



OFFICE OF ENERGY INFRASTRUCTURE SAFETY
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Caroline Thomas Jacobs, Director

October 10, 2024

To: Liberty Utilities
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 Report of Liberty’s 2022 Vegetation Management Work

Pursuant to the requirements of California Public Utilities Code section 8386.3(c)(5)(C), the Office of Energy Infrastructure Safety (Energy Safety) completed its final report on Liberty’s 2022 Substantial Vegetation Management (SVM) audit. Energy Safety finds that Liberty substantially complied with the substantial portion of the vegetation management requirements in its 2022 Wildfire Plan Update.

The attached report follows Energy Safety’s publication of its SVM audit on August 13, 2024, and Liberty’s subsequent response on September 12, 2024. Pursuant to statutory requirements, a copy of the report is issued to Liberty, published on Energy Safety’s 2022 SVM Docket¹ and provided to the California Public Utilities Commission.

Sincerely,

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

Cc:
Karen McLaughlin, Energy Safety
Julie Rueckheim, Energy Safety

¹ All documents related to Liberty’s 2022 SVM audit are available on Energy Safety’s e-filing system under the “[2022-SVM](#)” docket number (accessed September 20, 2024).

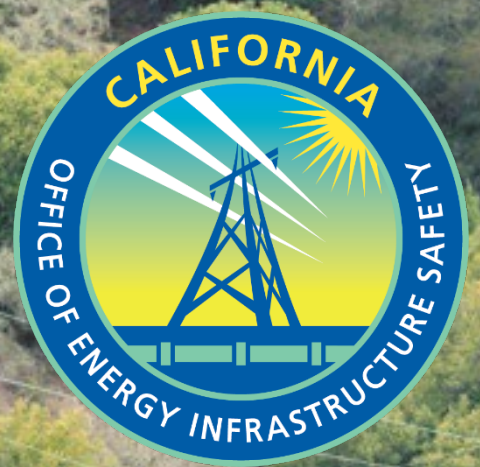


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Attachment: Report on 2022 SVM Audit of Liberty Utilities



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

October 2024

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1. Introduction

Pursuant to Public Utilities Code section 8386.3(c)(5), the Office of Energy Infrastructure Safety (Energy Safety) must audit the vegetation management work performed by, or on behalf of, an electrical corporation. The Audit shall specify any failure of the electrical corporation to fully comply with the vegetation management requirements in its Wildfire Mitigation Plan (WMP).¹ Energy Safety then provides the Audit to the electrical corporation and grants it a reasonable time to correct and eliminate any deficiency therein, documented in a Corrective Action Plan (CAP). Following receipt and review of the electrical corporation's CAP, Energy Safety issues an Audit Report to the electrical corporation identifying whether the electrical corporation substantially complied with the substantial portion of the vegetation management requirements in the applicable year.²

Energy Safety published the 2022 Liberty Substantial Vegetation Management (SVM) Audit (Audit) on August 13, 2024.³ The Audit concluded that Liberty did not perform all the work specified in three out of the 21 vegetation management initiatives in its 2022 WMP Update as shown in Section 2, Table 1 reproduced from the Audit. In response to the Audit, Liberty submitted its CAP on September 12, 2024.⁴ Energy Safety reviewed Liberty's CAP as part of the analysis presented in Section 3 of this document and determined that Liberty substantially complied with the substantial portion of the vegetation management requirements in its 2022 WMP Update.

¹ Pub. Util. Code, § 8386.3(c)(5)(A).

² 2023 Compliance Guidelines, Section 6.1 (September 2023). p. 14.

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=55586&shareable=true>, accessed August 8, 2024).

³ 2022 Substantial Vegetation Management Audit Liberty.

(<https://efiling.energysafety.ca.gov/Search.aspx?docket=2022SVM>, accessed August 13, 2024).

⁴ Liberty 2022 SVM Audit Corrective Action Plan (September 2024).

