDR, EC ARC, pages 21-28, and IE ARC, pages 21-23.

⁴⁴ VMA Report, pages. 13-14.

⁴⁵ Pub. Util. Code section 8386.3(b)(5)(A).

⁴⁶ WMP Technical Guidelines, pages A-24 through A-26.

For performance year 2024, Energy Safety issued its VMA to Liberty on August 28, 2025,⁴⁷ received the CAP on October 16, 2025,⁴⁸ and issued the 2024 VMA Report on February 3, 2026.⁴⁹ The conclusions from the VMA Report are summarized in the table below.

Table 1. Summary of Energy Safety's Findings Regarding Completion of Liberty's VM Initiatives in its 2023-2025 WMP for Performance Year 2024.

Vegetation Management Initiative	VMA Finding	VMA Report Finding
8.2.2. Vegetation Management Inspections	Complete	Complete
8.2.3.1 Pole Clearing	Complete	Complete
8.2.3.2 Wood and Slash Management	Complete	Complete
8.2.3.3 Clearance	Complete	Complete
8.2.3.4 Fall-In Mitigation	Complete	Complete
8.2.3.5 Substation Defensible Space	Complete	Complete
8.2.3.6 High-Risk Species	Complete	Complete
8.2.3.7 Fire Resilient Right-of-Ways	Complete	Complete
8.2.3.8 Emergency Response of Vegetation Management	Complete	Complete
8.2.4 Vegetation Management Enterprise System	Complete	Complete
8.2.5. Quality Assurance and Quality Control	Deficient	Complete
8.2.6 Open Work Orders	Deficient	Complete
8.2.7 Workforce Planning	Complete	Complete

This APR reproduces the VMA Report conclusions but rather than referencing each vegetation management initiative number it references the Utility Initiative Tracking ID to allow for consistency throughout this APR. Appendix B provides a crosswalk between the 13 Vegetation

⁴⁷ VMA Report, Appendix 1.

⁴⁸ VMA Report, Appendix 2

⁴⁹ VMA Report.

Management initiative numbers included in the VMA Report to the 15 Utility Initiative Tracking IDs included in this APR.

Energy Safety's VMA Report concluded that Liberty successfully achieved the objectives of its vegetation management program and completed all work associated with its 2024 WMP commitments as summarized in the table above. While Energy Safety identified areas for improvement in its quality assurance and quality control program, and its timely completion of open work orders, Liberty committed to corrective actions to address these deficiencies in future years.

The specific findings from Energy Safety's VM Audit Report are summarized in Appendix B.

6.3 Energy Safety Field Inspection Assessment

Energy Safety regularly performs field audits of the WMP work reported as complete by the electrical corporations. Energy Safety's field audits provide empirical validation of the WMP work conducted by the EC, including whether the data on completed WMP work is accurate and therefore can be relied upon by the electrical corporation in understanding the effectiveness of its wildfire mitigation activities.

When performing a field audit, Energy Safety conducts two types of inspections: 1) inspections of grid hardening, vegetation management, and other work related to WMP initiatives, and 2) inspections of general wildfire safety (GWS) conditions at an inspection site. The second category of general wildfire safety conditions is not strictly related to WMP initiatives, and these inspections are additional to Energy Safety's WMP initiative-related inspection work.⁵⁰

Observation

As detailed below, Energy Safety's field inspections determined that Liberty's initiative completeness data had inconsistencies with respect to some 2024 WMP initiatives, which represent broader data management issues that Liberty must address going forward.

⁵⁰ If Energy Safety observes a general wildfire safety concern during an inspection activity, that is recorded as a "Wildfire Safety Concern." Or as it was known prior to 2024, a "defect."

6.3.1 Inspection and Notice Counts

For field audits of 2024 WMP work, inspections that found instances of non-performance on WMP initiative work resulted in a notice of violation or a notice of data inaccuracy.⁵¹ An overview of the number of inspections and notices by initiative appears in (Table 2).

Table 2. Energy Safety Inspection Counts and Notices by Initiative

Initiative	Number of Inspections	Notices of Violation	Notices of Data Inaccuracy	Total
Distribution pole replacements and reinforcements 8.1.2.3 (GDOM-GH-03)	372 points	4	2	6
Tree attachment removals 8.1.12.12 (GDOM-GH-12a)	37 points	2	0	2
Clearance 8.2.3.3 (VM-VFM-05)	473 points	1	0	1

6.3.2 Data Accuracy and Completeness Issues Observed by Field Audits

As described above, Energy Safety issued nine notices to Liberty upon inspection of its 2024 WMP work. Of those nine notices, two were related to data accuracy issues, and seven were related to completeness issues observed in the course of field audits.

Data accuracy issues can vary, but generally they are either: 1) instances where an electrical corporation reports WMP work as completed at a location where the reported work has not

⁵¹ If Energy Safety observes non-performance of a WMP initiative during an inspection activity that an electrical corporation claimed to have occurred at a site, then that is recorded as a “deficiency” and may be the subject of a “Notice of Non-Performance” or a “Notice of Data Inaccuracy” sent to the electrical corporation. Prior to SB 254, Energy Safety issued Notices of Violation, which could be issued due to completeness or data accuracy issues.

taken place, or 2) instances where the kind of WMP work reported as completed at a location did not take place, even if other types of work occurred there.

Completeness issues are instances where the WMP work claimed to have been completed at a location was done in an incomplete manner and therefore should not have been counted by the electrical corporation as “complete” WMP work.

The existence of data accuracy or completeness issues in the spatial QDR submissions of an electrical corporation calls into question the reliability of the electrical corporation’s claimed completion of WMP work. For example, if an electrical corporation claims to have completed 100 units of a type of WMP work, but Energy Safety inspectors discover data accuracy and completeness issues with specific instances of the work reported, then the claim that 100 units were completed is unreliable.

In the case of Liberty’s 2024 WMP work, Energy Safety’s field audits observed data accuracy and/or completeness issues with the work claimed as completed under the following WMP initiatives: Distribution pole replacements and reinforcements - 8.1.2.3, Tree attachment removals - 8.1.12.12, and Clearance - 8.2.3.3 (Table 3).

The table below (Table 2) also includes the numbers of points or miles inspected by Energy Safety for the 2024 WMP work reported by Liberty as completed for each of the relevant WMP initiatives, and the number of points or miles with data accuracy or completeness issues. A percentage of the 2024 WMP work reported by Liberty as complete with those issues is also described.

Table 3. Energy Safety Inspection Counts and Data Accuracy and Completeness Issues, with Percentage of Inspections Where Issues were Observed

Initiatives with Data Accuracy and Completeness Issues	Number of Points or Miles Inspected	Total Points or Miles With Issues	Percentage of Points or Miles with Issues
Distribution pole replacements and reinforcements 8.1.2.3 (GDOM-GH-03)	372	6	1.61%
Tree attachment removals 8.1.12.12 (GDOM-GH-12a)	37	2	5.4%

Initiatives with Data Accuracy and Completeness Issues	Number of Points or Miles Inspected	Total Points or Miles With Issues	Percentage of Points or Miles with Issues
Clearance 8.2.3.3 (VM-VFM-05)	473	1	0.2%

The electrical corporation must demonstrate that it met its WMP targets. Because Energy Safety's field audit of Liberty's 2024 WMP work observed issues with the data reported by Liberty on some 2024 WMP work, the actual amount of 2024 WMP work reported as completed by Liberty with respect to the above initiatives is somewhat unreliable as shown in (Table 4). However, this unreliability did not ultimately affect Energy Safety's determination that Liberty met their 2024 WMP targets with respect to these initiatives.

Table 4. Energy Safety Estimates of Data Accuracy and Completeness Issue Impacts on Reported WMP Compliance

Initiatives with Data Accuracy and Completeness Issues	Liberty 2024 WMP Target	Actual Points or Miles Completed as Reported by LU	Percentage of Points or Miles with Issues	Reliable Actual Points or Miles
Distribution pole replacements and reinforcements 8.1.2.3 (GDOM-GH-03)	400 Poles	426 points ⁵²	1.61%	419 points

⁵² 2024 Q4 QDR Spatial Data.

Initiatives with Data Accuracy and Completeness Issues	Liberty 2024 WMP Target	Actual Points or Miles Completed as Reported by LU	Percentage of Points or Miles with Issues	Reliable Actual Points or Miles
Tree attachment removals 8.1.12.12 (GDOM-GH-12a)	60 Tree Attachments	95 points	5.4%	90 points
Clearance 8.2.3.3 (VM-VFM-05)	702.1 Miles	683 miles ⁵³	0.2%	669.4 miles ⁵⁴

⁵³ 2024 Q4 QDR Spatial Data. Liberty reported initiative actual progress as 1,099,232 meters. Energy Safety converted the unit of meters to miles to align with the WMP target unit.

⁵⁴ Energy Safety considers this initiative complete.

6.4 Liberty WMP Objective and Initiative Activity Attainment in 2024

An EC's WMP is assessed on the basis of whether it is feasible, cost efficient, demonstrates continued improvement and forward-looking progress, and reduces wildfire risk. An EC's ability to complete its initiative activities demonstrates its competence in and commitment to executing on that plan. Therefore, the findings regarding initiative attainment are at the heart of any WMP evaluation, in that they measure the EC's performance in implementing the wildfire risk reduction activities that the EC itself pledged to do for the benefit of its customers and the broader public of California.

Energy Safety assessed 43 wildfire mitigation initiatives for Liberty's 2024 WMP attainment performance and found that seven initiative activity targets (16%) were missed. The seven initiative activities with missed targets from Liberty's 2024 WMP are: Covered conductor installation 8.1.2.1, Undergrounding of electric lines and/or equipment 8.1.2.2, Microgrids 8.1.2.7, Installation of system automation equipment 8.1.2.8, Line removal (in HFTD) 8.1.2.9, Animal guards 8.1.2.1, and Patrol inspections of distribution electric lines and equipment 8.1.3.3. A complete list of the initiative activities with missed targets is shown in Table 4.

For some of these missed initiatives there is a year-over-year trend of Liberty missing targets for them. Liberty missed initiative targets related to undergrounding, system automation, and patrol inspections several times during the 2020-2023 period, and missed them again in 2024. While some missed targets from 2021 were reasonable due to the Caldor Fire, the recurring missed targets for these initiatives suggest a more systemic issue with Liberty's implementation of its WMP work generally that it must address. Energy Safety will continue to monitor Liberty's performance and push Liberty to consistently meet its targets in these areas.

Section 6.4.2 elaborates on the financial impact of initiatives with missed targets on proposed expenditures, and Section 6.4.3 on the impacts of initiatives with missed targets on risk reduction, to measure the gap between Liberty's WMP and its implementation.

Observation

While Liberty met targets for a large majority of its 2024 WMP initiatives, as detailed below some of those targets that were missed were related to grid hardening activities that would have otherwise reduced risk on Liberty's system in the manner Liberty pledged to its customers and the broader public of California, and are part of a multi-year trend of missing several different WMP initiatives.

Table 5. Liberty WMP Initiatives with Missed Targets⁵⁵

Not Attained LU2024 WMP Initiative	2024 WMP Initiative Activity Target	Actual Performance
Covered conductor installation 8.1.2.1 (GDOM-GH-01)	Target: 5.6 Circuit Miles	Installed 3.9 Miles
Undergrounding of electric lines and/or equipment 8.1.2.2 (GDOM-GH-02)	Target: 1.3 Circuit Miles	Zero installed
Microgrids 8.1.2.7 (GDOM-GH-07)	Target: One Microgrid	Zero installed
Installation of system automation equipment 8.1.2.8 (GDOM-GH-08)	Target: Eight Automatic Reclosers	Installed two reclosers
Line removal (in HFTD) 8.1.2.9 (GDOM-GH-09)	Target: 1.1 Circuit Miles	Zero removed
Animal guards 8.1.2.12 (GDOM-GH-12c)	Target: Two Animal Guards	Zero installed
Patrol inspections of distribution electric lines and equipment 8.1.3.3 (GDOM-AI-03)	Target: 589 Circuit Miles	477 Circuit Miles inspected

6.4.1 Liberty Change Order Request

As previously discussed, on May 28, 2024, Liberty submitted a Change Order Request that sought to update seven initiative targets for 2024.⁵⁶ On July 1, 2024, Energy Safety rejected Liberty's Change Order Request with respect to all requests to reduce targets.⁵⁷ Of the seven missed 2024 WMP initiatives, four were initiatives Liberty sought to change in the Change

⁵⁵ EC ARC, page 21.

⁵⁶ 2024 Liberty Change Order Request.

⁵⁷ 2024 Change Order Decision, pages 3-6.

Order Request (covered conductor, undergrounding, installation of system automation equipment, and line removal in High Fire Threat Districts), but Energy Safety denied the proposed target decreases because they would not reduce risk as effectively as the existing 2024 WMP targets.⁵⁸ (Table 6) below summarizes the four missed WMP initiatives targets that were related to the change order request.

Table 6. Liberty WMP Initiatives with Missed Targets Related to Change Order Request

Not Attained Liberty 2024 WMP Initiative from Change Order Request	Change Order Request ⁵⁹	Energy Safety's Change Request Decision ⁶⁰	Actual Performance
Covered conductor installation 8.1.2.1 (GDOM-GH-01)	Target: 3.9 miles	Rejected	Actual: 3.9 miles
Undergrounding of electric lines and/or equipment 8.1.2.2 (GDOM-GH-02)	Target: Zero miles	Rejected	Actual: Zero miles
Microgrids 8.1.2.7 (GDOM-GH-07)	Target: Zero microgrids	Rejected	Actual: Zero microgrids
Installation of system automation equipment 8.1.2.8 (GDOM-GH-08)	Target: Four automatic reclosers	Rejected	Actual: Two automatic reclosers

⁵⁸ As noted previously, the failure of a Change Order Request to lead to greater risk reduction as compared to the approved WMP was the main criterion used by Energy Safety to reject Charge Order Requests during the 2024 performance year, pursuant to the WMP Process and Evaluation Guidelines in effect at the time.

⁵⁹ 2024 Liberty Change Order Request.

⁶⁰ 2024 Change Order Decision.

Not Attained Liberty 2024 WMP Initiative from Change Order Request	Change Order Request ⁵⁹	Energy Safety's Change Request Decision ⁶⁰	Actual Performance
Line removal (in HFTD) 8.1.2.9 (GDOM-GH- 09)	Target: Zero miles	Rejected	Actual: Zero miles

Liberty's EC ARC explained that it missed seven 2024 WMP initiative targets, and that Liberty sought to reduce targets for five of these seven through its 2024 Change Order Request because, according to Liberty, no 2024 WMP Update process was available for Liberty to pursue. Liberty's EC ARC noted that Energy Safety denied the request to reduce these five targets.⁶¹ While it may be literally true that there was no 2024 WMP Update process available for Liberty, the Change Order Request process provided Liberty a comparable opportunity to seek changes to its 2024 WMP targets, and Liberty's availed itself of that process.

Liberty's more detailed explanations for missing specific grid hardening targets reiterated their argument that the lack of a 2024 WMP Update process was the cause of some of its missed targets. For example, Liberty's EC ARC stated that there were no lessons to be learned from missing its covered conductor target in 2024 and that no corrective action would be taken "as the driver for missing the target was not having a 2024 WMP Update submission and associated opportunity to update 2024 targets as part of Energy Safety's WMP process."⁶² This conclusory statement omitted the procedural history regarding the 2024 Change Order Process, and therefore led to an inaccurate picture of the reasons Liberty did not meet this 2024 WMP target as an opportunity to modify the 2024 WMP targets was actually available and utilized by Liberty. In any event, the EC ARC did not explain exactly why the lack of a 2024 WMP Update process, or the denied 2024 Change Order Request, led necessarily to the missed targets.

Liberty's EC ARC did state that the missed covered conductor target "was due to a change in strategic direction that prioritized Liberty's [SRP] Program as an expedited wildfire mitigation during the current WMP cycle. Liberty covered more of its system with SRP over a shorter time and anticipated that this change would reduce wildfire risk within the current WMP cycle."⁶³ However, as stated previously, Energy Safety identified in its Decision on Liberty's 2023-2024 WMP—issued in February 2024—that Liberty had not quantitatively demonstrated that use of

⁶¹ EC ARC, page 23.

⁶² EC ARC, page 23.

⁶³ EC ARC, page 23.

SRP would have a comparable risk reduction as covered conductor. It is unclear why Liberty's EC ARC omitted mention of this previous finding by Energy Safety.

Observation

Liberty's EC ARC did not sufficiently explain the reason for its missed targets or provide a reasonable plan for ensuring that the same targets are not missed in future years, as required by Energy Safety's Performance Guidelines.

This APR reiterates that an EC ARC is the mechanism by which an electrical corporation should describe the reasons for its failure to meet its WMP targets or objectives in a given year. This retrospective analysis allows both the electrical corporation and Energy Safety to consider the impact of real-world events on targets set years in the past, and whether a reasonable basis exists for excusing the failure to meet a given target. This mechanism balances the importance of the EC's pledge to its customers and the broader public of California to reduce the risk of catastrophic wildfire with the reality that some failures to meet targets could not be reasonably avoided. However, this approach depends on the transparency and reliability of an electrical corporation's representations in its EC ARC.

6.4.2 Impact of Initiatives with Missed Targets on Proposed Expenditures

Energy Safety uses the magnitude of funding proposed for a given WMP initiative as one way of gauging the impact of a missed initiative relative to the larger suite of WMP work. This analysis proceeds from the assumption that the greater the proposed expenditure for a WMP initiative, the greater importance that initiative has to the EC's overall plan for wildfire risk reduction. Note that this financial analysis does not attempt to quantify the risk reduction impact of a WMP initiative.

