



August 13, 2024

To: Liberty
Dan Marsh
Senior Manager, Rates and Regulatory Affairs
Liberty Utilities
701 National Avenue Tahoe Vista, CA 96148

SUBJECT: Office of Energy Infrastructure Safety’s Audit of Liberty’s 2022 Vegetation Management Work

Pursuant to the requirements of California Public Utilities Code section 8386.3(c)(5)(A), the Office of Energy Infrastructure Safety (Energy Safety) completed its audit of Liberty’s 2022 vegetation management work pursuant to its 2022 Wildfire Mitigation Plan Update. Energy Safety found that Liberty did not provide information consistent with the completion of the work required for three of the 21 vegetation management initiatives. Liberty must submit its Corrective Action Plan response to the 2022 SVM docket¹ in Energy Safety’s e-filing system within 30 days from the issuance of this audit. If you have any questions concerning this audit, please e-mail me at Sheryl.Bilbrey@energysafety.ca.gov and provide a copy to Julie Rueckheim at julie.rueckheim@energysafety.ca.gov and environmentalsciencedivision@energysafety.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Sheryl Bilbrey".

Sheryl Bilbrey
Program Manager | Environmental Science Division
Office of Energy Infrastructure Safety

Cc:

Forest Kaser, CPUC
Leslie Palmer, CPUC
Peter Stoltman, Liberty
Jordan Parillo, Liberty

¹ All documents related to Liberty’s 2022 SVM audit are available on Energy Safety’s e-filing under the “[2022-SVM](#)” docket and available here: (<https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2022-SVM> [accessed July 22, 2024])



OFFICE OF ENERGY INFRASTRUCTURE SAFETY
2022 SUBSTANTIAL VEGETATION
MANAGEMENT AUDIT
LIBERTY UTILITIES

August 2024

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Executive Summary

The Office of Energy Infrastructure Safety (Energy Safety) completed an audit of Liberty Utility's (Liberty's) vegetation management commitments from its 2022 Wildfire Mitigation Plan (WMP) Update.¹ Energy Safety found that Liberty did not provide information consistent with the completion of work for three of its 21 vegetation management initiatives (Initiatives 7.3.5.2 Detailed Inspections and Management Practices for Vegetation Clearances Around Distribution Electrical Lines and Equipment, 7.3.5.15 Identification and Remediation of "at-risk species," and 7.3.5.18 Substation Vegetation Management).

A detailed discussion of the audit findings is provided in Appendix A of this document. For each audit finding, Liberty must submit a response to Energy Safety within 30 days of receipt of this audit. Liberty must title its response "Liberty 2022 SVM Audit Corrective Action Plan" and submit the response on the 2022 SVM Docket in Energy Safety's E-Filing System. Requirements for the response are discussed in Section 3 of this document. Energy Safety is available to meet with Liberty to discuss the audit findings and provide any clarification necessary for Liberty to respond in a timely manner to Energy Safety's audit.

¹ [Liberty's 2022 WMP Update \(Rev. #1, July 15, 2022\)](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true) (hereafter Liberty's 2022 WMP Update)

Jul(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

1. OVERVIEW

Pursuant to Public Utilities Code section 8386.3(c)(5), the Office of Energy Infrastructure Safety (Energy Safety) must, on an annual basis, audit the vegetation management work performed by an electrical corporation upon notification that the electrical corporation has completed a substantial portion of the vegetation management requirements in its Wildfire Mitigation Plan (WMP).² In each audit, Energy Safety must specify any failure of the electrical corporation to fully comply with the vegetation management requirements in the WMP.

Liberty Utilities (Liberty) submitted its final substantial vegetation management (SVM) 2022 completion notification on January 31, 2023. As a result, Energy Safety has completed its SVM audit of Liberty's vegetation management program activities for 2022. The 2022 WMP Update Guidelines included 21 vegetation management program activities for 2022.³ As part of the SVM audit process, Energy Safety identified both vegetation management quantitative commitments (e.g., number of inspections completed) and verifiable statements (e.g., training of personnel) from the Liberty 2022 WMP Update. Energy Safety then compared vegetation management commitments and statements to the work performed by Liberty in 2022.

Table 1 of this report includes a list of all vegetation management activities and Energy Safety's determination of whether Liberty completed all required work for 2022. The detailed analysis, supporting documents and data, and findings for each initiative are included in Appendix A.

² [Public Utilities Code - PUC § 8386.3 \(c\)\(5\)\(A\)](#)

³ [2022 Wildfire Mitigation Plan Update Guidelines \(published Dec. 2021\) \(hereafter Update Guidelines\)](#), attachment 2, p. 92 (<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

2. AUDIT FINDINGS

The audit findings for the Liberty 2022 WMP Update vegetation management initiatives are listed in Table 1 and detailed in Appendix A.

Table 1. Liberty 2022 SVM Audit Findings

2022 Vegetation Management Initiative	Audit Finding
7.3.5.1 Additional Efforts to Manage Community and Environmental Impacts	Performed Required Work
7.3.5.2 Detailed Inspections and Management Practices or Vegetation Clearances around Distribution Electrical Lines and Equipment	Did not Perform All Required Work
7.3.5.3 Detailed Inspections and Management Practices for Vegetation Clearances Around Transmission Electric Lines and Equipment	Performed Required Work Refer to 7.3.5.2
7.3.5.4 Emergency Response Vegetation Management due to Red Flag Warning or Other Urgent Climate Conditions	Performed Required Work Refer to 7.3.5.2, 7.3.5.3, 7.3.5.5, 7.3.5.7, 7.3.5.8, 7.3.5.11, 7.3.5.12, 7.3.5.15, and 7.3.5.16.
7.3.5.5 Fuels Management (including all wood management) and Reduction of “slash” from Vegetation Management Activities	Performed Required Work
7.3.5.6 Improvement of Inspections	Performed Required Work
7.3.5.7 Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment	Performed Required Work
7.3.5.8 Remote Sensing Inspections of Vegetation Around Transmission Electric Lines and Equipment	Performed Required Work Refer to 7.3.5.7
7.3.5.9 Other Discretionary Inspections of Vegetation Around Distribution Electric Lines and Equipment, Beyond Inspections Mandated by Rules and Regulations	Performed Required Work Refer to 7.3.5.2, 7.3.5.7, and 7.3.5.11.

7.3.5.10 Other Discretionary Inspections of Vegetation Around Transmission Electric Lines and Equipment, Beyond Inspections Mandated by Rules and Regulations	Performed Required Work Refer to 7.3.5.3, 7.3.5.8, and 7.3.5.12
7.3.5.11 Patrol Inspections of Vegetation Around Distribution Electric Lines and Equipment	Performed Required Work
7.3.5.12 Patrol Inspections of Vegetation Around Transmission Electric Lines and Equipment	Performed Required Work Refer to 7.3.5.11.
7.3.5.13 Quality Assurance / Quality Control of Vegetation Management	Performed Required Work
7.3.5.14 Recruiting and Training of Vegetation Management Personnel	Performed Required Work
7.3.5.15 Identification and Remediation of “At-Risk Species”	Did not Perform All Required Work
7.3.5.16 Removal and Remediation of Trees with Strike Potential to Electric Lines and Equipment	Performed Required Work
7.3.5.17 Substation Inspections	Performed Required Work Refer to 7.3.5.2, 7.3.5.3, 7.3.5.11, and 7.3.5.12
7.3.5.18 Substation Vegetation Management	Did not Perform All Required Work
7.3.5.19 Vegetation Management System	Performed Required Work
7.3.5.20 Vegetation Management to Achieve Clearances Around Electric Lines and Equipment	Performed Required Work
7.3.5.21 Vegetation Management Activities Post-Fire	Performed Required Work

3. LIBERTY AUDIT RESPONSE

For the initiatives listed in Table 1 with a finding that all required work was not performed, Liberty must provide Energy Safety with a response that addresses the following criteria:

- 1) Should Liberty disagree with an audit finding that all work was not performed per the WMP, Liberty must provide the basis for that conclusion including detailed supporting documentation and rationale for that response.
- 2) If Liberty contends that the intent of the initiative was met because either a large percentage of the work was completed and/or other vegetation management actions taken by Liberty addressed the wildfire risk at issue, Liberty must provide specific details and documentation supporting that conclusion.
- 3) Should Liberty agree with the audit finding that all work was not performed for a vegetation management initiative, Liberty must provide the following in a corrective action plan:
 - a. Data and/or supporting documents explaining why a commitment was missed.
 - b. The circumstances or mitigating factors as to why a commitment was missed; and
 - c. If Liberty was aware of the missed commitment during the 2022 compliance period, a detailed accounting of any corrective action measures implemented since the end of the 2022 compliance period to avoid future missed commitments including long term strategies to reduce or eliminate wildfire risk.
 - d. Additional actions Liberty plans to implement to ensure commitments of a similar nature are not missed in the future.