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57187&shareable=true>, accessed September 12, 2024)

2. 2022 SVM Audit Findings

The 2022 SVM Audit found that Liberty performed all required work in 18 of the 21 applicable Initiatives and was deficient in three. Table 1 below is reproduced from Energy Safety's 2022 Liberty SVM Audit.

2022 WMP Update Initiative Number	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 Electrical 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 Weather 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	Fuel 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
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3. Substantial Vegetation Management Compliance Analysis

Energy Safety is required to assess whether the electrical corporation substantially complied with the substantial portion of the vegetation management requirements in the applicable compliance year.⁵ The determination of substantial compliance is based on an analysis of both the electrical corporation's compliance with each vegetation management initiative as well as the program overall. The initiative level analysis includes:

- 1) **Achievement of Objective-** Determination of whether the electrical corporation's deficiencies, after considering its planned corrective actions, have not detracted from the electrical corporation's ability to achieve the objectives of its vegetation management programs; and
- 2) **Good Faith Effort-** Determination of whether the electrical corporation's effort to fulfill the vegetation management requirement constituted a good faith effort to comply with the vegetation management requirements in the approved WMP.

The final analysis includes a synthesis of initiative level analysis and a programmatic assessment of whether the electrical corporation completed the large majority of the vegetation management requirements in its approved WMP.

Energy Safety's Audit document, dated August 13, 2024, concluded that Liberty did not provide documentation to support that all work was performed for three of the 21 vegetation management initiatives in its 2022 WMP Update (Initiative 7.3.5.2 Detailed Inspections and Management Practices or Vegetation Clearances around Distribution Electrical Lines and Equipment, Initiative 7.3.5.15 Identification and Remediation of "At-Risk Species," and Initiative 7.3.5.18 Substation Vegetation Management). Section 3.1 is the initiative level assessment which includes: 1) a summary of the 2022 SVM audit finding, 2) the CAP submitted by Liberty specific to the audit findings, and 3) Energy Safety's initiative level analysis and determination of compliance with the substantial vegetation management portions of the 2022 WMP Update. Section 3.2 is Energy Safety's programmatic assessment of Liberty's completion of the large majority of the vegetation management requirements.

⁵ Pub. Util. Code, § 8386.3(c)(5)(C).

3.1 Initiative Level Assessment

3.1.1. Initiative 7.3.5.2: Detailed Inspections and Management Practices or Vegetation Clearances around Distribution Electrical Lines and Equipment

2022 SVM Audit Finding

Energy Safety's SVM Audit concluded that Liberty did not provide information consistent with the completion of its target with in the 2022 WMP Update and failed to complete its inspection target of 221 circuit miles. Energy Safety's review of Liberty's non-spatial, Q4 2022 Quarterly Data Report (QDR) showed that Liberty inspected 210.6 circuit miles, or 95% of its 2022 target for detailed inspections.⁶ This finding contradicted documentation from Liberty's data request response, which indicated that Liberty completed 221 circuit miles of inspections.⁷

Liberty's CAP Response

In its CAP response, Liberty states that it successfully complied with this initiative because it performed 95% of its targeted number of detailed inspections. Additionally, Liberty noted that resources were redirected from its WMP target of 221 miles of detailed inspections to perform additional mitigation patrol inspections under Initiative 7.3.5.11 to address the risk of tree mortality and reduce wildfire risk affecting the system in 2022. Liberty was able to complete 235 miles of patrol inspections in 2022, exceeding the target of 171 miles. Ultimately, Liberty states the purpose of the initiative effort is "...to identify and prescribe tree work for at-risk species and hazard trees through comprehensive, detailed inspections." Also, Liberty states these circuit mile inspections are "...used to assess the effectiveness of other protocols in place to maintain adequate vegetation clearances and to locate and remove obvious hazards within the utility strike zone." Therefore, Liberty contends the "combination of detailed and patrol inspections" are "multifaceted" and increasing the effort of patrol inspections in lieu of detailed inspections was a priority to manage vegetation risk.⁸

⁶ Liberty's 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB24.