Energy Safety quantified the financial importance of Liberty's 2024 WMP initiatives with missed targets. For this assessment, Energy Safety created three different perspectives of financial importance:

1. Relative magnitude of proposed expenditures for initiatives with missed targets to the overall 2024 WMP;
2. Percentage of the proposed expenditures for the initiatives with missed targets that was spent; and
3. Of the ten largest initiatives by proposed expenditure, the number of initiatives that had missed targets.

The total amount budgeted for the seven initiative activities with missed targets was \$20 million, or 35% of the approximate \$56 million allocated in Liberty's 2024 WMP budget. Of the \$20 million budgeted for the initiatives with missed targets, \$10 million was spent (50%).

Energy Safety found that of the 10 largest initiatives by proposed expenditure, three missed their targets and represented a budgeted amount of \$18.5 million, or 44%, of the \$42 million

allocated for these 10 initiatives in 2024. These three initiatives and their budgeted amounts were:⁶⁴

- Covered Conductor Installation (GDOM-GH-01) - \$8.6 million
- Undergrounding of Electric Lines and Equipment (GDOM-GH-02) - \$8.4 million
- Microgrids (GDOM-GH-07) - \$1.5 million

Observation

Liberty spent less than proposed for expenditures on missed initiatives by a significant amount (50%). This underscores the EC ARC's failure to give reasonable explanations for the failure to miss certain targets as described above.

See the table in Appendix A for a complete list of initiatives and their proposed and actual expenditures.

6.4.3 Impact of Initiatives with Missed Targets on Risk Reduction

For the 2024 WMP, Energy Safety's WMP Technical Guidelines (as published on December 7, 2022) required an electrical corporation to estimate the relative risk impact of its mitigation activities by subtracting the remaining risk after the mitigation activity is completed from the risk that existed before the mitigation activity occurred.⁶⁵ The electrical corporation is then to divide the risk difference by the risk before the mitigation activity, and finally, multiply the divided number by 100.⁶⁶

Observation

Despite these requirements in the WMP Technical Guidelines, Liberty's EC ARC did not provide a risk impact analysis of the missed targets. However, Energy Safety's decision on Liberty's Change Order Request determined that Liberty's proposed reduced targets, which generally track with Liberty's actual performance for several of its missed targets, would not have reduced risk on Liberty's system. Therefore, this report concludes that Liberty's missed 2024 WMP targets led to less risk reduction than Liberty pledged to its customers and the broader public in its 2024 WMP.

6.5 Liberty 2024 WMP Expenditure Assessment

Energy Safety conducted an expenditure assessment to estimate Liberty's spending alignment with its 2024 WMP. Unlike the analyses of the impact of initiatives with missed targets on proposed expenditures, this analysis considers all 2024 WMP initiatives and

⁶⁴ 2024 Q4 QDR, Table 11.

⁶⁵ WMP Technical Guidelines, page 71.

⁶⁶ WMP Technical Guidelines, page 71.

focuses on the gap between proposed and actual spending, as stated in the WMP. In addition, Energy Safety's analysis identifies spending deviations exceeding 10%, analyzing how they impact Liberty's planned spending variance.

This analysis is intended to provide an assessment of the EC's project management capabilities as they relate to financial management, which in turn provides insight into the EC's ability to responsibly utilize ratepayer funds dedicated to its WMP work.⁶⁷

According to Liberty's Q1 QDR,⁶⁸ it budgeted \$56 million for its 43 WMP initiatives for 2024, representing 38% of Liberty's total budget for wildfire mitigation for the 2023-2025 period. The EC ARC and IE ARC reported \$49 million (87%) spent of the \$56 million proposed,^{69, 70} and Energy Safety's analysis concurs with these findings.

Observation

Energy Safety analyzed Liberty's expenditures on individual 2024 WMP initiatives and found that 37% (16 out of 43) of the initiatives had actual expenditures that deviated more than 10% from those proposed. See the table in Appendix A for a complete list of initiatives and their proposed and actual expenditures.

6.6 Initiative Performance Observations and Conclusions

Section 6 of this report demonstrates that Liberty missed several of its 2024 WMP initiative activity targets, and that this failure reduced Liberty's ability to reduce risk on its system in 2024 compared to what it pledged to its customers and the California public in its 2024 WMP. Liberty's EC ARC lays out Liberty's explanation for the failure to meet its 2024 WMP targets and in many cases, as noted previously, the EC ARC does not provide substantiation beyond saying that Liberty made an operational decision to lower its targets.

Energy Safety made several observations above regarding the impact of Liberty's 2024 initiative performance, which include:

- Energy Safety's field inspections determined that there was some inconsistency in the data provided by Liberty with respect to the completeness of some 2024 WMP initiatives, which are part of broader data management issues that Liberty should address going forward.
- While Liberty met targets for a large majority of its 2024 WMP initiatives, some of those targets that were missed were related to grid hardening activities that would have

⁶⁷ See Pub. Util. Code section 8386.3(c)(1) regarding the prohibition of diverting wildfire mitigation funds.

⁶⁸ 2024 Q1 QDR, Table 11.

⁶⁹ EC ARC, page 27-28.

⁷⁰ IE ARC, pages 21-24, 72-73, 93-34, 103, 112-113.

otherwise reduced risk on Liberty's system in the manner Liberty pledged to its customers and the broader public of California, and are part of a multi-year trend of missing several different WMP initiatives.

- Liberty's EC ARC did not sufficiently explain the reason for its missed targets or provide a reasonable plan for ensuring that the same targets are not missed in future years, as required by Energy Safety's Performance Guidelines.
- Liberty underspent its proposed expenditure on missed initiatives by a significant amount (50%). This underscores the EC ARC's failure to give reasonable explanations for the failure to miss certain targets.
- Energy Safety analyzed Liberty's expenditures on individual 2024 WMP wildfire mitigation initiatives and found that 37% (16 out of 43 initiatives) of the initiatives had actual expenditures that deviated more than 10% from those proposed.

Energy Safety remains committed to an open and collaborative approach to reducing wildfire risk in California. In order to achieve this goal, it is important that Liberty effectively implement its own plan for wildfire risk reduction within the regulatory framework overseen by Energy Safety.

7. Ignition Risk Performance

Energy Safety requires electrical corporations to report data, such as ignitions, that help Energy Safety assess whether an electrical corporation is reducing its wildfire risk over time while also reducing its reliance on PSPS events. In order to consistently analyze these data between years and between ECs, Energy Safety uses a set of quantitative ignition risk performance metrics, as follows:⁷¹

- Direct Metric - Ignition Rates: This report defines ignitions as incidents in which electrical corporation infrastructure contributed to an ignition. Liberty reports its total number of ignitions to Energy Safety on a quarterly basis.⁷²
- Proxy Metric - Wire Down Event Rate: This report defines wire down events as incidents in which overhead electrical lines fall to the ground, land on objects, or become disconnected from their moors. Liberty reports its total number of wire down events to Energy Safety on a quarterly basis.

⁷¹ Data for all figures in this section utilize a combination of Liberty's response to DR-281 and Liberty's data from the QDRs. Priority is given to the data request if both are available. Otherwise, 2015-2021 data are sourced from Q3 2022 QDR, 2022-2023 data are sourced from the Q4 2023 QDR, and 2024 data are sourced from the relevant quarter's QDR (e.g., Q1 2024 data sourced from the Q1 2024 submission, Q2 2024 data sourced from the Q2 2024 submission, etc.).

⁷² The term "ignition," utilized by Energy Safety, is an ignition that meets all of the following criteria: 1) a self-propagating fire of material other than electrical and/or communication facilities, 2) the resulting fire traveled greater than one linear meter from the ignition point, and 3) the utility has knowledge that the fire occurred.

- Proxy Metric – Outage Event Rate: This report defines outages as all unplanned outages experienced in Liberty’s territory. PSPS outages are not included. Liberty reports its total amount of outages to Energy Safety on a quarterly basis.

For this report, Energy Safety estimates Liberty’s ignition risk performance metrics for the calendar years 2017 through 2024.

For direct and proxy performance metrics, Energy Safety converts the metric counts into rates by dividing them by Liberty’s Overhead Circuit Miles (OCM). These rates for ignition risk events add nuance to the assessment and allow for comparisons across the ECs.

To see the raw counts of all ignition risk events and OCM values for each year used, see Appendix C.

7.1 Ignition Rates

Ignition rates are the most direct measure of wildfire risk performance. There are limitations to only using ignition rates, however, due to the relatively small size of the dataset relative to other indications of risk, such as wires down and unplanned outages. As a result, this analysis of Liberty’s ignitions over time should be read in concert with the other metrics to give a full picture of an EC’s performance over time.

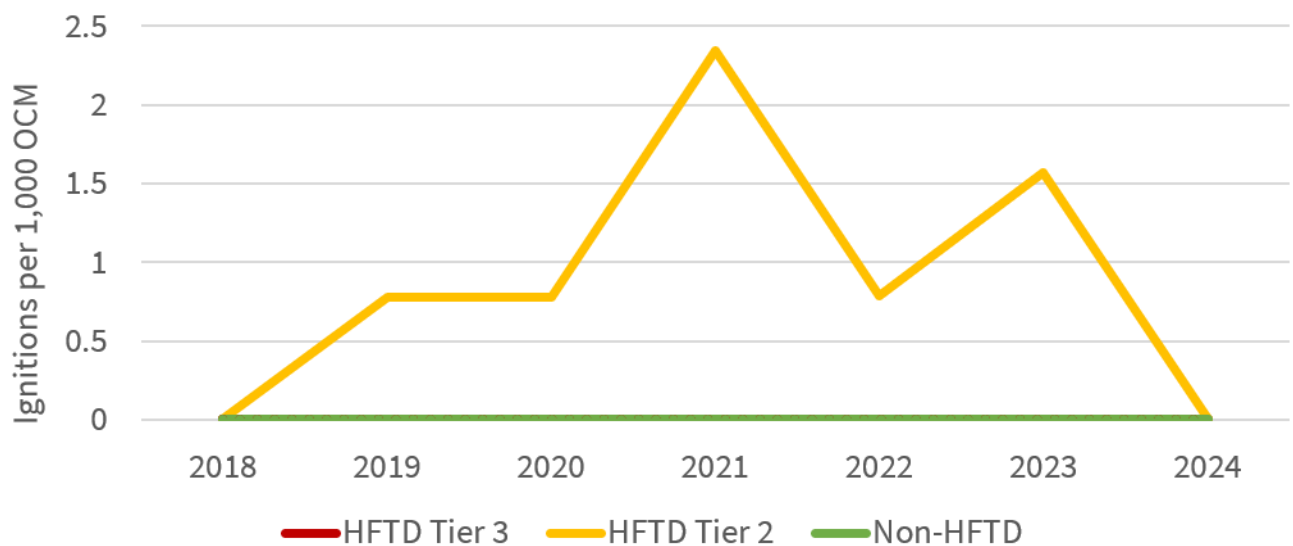
Ignition Rates per Overhead Circuit Mile

To account for concurrent overhead grid expansion within Liberty's territory and allow for comparisons with other utilities, ignitions normalized by overhead circuit miles (OCM) are provided as a rate of ignitions per 1,000 miles and delineated by HFTD Tier 3, HFTD Tier 2, and non-HFTD Areas.

For this analysis, ignitions in HFTD Tier 2 areas comprised the large majority of ignition activity across the study period from years 2018-2024, reaching its peak in 2021 at approximately 2.35 ignitions per 1,000 OCM. Non-HFTD and HFTD Tier 3 ignitions remained consistently at or near zero throughout the entire period (Figure 2).

For a plot of ignition event raw counts, see Appendix C.

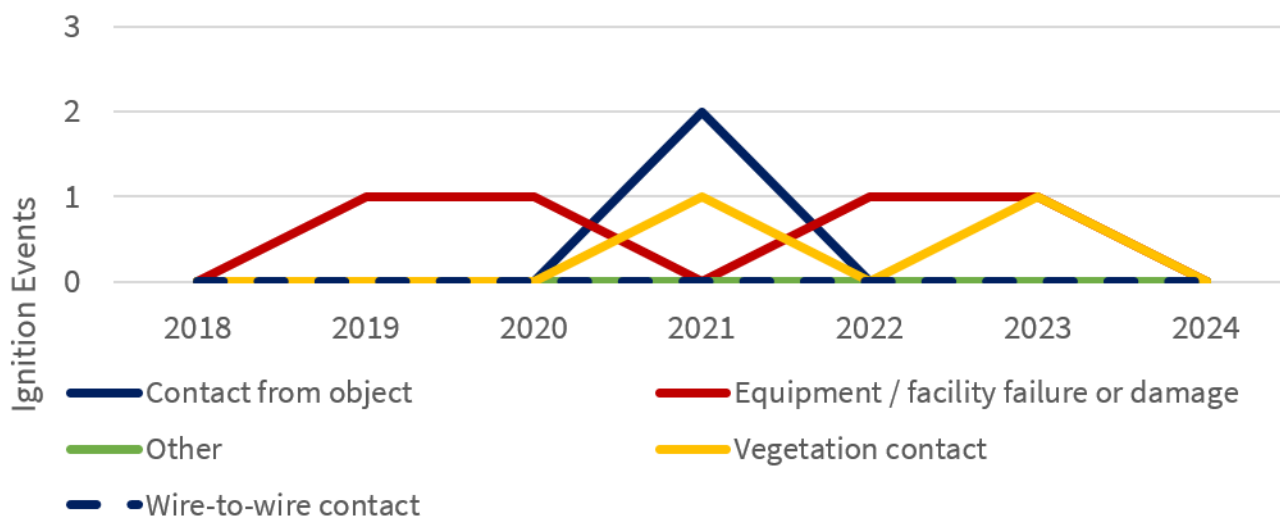
Figure 2. Liberty Ignitions per OCM (2018-2024) by HFTD Tier



Raw Ignitions by Risk Driver

Liberty's data shows the two most prevalent causes of ignition from 2018-2024 were: 1) equipment/facility failure or damage, and 2) contact from object. Equipment/facility failure or damage was the most recurring driver, recording one ignition event in four of the eight years observed. Contact from object reached the single highest annual count of the entire period at two ignition events in 2021. Vegetation contact was an additional contributing factor, recording one event in both 2021 and 2023. Wire-to-wire contact and "other" causes remained at zero throughout the entire period, indicating that unclassified or miscellaneous causes did not materially contribute to Liberty's overall ignition profile. In 2024, Liberty did not report any ignitions (Figure 3).

Figure 3. Liberty Ignition Events Delineated by Risk Driver

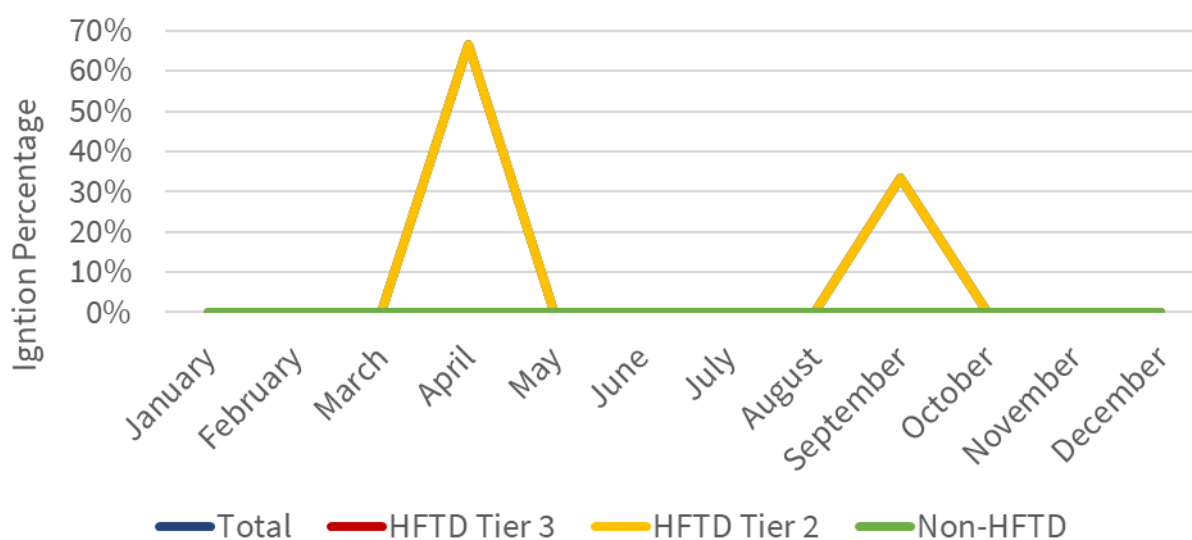


Ignition Events Organized by Month and HFTD Tier for the 2022-2024 Period

Energy Safety estimated where, by HFTD tier, and when, by month of the year, ignition events recently occurred. The last three years (2022-2024) of events are averaged to account for noise in the sparse event data. In order to show the relative contribution of each HFTD tier, Energy Safety divided the 3-year average number of events for each month within each HFTD tier by the 3-year average number of all events for the year.

According to the assessment conducted, HFTD Tier 2 accounted for the primary ignition activity across the 2022–2024 period. Ignitions were concentrated in two distinct seasonal windows: a peak in April at approximately 67% of total HFTD Tier 2 ignitions, and a secondary peak in September at approximately 33%. Ignitions outside HFTD Tier 2 areas remained at or near zero across all months (Figure 4).

Figure 4. Liberty 3-Year Average (2022-2024) of Monthly Ignition Events by HFTD Tier



7.2 Wire Down Event Rates

Wire down events are wildfire risks where a wire is touching the ground, touching an object, or has become disconnected from its mooring. This type of event poses a risk of ignition or a danger to people if that wire is also energized with electricity, and therefore is tracked by Energy Safety in its Annual Performance Reports as a proxy metric for ignition risk.