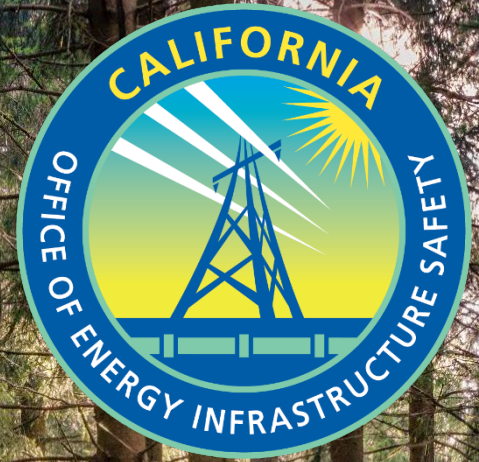
4. 2022 SVM AUDIT CONCLUSION

Energy Safety reviewed the 21 vegetation management initiatives detailed in Liberty's 2022 WMP Update and found Liberty could not provide documentation demonstrating completion of three of the 21 vegetation management initiatives. Liberty was unable to provide supporting documentation or information consistent with statements and/or targets regarding initiatives 7.3.5.2 Detailed Inspections and Management Practices for Vegetation

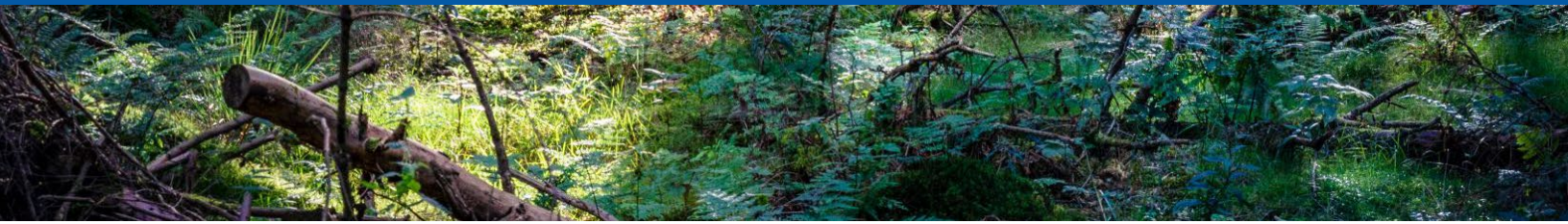
Clearances Around Distribution Electrical Lines and Equipment, 7.3.5.15 Identification and Remediation of "at-risk species," and 7.3.5.18 Substation Vegetation Management.

For each audit finding, Liberty must submit a response to Energy Safety within 30 days of receipt of this audit.

This audit is not an assessment of the quality of Liberty's execution of its vegetation management program.



APPENDIX / ANALYSIS, SUPPORTING DOCUMENTATION AND FINDINGS



Appendix A

Each vegetation management initiative listed in Liberty Utilities' (Liberty's) 2022 Wildfire Mitigation Plan (WMP) Update was analyzed by the Office of Energy Safety (Energy Safety) as part of this audit by identifying the WMP numeric commitment or qualitative statement and comparing that commitment or statement to the work performed by Liberty in 2022. Liberty's WMP Update included 21 vegetation management initiatives. Energy Safety conducted an audit of all commitments and/or statements for each initiative; therefore, determination of whether all work was complete for each initiative was based on verification that all WMP numeric commitments or qualitative statements were completed for each initiative.

As shown in Table 1, Energy Safety determined that Liberty could not provide supporting documentation or information demonstrating completion of all work for three of the 21 vegetation management initiatives in its 2022 WMP Update. Below is a summary of each WMP vegetation management initiative commitment or statement, the data or supporting documentation used to verify the commitment or statement, and the associated finding.

A.1 Initiative 7.3.5.1 Additional Efforts to Manage Community and Environmental Impacts

The purpose of this initiative is the “Plan and execution of strategy to mitigate negative impacts from utility vegetation management to local communities and the environment, such as coordination with communities, local governments, and agencies to plan and execute vegetation management work.”⁴

Statements, Supporting Information and Analysis, and Conclusions

Statement 1

Statement: “Liberty works with customers, property owners, and surrounding land managers to implement vegetation management projects while minimizing negative impacts and promoting benefits to the community.”⁵

Supporting Information and Analysis: Liberty provided the following examples of Liberty’s efforts to outreach with the community, including customers, to implement vegetation management activities while minimizing negative impact.

- A copy of a Wood Removal Notification letter which notifies customers of Liberty’s scheduled vegetation management work to be conducted on customers’ properties.⁶
- A Notice to Proceed letter which describes a project conducted in October 2022 and includes a brief overview of the scope of work and map of the project’s area. Based on this letter, Liberty considered various factors such as sensitive resources, heritage, and wildfire, as it scheduled to remove 44 poles 253 hazard trees and install 57 new poles.⁷
- A news article published in September of 2022 that highlights Liberty’s firewood donation to the Washoe Tribe.⁸ Liberty recycled wood, green waste, and the

⁴ [Update Guidelines](#), attachment 2, p. 92

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

⁵ [Liberty’s 2022 WMP Update](#), p. 125

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁶ Response to DR-227, question 1; attachment “22-238 Wood Haul Notification_letter.pdf.”

⁷ Response to DR-227, question 1; attachment “Cathedral B WMP Notice to Proceed.pdf.”

⁸ Response to DR-227, question 1; South Tahoe Now. *Liberty Utilities donates firewood to the Washoe Tribe* (September 23, 2022). <https://southtahoenow.com/story/09/23/2022/liberty-utilities-donates-firewood-washoe-tribe>

biproductions of vegetation management activities, to green waste facilities and community partners, including the Washoe Tribe.

- Email correspondence from Liberty’s arborist to state park representatives to discuss Liberty’s vegetation work in November 2022 on state park property.⁹

Liberty also included its Resource Protection Measures (RPMs) and Best Management Practices (BMPs) which provide policies, procedures, and guidelines to protect resources such as wildlife, sensitive plants, and habitats, and reduce negative impact from vegetation management activities.¹⁰

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 2

Statement: “Liberty also works with local consultants who conduct heritage surveys and provide recommendations to avoid causing negative impacts to and possible loss of cultural resources. Liberty performs vegetation management while preserving the integrity of natural and cultural resources via effective planning and execution of its WMP objectives.”¹¹

Supporting Information and Analysis: Liberty provided a Heritage Resource Inventory Report that was published by a consulting firm hired by Liberty in March 2022.¹² The report provided an overview of environmental characteristics, and archaeological sites found within the project boundaries of a Line Hazard Removal Project which was completed by Liberty in 2022. The report also provided guidance and best management practices to ensure heritage resources within the project area were protected during vegetation management work. Liberty also included two memorandum of understanding memos published in 2022, that were prepared by a consulting firm hired by Liberty. The memos assessed potential cultural resources constraints identified within proposed vegetation management project areas.¹³ The provided information indicates that Liberty worked with consultants to document and preserve cultural resources within vegetation management project areas in 2022.

⁹ Response to DR-227, question 1; attachment “RE_Liberty – Tahoe City 7300 Section 6 – CA State Park Tree Removals.pdf.”

¹⁰ Response to DR-227, question 1; “attachment RPMs and BMPs.pdf.”

¹¹ [Liberty’s 2022 WMP Update](#), p. 125

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹² Response to DR-227, question 2; attachment “Liberty 640 Line HRIR Final.pdf.”

¹³ Response to DR-227, question 2; attachments “Liberty 5024 MOU Memo – 5580 W Lake Blvd v02.pdf” and “Liberty 5024 MOU Memo – 7300 Line v02.pdf.”

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 3

Statement: “In order to achieve successful project implementation, Liberty engages with its customers and community partners to provide communications about planned vegetation management projects.”¹⁴

Supporting Information and Analysis: Liberty provided the following examples of Liberty’s engagement and communication with customers and the community regarding planned vegetation management projects in 2022.

- A copy of a postcard template used by Liberty in 2022 to notify customers of Liberty’s scheduled vegetation maintenance work. The postcard informs customers on what to expect from tree crews and provides contact information.¹⁵
- A copy of an Operating Plan, which provides an overview of the scope of work on US Forest land, Liberty’s anticipated schedule in 2022, and contact information.¹⁶
- Email correspondence between Liberty and the Tahoe Conservancy discussing upcoming vegetation management work, check-in meetings, and environmental considerations.¹⁷
- Facebook posts from Liberty in December 2022 notifying customers of scheduled vegetation work in specific areas within Lake Tahoe.¹⁸

The provided examples indicate that Liberty engaged with its customers in 2022 to provide information concerning planned vegetation management projects.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 4

Statement: “Liberty collects customer satisfaction information from J.D. Power surveys and uses the data to select initiatives to improve customer service. Over the last few years, Liberty

¹⁴ [Liberty’s 2022 WMP Update](#), p. 125

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹⁵ Response to DR-227, question 3; attachment “22-051 Pre-Tree_Final.pdf.”

¹⁶ Response to DR-227, question 3; attachment “Liberty_OM_Plan_2022_Muller1296.pdf.”

¹⁷ Response to DR-227, question 3; attachment “RE_Conservancy – Liberty Utilities Coordination Meeting – Draft Agenda.pdf.”

¹⁸ Response to DR-227, question 3; attachment “VM_Social_Posts_2022.pdf.”

has instituted several measures to improve customer service, communications, and operations.”¹⁹

Supporting Information and Analysis: Liberty provided an Excel file listing results from the JD Power customer survey.²⁰ The file documents the results from 20 customer responses provided to Liberty in 2022. Liberty also included customer notification emails, mail, and social media posts as example measures Liberty took in 2022 to improve customer service and communication.²¹

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 5

Statement: “Liberty recognizes the importance of managing vegetation in a manner that is sustainable, safe, and economical. In determining proper technique for controlling vegetation along rights-of-way, Liberty follows the practices described in the American National Standard A300 (Part 7) Integrated Vegetation Management (IVM) standards. Practicing IVM promotes sustainable plant communities that are compatible with the use of the land as a utility right-of-way. This is achieved by using a combination of treatment methods that are selected after consideration of environmental impacts, effectiveness, economics, site characteristics, and other factors.”²²

Supporting Information and Analysis: Liberty provided a report published by a third party consultant in 2022 that outlines Liberty’s Integrated Vegetation Management (IVM) program. The report focused on “increasing right-of-way (ROW) Reclamation...to phase up IVM programming and to enhance relationships with key coordinating federal agencies.”²³ The report indicates that Liberty sought out professional consultation to develop an IVM program that promotes the management of sustainable plant communities that are compatible in utility right-of-way areas.