⁷ Response to DR-227, question 23; attachment "2022 VM Workplan Main_archived.xlsx."

⁸ [Liberty Utilities 2022 SVM Audit Corrective Action Plan](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57187&shareable=true) (September 16, 2024). pp. 1-2 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57187&shareable=true, assessed September 19)

Energy Safety's Analysis of Substantial Vegetation Management Compliance with the 2022 WMP Update

Criteria 1: Achievement of Objective

Liberty completed 95% of the required detailed inspections. Per their CAP, they did not complete the remaining 5% because they diverted resources to complete additional patrol inspections (under Initiative 7.3.5.11) based on their assessment that additional patrol inspections would achieve higher wildfire risk reduction than completion of the detailed inspections target. Energy Safety finds that Liberty met the objective of the initiative through a combination of detailed and patrol inspections and that the diversion of resources to higher priority inspection work did not detract from Liberty's overall objectives to reduce wildfire risk during the 2022 compliance year.

Criteria 2: Good Faith Effort

Liberty's completion of 210.6 miles of detailed inspections met 95% of its intended target of 221 circuit miles. Further, Liberty's failure to complete the target was due to a diversion of resources to other initiatives with the intention of mitigating its overall wildfire risk. These facts indicate that Liberty made a good faith effort to comply with the vegetation management requirements associated with wildfire mitigation efforts detailed in Initiative 7.3.5.2 Detailed Inspections and Management Practices or Vegetation Clearances around Distribution Electrical Lines and Equipment.

Initiative Level Determination

Energy Safety recognizes that Liberty should prioritize programs to optimize removal of risk to their system; however, Energy Safety cannot independently verify whether the redirection of resources from detailed inspections to patrol inspections achieved the objective of mitigating wildfire ignition. Therefore, Energy Safety requests that, in future years, Liberty communicate reallocation of resources in advance and provide evidence justifying why such actions are necessary to mitigate overall risk to the system. Furthermore, Energy Safety requests that Liberty improve its planning process so that sufficient resources are allocated to complete all work for all initiatives as described in its WMP moving forward. Energy Safety concludes that Liberty substantially complied with the initiative requirements by completing a large majority of its detailed inspections target.

3.1.2. Initiative 7.3.5.15: Identification and Remediation of “At-Risk Species”

2022 SVM Audit Finding

Energy Safety’s SVM Audit concluded that Liberty did not provide information consistent with the completion of its inspection target of treating “at-risk species” along 238 circuit miles. Energy Safety’s review of Liberty’s non-spatial, 2022 Q4 QDR showed that Liberty treated “at-risk species” along 223 circuit miles.⁹ This contradicts documentation from Liberty’s data request response, which indicated that it completed its target and treated “at-risk species” along 238 circuit miles.¹⁰

Liberty’s CAP Response

In Liberty’s CAP response, it asserted that it followed the guidelines set forth in Initiative 7.3.5.15, to identify, document, and mitigate trees within the Utility Strike Zone that could potentially threaten electric facilities due to their structural integrity and environmental factors. Initiative 7.3.5.15 specifically addresses hazardous trees, and Liberty’s 2022 WMP Update indicates that this work is linked to Initiative 7.3.5.16, which pertains to the removal of trees posing risks to electric lines and equipment. During the planning of its 2022 vegetation management, Liberty chose to redirect resources to increase the removal of at-risk trees, responding to tree mortality concerns which posed a higher risk to its electrical facilities. This decision resulted in Liberty removing more trees than planned in its original goal for Initiative 7.3.5.16. According to the Liberty’s non-spatial data from 2022, it planned to treat 171 miles but completed 203 miles of tree removals. Liberty states that it achieved the intent of Initiative 7.3.5.15 because it accomplished 94% of its target, despite the diversion of resources to mitigate tree mortality risks.¹¹

⁹ Liberty’s 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB24.