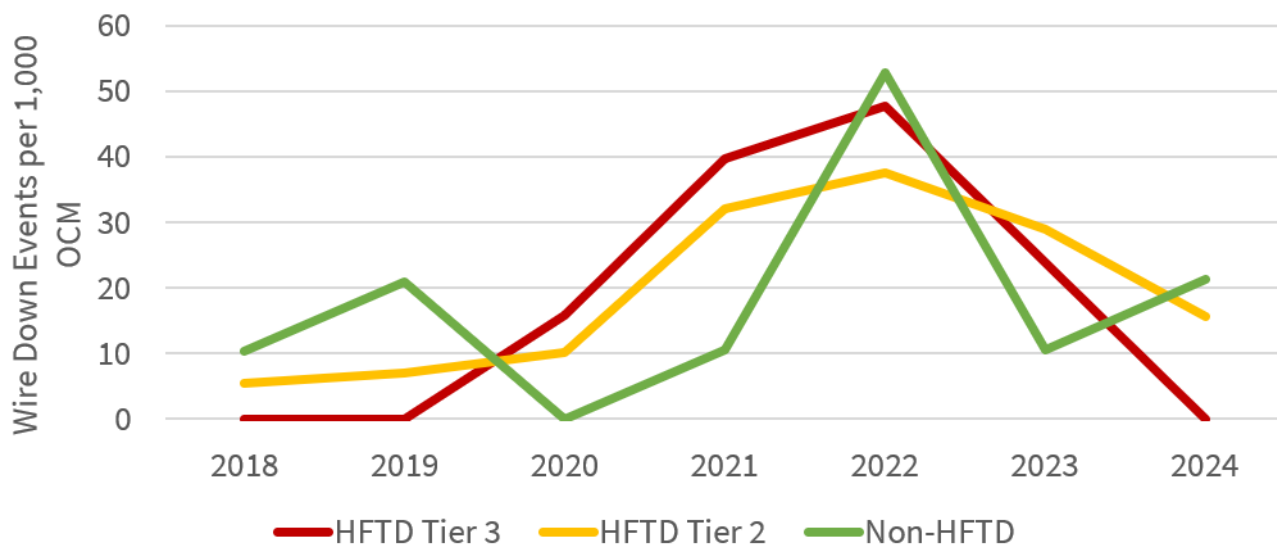
Wire Down Events per Overhead Circuit Mile

To account for concurrent overhead grid expansion within Liberty’s territory and allow for comparisons with other utilities, wire down events normalized by overhead circuit miles (OCM) are provided as a rate of wire down events per 1,000 miles and delineated by HFTD Tier 3, HFTD Tier 2, and non-HFTD Areas.

For the period of 2018-2024, wire down events peaked in all areas in 2022, but then dropped considerably in 2023. HFTD Tier 3 wire down events exhibited variability, rising steadily from near zero in 2018–2019, to a peak of approximately 48 wire down events per 1,000 OCM in 2022, before declining to near zero in 2024. HFTD Tier 2 wire down events followed a similar pattern, peaking at approximately 38 wire down events per 1,000 OCM in 2022 before moderating through 2024 (Figure 5).

For wire down event counts, see Appendix C.

Figure 5. Liberty Wire Down Events per OCM (2018-2024) by HFTD Tier

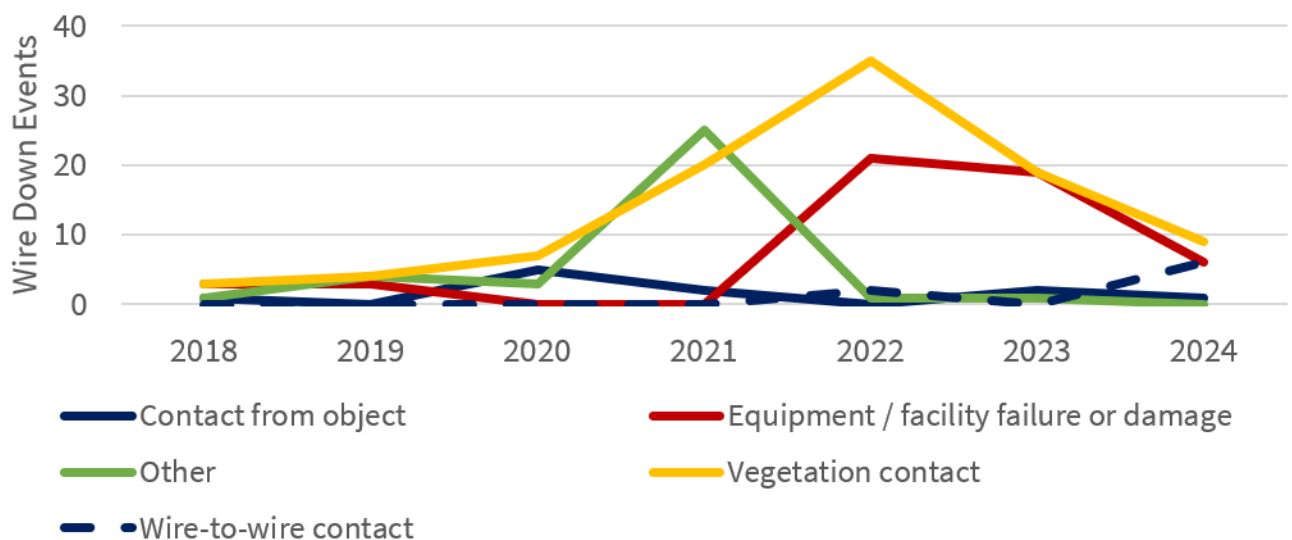


Raw Wire Down Events by Risk Driver

Liberty wire down event counts are shown delineated by risk drivers to indicate which causes are the most common (Figure 6).

Vegetation contact and equipment/facility failure or damage were the two most prevalent risk drivers between years 2018-2024. Vegetation contact reached the highest single-year count at approximately 35 events in 2022. Equipment/facility failure or damage peaked at approximately 21 events in the same year, indicating that 2022 represented a particularly severe year for wire down activity across multiple cause categories. Notably, the “other” category also recorded a substantial spike of approximately 25 events in 2021, representing a meaningful share of total wire down activity for that year.

Figure 6. Liberty Wire Down Events Delineated by Risk Driver



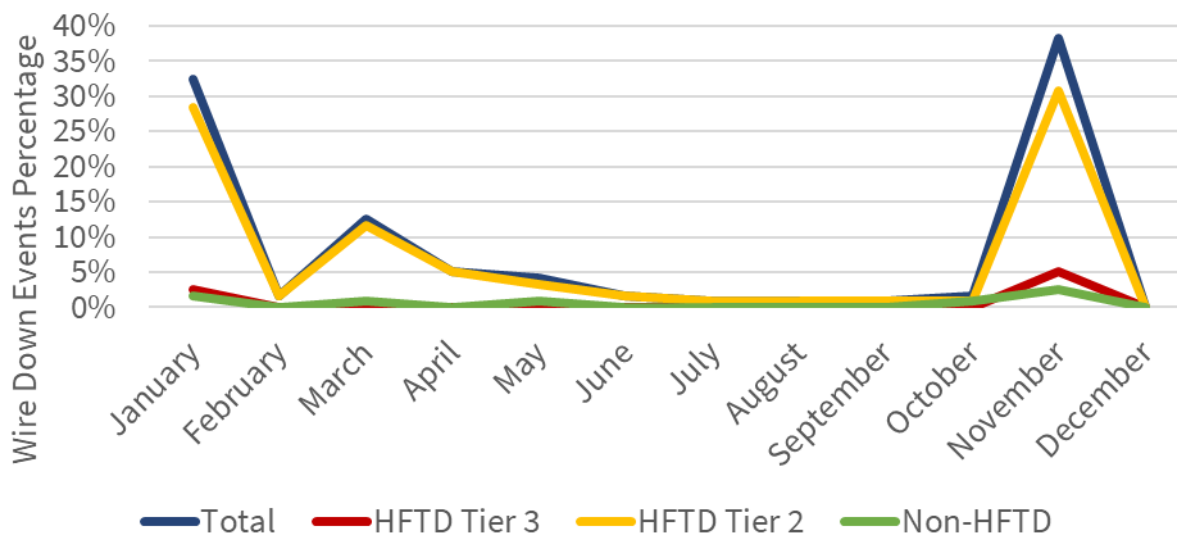
Wire Down Rates Organized by Month and HFTD Tier for the 2022-2024 Period

Energy Safety estimated where, by HFTD tier, and when, by month of the year, wire down events recently occurred. The last three years (2022-2024) of events are averaged to account for noise in the sparse event data. In order to show the relative contribution of each HFTD tier, Energy Safety divided the 3-year average number of events for each month within each HFTD tier by the 3-year average number of all events for the year.

According to the assessment conducted, wire down events for the 2022–2024 period were concentrated predominantly in winter months, with the system-wide total peaking in November at approximately 38% of annual wire down events and January at approximately 33%. HFTD Tier 2 closely mirrored this pattern, recording its highest concentrations in January at approximately 28% and November at approximately 31%, while HFTD Tier 3 and non-HFTD remained near zero across virtually all months. The pronounced concentration of wire down activity in January and November — outside of the traditional fire season window

— stands in contrast to the spring and fall ignition-risk periods identified in the monthly ignition analysis (Figure 7).

Figure 7. Liberty 3-Year Average (2022-2024) of Monthly Wire Down Events by HFTD Tier



7.3 Outage Event Rates

Power outages (outages) are unplanned power outage events (i.e., do not include PSPS events) tabulated by circuits and not by number of customers impacted. Outage events are tracked as they may both cause ignitions and impact a customer's quality of life.

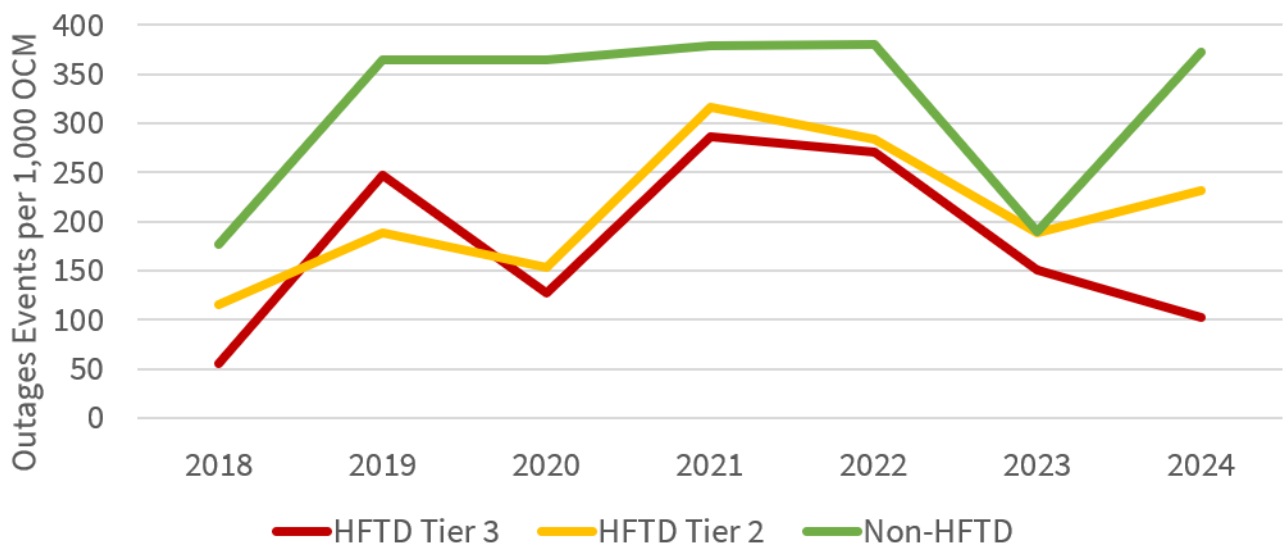
Outage Events per Overhead Circuit Mile

To account for concurrent overhead grid expansion within Liberty's territory and allow for comparisons with other utilities, outages normalized by OCM are provided as a rate of outages per 1,000 miles and delineated by HFTD Tier 3, HFTD Tier 2, and non-HFTD Areas.

For the period of 2018-2024, non-HFTD areas exhibited the highest rates, peaking at approximately 365 outage events per 1,000 OCM in 2019 -2020. These rates rose again to a secondary peak around 2021-2022, and reached a new high of approximately 380 outage events per 1,000 OCM in 2024. HFTD Tier 2 followed a broadly similar pattern to Tier 3, rising from low levels in 2018, peaking at approximately 317 outage events per 1,000 OCM in 2021, moderated through 2023, then rose again in 2024 (Figure 8).

For raw outage event counts, see Appendix C.

Figure 8. Liberty Outages per OCM (2018-2024) by HFTD Tier

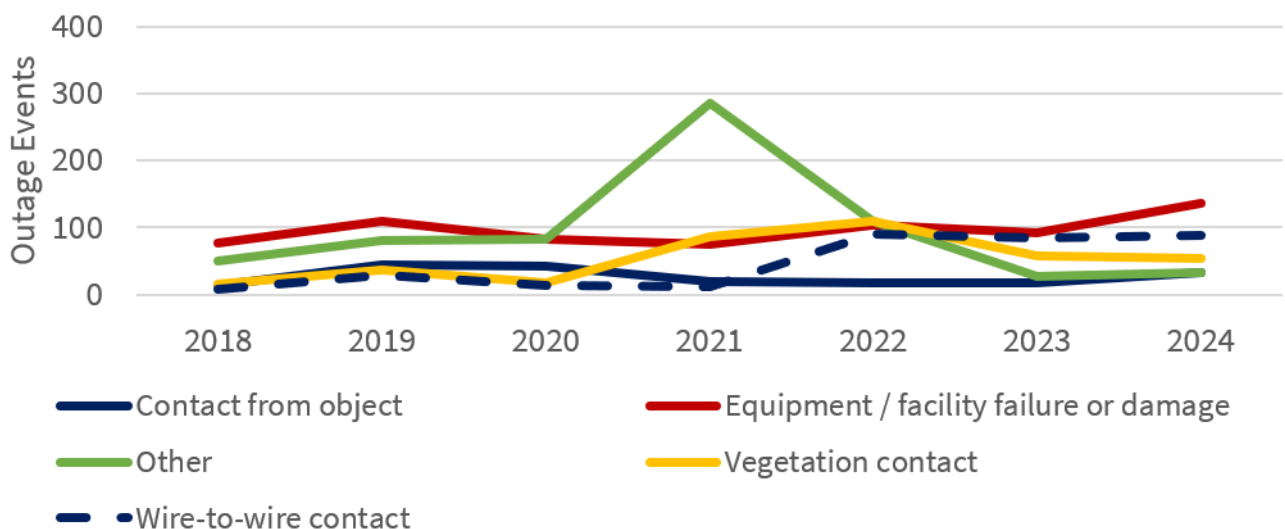


Raw Outage Events by Risk Driver

Liberty outages are shown delineated by risk drivers to indicate which causes are the most common (Figure 9).

Equipment/facility failure or damage was the most consistently prevalent risk driver across the entire period, maintaining relatively stable counts in the range of approximately 90–110 events from 2018 through 2019, dipping in 2020, and then rising to approximately 137 events by 2024 — the highest value recorded for that category. The “other” category emerged as a secondary driver, recording a spike of approximately 286 events in 2021, exceeding all other risk drivers in that year, and representing a substantial share of total outage activity for the period. The category of “other” contains several sub-categories such as emergency repairs, lightning, government requests, and vandalism. However, the “other” category is dominated by the sub-category of unknown (>95%).

Figure 9. Liberty Outage Events Delineated by Risk Driver

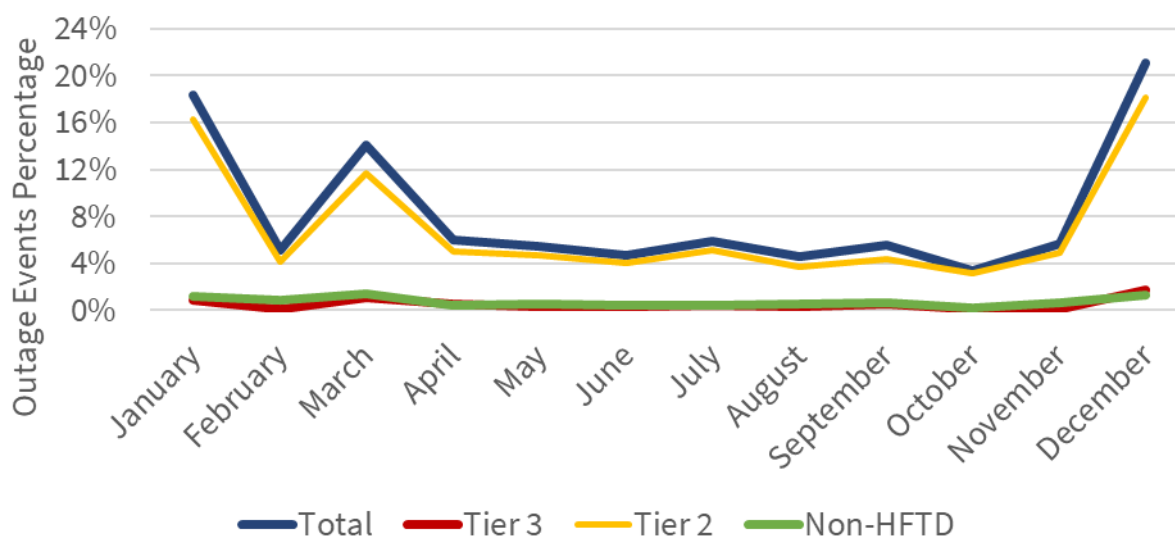


Outage Events Organized by Month and HFTD Tier for the 2022-2024 Period

Energy Safety estimated where, by HFTD tier, and when, by month of the year, outage events recently occurred. The last three years (2022-2024) of events are averaged to account for noise in the sparse event data. In order to show the relative contribution of each HFTD tier, Energy Safety divided the 3-year average number of events for each month within each HFTD tier by the 3-year average number of all outage events for the year.