¹⁹ [Liberty’s 2022 WMP Update](#), p. 125

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

²⁰ Response to DR-227, question 4; attachment “CSAT Electric Results Q1 2024.xlsx.”

²¹ Response to DR-227, question 4; attachments “22-051 Pre-Tree_Final.pdf,” “22-238 Wood Haul Notification_letter.pdf,” “Liberty_Customer_email_April_19_2022.pdf,” and “VM_Social_Posts_2022.pdf.”

²² [Liberty’s 2022 WMP](#), pp. 125-126

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

²³ Response to DR-227, question 5; attachment “LU CalPeco Companion Guide to VM Final updated 6.28.2022.pdf, p. i.”

Liberty also included its Statement of Work and Specifications for Vegetation Management Tree Pruning and Removal Services document.²⁴ An email between Liberty vegetation management staff indicates that the statement of work document was updated in October 2022.²⁵ The statement of work document describes Liberty's procedure for controlling vegetation along rights-of-way in compliance with state laws and regulations. The provided information indicates that Liberty had procedures in place to implement effective vegetation management work in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 6

Statement: "Liberty coordinates with surrounding land managers to complete environmental and cultural surveys of project areas prior to implementation."²⁶

Supporting Information and Analysis: Liberty provided a report indicating that it engaged a third-party vendor, who conducted two cultural resources constraints reports in 2022 prior to the projects' implementations in 2023. Each report provides a brief description of the project followed by a review of environmental and cultural considerations. The report indicates that the third-party vendor conducted a field review of the proposed project's site, considered resource protection measures, coordinated with other entities (i.e., Native American tribes or agencies), and considered the potential environmental and cultural effects of the project.²⁷ Liberty also included a heritage resources inventory report, developed in 2022, which provided a more in-depth cultural, historical, and environmental assessment of the proposed project site.²⁸

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 7

Statement: "The National Forest Foundation (NFF) is performing project preparation and administration for [the Liberty Utilities Resilience Corridors Project] on behalf of the Lake Tahoe Basin Management Unit (LTBMU). After planning and preparing work areas, the [forest service] will award timber sale contracts for project implementation. Although Liberty was

²⁴ Response to DR-227, question 15; attachment "DR-227-Q15_FW_Tree_Pruning_and_Removal_SOW_2022-10-25.docx.pdf."

²⁵ Response to DR-227, question 15; attachment "DR-227-Q15_FW_Tree_Pruning_and_Removal_SOW_2022-10-25.docx.pdf."

²⁶ [Liberty's 2022 WMP Update](#), p. 126

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

²⁷ Response to DR-227, question 6; attachments "Liberty 5024 MOU Memo – 5580 W Lake Blvd v02.pdf" and "Liberty 5024 MOU Memo – 7300 Line v02.pdf."

²⁸ Response to DR-227, question 6; attachment "Liberty 640 Line HRIR Final.pdf."

not authorized to implement all of its work plan for this initiative in 2021, Liberty was able to redirect efforts for the preparation and layout of work units (approximately 430 acres) expected to be issued by the [forest service] in 2022.”²⁹

Supporting Information and Analysis: Liberty provided two expense reports summarizing Liberty’s expenditures towards the Utilities Resilience Corridors project in 2022.³⁰ The reports document that Liberty performed Mechanical and hand fuel treatments on 424 acres of National Forest land in 2022. In addition, the reports show that Liberty made monetary contributions for NFF’s preparation and layout of acres to be treated by the US Forest Service in support of the Utilities Resilience Corridors Project in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 8

Statement: “To facilitate continued progress, Liberty secured contracts with environmental consulting firms to coordinate with [forest service] resource specialists and perform the necessary surveys.”³¹

Supporting Information and Analysis: Liberty provided “Purchase Orders” indicating that Liberty contracted with environmental consulting firms to perform environmental and cultural surveys in 2022.³² Liberty also provided a cultural resource survey reported completed by an environmental consulting firm in 2022.

Liberty also provided a cultural resource report conducted by an environmental consulting firm hired by Liberty in 2022. The report indicates that the consulting firm coordinated with a U.S. Forest Service Tahoe National Forest Archaeologist to assess cultural sites within a proposed vegetation management project area.³³

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

²⁹ [Liberty’s 2022 WMP Update](#), p. 128

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

³⁰ Response to DR-227, question 9; attachment “Liberty_In-Kind_Tracker.xlsx,” and “Liberty Cash Contribution.xlsx.”

³¹ [Liberty’s 2022 WMP Update](#), p. 128

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

³² Response to DR-227, question 10; attachments “PO 10936 NCE 2022 HERITAGE SRVY CMBND – Executed.pdf,” “PO 1163 NCE 8800-OMVG CMBND.pdf,” and “PO 11808 NICHOLS WFMP_FRC CMBND.pdf.”

³³ Response to DR-227, question 10; attachment “PO 11808 NICHOLS WFMP_FRC CMBND.pdf.”

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.1: Additional Efforts to Manage Community and Environmental Impacts.

A.2 Initiative 7.3.5.2 Detailed Inspections and Management Practices for Vegetation Clearances Around Distribution Electrical Lines and Equipment

The purpose of this initiative is “Careful visual inspections and maintenance of vegetation around the distribution right-of-way, where individual trees are carefully examined, visually, and the condition of each rated and recorded. Describe the frequency of inspection and maintenance programs.”³⁴

Statements, Supporting Information and Analysis, and Conclusions

Statement 9

Statement: Table “5.3- 1: List and Description of Program Targets, last 5 years” within Liberty’s 2022 WMP Update sets a detailed inspection target of 221 circuit miles.³⁵

Supporting Information and Analysis: Liberty’s non-spatial, Quarter 4 (Q4) Quarterly Data Report (QDR) from 2022 indicates that Liberty inspected 210 circuit miles, or 95% of its target during 2022 patrol inspections.³⁶

Conclusion: Liberty did not provide information consistent with the completion of work identified in this statement.

Statement 10

Statement: “During the inspection process, tree and site conditions are assessed per ANSI A300 (Part 9) Tree Risk Assessment guidelines to determine tree risk. If work is required to

³⁴ [Update Guidelines](#), attachment 2, p. 92

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

³⁵ [Liberty’s 2022 WMP Update](#), p. 83

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

³⁶ Liberty’s 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB24.

remediate any concerns identified during the inspection process, the inspector will prescribe corrective actions to mitigate the identified risk.”³⁷

Supporting Information and Analysis: Liberty submitted a spatial QDR for each quarter of 2022 which is comprised of GIS data. The spatial QDR data documented the location of trees identified for work during detailed inspections in 2022. The spatial QDRs indicate that Liberty assessed approximately 3,198 trees during detailed inspections in 2022.³⁸

Liberty also provided its “VM-03 Hazard Tree Plan”, which describes the three assessment levels based on the ANSI A300. The varying levels (1, 2, or 3) indicate the type of assessment personnel must perform and the level of detailed information that must be collected about the tree and/or site conditions. The document goes on to state that “assessment results are captured in the work management system in order to track and manage the prescribed work or other mitigation.”³⁹ The plan indicates that Liberty had procedures in place to evaluate hazard trees during detailed inspections and store work order information for prescribed work.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 11

Statement: “Liberty monitors vegetation conditions using several sources of information for VM inspection planning and prioritization. Factors taken into consideration when planning and prioritizing detailed inspections of vegetation include vegetation density, maintenance history, regional fire risk rating based on CPUC fire threat areas and REAX fire risk ratings, customer tree inspection requests, observations from field employees and customer tree inspection requests, observations from field employees and contractors.”⁴⁰

Supporting Information and Analysis: Liberty provided a summary report of tree clearance data captured by LiDAR inspections in 2021 and 2022.⁴¹ The report analyzes and summarizes trends in vegetation clearances of Liberty’s facilities, and tree growth rates.

³⁷ [Liberty’s 2022 WMP Update](#), p. 132

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

³⁸ Liberty’s 2022 spatial QDR data from Q1, Q2, Q3, and Q4.

³⁹ Response to DR-227, question 22; attachment “DR-227-Q22_VM-03_Hazard_Tree_Plan_1.0.pdf.”

⁴⁰ [Liberty’s 2022 WMP Update](#), p. 132

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁴¹ Response to DR-227, question 23; attachment “LiDAR_2021-2022_Change_Detection_Summary.docx.”

Liberty also provided a map of its service territory, which categorized areas within Tier 2 and Tier 3 of the HFTD by their REAX risk rating (low, moderate, high, and very high).⁴²

Liberty developed its pole clearing priority 2022 schedule using LiDAR data, and fire risk ratings. Circuits in areas rated as a very high or high fire risk, with a high density of poles, were categorized as Priority 1, and so forth.⁴³

Liberty also included internal emails discussing Liberty's response to customer tree inspection requests⁴⁴ and an Excel file listing treetop data captured by LiDAR inspections in 2022.⁴⁵

The provided information indicates that Liberty monitored vegetation conditions in 2022, and that Liberty had the resources described in statement 11 above to plan vegetation management inspections.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty did not provide information consistent with the completion of work identified in Initiative 7.3.5.2: Detailed Inspections of Vegetation Around Distribution Electric Lines and Equipment. Liberty must supply a corrective action response addressing the finding identified in statement 9 above.

A.3 Initiative 7.3.5.3 Detailed Inspection of Vegetation Around Transmission Electric Lines and Equipment

The purpose of this initiative is the "Careful visual inspections and maintenance of vegetation around the transmission right-of-way, where individual trees are carefully examined, visually, and the condition of each rated and recorded. Describe the frequency of inspection and maintenance programs."⁴⁶

⁴² Response to DR-227, question 23; attachment "Liberty_HFTD_REAX_Map.pdf."