¹⁰ [Liberty’s 2022 WMP Update](#), p. 83

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

¹¹ Liberty Utilities 2022 SVM Audit CAP Response. p. 2

(<https://efiling.energysafety.ca.gov/Search.aspx?docket=2022-SVM>, accessed September 16, 2024).

Energy Safety's Analysis of Substantial Vegetation Management Compliance with the 2022 WMP Update

Criteria 1: Achievement of Objective

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.¹² In addition, because Liberty diverted resources to exceed its tree removal target for Initiative 7.3.5.15, the shortfall for treating "at-risk" species in this initiative does not detract from Liberty's ability to mitigate wildfire risk and contributed to overall reduction of wildfire risk.

Criteria 2: Good Faith Effort

Liberty completed a majority of the target for this initiative and its failure to complete the target was the result of diverting effort and resources to address the risk of tree mortality on the system, thereby prioritizing a higher risk potential on the electric lines and equipment in 2022. Consequently, Energy Safety finds that Liberty demonstrated a good faith effort to comply with the initiative requirement to decrease risk on the system.

Initiative Level Determination

Energy Safety recognizes that Liberty's decision to prioritize removal of high-risk trees over treatment of trees reduced ignition risk on their system. Furthermore, Liberty exceeded its combined removal and treatment targets for at risk trees under both initiatives. However, in future years, Energy Safety requests that Liberty notify Energy Safety of any necessary diversion of resources to mitigate priority trees in its service area within the compliance year. Based on Liberty's completion of 94% of its target commitment, Energy Safety concludes that Liberty substantially complied with its vegetative management under Initiative 7.3.5.15.

3.1.3. Initiative 7.3.5.18: Substation Vegetation Management

2022 SVM Audit Finding

Energy Safety's 2022 SVM Audit concluded that Liberty did not complete vegetation management treatment on all 12 of its substations. Liberty provided documentation showing

¹² Liberty's 2022 Q4 Tables1-15R1 submitted on March 8, 2023, Table 1, cell AB24.

that it treated two of its 12 substations in 2022 and deferred work on the remaining substations to the following year due to weather conditions.¹³

Liberty's CAP Response

In the CAP response Liberty stated, "Liberty's Substation Vegetation Management Initiative and Scope of Work and Specifications for Substation Vegetation Management ('Scope of Work') were established in the fall of 2022, and no quantitative target was set for this initiative in 2022."¹⁴ Liberty completed work at two of its 12 substations in the fall of 2022 and deferred work on the remaining 10 substations to the following spring due to weather conditions, because snowfall negated the need for further substation treatments during the compliance year. As indicated in Liberty's non-spatial, QDR from 2023, Liberty completed 10 treatments in Q2 and then preformed substation work at its 12 substations again in 2023 by completing two treatments in Q3 and 10 in Q4.¹⁵ Liberty also stated, "To address the corrective action requirement to implement practices to improve initiative compliance, Liberty has updated its Scope of Work to reflect that adaptive substation vegetation management includes adjusting control methods, timing, or frequency of site visits due to weather, access, or other environmental constraints."¹⁶ Based on Liberty's clarification in the CAP and the Scope of Work submittal, Liberty states it met the objective of this initiative.

Energy Safety's Analysis of Substantial Vegetation Management Compliance with the 2022 WMP Update

Criteria 1: Achievement of Objective

In Liberty's CAP response, it established a Scope of Work and Specifications for substation vegetation management to reduce wildfire risk beginning in the fall of 2022 and was only able to complete treatment for 2 substations in 2022 before snowfall prohibited work for the duration of the year. However, Liberty's CAP response provides justification for the delayed work and demonstrated that the remaining 10 substations were treated in the spring of 2023 (Q2).¹⁷ Consequently, Energy Safety finds the delayed treatment did not detract from Liberty's ability to mitigate wildfire risk.