According to the assessment conducted, outage events for the 2022–2024 period were concentrated predominantly in winter months, with the system-wide total peaking in December at approximately 21% of annual outage events and January at approximately 18%. HFTD Tier 2 closely mirrored this pattern, recording its highest concentrations in January at approximately 16% and December at approximately 18%, while HFTD Tier 3 and non-HFTD remained near zero across virtually all months. There is a concentration of outage activity in December and January — outside the traditional fire season window — combined with near-exclusive attribution to HFTD Tier 2 infrastructure (Figure 10).

Figure 10. Liberty 3-Year Average (2022-2024) of Monthly Outage Events by HFTD Tier



8. Public Safety Power Shutoff Event Performance

PSPS events are planned outages that may be used as a wildfire mitigation tool during extreme fire conditions, particularly hot, dry, and windy days. While useful as a wildfire mitigation measure, PSPS events carry their own risks and adverse impacts on customers — particularly vulnerable customers who rely on electricity. As such, electrical corporations take mitigating actions to reduce the frequency, scope, duration, and impacts of PSPS events.

Energy Safety collects data from the ECs on their PSPS events and tracks their PSPS performance on a year-over-year basis. The purpose of this analysis is to monitor and publicize the impacts of an EC's PSPS performance. This analysis does not make any judgment about the reasonableness of the decision to employ PSPS.

The following four PSPS event parameters are presented by year and comprise the main components of the PSPS event performance assessment:

- *Scope* is measured as the total number of utility circuits impacted because of PSPS events,
- *Duration - Customer* is measured by the total number of customer-hours because of PSPS events,
- *Duration - Critical Infrastructure* is measured as the total number of critical infrastructure hours affected by PSPS events,⁷³ and
- *Impact* - is measured as the total number of customers affected by PSPS events.

Energy Safety converted the event parameters into rates by dividing them by Liberty's PSPS frequency, measured as the count of all PSPS events. These rates for PSPS event parameters measure the performance of EC PSPS event management and account for year-to-year variances in weather. They reflect the performance of the PSPS events once they have occurred.

To estimate when PSPS events typically occur throughout the year, the PSPS events by month for the years 2022 – 2024 have been averaged.

The data source for PSPS event parameters information is the QDRs.⁷⁴

To see the raw counts of all PSPS event parameters and PSPS frequency for each year used, see Appendix C.

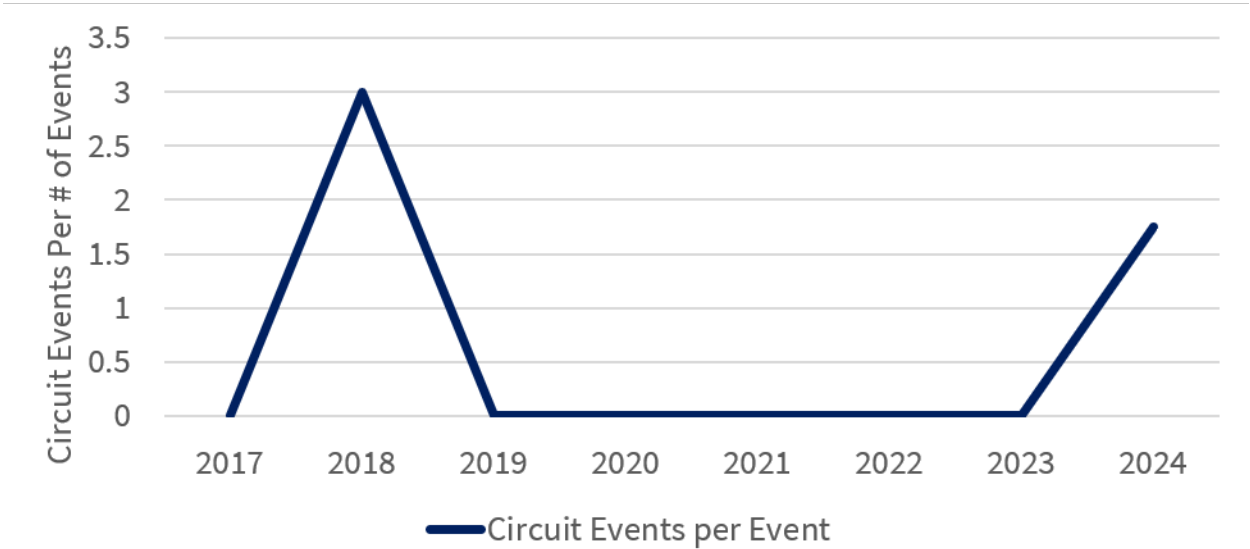
⁷³ The term "critical infrastructure hours" means the total number of hours that critical infrastructure was impacted by PSPS events. Energy Safety's 2024 Compliance Guidelines (which were effective during the 2024 performance period) defines critical infrastructure as structures that are: chemical, communication, educational, emergency services, energy, government facilities, healthcare and public health, public safety answering points, transportation, water and wastewater systems, and other.

⁷⁴ 2022 Q3 QDR, Table 11; 2023 Q4 QDR, Table 10; 2024 Q4 QDR, Table 10.

Scope of PSPS Events

Based on information provided by Liberty, the rate of circuits impacted by PSPS events reached its highest point in 2018, reaching approximately three circuit events per PSPS event, before dropping to zero in 2019–2023, and then rising again to approximately 1.8 in 2024 (Figure 11).

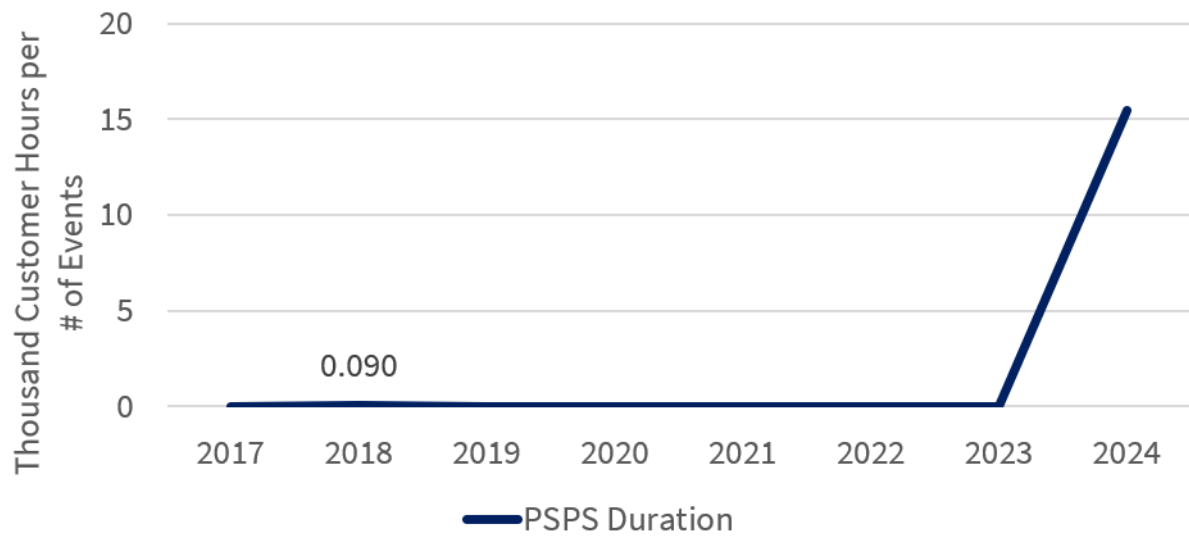
Figure 11. Liberty PSPS Event Scope per Event (2017-2024)



Duration-Customers of PSPS Events

Based on information provided by Liberty, the rate of customer-hours impacted per event remained effectively at or near zero from 2017 through 2023, before rising to approximately 15,470 customer hours per PSPS event in 2024 — the highest value recorded across the entire study period (Figure 12).

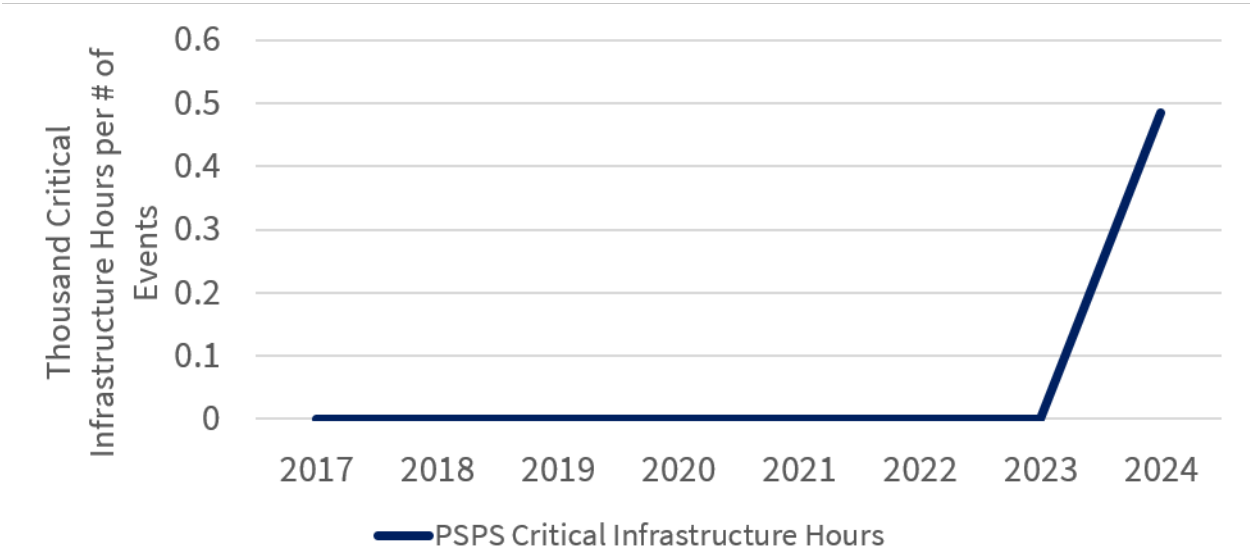
Figure 12. Liberty PSPS Event Duration Customers per Event (2017-2024)



Duration-Critical Infrastructure of PSPS Events

Based on information provided by Liberty, the duration of PSPS events on critical infrastructure hours per event remained effectively at or near zero from 2017 through 2023, before rising sharply to approximately 485 critical infrastructure hours per event in 2024 — the highest value recorded across the entire study period (Figure 13).

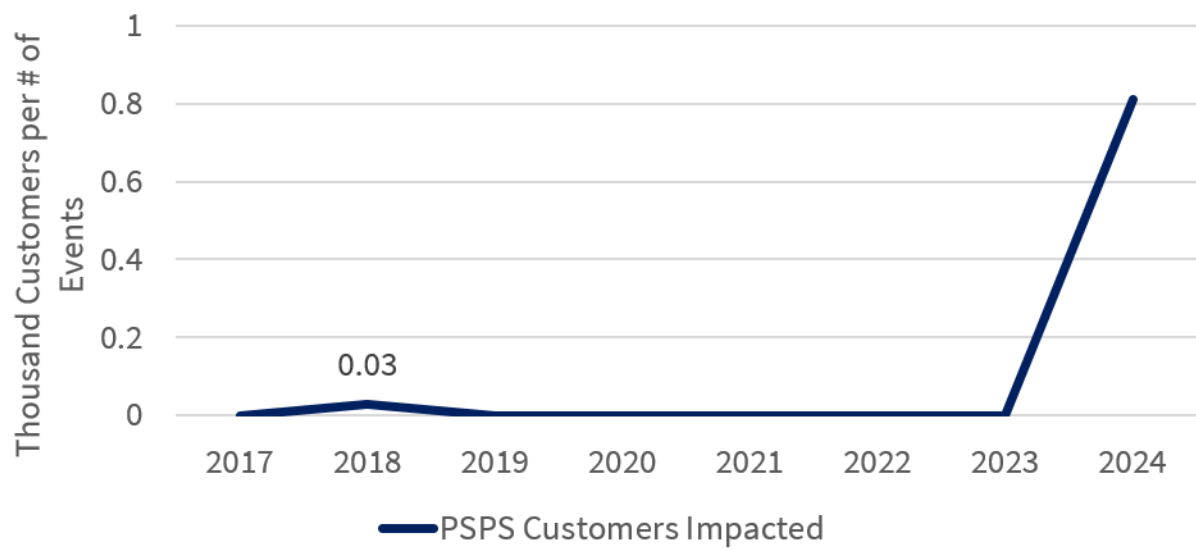
Figure 13. Liberty PSPS Event Duration - Critical Infrastructure per Event (2017 - 2024)



Customers Impacted by PSPS Events

Based on information provided by Liberty, the rate of PSPS event impacts on the number of customers per event remained effectively at or near zero from 2017 through 2023, with only a minor elevation in 2018 at approximately 30 customers per event, before rising sharply to approximately 810 customers per event in 2024 — the highest value recorded across the entire study period (Figure 14).

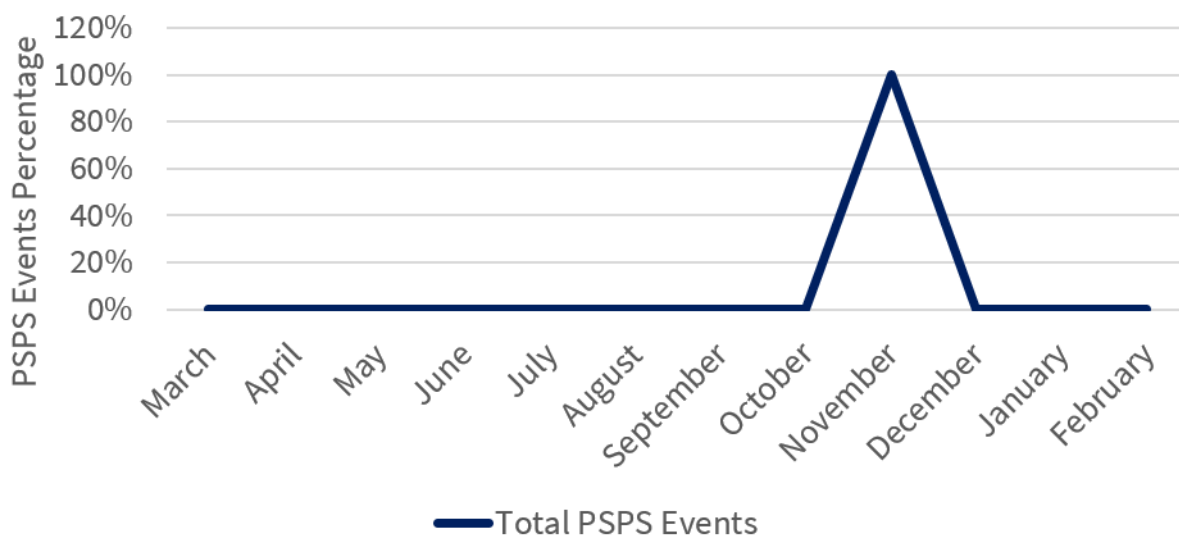
Figure 14. Liberty PPS Event Impacts on Number of Customers per Event (2017 - 2024)



PSPS Events Organized by Month and HFTD Tier for the 2022-2024 Period

Energy Safety conducted a separate assessment to identify when PSPS events have occurred during the last 3 years. To do so, Energy Safety estimated Liberty's monthly 3-year average count of PSPS event percentages for the 2022-2024 period (Figure 15). According to the assessment conducted, PSPS events for the 2022-2024 period were overwhelmingly concentrated in November, accounting for 100% of all PSPS event activity, with negligible activity recorded in October and December and zero activity across all remaining months.

Figure 15. Liberty 3 Year Average (2022-2024) Monthly PSPS Event Percentages



9. Outcome Metric Performance

Energy Safety collects data from the ECs regarding the consequences, or outcomes, of the ignitions caused by their equipment each year. Tracking this data over time allows for year-to-year assessment of the risk presented to the public by ignitions caused by the EC.

This section presents outcome performance metrics on EC-related wildfires including:

1. *Acres burned* – The total number of acres burned due to electrical corporation caused fires;
2. *Structures damaged/destroyed* - The total number of structures damaged or destroyed due to electrical corporation caused fires;
3. *Injuries/fatalities* - The total number of injuries and fatalities due to electrical corporation caused fires; and
4. *Value of assets destroyed* - The total value of assets destroyed due to electrical corporation caused fires.

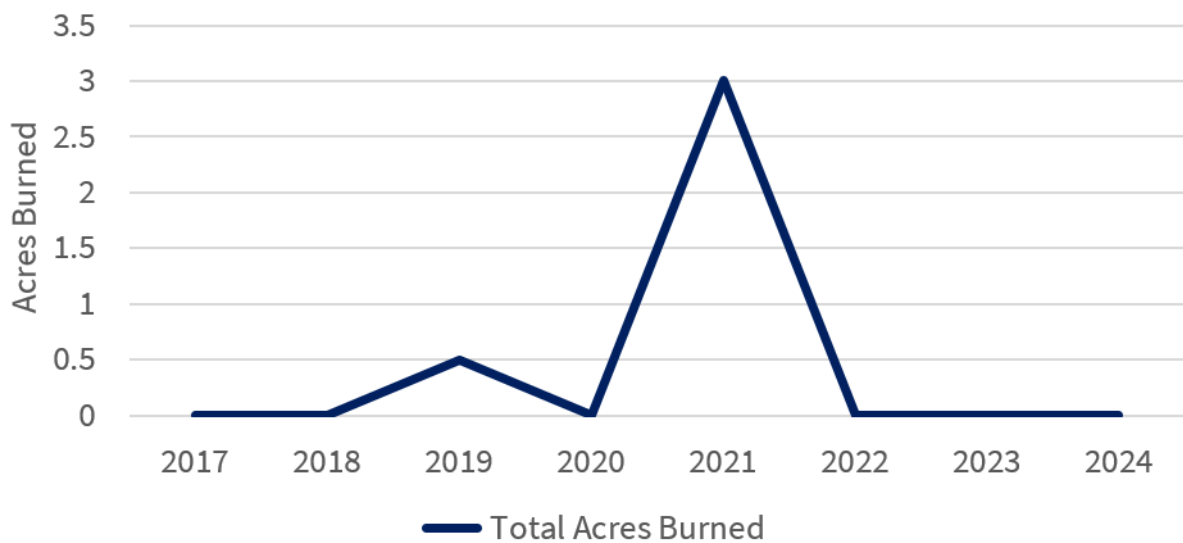
The data source for outcomes performance metrics information is the QDRs.⁷⁵

⁷⁵ 2023 Q3 QDR, Table 2; 2024 Q4 QDR, Table 2.