⁴³ Response to DR-227, question 23; attachment "Pole_Clearing_Priority_Schedule_2022_v2.xlsx."

⁴⁴ Response to DR-227, question 23; attachment "RE_tree mortality.pdf."

⁴⁵ Response to DR-227, question 23; attachment "LiDAR_TreetopsWKBK."

⁴⁶ [Update Guidelines](#), attachment 2, p. 92

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

Statements, Supporting Information and Analysis, and Conclusions

Liberty's 2022 WMP Update, Initiative 7.3.5.3 Detailed Inspection of Vegetation Around Transmission Infrastructure, directs readers to Initiative 7.3.5.2. Therefore, Energy Safety did not conduct a separate analysis of the work performed for this initiative.

Finding

See the finding for Initiative 7.3.5.2.

A.4 Initiative 7.3.5.4 Emergency Response Vegetation Management due to Red Flag Warning or Other Urgent Climate Conditions

The purpose of this initiative is the “Plan and execution of vegetation management activities, such as trimming or removal, executed based upon and in advance of forecast weather conditions that indicate high fire threat in terms of ignition probability and wildfire consequence.”⁴⁷

Statements, Supporting Information and Analysis, and Conclusions

In its 2021 WMP Update, Liberty states that “Although Liberty does not currently have a specific applicable WMP initiative, the inspections and vegetation management work performed in Sections 7.3.5.2, 7.3.5.3, 7.3.5.5, 7.3.5.7, 7.3.5.8, 7.3.5.11, 7.3.5.12, 7.3.5.15, and 7.3.5.16 support preparation and identification of these types of events.”⁴⁸

Finding

See the findings for Initiatives 7.3.5.2, 7.3.5.3, 7.3.5.5, 7.3.5.7, 7.3.5.8, 7.3.5.11, 7.3.5.12, 7.3.5.15, and 7.3.5.16.

⁴⁷ [Update Guidelines](#), attachment 2, p. 92

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

⁴⁸ [Liberty's 2022 WMP Update](#), p. 134

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

A.5 Initiative 7.3.5.5 Fuel Management (including all wood management) and Reduction of “slash” from Vegetation Management Activities

The purpose of this initiative is the “Plan and execution of fuel management activities in proximity to potential sources of ignition. This includes pole clearing per PRC 4292 and reduction or adjustments of live fuel (based on species or otherwise) and of dead fuel, including all downed wood and “slash” generated from vegetation management activities.”⁴⁹

Statements, Supporting Information and Analysis, and Conclusions

Statement 12

Statement: Table “5.3- 1: List and Description of Program Targets, last 5 years” within Liberty’s 2022 WMP Update sets a target to complete fuel reduction work across 280 acres in 2022.⁵⁰

Supporting Information and Analysis: Liberty’s non-spatial QDR submission from Q4 of 2022, indicates that Liberty exceeded target by completion of 515 acres of fuel treatment work in 2022.⁵¹

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 13

Statement: “Liberty has implemented a Fuel Management Program as a precautionary measure to reduce wildfire risks by removing wood and treating brush and slash after vegetation maintenance is performed. Additional treatments that reduce surface fuels from previous activities and those that further reduce fuel loads are also implemented.”⁵²

⁴⁹ [Update Guidelines](#), attachment 2, p. 92

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

⁵⁰ [Liberty’s 2022 WMP Update](#), p. 83

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁵¹ Liberty’s 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB25.

⁵² [Liberty’s 2022 WMP Update](#), p. 134

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

Supporting Information and Analysis: Liberty stated that it did not have a document governing its Fuel Management Program in 2022, but instead incorporated it into scopes of work or operating plans for projects occurring within the Fuel Management Program.⁵³

Liberty provided an “Operating Plan” that indicates Liberty performed hazard tree removal and fuel reduction work within the Humboldt-Toiyabe National Forest in 2022. Included in the plan is a “Tree and Slash Treatment” section which includes procedures related to fuel management work that tree crews were required to follow while completing the project. Tree crews were required to chip all trees up to 24” in diameter and broadcast all chips into piles measuring no more than 4” in depth. Additionally, the plan required tree crews to remove any tree trunks too large for chipping off Forest Service land entirely.⁵⁴

Liberty also provided a “Notice to Proceed” letter from the Tahoe National Forest approving Liberty’s removal of 253 trees within the national forest in 2022. The letter includes procedures that Liberty’s tree crews were required to follow pertaining to fuel reduction work.⁵⁵

Liberty also provided a “Statement of Work” document published in 2022 outlining procedures for managing fuels and debris during vegetation management work performed on California Tahoe conservancy Land in 2022. The document states that tree crews were required to remove all brush less than 12” diameter from the project site, and cut and remove any small diameter trees that had potential to grow into the powerlines.⁵⁶

Lastly, Liberty provided a “Statement of Work” document published in 2022 outlining fuel reduction activities performed at Liberty’s substations. The plan states that “any vegetation removed within the facility or from outside the perimeter fence will be required to be physically removed off of the site and disposed of properly in accordance with all laws, regulations, and ordinances.”⁵⁷

The provided information indicates that Liberty implemented fuel reduction activities and had procedural documentation in place to manage brush and slash created by vegetation management work in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 14

⁵³ Response to DR-227, question 29; attachment “Liberty CalPeco’s Response to DR No. Energy Safety-DR-227.pdf,” p. 14.

⁵⁴ Response to DR-227, question 29; attachment “Liberty_OM_Plan_2022_Muller1296.pdf.”

⁵⁵ Response to DR-227, question 29; attachment “Cathedral B WMP Notice to Proceed.pdf.”

⁵⁶ Response to DR-227, question 29; attachment “Cathedral B WMP Notice to Proceed.pdf.”

⁵⁷ Response to DR-227, question 29; attachment “Substation Vegetation Management SOW.docx.”

Statement: “Vegetation management fuel load is treated in a manner that reduces both the fire ignition risk and the potential for increased fire intensity.”⁵⁸

Supporting Information and Analysis: Liberty provided an Excel file indicating that Liberty completed 1,243 work orders related to the treatment of vegetation management generated debris in 2022.⁵⁹

Liberty also provided an Excel file that categorizes vegetation management fuel load treatments into categories. That file indicates that Liberty completed 1,140 of the following types of work orders related to the cleanup of debris from vegetation management work in 2022:

- 89 work orders called for 100% of vegetation management debris to be removed.
- 63 work orders called for vegetation management debris to be chipped and broadcasted on site.
- 976 work orders called for vegetation management debris to be chipped and hauled away.
- 12 work orders called for all slash generated by vegetation management debris to be chipped and hauled away, and to have logs left in firewood lengths on site.

Liberty also provided before and after images of wood hauling and cleanup for fuel management in 2022.⁶⁰ The pictures indicate a significant reduction in fuel loading at the sites the pictures were taken.

The provided information indicates that Liberty treated fuel loads generated by vegetation management work in a manner that resulted in a decreased fuel level after the work was completed.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 15

Statement: “Liberty partners with local, state, and federal agencies and other larger landowners throughout its service area to collaborate on projects that will reduce fuel loads. Liberty has engaged with the California Tahoe Conservancy (“CTC”) to reduce and remove

⁵⁸ [Liberty’s 2022 WMP Update](#), p. 134

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁵⁹ Response to DR-227, question 30; attachments “R30 Fuel Management Work Orders 2022.xlsx” and “R30 IE 2022 Audit-Work Orders.xlsx.”

⁶⁰ Response to DR-227, question 30; attachment “R30 Wood Hauling 2022.pdf.”

wood and fuels left over from VM activity from parcels owned by the CTC in the Tahoe Basin.”⁶¹

Supporting Information and Analysis: Liberty provided a “Statement of Work” document indicating Liberty’s coordination with the CTC in 2022. The plan states that “Liberty is coordinating with the California Tahoe Conservancy (CTC) to reduce and/or remove debris from parcels owned by the CTC in the Tahoe Basin.”⁶² Liberty also provided a screenshot from its webpage that provides details of Liberty’s partnership with CTC and provides a link to CTC’s fuelwood permit webpage for Liberty customers interested in collecting firewood from the project.⁶³

Liberty also provided its “Operating Plan” for a hazard tree and fuel reduction project that was signed and dated by the Humboldt-Toiyabe Forest Supervisor in 2022.⁶⁴ The plan indicates that Liberty partnered with a federal agency to complete a fuel reduction project in the Humboldt-Toiyabe National Forest.

Liberty also provided a wood removal notification letter template from 2022 that is provided to private landowners prior to vegetation management work.⁶⁵ The letter indicates that Liberty had procedures in place in 2022 to communicate with private landowners regarding fuel reduction work.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.5: Fuels Management (including all wood management) and Reduction of “slash” from Vegetation Management Activities.

⁶¹ [Liberty’s 2022 WMP Update](#), p. 138

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁶² Response to DR-227, questions 31 and 32; attachment “CTC_FuelMGT_SOW.pdf.”

⁶³ Response to DR-227, question 32; attachment “Liberty-CTC Fuelwood Webpage.pdf.”

⁶⁴ Response to DR-227, question 31; attachment “Liberty_OM_Plan_2022_Muller1296.pdf.”

⁶⁵ Response to DR-227, question 31; attachment “22-238 Wood Haul Notification_letter.pdf.”