Criteria 2: Good Faith Effort

¹³ Liberty's response to DR-242, question 65; attachment "Substation Vegetation Management SOW.docx."

¹⁴ [Liberty Utilities 2022 SVM Audit Corrective Action Plan Response](https://efiling.energysafety.ca.gov/Search.aspx?docket=2022-SVM). p. 4 (<https://efiling.energysafety.ca.gov/Search.aspx?docket=2022-SVM>, accessed September 16, 2024).

¹⁵ Liberty's 2023 Q4 Tables1-15R1 submitted on February 12, 2024, Table 1, row 37 and Table 7, row 154

¹⁶ [Liberty Utilities 2022 SVM Audit Corrective Action Plan Response](https://efiling.energysafety.ca.gov/Search.aspx?docket=2022-SVM). p. 4 (<https://efiling.energysafety.ca.gov/Search.aspx?docket=2022-SVM>, accessed September 16, 2024).

¹⁷ Liberty's 2023 Q4 Tables1-15R1 submitted on February 12, 2024, Table 1, row 37 and Table 7, row 154-171.

Liberty initiated its treatment plan for substations in the Fall of 2022 but did not complete inspections at all 12 of its substations due to snowfall, a factor outside of Liberty's control. Liberty updated its Scope of Work to reflect adaptive vegetation management practices to account for constraints and other factors¹⁸ and has implemented new processes to minimize weather related constraints in the future. Thus, Energy Safety concludes that Liberty made a good faith effort to comply with the 2022 WMP Update requirements.

Initiative Level Determination

In its CAP response, Liberty provided Energy Safety with an updated Scope of Work which included adaptive substation vegetation management protocols and details regarding how it will make adjustments to its "control methods, timing, or frequency of site visits due to weather, access, or other environmental constraints."¹⁵ Work completed under the updated Scope of Work will be evaluated in Energy Safety's 2023 audit process. Energy Safety recognizes that work may be delayed due to weather or other constraints outside of Liberty's control; however, Energy Safety requests that Liberty improve its planning process to ensure work is completed within the compliance year before winter weather conditions prohibit work in its service area. In addition, Energy Safety requests that Liberty provide notification when deferment of substation work is required due to constraints and continue to provide documentation that work was completed when those constraints are removed. While substation work was not completed in the 2022 compliance year, which left some risk on the system, the risk was mitigated the following spring. Energy Safety finds that Liberty substantially complied with the vegetation management work for Initiative 7.3.5.18 Substation Vegetation Management.

¹⁸ Liberty's response to DR-226, attachment "Liberty's Scope of Work and Specifications for Substations Vegetation Management", accessed June 18, 2024.

3.2 Programmatic Assessment

Energy Safety's Audit document, dated August 13, 2024, found that Liberty completed 18 of the 21 initiatives in its 2022 WMP Update.¹⁹ Energy Safety determined that two of the initiatives with deficiencies were sufficiently addressed in Liberty's CAP response to Energy Safety's satisfaction, providing clarifications and additional documentation to support compliance. For the third initiative regarding substation inspections, Energy Safety determined that the corrective action measures Liberty has implemented will result in improved program implementation processes to ensure future compliance with this initiative. As its vegetation management program matures, Energy Safety requests that Liberty improve its planning process to allow sufficient time and resources to complete all work in their WMP during the compliance year in the future, and that it provides both notification of and justification for changes to resource allocation when needed. Energy Safety finds that programmatically, Liberty performed the large majority of the work described in its 2022 WMP Update.

¹⁹ [Liberty's 2022 WMP Update](#), p. 83

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

4. Conclusion

Based on the analysis discussed in Section 3, Energy Safety concludes that Liberty substantially complied with the substantial portion of the vegetation management requirements in its 2022 WMP Update.

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