Acres Burned

This figure presents total acres burned associated with Liberty-caused ignitions for the 2017–2024 period. Acres burned remained near zero for most of the study period, before spiking sharply to approximately three acres in 2021 — the highest value recorded across the entire study period — and then returning to near zero through 2022–2024. The 2021 outlier underscores the potential for episodic fire events and warrants continued monitoring in future reporting periods (Figure 16).

Figure 16. Liberty Total Acres Burned (2017-2024)



Structures Damaged or Destroyed

Liberty did not report any structures damaged or destroyed in the 2017 through 2024 period (Figure 17).

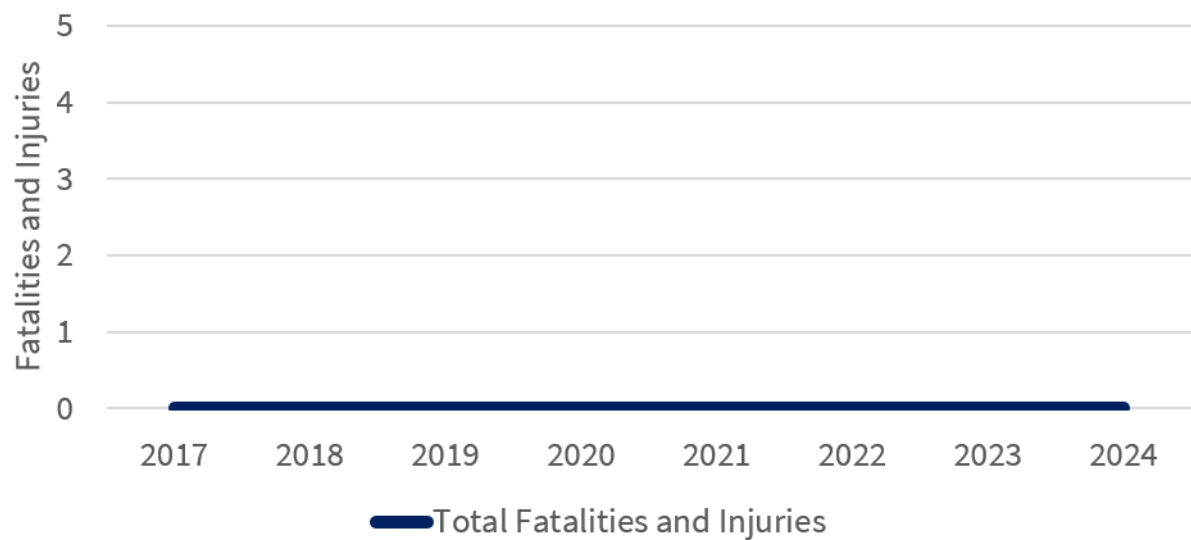
Figure 17. Liberty Structures Damaged or Destroyed (2017-2024)



Injuries and Fatalities

Liberty did not report any injuries and fatalities from 2017 through 2024 (Figure 18).

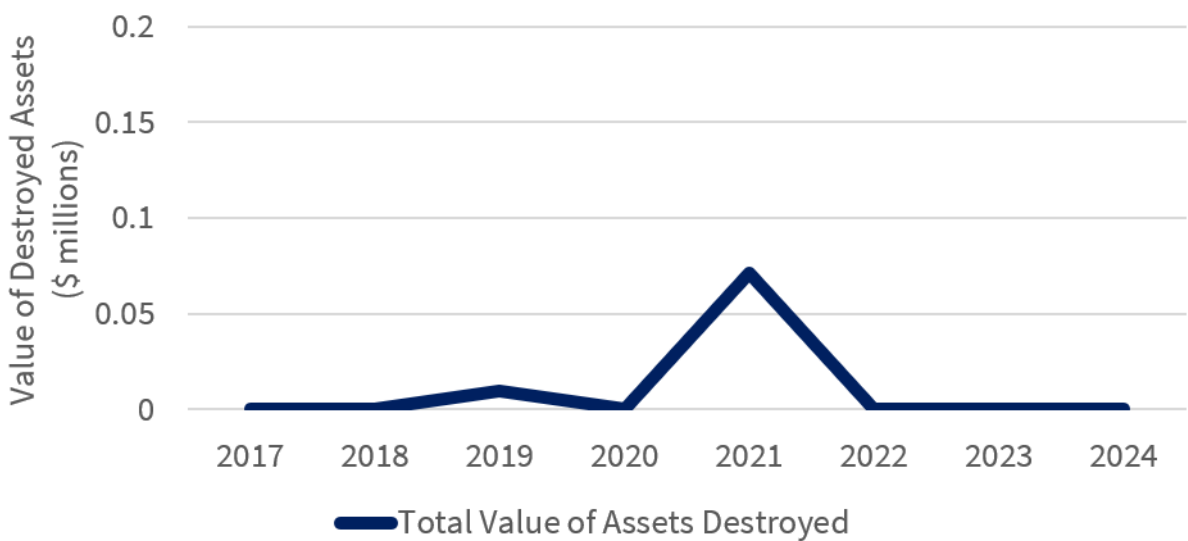
Figure 18. Liberty Injuries and Fatalities (2017-2024)



Value of Destroyed Assets

The value of destroyed assets by Liberty-related wildfires was \$0 in most years of the 2017–2024 period (2017, 2018, 2020, and 2022 through 2024). A small loss occurred in 2019, followed by a sharp increase to approximately \$71,000 in 2021 — the highest value recorded within the 2017–2024 period shown in this figure — consistent with the elevated acres burned and ignition activity observed that same year. Values returned to \$0 across 2022–2024, indicating that the 2021 loss was a single-year event rather than a sustained escalation. Continued monitoring remains warranted given the potential for similarly high-impact events in future periods (Figure 19).

Figure 19. Liberty Value of Destroyed Assets (2017-2024)



10. Reporting Accuracy and Completeness Performance

This section considers Liberty’s performance related to its documentation of its 2024 WMP implementation. To accomplish this, Energy Safety holistically assessed all relevant information sources and assessments, including field verifications, for any systemic failings that may have hindered Liberty’s ability to record and report on its 2024 WMP implementation.

Reporting accuracy and completeness is relevant to an electrical corporation’s overall performance. If an electrical corporation cannot accurately track WMP work and report on progress toward its WMP targets, this calls into question 1) the validity of reporting WMP progress, and 2) the situational awareness of the electrical corporation and therefore its ability to achieve its WMP risk reduction goals through planned wildfire safety mitigation

activities. This section of the report combines five dimensions of reporting accuracy and completeness to provide an overall performance assessment. The five dimensions are:

1. The consistency of data reporting between the QDR and the EC ARC is assessed for issues beyond routine data value updates,
2. Various reports are reviewed for issues identified,
3. Findings from the IE ARC QA/QC program maturity model evaluations are summarized along with other IE ARC data issues observed,
4. Consistency between QDR tabular and QDR spatial reporting is reviewed, and
5. Data accuracy issues identified by the inspections team are reviewed.

Data reporting accuracy is an ongoing issue for Liberty that has been identified in previous annual performance reporting. The 2020 report explained that Liberty's inaccurate reporting made it difficult to analyze the work performed that year, and that Energy Safety expected Liberty to improve its reporting practices. Similar themes emerged in the 2021, 2022, and 2023 reports. In 2021, Energy Safety found that Liberty failed to establish mechanisms to track progress against its targets. In 2022, Energy Safety found that Liberty did not distinctly report on progress for each WMP initiative. Instead, it reported on general progress for the year, and reported progress in more detail with critical projects only. In 2023, Energy Safety found that several of Liberty's reporting sources were incomplete and inconsistent.

10.1 QDR as compared to EC ARC

Energy Safety's analysis found minor differences between the EC ARC and Q4 QDR. Energy Safety identified slight differences between reports such as with the Ignition Likelihood Calculation initiative (SA-06) for model enhancements. The QDR noted this initiative as "in progress," whereas the EC ARC reported it as "N/A" (See Appendix A).

10.2 VMA Report Identified Issues

Energy Safety identified one data completeness issue in its 2024 VMA Report for Liberty. Data provided by Liberty in the initial audit to substantiate achievement of the Open Work Orders initiative did not include records of work completion dates for 50 out of 5,653 work orders (<1%) created in 2024. In its CAP, Liberty provided justifications for the missing records and stated that they are actively exploring controls to address future data completeness issues.

10.3 IE ARC Evaluation

The IE noted several discrepancies in Liberty's reporting. For substation inspections (GDOM-AI-06), Liberty reported 71 inspections completed, but documentation reviewed by the IE showed that only 51 inspections were completed. For distribution pole replacements (GDOM-GH-03), the IE determined that Liberty had misidentified a guy pole, reported poles without tags, or mis-recorded identification tag numbers. For expulsion fuses (GDOM-GH-12b), Liberty

reported completing 750 fuses, but documentation reviewed by the IE showed that only 681 fuses installations were completed.

10.4 Comparison of Spatial and Tabular QDR Data

Pursuant to Energy Safety’s Data Guidelines, electrical corporations must submit quarterly data reports in both spatial and non-spatial (i.e., tabular) formats. Each of these quarterly reports must contain accurate information about the progress in meeting WMP targets throughout a compliance period.⁷⁶

Energy Safety analyzed the data submitted by Liberty regarding the WMP work it completed in 2024, in both the spatial and tabular QDR submissions. Energy Safety found the following inconsistencies between spatial and tabular QDR submissions, which may call into question Liberty’s data reporting practices and initiative attainment. Of the 43 2024 WMP initiatives, 11 showed discrepancies between tabular and spatial data (Table 7).⁷⁷

Table 7. Energy Safety Summary of Initiatives with Inconsistent QDR Reporting

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁷⁸	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%)
Clearance WMP-VM-VFM-05	702 Line Miles	702.1 Line Miles	683 miles ⁷⁹	3%
Fall-In Mitigation WMP-VM-VFM-06	220 Line Miles	364 Line Miles	86 miles ⁸⁰	76%

⁷⁶ Data Guidelines, page 1, pages 47-105, and pages 151-156.
⁷⁷ For more information regarding the unmet initiatives, see Appendix A.
⁷⁸ 2024 WMP, pages 152-353.
⁷⁹ Spatial QDR value originally reported in meters; converted to miles for consistency with tabular QDR reporting.
⁸⁰ Spatial QDR value originally reported in meters; converted to miles for consistency with tabular QDR reporting.

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁷⁸	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%)
Covered Conductor Installation WMP-GDOM-GH_01	5.61 Circuit Miles	3.9 Circuit Miles	4.06 mile ⁸¹	4%
Traditional Overhead Hardening WMP-FDOM-GH-05	3.5 Miles	3.5 Miles	Reported as 5,823 meters and converted to 3.62 miles	3%
Distribution Pole Replacements and Reinforcements WMP-GDOM-GH-03	400 Points	823 Points	426 Points	48%

⁸¹ Spatial QDR value originally reported in meters; converted to miles for consistency with tabular QDR reporting.

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁷⁸	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%)
Tree Attachment Removals WMP-GDOM-GH-12a	60 Tree attachments	98 Tree attachments	95 Tree attachments	3%
Asset Inspections WMP-GDOM-AI-06	42 Points	71 Points	76 Points	7%
Vegetation Management Inspection Program – Detailed WMP-VM-INSP-01	220 Circuit Miles	258 Line Miles	314.62 Miles	22%

Initiatives with Inconsistent QDR Reporting	2024 WMP Target ⁷⁸	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%)
Vegetation Management Inspection Program – Patrol WMP-VM-INSP-02	Conduct supplemental patrols as needed	136.40 Line Miles	95.18 Miles	30%
Detailed Inspections of Distribution Electric Lines and Equipment WMP-GDOM-AI-01	264.2 Circuit Miles	363.5 Circuit Miles	6,579 Points	N/A Units of measure differ between the Spatial QDR and the Tabular QDR.
Vegetation Management Inspection Program – LiDAR WMP-VM-INSP-03	700 Circuit Miles	700 Circuit Miles	2,228 Points	N/A Units of measure differ between the Spatial QDR and the Tabular QDR.

Table 8. Energy Safety Summary of Ignition Risk Metrics with Inconsistent QDR Reporting

Risk Metrics with Inconsistent QDR Reporting	Actual Recorded in Tabular QDR	Actual Recorded in Spatial QDR	Deviation (%)
2024 Total Ignitions	0	0	0%
2024 Total Wire Down Events	22	20	10%
2024 Total Unplanned Outage Events	345	345	0%

10.5 Field Inspection Issues Identified

Energy Safety’s field inspections of Liberty’s 2024 WMP work identified data accuracy issues regarding some of its 2024 WMP initiatives, as described in Section 6.3. Specifically, regarding its distribution pole replacement initiative (GDOM-GH-03), the 2024 WMP stated that distribution poles would be replaced under this initiative if an inspection indicated that replacement was warranted; but Energy Safety’s field inspections found Liberty counted brand new poles (e.g., poles that were installed as part of capital improvement projects) as replaced poles. Pole replacement under the 2024 WMP) was meant to make existing poles safer. Installing new poles where no poles previously existed did not make existing poles safer, it just added new poles to the system. Thus, it was inappropriate to count new poles in this mitigation initiative.

Energy Safety issued Notices of Data Inaccuracy (NODIs) to Liberty concerning these field observations. In response to the NODIs, Liberty clarified that 695 (84%) poles out of the 823 originally reported by Liberty were replaced due to an inspection work order requiring replacement, whereas 128 (16%) poles were installed for a new construction project of some sort.^{82, 83} For example, NODI NODI_CAD_LU_BKA_1533 stated:

“Energy Safety concludes that there is inaccurate data because of these facts:

1. The foreman of the construction crew building the new house fed by the subject pole stated that the pole was installed recently and that he had requested the weather-head⁸⁴ installation when the pole was set.

⁸² Liberty Response to Notice of Data Inaccuracy 1252.

⁸³ Liberty Response to Notice of Data Inaccuracy 1533.

⁸⁴ Liberty Residential Service Standards 2025. A “weather-head” is the industry term for a protective, waterproof hood where overhead utility power lines connect to the customer home’s electrical system. In California, the property owner is the owner of the weather-head and is responsible for installing and maintaining it.

2. There was no existing distribution pole at this point to replace or reinforce.
3. A new distribution pole was installed.”

These 128 poles should not have been reported by Liberty as completed work under the distribution pole replacement initiative, as they were not installed in response to an inspection finding that warranted pole replacement.

Figure 20: Example of a new distribution pole inappropriately reported under Liberty’s 2024 WMP initiative⁸⁵



10.6 Data Accuracy and Completeness Conclusions

As described above, Energy Safety found that Liberty’s documentation and reporting on its 2024 WMP implementation was inconsistent in several areas. These problems have persisted for many years and have been identified in prior reports. Energy Safety’s assessment of all the initiatives by data source can be found in Appendix A.

Observation

Taken together, this analysis shows that Liberty must continue to improve the accuracy of its WMP implementation documentation practices. Energy Safety will monitor Liberty’s

⁸⁵ The pictures above show one of the newly installed electric distribution poles in 2024 by Liberty and reported as a replacement. NODI_CAD_LU_BKA_1533

reporting and expects improvements regarding the accuracy of Liberty's documentation and tracking processes going forward.

11. Conclusion

Energy Safety makes the following observations and recommendations regarding Liberty's execution of its WMP initiative activities and the performance of its infrastructure relative to its wildfire risk in 2024.

WMP Initiative Attainment Performance

For initiative attainment, Liberty completed 36 of its 43 2024 WMP initiatives (86%). Liberty submitted a change order request in 2024 to reduce the majority of these missed initiative targets, but its request was denied. Liberty failed to undertake the work necessary to achieve its WMP targets even though Energy Safety proactively considered Liberty's reasons for potentially missing targets and determined that they were not adequate.

Additionally, there is a concerning year-over-year trend of Liberty missing targets for certain initiatives. For initiatives related to undergrounding, system automation, and patrol inspections, targets were missed several times during the 2020-2023 period and were missed again in 2024. While some missed targets from 2021 were deemed reasonable due to the Caldor Fire, the recurring missed targets for these initiatives suggest a more systemic issue with Liberty's implementation of its WMP work generally that it must address. Energy Safety will continue to monitor Liberty's performance and push Liberty to consistently meet its targets in these areas.

Ignition Risk Performance

In 2024, Liberty had zero ignitions and annual reductions overall in outages and wire down events. Events were most common in winter due to weather conditions. Ignition risk metrics appeared most commonly in HFTD Tier 2 areas and should continue to be monitored for prevention. Liberty did not report any acres burned, associated injuries, fatalities, or structural losses in 2024.