A.6 Initiative 7.3.5.6 Improvement of Inspections

The purpose of this initiative is “Identifying and addressing deficiencies in inspection protocols and implementation by improving training and the evaluation of inspectors.”⁶⁶

Statements, Supporting Information and Analysis, and Conclusions

Statement 16

Statement: “Liberty is continuing to focus on improving internal processes, workforce development, and identifying alternative methods of conducting inspections.”⁶⁷

Supporting Information and Analysis: Liberty provided a syllabus from “Liberty Utilities’ 2022 Plant Identification and Landscape Awareness Training.”⁶⁸ The syllabus indicates that the course aimed to “strengthen site awareness skills to implement vegetation management to protect, enhance and sustain compatible plant communities.”⁶⁹ The syllabus also indicates that 4 training sessions took place in 2022, and that 26 arborists and contractors were enrolled in the training. The provided information indicates that Liberty provided resources for workforce development in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.6: Improvement of Inspections.

⁶⁶ [Update Guidelines](#), attachment 2, p. 93

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

⁶⁷ [Liberty’s 2022 WMP Update](#), p. 141

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁶⁸ Response to DR-227, question 33; attachment “LU Calpeco 2022 ID Training Syllabus 5.12.2022.pdf.”

⁶⁹ Response to DR-227, question 33; attachment “LU Calpeco 2022 ID Training Syllabus 5.12.2022.pdf.”

A.7 Initiative 7.3.5.7 Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment

The purpose of this initiative is to perform “Inspections of right-of-way using remote sensing methods such as LiDAR, satellite imagery, and UAV.”⁷⁰

Statements, Supporting Information and Analysis, and Conclusions

Statement 17

Statement: “Liberty performs annual LiDAR inspections of vegetation around 100% of its electrical lines.”⁷¹

Supporting Information and Analysis: Liberty’s 2022 WMP Update states that Liberty’s entire service territory had 701 total miles of overhead electric lines in 2022.⁷² Liberty provided an Excel file listing completed miles of LiDAR inspections of vegetation on distribution and transmission electrical lines in 2022 by “Span ID.”⁷³ The Excel file indicates that Liberty inspected 19,845 spans totaling 707 miles in 2022. Based on the total miles of electrical lines reported in Liberty’s 2022 WMP Update, the Excel file indicates that Liberty inspected 100% of its electrical lines using LiDAR in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 18

Statement: “To evaluate remote sensing inspections for remediating trees with strike potential, Liberty is piloting the use of imagery that has been collected along with the LiDAR to perform tree health analysis. The purpose of this project is to determine how well remote sensing data can categorize areas where tree health is in decline along Liberty’s transmission and distribution system. This analysis will be completed within Q2 of 2022, and Liberty will begin testing the data for incorporating into inspection processes in Q3 and Q4 of 2022. If

⁷⁰ [Update Guidelines](#), attachment 2, p. 93

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

⁷¹ [Liberty’s 2022 WMP Update](#), p. 143

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁷² [Liberty’s 2022 WMP Update](#), p. 150

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁷³ Response to DR-227, question 34; attachment “2022 Spans.xlsx.”

successful, the data can be used to gain efficiencies with the identification, planning, inspection and removal of dead and dying trees that are potential hazards.”⁷⁴

Supporting Information and Analysis: Liberty provided two Excel files with results from its 2022 tree health analysis pilot.⁷⁵ The Excel files included tree identification numbers, tree height, tree health (i.e., stressed), and field review observations. The Excel files indicate that the tree health analysis pilot was completed by July 19th, 2022.

Liberty also included emails from July 2022 between Liberty’s vegetation management personnel that discussed the findings from the tree health pilot program, and ways the vegetation management team could incorporate it into Liberty’s inspection process moving forward.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.7 Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment.

A.8 Initiative 7.3.5.8 Remote Sensing Inspections of Vegetation Around Transmission Electric Lines and Equipment

The purpose of this initiative is “to describe the electrical corporation’s methods for inspecting transmission rights-of-way using LiDAR.”⁷⁶

Statements, Supporting Information and Analysis, and Conclusions

Liberty’s 2022 WMP Update, Initiative 7.3.5.8 Remote Sensing Inspections of Vegetation Around Transmission Electric Lines and Equipment, directs readers to Initiative 7.3.5.7.

⁷⁴ [Liberty’s 2022 WMP Update](#), p. 145

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁷⁵ Response to DR-227, question 36; attachments “DR-227-Q36-portola tree health review.xlsx” and “DR-227-Q36-TC&100 tree health.xlsx.”

⁷⁶ [Update Guidelines](#), attachment 2, p. 93

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

Therefore, Energy Safety did not conduct a separate analysis of the work performed for this initiative.

Finding

See the finding for Initiative 7.3.5.7.

A.9 Initiative 7.3.5.9 Other Discretionary Inspections of Vegetation Around Distribution Electric Lines and Equipment, Beyond Inspections Mandated by Rules and Regulations

The purpose of this initiative is “inspecting the distribution rights-of-ways and the adjacent vegetation that may be hazardous, which goes beyond the minimum standards in rules and regulations.”⁷⁷

Statements, Supporting Information and Analysis, and Conclusions

Liberty’s 2022 WMP Update, Initiative 7.3.5.9 Other Discretionary Inspections of Vegetation Around Distribution Electric Lines and Equipment, beyond inspections mandated by rules and regulations, directs readers to Initiatives 7.3.5.2, 7.3.5.7, and 7.3.5.11. Therefore, Energy Safety did not conduct a separate analysis of the work performed for this initiative.

Finding

See the findings for Initiatives 7.3.5.2, 7.3.5.7, and 7.3.5.11.

⁷⁷ [Update Guidelines](#), attachment 2, p. 93
(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

A.10 Initiative 7.3.5.10 Other Discretionary Inspections of Vegetation Around Transmission Electric Lines and Equipment, Beyond Inspections Mandated by Rules and Regulations

The purpose of this initiative is “inspecting transmission rights-of-way to identify vegetation hazards.”⁷⁸

Statements, Supporting Information and Analysis, and Conclusions

Liberty’s 2022 WMP Update, Initiative 7.3.5.10 Other Discretionary Inspections of Vegetation Around Transmission Electric Lines and Equipment, beyond inspections mandated by rules and regulations, directs readers to Initiatives 7.3.5.3, 7.3.5.8, and 7.3.5.12. Therefore, Energy Safety did not conduct a separate analysis of the work performed for this initiative.

Finding

See the findings for Initiatives 7.3.5.3, 7.3.5.8, and 7.3.5.12.

A.11 Initiative 7.3.5.11 Patrol Inspections of Vegetation Around Distribution Electric Lines and Equipment

The purpose of this initiative is “to inspect distribution rights-of-way to identify obvious [vegetation] hazards.”⁷⁹

Statements, Supporting Information and Analysis, and Conclusions

⁷⁸ [Update Guidelines](#), attachment 2, p. 93

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

⁷⁹ [Update Guidelines](#), attachment 2, p. 93

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

Statement 19

Statement: Table 5.3- 1: List and Description of Program Targets, last 5 years within Liberty's 2022 WMP Update sets a patrol inspection target of 167 circuit miles.⁸⁰

Supporting Information and Analysis: Liberty's non-spatial QDR submission from Q4 of 2022 indicates that Liberty exceeded target by inspection of 235 miles of its utility rights-of-ways during 2022 patrol inspections.⁸¹

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 20

Statement: "Liberty performs inspections of vegetation along utility rights-of-way to identify obvious hazards."⁸²

Supporting Information and Analysis: Liberty provided an Excel file documenting work orders to trim or remove hazard trees identified during 2022 Patrol Inspections.⁸³ The file indicates that Liberty mitigated 992 identified hazard trees during patrol inspections in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 21

Statement: "Due to the nature of increasing tree mortality within its service territory, Liberty has identified the need to implement accelerated inspections for dead and dying trees along its system. Patrol inspections are typically performed by completing a Level 1: Limited Visual Assessment per ANSI A300 (Part 9) Tree Risk Assessment and application of Liberty's Hazard" Tree Management Plan to identify dead and dying trees capable of striking electrical infrastructure."⁸⁴

Supporting Information and Analysis: Liberty provided an Excel file listing all spans where inspectors performed accelerated inspections for dead and dying trees in 2022.⁸⁵ The Excel

⁸⁰ [Liberty's 2022 WMP Update](#), p. 83

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁸¹ Liberty's 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB28.

⁸² [Liberty's 2022 WMP Update](#), p. 146

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁸³ Response to DR-227, question 40; attachment "DR-227-Q40-Patrol_Work_Orders_2022.xlsx."

⁸⁴ [Liberty's 2022 WMP Update](#), p. 146

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁸⁵ Response to DR-227, question 41; attachment "2022_Patrol_Span_Inspection.xlsx."

file indicates that Liberty performed accelerated inspections to identify dead and dying trees as part of its patrol inspection program at 5,711 spans in 2022.⁸⁶

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 22

Statement: “Emergency pruning or removal is performed when a tree poses an imminent threat to the electrical facilities.”⁸⁷

Supporting Information and Analysis: Liberty stated that it performed emergency pruning or removal work on 69 trees that were identified as an imminent threat to electrical facilities in 2022.⁸⁸ Liberty provided two work orders of completed emergency mitigation work from 2022, in which one tree was mitigated within 24 hours of identification and one tree was mitigated within 32 hours of identification.⁸⁹ The work orders indicate that Liberty performed emergency mitigation work in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Energy Safety’s audit found that Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.11: Patrol Inspections of Vegetation Around Distribution Electric Lines and Equipment.

A.12 Initiative 7.3.5.12 Patrol Inspections of Vegetation Around Transmission Electric Lines and Equipment

The purpose of this initiative is “to inspect transmission rights-of-way to identify “obvious [vegetation] hazards.”⁹⁰

⁸⁶ Response to DR-227, question 41; attachment “2022_Patrol_Span_Inspection.xlsx.”