Public Safety Power Shutoff Performance

The impact of Liberty's PSPS events increased dramatically in 2024 compared to previous years where the impacts had been near zero. While Liberty demonstrated satisfactory work through its planning, community engagement, and successful execution of PSPS-related WMP initiatives, Liberty experienced four events (compared to prior years with zero recorded events), which impacted over 3,000 customers for around 15,000 customer hours, and about two hours for critical infrastructure. Energy Safety's analysis of the impacts of Liberty's 2024 PSPS performance does not include a judgment about whether the decision by Liberty to employ PSPS in a given circumstance was reasonable.

Data Reporting Accuracy and Completeness Performance

Liberty's reporting accuracy and completeness requires improvement. Energy Safety identified important errors in the accuracy of work completion or accounting for vegetation open work orders, fuse replacements, distribution pole replacements, and substation inspections. Most notable was the misreporting related to Liberty's distribution pole replacements, where 16% of the reported completed work was installation of brand-new poles for electrical facilities, not replacements, and thus did not actually contribute to the initiative's intended risk reduction.

Data reporting accuracy is an ongoing issue for Liberty that was identified in previous annual performance reporting. The 2020 report found that Liberty's inaccurate reporting made it difficult to analyze the work performed that year, and that Energy Safety expected Liberty to improve its reporting practices. Similar themes emerged in the 2021, 2022, and 2023 reports. In 2021, Energy Safety found that some initiatives had no initial targets or their targets were unclear, unmeasurable or erroneously reported. In 2022, Energy Safety found that Liberty did not distinctly report on progress for each WMP initiative. In 2023, Energy Safety found that several of Liberty's reporting sources were incomplete and inconsistent.

Given the ongoing issues with Liberty's data reporting accuracy and completeness, this APR reiterates Energy Safety's previous expectation that Liberty improve its data collection and reporting practices. Future performance reporting will continue to focus on this issue to ensure that Liberty improves.

Conclusion

Going forward, Liberty must show, through consistent action, that it will honor its WMP commitments and thus meaningfully reduce wildfire risk in the manner pledged to its customers and the people of California through its WMP. Energy Safety will continue to monitor Liberty's implementation of its ongoing wildfire mitigation activities so that Liberty improves its ability to eliminate utility-caused catastrophic wildfires in California.

12. References

Table 9. References for Citations

Citation	Reference
2022 Q3 QDR	Liberty Utilities, " <u>Liberty 2022 Q3 QDR</u> ," Published November 1, 2022, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53178&shareable=true).
2023-2025 Base WMP	Liberty Utilities, " <u>2023-2025 Base Wildfire Mitigation Plan</u> ," Published July 26, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57090&shareable=true).
2023-2025 Base WMP Decision	Office of Energy Infrastructure Safety, " <u>Decision on Liberty Utilities' 2023-2025 WMP</u> ," Published February 5, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56276&shareable=true).
2024 WMP	Liberty utilities, " <u>2023-2025 Wildfire Mitigation Plan</u> ," Published August 9, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57172&docket=2023-2025-WMPs&shareable=true).
2024 Change Order Decision	Office of Energy Infrastructure Safety, " <u>Decision on Liberty Change Order Request</u> ", Published July 1, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56937&docket=2023-2025-WMPs&shareable=true).
2024 Compliance Guidelines	Office of Energy Infrastructure Safety, " <u>Compliance Guidelines</u> ", Published September 2023, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=55586&shareable=true).
2024 IE ARC Outline	Energy Safety, " <u>Independent Evaluator Outline</u> ," Published December 12, 2024, URL:(https://caleprocure.ca.gov/event/3355/0000033680).
2024 Liberty Utilities Change Order	Liberty Utilities, " <u>Liberty 2024 WMP Update Change Order Report_05282024</u> ", Published May 28, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56728&docket=2023-2025-WMPs&shareable=true).

Citation	Reference
2023 Q4 QDR	Liberty Utilities, " <u>Liberty 2023 Q4 Tables1-15 R0</u> ," Published February 14, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56313&shareable=true).
2024 Q1 QDR	Liberty Utilities, " <u>Liberty 2024 Q1 Tables1-15 R1</u> ," Published July 29, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57092&shareable=true).
2024 Q2 QDR	Liberty Utilities, " <u>Liberty 2024 Q2 Tables1-15 R0</u> ," Published August 1, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57145&shareable=true).
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2024 Q4 QDR	Liberty Utilities, " <u>Liberty 2024 Q4 Tables1-15 R3</u> ," Published July 16, 2025, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57951&shareable=true).
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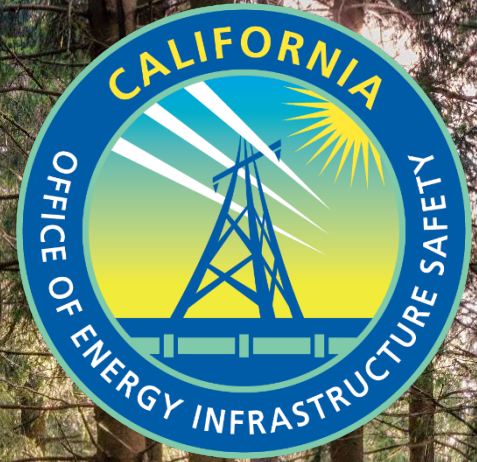
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DATA DRIVEN FORWARD-THINKING INNOVATIVE SAFETY FOCUSED

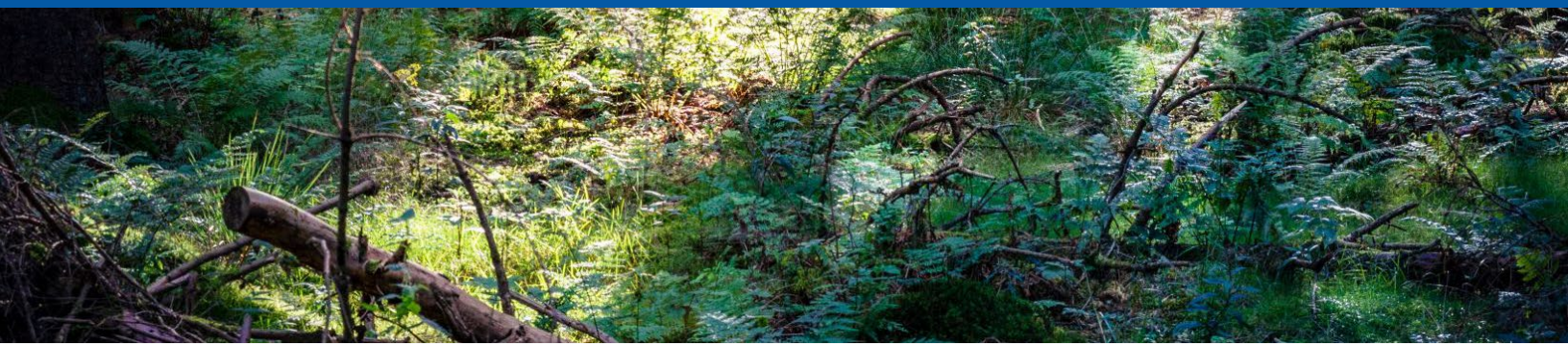


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APPENDICES



13. Appendices

Appendix A: Liberty Information on WMP Initiative Activity Attainment

Table 9 summarizes each of Liberty's 43 initiative activity targets from its 2024 WMP, Liberty's self-reporting on performance contained in its QDR, Liberty's self-reporting on performance contained in its submission in response to Energy Safety DR-281, Liberty's EC ARC, the IE ARC, and the VMA Report.⁸⁶

Table 10. WMP Initiative Activity Attainment Information⁸⁷

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Covered Conductor Installation 8.1.2.1 GDOM-GH-01	5.61 Circuit Miles (CM)	Not met Target: 5.6 CM Actual: 3.9 CM	Not met Target: 5.6 CM Actual: 3.9 CM	Not met Target: 6 CM Actual: 4.3 CM	Not met	\$8,267,427	\$8,312,596

⁸⁶ 2024 Q4 QDR, EC ARC, IE ARC, and VM Report.

⁸⁷ This table includes all initiative activities that had targets for the 2024 calendar year but does not include initiative activities for which Liberty had proposed or actual expenditures and no targets for the 2024 calendar year.

⁸⁸ The IE ARC Actuals are reflective of the IE ARC Appendix B Table, Column Q titled, "Initiative Validation Rate."

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Undergrounding of Electric Lines and Equipment 8.1.2.2 GDOM-GH-02	1.25 CM	Not met Target:1.25 CM Actual: 0 CM	Not met Target:1.25 CM Actual: 0 CM	Not met Target: 1 CM Actual: 0 CM	Not met	\$8,482,680	\$46,067
Distribution Pole Replacement and Reinforcement 8.1.2.3 GDOM-GH-03	400 Poles Replaced	Met Target: 400 Poles Actual: 823 Poles	Met Target: 400 Poles Actual: 823 Poles	Met Target: 400 Poles Actual: 823 Poles	Met ⁸⁹	\$7,412,000	\$20,147,051

⁸⁹ Energy Safety's analysis in Section 10.5, based on the observation of Energy Safety's field inspectors, finds that the actual count of poles replaced in accordance with the risk reduction intent of the WMP was 695. This still exceeds the WMP target of 400 poles.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Traditional Overhead Hardening 8.1.2.5 GDOM-GH-05	3.5 CM	Met Target: 3.5 CM Actual: 3.5 CM	Met Target: 3.5 CM Actual: 3.5 CM	Met Target: 4 CM Actual: 4.16 CM	Met	\$3,500,000	\$1,863,709
Microgrids 8.1.2.7 GDOM-GH-07	1 Microgrid	Not met Target: 1 Microgrid Actual: 0 Microgrid	Not met Target: 1 Microgrid Actual: 0 Microgrid	Not met Target: 1 Microgrid Actual: 0 Microgrid	Not met	\$1,500,000	\$0 ⁹⁰
Installation of System Automation Equipment 8.1.2.8 GDOM-GH-08	8 Reclosers installed	Not met Target: 8 reclosers Actual: 2 reclosers	Not met Target: 8 reclosers Actual: 2 reclosers	Not met Target: 8 Reclosers Actual: 2 Reclosers	Not met	\$1,200,000	\$1,300,520

⁹⁰ Per Liberty's EC ARC, page 27, Liberty did not complete its initial 2024 WMP target for microgrids.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Line Removal 8.1.2.9 GDOM-GH-09	1.1 CM	Not met Target: 1.1 CM Actual: 0 CM	Not met Target: 1.1 CM Actual: 0 CM	Not met Target: 1 CM Actual: 0 CM	Not met	\$500,000	\$0 ⁹¹
Tree Attachment Removal 8.1.2.12 GDOM-GH-12a	60 Tree attachments	Met Target: 60 Tree attachments Actual: 98 Tree attachments	Met Target: 60 Tree attachments Actual: 98 Tree attachments	Met Target: 60 Tree attachments Actual: 97.8 Tree attachments	Met	\$720,392	\$928,831
Expulsion Fuse Replacement 8.1.2.12 GDOM-GH-12b	500 Fuses ⁹²	Met Target: 500 Fuses Actual: 750 Fuses	Met Target: 500 Fuses Actual: 750 Fuses	Met Target: 500 Fuses Actual: 680 Fuses	Met	\$0 ⁹³	\$699,266

⁹¹ Per Liberty's EC ARC, page 27, Liberty did not complete its initial 2024 WMP target for line removal.

⁹² Liberty's 2024 WMP, page 155, refers to an expulsion fuse replacement target as "TBD." Liberty's 2025 WMP Update confirms the 2024 target for expulsion fuse replacement was 500 fuses.

⁹³ Per Liberty's EC ARC, page 27, Liberty's projected expenditure for its 2024 expulsion fuse replacements was TBD at the time of WMP submission.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Animal Guards 8.1.2.12 GDOM-GH-12c	2 Animal guards	Not met Target: 2 Animal guards Actual: 0 Animal guards	Not met Target: 2 Animal Guards Actual: 0 Animal Guards	Not met Target: 2 Animal Guards Actual: 0 Animal Guards	Not met	\$100,000	\$0 ⁹⁴
Open Wire/Grey Wire Replacement 8.1.2.12 GDOM-GH-12e	5.10 CM	Met Target: 5.1 CM Actual: 7.4 CM	Met Target: 5.1 CM Actual: 7.4 CM	Met Target: 5 CM Actual: 7.25 CM	Met	\$2,000,000	\$1,754,773

⁹⁴ Per Liberty's EC ARC, page 27, Liberty did not complete its 2024 WMP target for animal guards.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Substation Equipment Replacement 8.1.2.12 GDOM-GH-12f	None planned ⁹⁵	Met Target: N/A Actual: 1	Met Target: N/A Actual: 1	Met Target: 1 Actual: 1	Met	\$0 ⁹⁶	\$415,204
Detailed Inspection of Distribution Electric Lines and Equipment 8.1.3.1 GDOM-AI-01	264.2 CM	Met Target: 264.2 CM Actual: 363.5 CM	Met Target: 264.2 CM Actual: 363.5 CM	Met Target: 264 CM Actual: 361.68 CM	Met	\$125,000	\$536,670

⁹⁵ Liberty's 2024 WMP, page 155, refers to revising its 2024 target "per Energy Safety Decision on Liberty Change Order Request in relation to its 2023-2025 Base WMP, July 1, 2024, p.6." Ultimately, this initiative was not included in the 2024 change order request or the 2025 WMP update but was noted in its QDR and EC ARC to have a target of one substation.

⁹⁶ Per Liberty's EC ARC, page 27, Liberty did not project expenditures for substation equipment replacement as work associated with initiative is determined by substation inspections.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Intrusive Pole Inspections 8.1.3.2 GDOM-AI-02	2,302 Poles inspected	Met Target: 2,302 Poles Actual: 2,641 Poles	Met Target: 2,302 Poles Actual: 2,641 Poles	Met Target: 2,302 Poles Actual: 3,315 Poles	Met	\$0 ⁹⁷	\$147,642
Patrol Inspections of Distribution Electric Lines and Equipment 8.1.3.3 GDOM-AI-03	589 CM	Not met Target: 589 CM Actual: 476.9 CM	Not met Target: 589 CM Actual: 476.9 CM	Not met Target: 589 CM Actual: 477.9 CM	Not met	\$125,000	\$536,760

⁹⁷ Per Liberty's EC ARC, page 27, Liberty did not project costs for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Other Discretionary Inspections of Distribution Electric Lines and Equipment 8.1.3.4 GDOM-AI-04	1 CM ⁹⁸	Met Target: 1 CM Actual: 1 CM	Met Target: N/A Actual: 1 CM	Met Target: N/A Actual: 1 CM	Met	\$1,000,000	\$363,867
Quality Assurance/ Quality Control of inspections 8.1.3.5 GDOM-AI-05	12% of the detailed inspection circuit miles	Met Target: 12% Actual: 12%	Met Target: 12% Actual: 12%	Met Target: 12% Actual: 12.6%	Met	\$10,000	\$212,986

⁹⁸ Liberty's 2024 WMP, page 156, contains a footnote stating the applicable target is found in the QDR. Liberty's QDR for this initiative listed one circuit mile as the target.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Substation Inspections 8.1.3.6 GDOM-AI-06	42 inspections	Met Target: 42 Inspections Actual: 71 Inspections	Met Target: 42 Inspections Actual: 71 Inspections	Met Target: 42 Inspections Actual: 50.82 Inspections	Met	\$10,000	\$0 ⁹⁹
Equipment Settings to Reduce Wildfire Risk 8.1.8.1 GDOM-GO-01	15 Circuits enabled	Met Target: 15 Circuits Actual: 15 Circuits	Met Target: 15 Circuits Actual: 15 Circuits	Met Target: 15 Circuits Actual: 15 Circuits	Met	\$800,000	\$0 ¹⁰⁰

⁹⁹ Per Liberty's EC ARC, page 27, its initial projections for 2024 asset inspections were inaccurate.

¹⁰⁰ Per Liberty's EC ARC, page 27, Liberty captured costs associated with implementing its SRP Program in initiatives GDOM-GH-08 and SA-02.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Vegetation Management Inspection Program - Detailed 8.2.2.1 VM-INSP-01	220 CM ¹⁰¹	Met Target: 220 Circuit Miles Actual: 258 Line Miles	Met Target: 220 Circuit Miles Actual: 258 Line Miles	Met Target: 220 Line Miles Actual: 259.5 Line Miles	Met	\$813,515	\$763,520
Vegetation Management Inspection Program - Patrol 8.2.2.2 VM-INSP-02	Conduct supplemental patrols as needed	Met Target: N/A Actual: 136.4 Line Miles	Met Target: N/A Actual: N/A	Met Target: N/A Actual: 136 Line Miles	Met	\$257,500	\$595,415

¹⁰¹ While improvements are needed to ensure consistent mileage reporting and to complete work, Energy Safety's VMA report concluded that the information provided by Liberty demonstrated that it completed its 2024 Distribution Routine Patrol target (VM-INSP-01) target.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Vegetation Management Inspection Program – LiDAR 8.2.2.3 VM-INSP-03	700 CM ¹⁰²	Met Target: 700 CM Actual: 700 Line Miles	Met Target: 700 CM Actual: 700 Line Miles	Met Target: 700 CM Actual: 700 CM	Met	\$721,000	\$563,342
Pole Clearing 8.2.3.1 VM-VFM-01	4,960 Poles	Met Target: 4,960 Poles Actual: 5,084 Poles	Met Target: 4,960 Poles Actual: 5,084 Poles	Met Target: 4,960 Poles Actual: 5,108.8 Poles	Met	\$494,400	\$565,771
Wood and Slash Management 8.2.3.2 VM-VFM-02	280 Acres managed	Met Target: 280 Acres Actual: 349.5 Acres	Met Target: 280 Acres Actual: 349.5 Acres	Met Target: 280 Acres Actual: 347.2 Acres	Met	\$1,545,000	\$1,267,478

¹⁰² While improvements are needed to ensure consistent mileage reporting and to complete work, Energy Safety's VMA report concluded that the information provided by Liberty demonstrated that it completed its 2024 LiDAR inspections target (VM-INSP-03).

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Clearance Maintenance 8.2.3.3 VM-VFM-05	Conduct as identified by LiDAR	Met Target: N/A Actual: 702.1 Line Miles	Met Target: N/A Actual: 702.1 Line Miles	Met Target: 702 LM Actual: 702.1 Line Miles	Met	\$913,507	\$996,356
Fall-in Mitigation 8.2.3.4 VM-VFM-06	220 CM ¹⁰³	Met Target: 220 CM Actual: 364 Line Miles	Met Target: 220 CM Actual: 364 Line Miles	Met Target: 220 CM Actual: 363 CM	Met	\$7,982,500	\$3,254,922
Substation Maintenance 8.2.3.5 VM-VFM-03	24 Treatments	Met Target: 24 Treatments Actual: 23 Treatments	Met Target: 24 Treatments Actual: 23 Treatments	Met Target: 23 Treatments Actual: 23 Treatments	Met	\$20,600	\$62,321

¹⁰³ While improvements are needed to ensure consistent mileage reporting and to complete work, Energy Safety's VMA report concluded that the information provided by Liberty demonstrated that it completed its 2024 Clearance Maintenance target (VM-VFM-02).

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Manage High Risk Species 8.2.3.5 VM-VFM-07	See Initiative 8.2.3.4 ¹⁰⁴	See Initiative 8.2.3.4	See Initiative 8.2.3.4	See Initiative 8.2.3.4	See Initiative 8.2.3.4	See Initiative 8.2.3.4	See Initiative 8.2.3.4
Fire-Resilient Right of Ways 8.2.3.7 VM-VFM-04	Conduct enhanced maintenance projects in forest resilience corridors and development of the Integrated Vegetation Management (IVM) program	Met Target: N/A Actual: 13.2 Line Miles	Met Target: N/A Actual: 13.2 Line Miles	Met Target: 13.2 Line Miles Actual: 13.2 Line Miles	Met	\$262,650	\$821,205

¹⁰⁴ Page 236 of Liberty's 2024 WMP states, "Liberty's methodology of addressing high-risk species does not differ from that described in initiative 8.2.3.4, Fall-In Mitigation." For results of this initiative, Energy Safety's VMA Report refers to the finding for Initiative 8.2.3.4 Fall-In Mitigation.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Emergency Response Planning 8.2.3.7 VM-VFM-08	Work to be determined per Red Flag Warnings or post-fire service restoration	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Met ¹⁰⁵	\$0 ¹⁰⁶	\$6,445
Vegetation Management Enterprise System 8.2.4 VFM-ESG-01	Continue to update and develop work management software	Met Target: N/A Actual: N/A	Met Target: N/A Actual: N/A	Met Target: N/A Actual: Fieldnote & Structured Query Language (SQL) database	Met	\$418,186	\$577,570
Quality Assurance and Quality Control 8.2.5 VFM-QAQC-01	229 CM ¹⁰⁷	Met Target: 229 CM Actual: 234.3 Line Miles	Met Target: 229 CM Actual: 234.3 Line Miles	Met Target: 229 CM Actual: 233.58 CM	Met	\$515,000	\$542,653

¹⁰⁵ VMA Report, pages 5, A-7, and A-23-24.

¹⁰⁶ EC ARC, page 28, Liberty did not project expenditures for this initiative as work is uncertain at the time of WMP submission.

¹⁰⁷ While improvements are needed to ensure consistent mileage reporting and to complete work, Energy Safety's VMA report concluded that the information provided by Liberty demonstrated that it completed its 2024 Quality Assurance and Quality Control target (VFM-QA/QC-01).

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Open Work Orders 8.2.6 (No Tracking ID)	Continued management of Open Work Orders	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Met ¹⁰⁸	\$0	\$0 ¹⁰⁹
Workforce Planning 8.2.7 (No Tracking ID)	Continued hiring and development of professional vegetation management staff	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	N/A Target: N/A Actual: N/A	Met ¹¹⁰	\$0	\$0 ¹¹¹
Grid Monitoring Systems/Fault Indicators 8.3.3 SA-02	10 Circuits	Met Target: 10 Circuits Actual:15 Circuits	Met Target: 10 Circuits Actual:15 Circuits	Met Target:10 Circuits Actual: 15 Circuits	Met	\$150,000	\$421,610

¹⁰⁸ VMA Report, Pages 5, 9-12, A-6 and A-34-35.

¹⁰⁹ Liberty did not provide funding information for this initiative.

¹¹⁰ VMA Report, pages 5, A-6 and A35-36.

¹¹¹ Liberty did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Ignition Likelihood Calculation 6.2.2.1 SA-06	Model enhancements	N/A Target: N/A Actual: In progress	N/A Target: N/A Actual: N/A	Met Target: N/A Actual: Validated ¹¹²	Met	\$683,807	\$1,224,799

¹¹² The IE ARC, page 97, discusses a review of documentation submitted by Liberty from Technosylva and Direxyon to validate this initiative. The documents outlined the steps taken and the improvements and milestones met in Liberty's risk modeling program for 2024.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Collaboration and Coordination with Public Safety Partners 8.4.3.1 EP-02	Conduct emergency drills, continued engagement with local stakeholders to prepare for and respond to fire related events	Met Target: Conduct emergency drills, continued engagement with local stakeholders to prepare for and respond to fire-related events Actual: Participated in 16 community councils and working group meetings	Met Target: Conduct emergency drills, continued engagement with local stakeholders to prepare for and respond to fire-related events Actual: Participated in 16 community councils & working groups	Met Target: Conduct emergency drills, continued engagement with local stakeholders Actual: Participated in 13 community councils and working group meetings	Met	\$0	\$0 ¹¹³

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Emergency Preparedness and Planning for Service Restoration 8.4.5.1 EP-04	Enhanced documentation and use of lessons learned to update plans	Met Target: Enhanced documentation Actual: Completed	Met Target: Enhanced documentation Actual: Individual Emergency Response Plans are updated to reflect lessons learned & increase granularity	Met Target: Enhanced documentation Actual: Liberty provided a copy of the Corporate Emergency Management Plan that included a revision history	Met	\$1,437,734	\$426,082

¹¹³ Liberty did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Customer Support in Wildfire and PSPS Emergencies 8.4.6 EP-05	Conduct Incident Command Training, hold a virtual PSPS tabletop exercise, continued implementing access and functional needs (AFN) plan, maintenance of emergency response plans, enhanced documentation & use of lessons learned to update plans.	Met Target: Conduct Incident Command Training, hold virtual PSPS exercises, continue implementing AFN plan, maintenance of emergency response plans, enhanced documentation and use of lessons learned. Actual: Tabletop exercise on May 23, 2024, full-scale exercise on June 27, 2024, with PSPS. Incident Management Team (IMT) training was completed in Q4.	Met Target: Conduct Incident Command Training, hold virtual PSPS exercises, continue implementing AFN plan, maintenance of emergency response plans, enhanced documentation and use of lessons learned. Actual: PSPS planning meetings on April 4 and 5, 2024. Tabletop exercise on May 23, 2024, full-scale exercise on June 27, 2024, with PSPS. IMT training was completed in Q4.	Met Target: Conduct Incident Command Training, hold a virtual PSPS tabletop exercise. Continue implementing AFN Plan. Actual: PSPS planning meeting took place on April 4, 2024, and Tabletop exercise conducted on May 23, 2024. Incident Management Team (IMT) training completed in Q4.	Met	\$105,000	\$122,974

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Learning after Wildfire and PSPS Emergencies 8.4.2 EP-06	After Action Reports	Met Target: N/A Actual: N/A	Met Target: N/A Actual: N/A	Met Target: After-Action Report for each event Actual: Liberty provided four After Action Reports for the four PSPS events in November 2024. The reports documented immediate and future actions and align with Liberty's PSPS Playbook.	Met	\$0	\$0 ¹¹⁴

¹¹⁴ Liberty did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Public Outreach and Education awareness for Wildfires, PSPS, Outages from Protective Equipment and Device Settings and Vegetation Management 8.5.2 CO-01	Two Wildfire and PSPS Outreach Surveys	Met Target: Two Wildfire and PSPS Outreach Surveys Actual: 33 in-person events, 26 virtual events, 57 rounds of emails, website posts and social media posts	Met Target: Two Wildfire and PSPS Outreach Surveys Actual: 33 in-person events, 26 virtual events, 57 rounds of emails, website posts and social media posts, 4 sets of direct mail & bill inserts and digital ads	Met Target: Two Wildfire and PSPS Outreach Surveys Actual: Two Wildfire and PSPS Outreach Surveys	Met	\$90,000	\$112,303

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Engagement with AFN Populations, Local Governments, and Tribal Communities 8.5.3 CO-03	Continued improvement of customer outreach, education, assistance programs, and services.	Met Target: Continued improvement if customer outreach, education assistance programs, and services. Actual: Completed	Met Target: Continued improvement of customer outreach, education, assistance programs, and services. Actual: Completed	Met Target: Continued improvement of customer outreach, education, assistance programs, and services. Actual: LU provided copies of its Wildfire Messaging Awareness reports and its Access and Functional Needs (AFN) plan.	Met	\$0	\$0 ¹¹⁵

¹¹⁵ Liberty did not provide funding information for this initiative.

2024 WMP Initiative	2024 WMP Activity Target	QDR	EC ARC	IE ARC ⁸⁸	Attainment Status	Proposed Expenditure	Actual Expenditure
Best Practice Sharing with other Electrical Corporations 8.5.5 CO-05	Participate in working groups and Joint EC Councils	Met Target: Participate in working groups and Joint EC Councils Actual: In progress	Met Target: Participate in working groups and Joint EC Councils Actual: In progress	Met Target: Participation in working groups and Joint EC councils Actual: Liberty provided documentation of participation in working groups and joint EC councils	Met	\$0	\$0 ¹¹⁶

¹¹⁶ Liberty did not provide funding information for this initiative.

Appendix B: Liberty Vegetation Management Audit Report

On February 3, 2026, Energy Safety issued its Vegetation Management Audit (VMA) Report for Liberty.¹¹⁷ In the VMA, Energy Safety assesses completeness of each qualitative commitment and quantitative target associated with each vegetation management-related initiative from the electrical corporation's approved WMP. The VMA Report issues findings on the initiative level, as defined in Appendix A of the 2023-2025 Wildfire Mitigation Plan Technical Guidelines.¹¹⁸ The VMA Report concluded that Liberty completed all work associated with all 13 vegetation management initiatives, and completed all work associated with the 15 vegetation management initiative activities described in its WMP.¹¹⁹

The findings from Energy Safety's VMA Report are detailed in Table 10, which provides a crosswalk between the vegetation management initiative numbers included in the VMA Report to the Utility Initiative Tracking IDs included in this APR. A finding of "Complete" for the VMA Report indicates that Liberty provided documentation to support that all work was completed. A finding of "Achieved Objective" would have indicated that, while Energy Safety identified some deficiencies, the majority of the work was completed and Liberty's Corrective Action Plan provided corrective actions that will address any remaining deficiencies. A finding of "Deficient" would have indicated that Liberty did not provide sufficient documentation to demonstrate that all work was completed and did not provide sufficient corrective actions to ensure that work would be completed in future performance years.

¹¹⁷ 2024 VMA Report.

¹¹⁸ WMP Technical Guidelines, pages A-24 to A-26.

¹¹⁹ Although Liberty's 2024 WMP contained 13 vegetation management initiatives, Energy Safety assessed performance on a total of 15 vegetation management targets and commitments. Of these 15, 13 had Utility Initiative Tracking IDs. Three initiatives did not have Utility Tracking IDs: Fire Resilient Right of Ways, Open Work Orders, and Workforce Planning. One initiative, Vegetation Management Inspections, had three Utility Tracking IDs, one for each of Liberty's inspection programs.

Table 11. Vegetation Management Initiatives and VMA Report Findings for performance year 2024.

Vegetation Management Initiative	Utility Initiative Tracking ID	VMA Report Finding
8.2.2. Vegetation Management Inspections	Detailed Vegetation Management Inspections (VM-INSP-01)	Complete
8.2.2. Vegetation Management Inspections	Patrol Inspections (VM-INSP-02)	Complete
8.2.2. Vegetation Management Inspections	LiDAR Inspections (VM-INSP-03)	Complete
8.2.3.1 Pole Clearing	Pole Clearing- PRC 4292 (VM-VFM-01)	Complete
8.2.3.2 Wood and Slash Management	Wood and Slash Management (VM-VFM-02)	Complete
8.2.3.3 Clearance	Clearance Maintenance (VM-VFM-05)	Complete
8.2.3.4 Fall-In Mitigation	Fall-In Mitigation (VM-VFM-06)	Complete
8.2.3.5 Substation Defensible Space	Substation maintenance and treatments (VM-VFM-03)	Complete
8.2.3.6 High-Risk Species	Manage High Risk Species (VM-VFM-07)	Complete
8.2.3.7 Fire Resilient Right-of-Ways	No Utility VM Tracking ID; Narrative statements assessed	Complete
8.2.3.8 Emergency Response Vegetation Management	Emergency Response planning and implementation (VM-VFM-08)	Complete
8.2.4. Vegetation Management Enterprise System	Vegetation Management Enterprise System upgrades and implementation (VM-ESG-01)	Complete
8.2.5. Quality Assurance and Quality Control	Quality Assurance and Quality Control (VM-QAQC-01)	Complete
8.2.6 Open Work Orders	No Utility VM Tracking ID; Narrative and quantitative statements assessed	Complete
8.2.7 Workforce Planning	No Utility VM Tracking ID; Narrative statements assessed	Complete

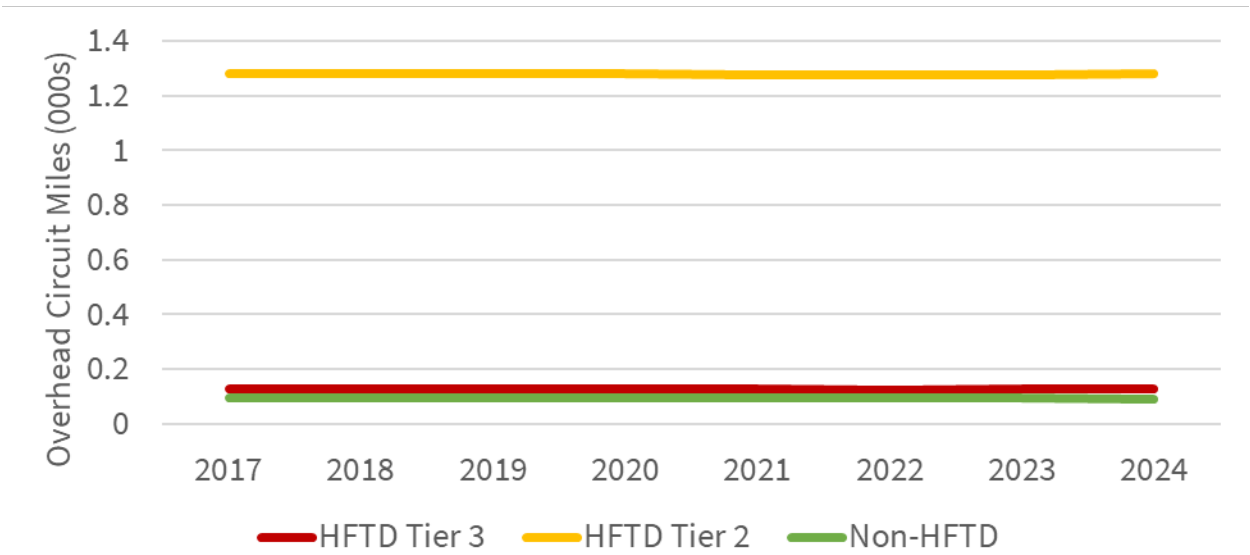
Appendix C: Normalizing Metrics and Raw Count Data

Data for this appendix comes from the QDRs and the DR-281 Response, as reported by Liberty.¹²⁰ Overhead circuit miles (OCM) are used to estimate rates for ignition risk metrics. Raw counts of ignition risk metrics and PSPS event metrics are also presented in this appendix.

Overhead Circuit Miles

The number of overhead circuit miles (OCM) remained almost constant between 2017 and 2024 (Figure 21).

Figure 21. Liberty Overhead Circuit Miles (2017-2024) by HFTD Tier

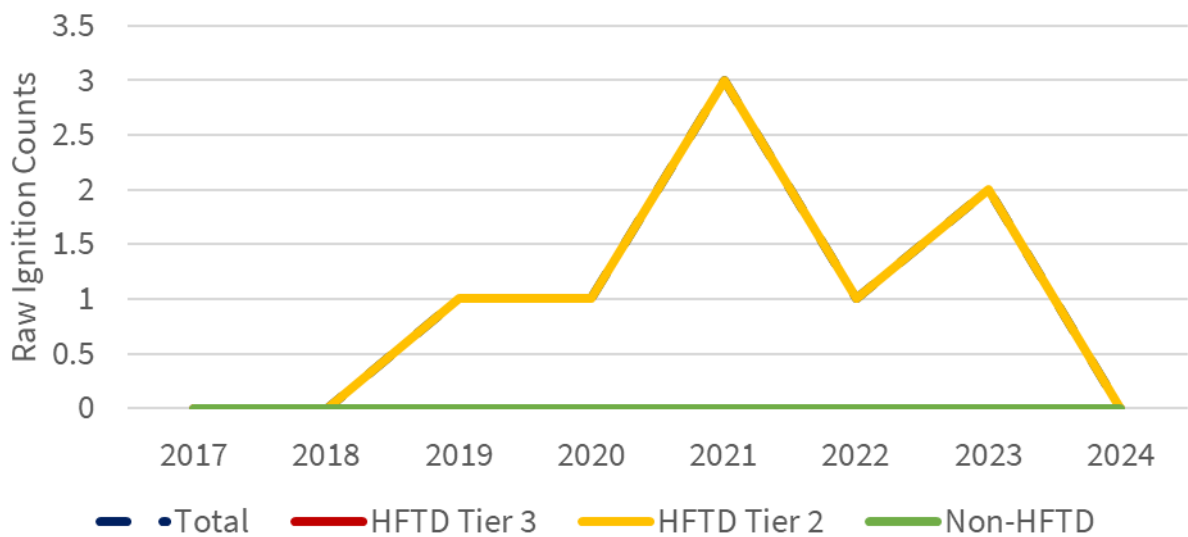


¹²⁰ 2022 Q3 QDR, 2023 Q4 QDR, 2024 Q4 QDR; and DR-281 Response.