⁸⁷ [Liberty’s 2022 WMP Update](#), p. 146

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁸⁸ Response to DR-227, question 25; attachment “Liberty CalPeco’s Response to DR No. Energy Safety-Dr-227.pdf,” p. 12.

⁸⁹ Response to DR-227, question 42; attachment “DR-227-Q42-Priority_1_Work_Order_data_Example_3.pdf,” and Response to DR-242, question 63; attachment “Q.63.xlsx.”

⁹⁰ [Update Guidelines](#), attachment 2, p. 93

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

Statements, Supporting Information and Analysis, and Conclusions

Liberty's 2022 WMP Update, Initiative 7.3.5.12 Patrol Inspections of Vegetation Around Transmission Electric Lines and Equipment, directs readers to Initiative 7.3.5.11. Therefore, Energy Safety did not conduct a separate analysis of the work performed for this initiative.

Finding

See the finding for Initiative 7.3.5.11.

A.13 Initiative 7.3.5.13 Quality Assurance / Quality Control of Vegetation Management

The purpose of this initiative is the "Establishment and function of audit process to manage and oversee the work completed by employees or contractors, including packaging QA/QC information for input to decision-making and workforce management processes. This includes identification of the percentage of vegetation inspections that are audited annually, as a program target, as a program target in Table 5.3-1."⁹¹

Statements, Supporting Information and Analysis, and Conclusions

Statement 23

Statement: Table 5.3- 1: List and Description of Program Targets, last 5 years within Liberty's 2022 WMP update sets a target of 220 circuit miles of Quality Assurance /Quality Control of vegetation to be inspected.⁹²

Supporting Information and Analysis: Liberty's non-spatial QDR submission from Q4 of 2022 indicates that Liberty completed 271 circuit miles of quality assurance/quality control work related to its vegetation management program in 2022.⁹³

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

⁹¹ [Update Guidelines](#), attachment 2, p. 94

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

⁹² [Liberty's 2022 WMP Update](#), p. 83

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁹³ Liberty's 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cells AB29.

Statement 24

Statement: “The QA/QC Program is aligned with Liberty’s Post Work Verification Procedure (VM-04).”⁹⁴

Supporting Information and Analysis: Liberty provided VM-04 Post Work Verification Procedure.⁹⁵ The procedure outlines some of the criteria that should be assessed during a post verification review of vegetation management work including the following:

- Ensure maintenance clearance distance was achieved
- Slash and debris removal satisfactory
- Complete and accurate inventory (e.g., species, location)
Pruning completed per ANSI standard

Liberty also provided a post verification field review report that was performed in 2022. The report includes the status, location, and completion date of the review. The report indicates that the auditor was required to follow Liberty’s VM-04 procedure by collecting data such as whether proper clearances were achieved, if slash or debris were not removed, and if the pruning work met ANSI standards.⁹⁶

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 25

Statement: “In order to mitigate [wildfire risk], various QC inspections are conducted during different phases of vegetation management work.”⁹⁷

Tree Pruning and Removal QC Inspections:

- Ensure the Maintenance Clearance Distance (MCD) was achieved, or work was completed as otherwise described in the work prescription
- Slash and debris removal was satisfactory as required by Liberty’s specification and applicable regulations
- Complete and accurate inventory (e.g., species, location, all other attributes as required)
- Pruning was completed per ANSI standard

⁹⁴ [Liberty’s 2022 WMP Update](#), p. 147

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

⁹⁵ Response to DR-227, question 44; attachment “VM-04_Post_Work_Verification_1.0.pdf.”

⁹⁶ Response to DR-227, question 45; attachment “2022_QC_Field_Review_Example.pdf.”

⁹⁷ [Liberty’s 2022 WMP Update](#), p. 147

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

Detailed Pre-inspection QC Inspections:

- Site location and access information are documented and accurate
- Complete and accurate inventory (e.g., species, all other attributes as required)
- Appropriate Work Categories are assigned for Pruning, Removal, and Facility Protect (see Paragraph ‘a’ below)
- Permission is secured, as required
- Ensure MCD was prescribed
- If unable to secure MCD prescription, a description of why (e.g., tree structure, past pruning practices, property owner request, etc.) is provided along with a description of what clearances are to be obtained
- Description of slash and debris handling was provided

Hazard Tree QC Inspections:

- Prescription was completed (i.e., monitor, facility protect, remove)
- Slash and debris removal was satisfactory as required by Liberty’s specification and applicable regulations
- Mitigation did not adversely impact other trees (e.g., adjacent trees exposed to windthrow, etc.)
- Site conditions are stable after the completion of work

Pole Brushing QC Inspections:

- Work was completed as required by Public Resource Code (PRC) 4292⁹⁸
- Slash and debris removal was satisfactory as required by Liberty’s specification and applicable regulations
- ANSI standard was met if pruning was required.”⁹⁹

Supporting Information and Analysis:

Tree Pruning and Removal QC Inspections:

- Liberty provided a QC form from its data management system confirming the completion status of a tree pruning and removal QC inspection in January 2022.¹⁰⁰ The form consists of several questions pertaining to tree work quality and completion that an evaluator fills out to verify the work was completed.

⁹⁸ Energy Safety does not make conclusions as to whether work required by Public Resource Code 4292 was properly completed.

⁹⁹ [Liberty’s 2022 WMP Update](#), pp. 147-148

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹⁰⁰ Response to DR-227, question 46; attachment “2022_QC_Tree_Pruning_Achieved_Example.pdf.”

Detailed Pre-inspection QC Inspections:

- Liberty provided a QC form from its data management system confirming the completion status of a detailed QC inspection in January 2022.¹⁰¹ The form consists of several questions pertaining to pre inspection work that an evaluator fills out to verify the work was completed.

Hazard Tree QC Inspections:

- Liberty provided a QC form from its data management system confirming the completion status of a hazard tree QC inspection in January 2022.¹⁰² The form consists of several questions pertaining to tree work quality and completion that an evaluator fills out to verify the work was completed.

Pole Brushing QC Inspections:

- Liberty provided a QC form from its data management system confirming the completion status of a pole brushing QC inspection in October 2022.¹⁰³ The form consists of several questions pertaining to pole brushing and PRC 4292 that an evaluator fills out to verify the work was completed.

Conclusion: Energy Safety’s audit found that Liberty provided information consistent with the completion of work identified in this statement.

Statement 26

Statement: “Liberty has implemented a Post Work Verification Procedure (VM-04), which is applicable to both vegetation inspections and vegetation management work that is conducted on local, federal, and state agency land. This procedure contains both QA and QC components. The purpose of the procedure is to define the program oversight requirements used to provide reasonable assurance that Liberty is meeting the applicable requirements related to vegetation management. The oversight contained in the procedure is intended to provide several levels of defense-in-depth strategy in order to provide reasonable assurance that inspection and maintenance work is being effectively performed.”¹⁰⁴

Supporting Information and Analysis: Liberty provided its VM-04 procedure. The report indicates an “effective date” of December 20th, 2022. Liberty stated that the procedure was updated and drafted in 2022 and plans to finalize the draft in 2024.¹⁰⁵ Liberty stated that

¹⁰¹ Response to DR-227, question 47; attachment “2022_QC_Detailed_Inspection_Achieved_Example.pdf.”

¹⁰² Response to DR-227, question 48; attachment “2022_QC_Hazard_Tree_Achieved_Example.pdf.”

¹⁰³ Response to DR-227, question 49; attachment “2022_QC_Pole_Clearing_Acheived_Example.pdf.”

¹⁰⁴ [Liberty’s 2022 WMP Update](#), p. 148

(<https://efiling.energy.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹⁰⁵ Response to DR-227, question 50; attachment “VM-04_Post_Work_Verification_1.1_Revision_Draft.docx.”

Revisions to VM-04 in 2022 included changes to sample sizes to account for updated system mileage and subject poles, an updated definition of hazard trees, and alignment with current work processes and procedures.¹⁰⁶

Liberty provided an Excel file of its QC pass results from 2022 post verification audits. The file indicates that 9,287 vegetation management “units” were assessed based on several metrics including but not limited to accurate species and location descriptions, clean up, general work performance, and clearance requirements. That file also provides summary report findings from three categories of vegetation management work including detailed inspections, completed tree work, and pole brushing. Detailed inspections, completed tree work, and pole brushing averaged a pass percentage rate of approximately 99%, 98%, and 89% respectively.¹⁰⁷

The provided information indicates that Liberty updated its VM-04 procedure in 2022, and effectively carried out the work described in the procedure to complete post verification audits of its vegetation management programs in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 27

Statement: “Liberty began its VM QC inspections in July of 2021 and implemented them for five of eight targeted projects. The three incomplete projects started in late 2021 and will be completed in 2022.”¹⁰⁸

Supporting Information and Analysis: Liberty provided a status report of the three VM QC inspection projects, Topaz 1261, Tahoe City 7300 Section 1, Muller 1296 Section 5, that were initiated in 2021 and completed in early 2022. The report indicates that all 2021 VM QC inspections were completed in 2022.

- Topaz 1261 project – Liberty completed the remaining 22% of QC inspections in 2022, identified 13 hazard trees, and added 18 trees.
- Tahoe City 7300 Section 1 – Liberty completed the remaining 79% of QC inspections in 2022, identified 453 hazard trees, and added 34 trees.

¹⁰⁶ Response to DR-227, question 50; attachment “Liberty CalPeco’s Response to DR No. Energy Safety-DR-227.pdf,” p. 23.

¹⁰⁷ Response to DR-227, question 51; attachment “2022_VM_QC_Pass_Results_Report.xlsx.”

¹⁰⁸ [Liberty’s 2022 WMP Update](#), p. 148

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

- Muller 1296 Section 5 – Liberty completed the remaining 73% of QC inspections in 2022, identified 364 hazard trees and added 10 trees.¹⁰⁹

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.13: Quality Assurance / Quality Control of Vegetation Management.