Raw Ignition Event Counts

Liberty’s ignition events varied considerably between 2017 and 2024, rising from zero in 2017 to a peak of three events in 2021 before declining to zero by 2024. HFTD Tier 2 ignition events made up the entirety of the total, with HFTD Tier 3 and non-HFTD remaining at or near zero throughout the entire study period, indicating that all reported ignition activity was exclusively within HFTD Tier 2 infrastructure (Figure 22).

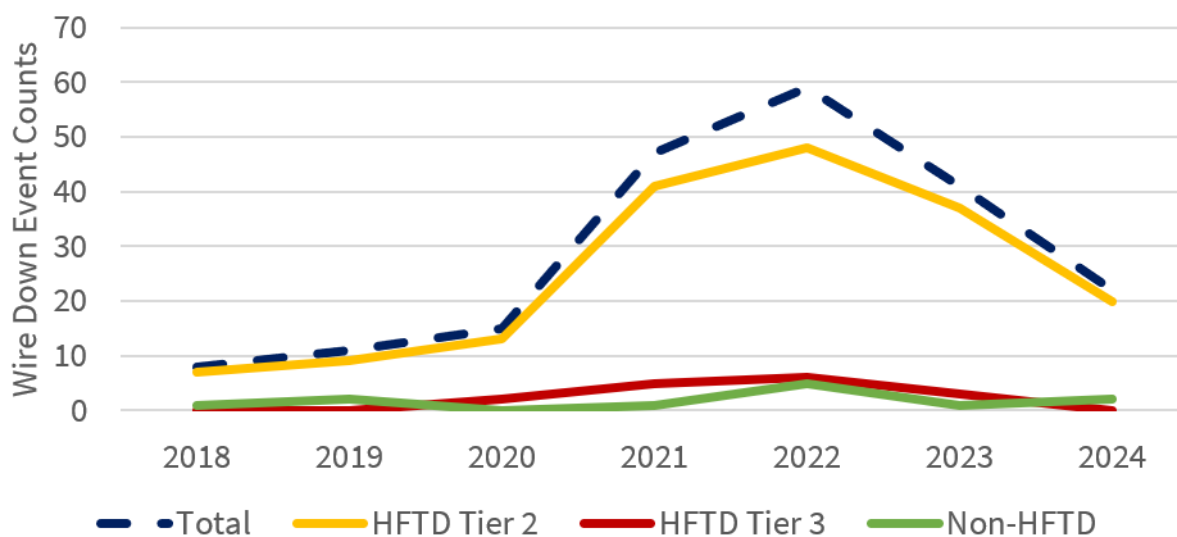
Figure 22. Liberty Ignition Event Counts (2017-2024) by HFTD Tier



Raw Wire Down Event Counts

Liberty's wire down event counts increased substantially between 2018 and 2022, rising from near zero in 2018 to a peak of approximately 59 total events in 2022 before declining to approximately 22 events by 2024. HFTD Tier 2 wire down events made up the majority of the total throughout the study period, peaking at approximately 48 events in 2022, while HFTD Tier 3 and non-HFTD contributions remained consistently near zero, indicating that wire down activity was concentrated predominantly within HFTD Tier 2 infrastructure (Figure 23).

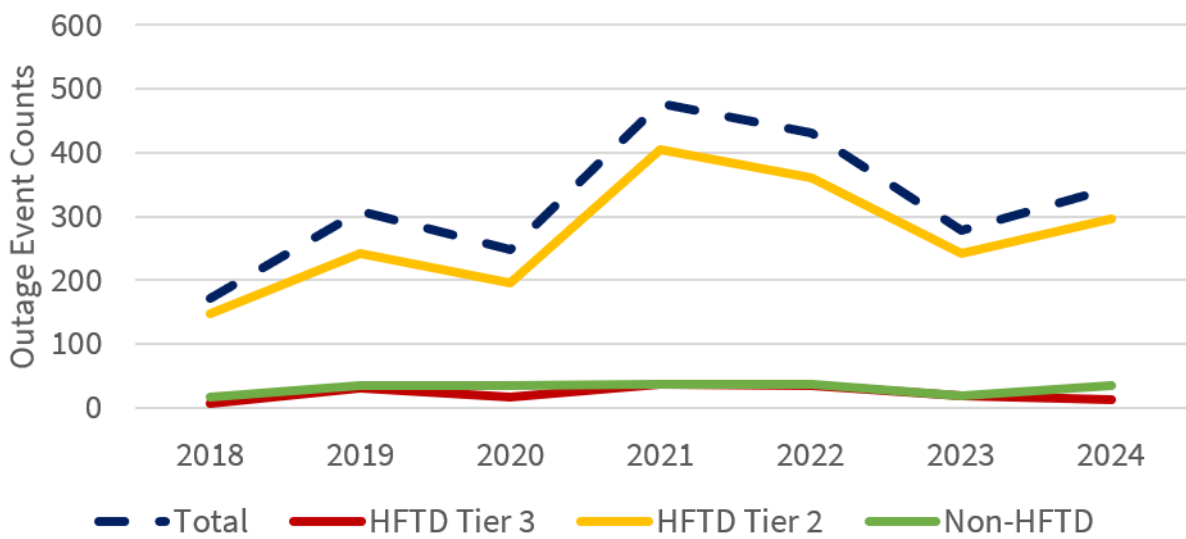
Figure 23. Liberty Wire Down Event Counts (2018-2024) by HFTD Tier



Raw Outage Event Counts

Liberty’s outage event counts increased consistently between 2018 and 2021, rising from near zero to a peak of approximately 477 total events, before declining to approximately 278 events in 2023 and partially recovering to approximately 345 events by 2024. HFTD Tier 2 outage events made up the majority of the total throughout the study period, peaking at approximately 410 events in 2021, while HFTD Tier 3 and non-HFTD contributions remained consistently near zero and low, respectively, indicating that outage activity was concentrated predominantly within HFTD Tier 2 infrastructure (Figure 24).

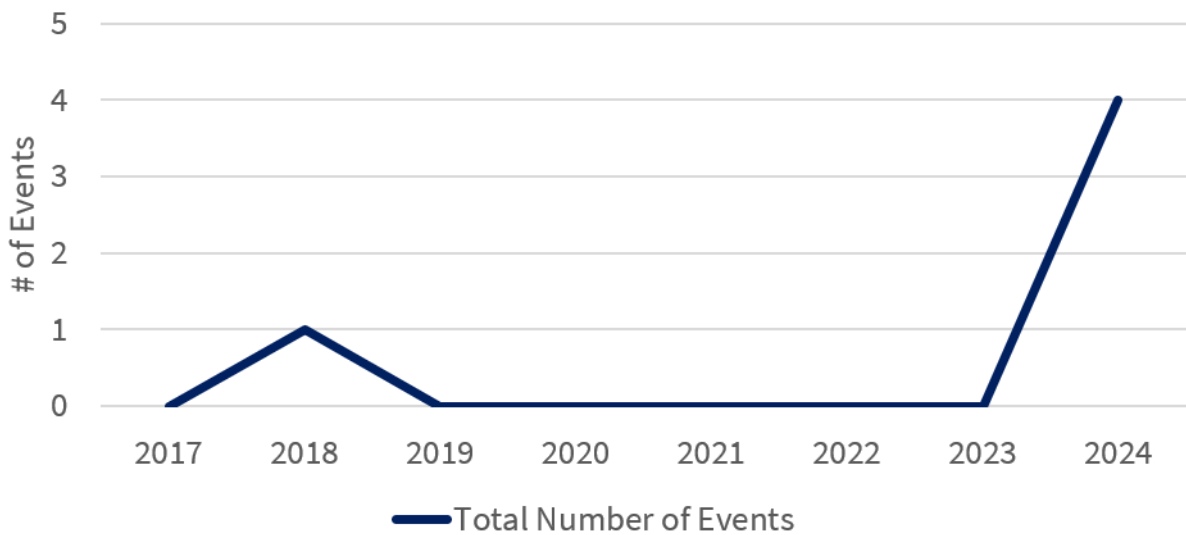
Figure 24. Liberty Outage Event Counts (2018-2024) by HFTD Tier



Frequency of PSPS Events

This figure presents the frequency of PSPS events for the 2017–2024 period. PSPS activity was minimal for most of the study period, with a single event recorded in 2018, zero activity from 2019 through 2023, before rising sharply to four events in 2024 — the highest frequency recorded across the entire period. This marked increase in 2024 is consistent with the concurrent spikes observed in PSPS scope, duration, and customer impact metrics, collectively suggesting that 2024 represented a notably more active PSPS year for Liberty (Figure 25).

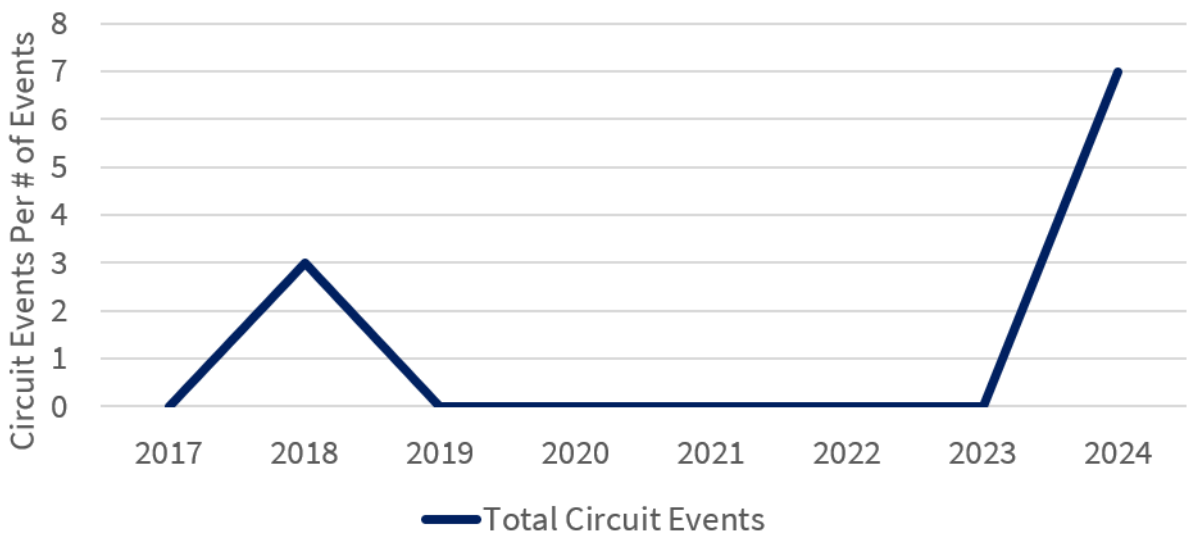
Figure 25. Liberty PSPS Events Frequency (2017-2024)



Scope of PSPS Events

This figure presents the raw scope of PSPS events, measured as total circuit events, for the 2017–2024 period. Circuit events remained near zero for most of the study period, with an initial peak of three circuit events in 2018, followed by zero activity from 2019 through 2023, before rising sharply to seven circuit events in 2024 — the highest value recorded across the entire period. This 2024 spike is consistent with the concurrent increase in PSPS event frequency, and together these metrics indicate that 2024 was characterized by both a greater number of PSPS activations and a broader circuit-level scope than any prior year in the period (Figure 26).

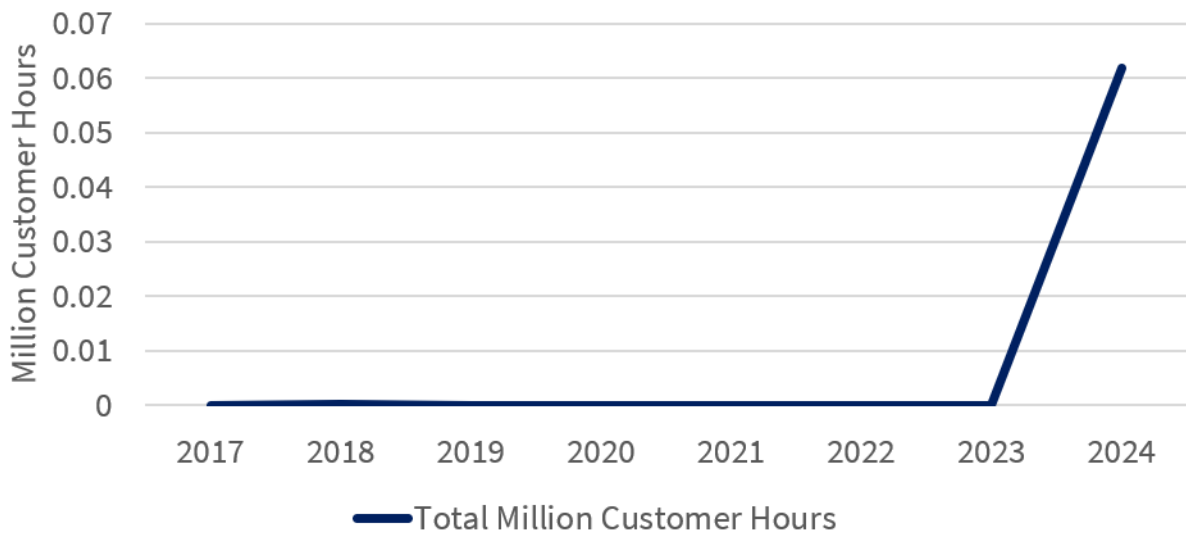
Figure 26. Liberty PSPS Event Scope (2017-2024)



Duration-Customers of PSPS Events

Liberty had an increase in PSPS event duration in 2024 to approximately .062 million customer hours (or approximately 61,880 customer hours) and otherwise stayed close to zero throughout the 2017 – 2023 period (Figure 27).

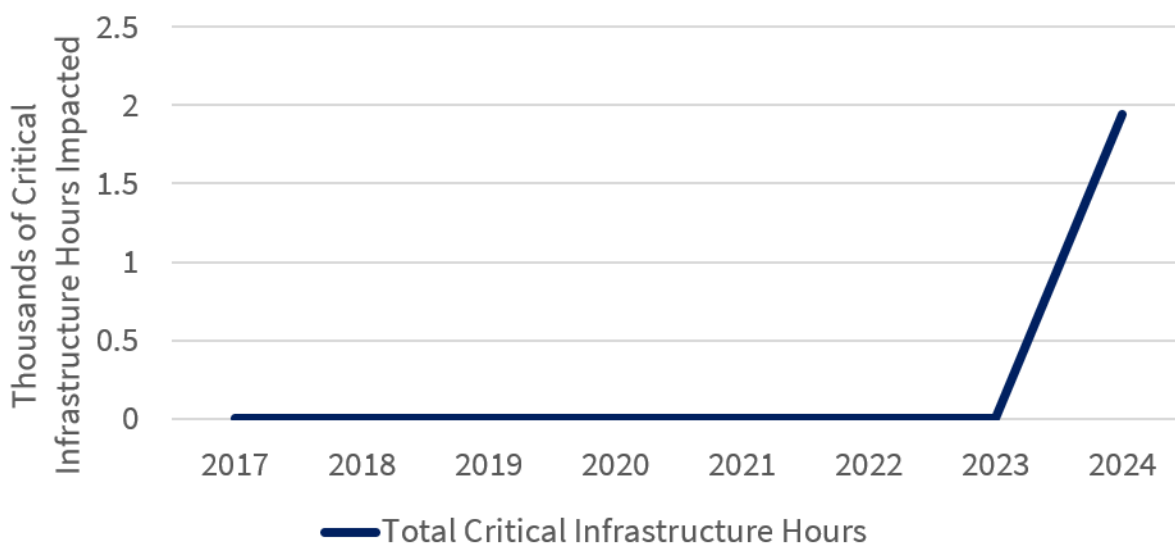
Figure 27. Liberty PSPS Event Duration Customers (2017-2024)



Duration -Critical Infrastructure of PSPS

Critical infrastructure impacts remained at zero from 2017 through 2023, before rising sharply to approximately 2,000 critical infrastructure hours in 2024 — the highest value recorded across the entire period. This 2024 spike is consistent with the broader pattern of elevated PSPS impacts observed across all metrics in that year, collectively indicating that 2024 PSPS activations carried materially greater consequences for critical infrastructure than any prior year in the period (Figure 28).

Figure 28. Liberty PSPS Event Duration in Critical Infrastructure (2017 - 2024)



Impacts of PSPS Events

Customer impacts remained effectively at or near zero from 2017 through 2023, with only negligible activity recorded in 2018, before rising sharply to approximately 3,200 customers impacted in 2024 — the highest value recorded across the entire period. This 2024 increase aligns with the concurrent spikes in PSPS frequency, scope, and duration metrics, collectively confirming that 2024 represented a significantly more impactful PSPS year for Liberty’s customers relative to all prior years in the period (Figure 29).

Figure 29. Liberty PSPS Event Impacts (2017 - 2024)