A.14 Initiative 7.3.5.14 Recruiting and Training of Vegetation Management Personnel

The purpose of this initiative is to facilitate “Programs to ensure that the utility can identify and hire qualified vegetation management personnel and to ensure that both employees and contractors tasked with vegetation management responsibilities are adequately trained to perform vegetation management work, according to the utility’s wildfire mitigation plan, in addition to rules and regulations for safety. Include discussion of continuous improvement of training programs and personnel qualifications.”¹¹⁰

Statements, Supporting Information and Analysis, and Conclusions

Statement 28

Statement: “Liberty reviews VM QC inspection results and provides recommendations to VM contractors as needed. In 2022, Liberty will improve its utilization of the data and provide additional feedback of VM work being conducted on the system by various VM contractors.”¹¹¹

Supporting Information and Analysis: Liberty provided copies of email correspondence between Liberty’s vegetation management staff and Liberty’s contractors in 2022. The emails indicate that Liberty’s vegetation management staff discussed the outcomes of 2022 vegetation management QC results with Liberty’s contractors, and provided

¹⁰⁹ Response to DR-227, question 52; attachment “DR227-Q52_QC_Completed_Work_Sheet.xlsx.”

¹¹⁰ [Update Guidelines](#), attachment 2, p. 94

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

¹¹¹ [Liberty’s 2022 WMP Update](#), pp. 149

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

recommendations as to how Liberty's contractors could improve upon vegetation management work moving forward.¹¹²

Liberty also provided a meeting agenda, slides from a PowerPoint presentation, and sign in sheets dated August 5th, 2022, and October 7th, 2022. The provided information indicates that Liberty held meetings with its vegetation management staff and contractors to discuss Liberty's vegetation management procedures to increase the quality of contractor work in 2022.¹¹³

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 29

Statement: "Liberty requires employees within the VM Department to hold professional credentials and to complete ongoing training necessary to maintain applicable certifications. Being a Certified Arborist by the International Society of Arboriculture (ISA) with three years of relevant experience is the minimum requirement to be employed by Liberty as System Arborists. Additional training and credentials beyond the minimum are encouraged to further the professional development of employees and to provide a well-trained, motivated workforce."¹¹⁴

Supporting Information and Analysis: Liberty provided a summary report in tabular form documenting the types of credentials held by Liberty's VM Department staff in 2022. The report indicates that Liberty's 2022 VM Department staff consisted of seven Certified Arborists, six staff members that were Tree Risk Assessment Qualified, four Utility Specialists, one Board Certified Master Arborist, one Certified Utility Vegetation Management Professional, and one Registered Professional Forester.¹¹⁵

Liberty also provided the names and ISA Certification number for all System Arborists that were employed by Liberty in 2022.¹¹⁶ The provided information indicates that Liberty's VM Department staff held professional credentials and that all of Liberty's System Arborists were ISA certified in 2022.

¹¹² Response to DR-227, question 54; attachments "Quality Control Findings - LiDAR work.pdf," "2022-01-17 Pole Brushing Projects.pdf."

¹¹³ Response to DR-227, question 54; attachment "LU ECI October Meeting Sign in Sheet.pdf," "October 2022 VM Monthly Meeting Agenda.pdf."

¹¹⁴ [Liberty's 2022 WMP Update](#), p. 151

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹¹⁵ Response to DR-227, question 55; attachment "Liberty CalPeco's Response to DR No. Energy Safety-DR-227.pdf," pp. 25-26, and response to DR-255, question 70; attachment "Energy Safety DR-255_Liberty Response.pdf," p. 3.

¹¹⁶ Response to DR-255, question 70; attachment "Energy Safety DR-255_Liberty Response.pdf," p. 3.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 30

Statement: “Insufficient VM workforce was identified as the biggest threat to program success. Liberty took appropriate action and identified the staffing levels necessary to maintain program effectiveness. Liberty is currently filling the additional positions and once fully staffed, the VM Department will have doubled in size since filing Liberty’s 2020 Wildfire Mitigation Plan.”¹¹⁷

Supporting Information and Analysis: Liberty provided a screen shot of its hiring dashboard indicating that 4 vegetation management employees were hired in 2022. That screenshot also included an org chart of Liberty’s VM program which indicated that each level of the org chart had a “filled” status indicating that Liberty’s VM department was fully staffed in 2022.¹¹⁸

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.14 Recruiting and Training of Vegetation Management Personnel.

A.15 Initiative 7.3.5.15 Identification and Remediation of “at-risk species”

The purpose of this initiative is that “Specific actions, not otherwise described in other WMP initiatives, taken to reduce the ignition probability and wildfire consequence attributable to “at-risk species,” such as trimming, removal, and replacement.”¹¹⁹

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¹¹⁷ [Liberty’s 2022 WMP Update](#), p. 151

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹¹⁸ Response to DR-227, question 56; attachment Liberty CalPeco’s Response to DR No. Energy Safety-DR-227.pdf,” p. 26.

¹¹⁹ [Update Guidelines](#), attachment 2, p. 94

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

Statement 31

Statement: Table “5.3- 1: List and Description of Program Targets, last 5 years” within Liberty’s 2022 WMP Update sets a target to treat “at-risk species” along 238 circuit miles of Liberty’s distribution and transmission system in 2022.¹²⁰

Supporting Information and Analysis: Liberty’s non-spatial, 2022 Q4 QDR indicates that Liberty treated “at-risk species” along 223 circuit miles, resulting in the completion of 94% of its target.¹²¹

Conclusion: Liberty did not provide information consistent with the completion of work identified in this statement.

Finding

Liberty did not provide information consistent with the completion of work identified in Initiative 7.3.5.15 Identification and Remediation of “at-risk species.” Liberty must supply a corrective action response addressing the finding identified in statement 31 above.

Statement 32

Statement: “Once a tree has been identified as a hazard, there are various mitigation actions that can be taken based on the specific conditions at the site. These actions include the following:

- Complete tree removal: Complete tree removals must meet one of the following criteria:
 - The distance between the tree and Liberty’s lines or facilities is equal to or less than the height of the tree and the Facility Protect mitigation (see below) is not feasible.
 - The tree is expected to pose a risk to electric facilities and shows characteristics that make the tree, or parts thereof, unstable, and the Facility Protect mitigation is not feasible.
- Facility protection: In some instances, a complete tree removal may not be required to mitigate the risk the tree poses to electric facilities. If appropriate conditions exist, portions of a tree can be pruned or removed to mitigate the risk. The hazard condition is not caused by or exacerbated by its site considerations.

¹²⁰ [Liberty’s 2022 WMP Update](#), p. 83

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹²¹ Liberty’s 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB31.

Spatial QDR data submitted Q4 February 6, 2023 and Q3 November 11, 2022.

- Monitoring: Assessed trees may be monitored when they are considered stable and are not expected to pose a risk to electric facilities in the foreseeable future but show signs of emerging hazard tree attributes or changing site considerations.
- Property owner – contractor assist: Only specially-trained and certified tree crews can work near high-voltage electric facilities. Property owners who hire their own tree workers to prune or remove trees near electric facilities should first notify Liberty. As part of the VM Program, Liberty will assess and remove portions of trees to a level that would allow workers that are not qualified to work within 10-feet of high-voltage electric facilities to remove or prune the remainder of the tree.”¹²²

Supporting Information and Analysis: Liberty provided an Excel file containing one example of each type of mitigation action, including (1) complete tree removal, (2) facility protect, (3) monitoring, and (4) property owner-contractor assist. That file indicates that Liberty conducted the four mitigation actions in 2022 in response to either vegetation within regulation clearance distance or an identified hazard tree.¹²³

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.15: Identification and Remediation of “at-risk species.”

A.16 Initiative 7.3.5.16 Removal and Remediation of Trees with Strike Potential to Electric Lines and Equipment

The purpose of this initiative is that “Actions taken to identify, remove, or otherwise remediate trees that pose a high risk of failure or fracture that could potentially strike electrical equipment.”¹²⁴

¹²² [Liberty's 2022 WMP Update](#), p. 154

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹²³ Response to DR-227, question 57; attachment “R57 Remediation of At-Risk Species.xlsx.”

¹²⁴ [Update Guidelines](#), attachment 2, p. 94

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

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Statement 33

Statement: Table “5.3- 1: List and Description of Program Targets, last 5 years” within Liberty’s 2022 WMP Update sets a target to Remove and remediate trees with strike potential to electric lines along 127 circuit miles in 2022.¹²⁵

Supporting Information and Analysis: Liberty’s non-spatial QDR submission from Q4 of 2022 indicates that Liberty met their target in removed and remediated trees with strike potential to electric lines along 203 circuit miles in 2022.¹²⁶

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.15 and 7.3.5.20.

A.17 Initiative 7.3.5.17 Substation Inspections

The purpose of this initiative is to inspect “vegetation surrounding substations.”¹²⁷

Statements, Supporting Information and Analysis, and Conclusions

Liberty’s 2022 WMP Update, Initiative 7.3.5.17 Substation Inspections, directs readers to Initiatives 7.3.5.2, 7.3.5.3, 7.3.5.11, and 7.3.5.12. Therefore, Energy Safety did not conduct a separate analysis of the work performed for this initiative.

Finding

See the findings for Initiatives 7.3.5.2, 7.3.5.3, 7.3.5.11, and 7.3.5.12

¹²⁵ [Liberty’s 2022 WMP Update](#), p. 83

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹²⁶ Liberty’s 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB32.

¹²⁷ [Update Guidelines](#), attachment 2, p. 94

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

A.18 Initiative 7.3.5.18 Substation Vegetation Management

The purpose of this initiative is to take actions “to reduce the ignition probability and wildfire consequences attributable to contact from vegetation to substation equipment.”¹²⁸

Statements, Supporting Information and Analysis, and Conclusions

Statement 34

Statement: “Liberty’s vegetation management work within the substation footprint is cleared on an as-needed basis using herbicide, pre-emergent and hand treatments.”¹²⁹

Supporting Information and Analysis: Liberty provided its Substation Vegetation Management “Scope of Work” document which was created in Fall of 2022. The document sets a cadence for routine inspections of substations as follows “the first cycle visit will occur any time between October 1st and December 31st each year. The second cycle will occur any time between June 1st and September 30th each year.”¹³⁰ Energy Safety asked Liberty in a data request to provide substation vegetation inspection findings from 2022. Liberty responded to the data request by stating that it only treated two of its 12 substations in the fall of 2022 and had to defer work on the remaining substations to the following year due to weather conditions.¹³¹

Liberty also provided the chemical use report, dated in October 2022, exemplifying Liberty’s use of pre-emergent chemicals to clear vegetation on two substations. The report included the date, substation location, and the type and quantity of chemicals utilized.¹³² Liberty also included before and after images of the site locations where pre-emergent treatments were applied near two substations.¹³³

Although the provided data indicates that vegetation management activities were performed in two of Liberty’s 12 substations, 10 substations did not receive vegetation management work in 2022. To avoid weather events influencing Liberty’s substation vegetation management activities moving forward, Liberty must provide in its corrective action response

¹²⁸ [Update Guidelines](#), attachment 2, p. 94

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

¹²⁹ [Liberty’s 2022 WMP Update](#), p. 155

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹³⁰ Response to DR-242, question 65; attachment “Substation Vegetation Management SOW.docx.”

¹³¹ Response to DR-242, question 65; attachment “Substation Vegetation Management SOW.docx.”

¹³² Response to DR-242, question 64; attachment “Liberty Utilities Chem Reports Fall Pre-emergent 2022.pdf.”

¹³³ Response to DR-242, question 64; attachment “Liberty Utilities Substation Fall Pre-Emergent Fall 2022.docx.”

a plan to incorporate seasonal weather conditions into its substation vegetation management scheduling.

Conclusion: Liberty did not provide information consistent with the completion of work identified in this statement.

Finding

Liberty did not provide information consistent with the completion of work identified in Initiative 7.3.5.18: Substation Vegetation Management. Liberty must supply a corrective action response addressing the finding identified in statement 34 above.

A.19 Initiative 7.3.5.19 Vegetation Management System

The purpose of this initiative is that “Inputs, operation, and support for a centralized vegetation management enterprise system is updated based upon inspection results and management activities such as trimming and removal of vegetation.”¹³⁴

Statements, Supporting Information and Analysis, and Conclusions

Statement 35

Statement: “Liberty has implemented the Vegetation Management System throughout its footprint.”¹³⁵

Supporting Information and Analysis: Liberty provided multiple screenshots of its Vegetation Management System (VMS). The first screenshot indicates that QC audits, vegetation management work orders, and invoices were uploaded to the VMS in 2022. The second screenshot indicates that Liberty was able to search work order, invoice, and audit records by project type (e.g., LiDAR, Routine, and Storm) in 2022. The third screenshot indicates that Liberty was able to query multiple attribute fields using the VMS (e.g., property address, and landowner information) in 2022. The fourth screenshot indicates that Liberty was able to generate summary reports of the data contained in the VMS in 2022.¹³⁶ The provided

¹³⁴ [Update Guidelines](#), attachment 2, p. 92

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

¹³⁵ [Liberty's 2022 WMP Update](#), p. 156

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹³⁶ Response to DR-227, question 58; attachments “VMS_Project_Types.pdf,” “VMS_Work_Status_Drop_Down.pdf,” and “VMS_Reports_Screenshot.jpg.”

information indicates that Liberty utilized a VMS to track vegetation management related data in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 36

Statement: “Photographs, tree work authorization forms, and other documents associated with specific trees can be linked to the tree records through local network drives. Each individual tree is also assigned a status drop-down in order to track notifications, project progress, and tree work completion. Upon receipt of signed and completed work requests, an individual tree records status is changed to a completed status.”¹³⁷

Supporting Information and Analysis: Liberty provided an example of a tree inventory record in the VMS, which includes data relating to the tree’s species and location, ownership type, project progress and status, and images and reports.¹³⁸ Liberty also provided an example of a completed work request of a tree inventory record in the VMS, which includes the completion date, contractor, and invoice.¹³⁹

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.19: Vegetation Management System.

A.20 Initiative 7.3.5.20 Vegetation Management to Achieve Clearances Around Electric Lines and Equipment

The purpose of this initiative is that “Actions taken to ensure that vegetation does not encroach upon the minimum clearances set forth in Table 1 of GO 95, measured between line conductors and vegetation, such as trimming adjacent or overhanging tree limbs.”¹⁴⁰

¹³⁷ [Liberty’s 2022 WMP Update](#), p. 156

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹³⁸ Response to DR-227, question 59; attachment “DR-227-Q59-VMS Tree Inventory Record.pdf.”

¹³⁹ Response to DR-227, question 60; attachment “DR-227-Q60-VMS Completed Work Request.pdf.”

¹⁴⁰ [Update Guidelines](#), attachment 2, p. 95

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

Statements, Supporting Information and Analysis, and Conclusions

Statement 37

Statement: Table “5.3- 1: List and Description of Program Targets, last 5 years” within Liberty’s 2022 WMP Update sets a target to perform Vegetation management to achieve clearances around electric lines and equipment along 701 circuit miles in 2022.¹⁴¹

Supporting Information and Analysis: Liberty’s non-spatial QDR submission from Q4 of 2022 indicates that Liberty met their target from performed vegetation management to achieve clearances around electric lines and equipment along 701 circuit miles in 2022.¹⁴²

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Statement 38

Statement: “Liberty also performs pole brushing on approximately 5,000 poles throughout its service territory in order to comply with requirements set forth in applicable regulations.”¹⁴³

Supporting Information and Analysis: Liberty provided an Excel file including pole number, location, and work completion dates for poles that received brushing work in 2022. The Excel file indicates that Liberty inspected and completed pole brushing work when necessary for 4,969 poles, or 99% of its target in 2022.¹⁴⁴

Conclusion: Liberty provided evidence reflecting completion of the vast majority (99%) of the identified miles, and the approved 2022 WMP Update target was approximately 5,000 poles; therefore, Energy Safety finds Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.20: Vegetation Management to Achieve Clearances Around Electric Lines and Equipment.

¹⁴¹ [Liberty’s 2022 WMP Update](#), p. 83

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹⁴² Liberty’s 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB32.

¹⁴³ [Liberty’s 2022 WMP Update](#), p. 157

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹⁴⁴ Response to DR-255, question 71; attachment “Completed Pole Clearing Data 2022.xlsx.”

A.21 7.3.5.21 Vegetation management activities post-fire

The purpose of this initiative is that “Vegetation management (VM) activities during post-fire service restoration including, but not limited to activities or protocols that differentiate post-fire VM from programs described in other WMP initiatives; supporting documentation for the tool and/or standard the utility used to assess the risk presented by vegetation post-fire; and how the utility includes fire-specific damage attributes into its assessment tool/standard.”¹⁴⁵

Statements, Supporting Information and Analysis, and Conclusions

Statement 39

Statement: “Liberty is currently managing post-fire mitigation work in accordance with Liberty’s special use permit on Federal lands, and in accordance with Section 7.3.5.15 and Liberty’s Hazard Tree Management Plan (VM-03) on other lands.”¹⁴⁶

Supporting Information and Analysis: Liberty provided its Hazard Tree Management Plan (VM-03), which identifies, documents, and mitigates trees located within the utility strike zone and are expected to pose a risk to electric facilities based on the tree’s observed structural condition and site considerations.¹⁴⁷ VM-03 also states that “Liberty may perform specific Hazard Tree inspections, as needed, after major storms, high wind events, and fires. The need for these inspections is determined based on the severity of the event and resulting possibility of damaged trees.”¹⁴⁸

Liberty also provided the special use permit, which authorized Liberty to operate and maintain its transmission and distribution power lines on Federal lands including El Dorado and Placer counties, California. The permit is effective for 30 years between Liberty and the U.S. Department of Agriculture, Forest Service.¹⁴⁹

¹⁴⁵ [Update Guidelines](#), attachment 2, p. 95

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true>, accessed May 10, 2024).

¹⁴⁶ [Liberty’s 2022 WMP Update](#), p. 157

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52685&shareable=true>, accessed June 11, 2024).

¹⁴⁷ Response to DR-227, question 27; attachment “DR-227-Q22_VM-03_Hazard_Tree_Plan_1.0.pdf.”

¹⁴⁸ Response to DR-227, question 27; attachment “DR-227-Q22_VM-03_Hazard_Tree_Plan_1.0.pdf.”

¹⁴⁹ Response to DR-242, question 66; attachment “30YEARMASPERMIT_Final.pdf.”

Lastly, Liberty provided two invoices from a post-fire vegetation management project.¹⁵⁰ The invoices indicate that Liberty hired a logging company to complete post-fire vegetation management work within Liberty's service territory in 2022.

Conclusion: Liberty provided information consistent with the completion of work identified in this statement.

Finding

Liberty provided information consistent with the completion of work identified in Initiative 7.3.5.21 Vegetation Management Activities Post-Fire.

¹⁵⁰ Response to DR-255, question 72; attachment "Bordges Inv.#222003 HTNF Cleanup.pdf," and "Bordges Inv.#222004 HTNF Cleanup.pdf."

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