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Caroline Thomas Jacobs, Director

July 29, 2024

To: Bear Valley Electric Service, Inc. Paul Marconi President, Treasurer & Secretary 42020 Garstin Dr, PO BOX 1547 Big Bear Lake, CA 92315

SUBJECT: Office of Energy Infrastructure Safety's Audit and Report on Bear Valley Electric Service, Inc'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 audit and report of Bear Valley Electric Service, Inc's (BVES's) vegetation management work pursuant to its 2022 Wildfire Mitigation Plan Update. Energy Safety finds that BVES substantially complied with the substantial portion of the vegetation management requirements in its 2022 Wildfire Mitigation Plan Update.

A copy of this report is issued to BVES, published on Energy Safety's 2022 SVM Docket,¹ and provided to the California Public Utilities Commission.

Sincerely,

Sheryl Bilbrey

Program Manager | Environmental Science Division

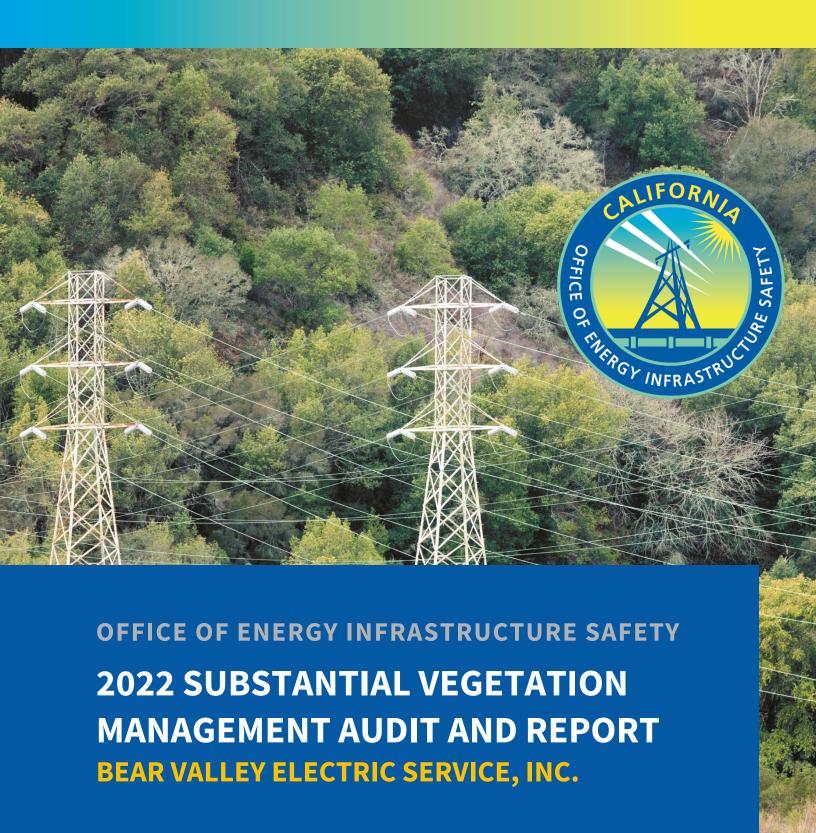
Office of Energy Infrastructure Safety

Cc:

Forest Kaser, CPUC Leslie Palmer, CPUC Jon Pechia, BVES Tom Tzu-Tong Chou, BVES Jarred Hennen, BVES

Sheryl Bilbrey

¹ All documents related to BVES'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 25, 2024]



July 2024

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1. OVERVIEW

Pursuant to Public Utilities Code section 8386.3(c)(5)(C), 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).¹ In each audit, Energy Safety must specify any failure of the electrical corporation to fully comply with the vegetation management requirements in the WMP.²

Bear Valley Electric Service, Inc. (BVES) submitted its substantial vegetation management (SVM) 2022 completion notification on February 3, 2023. As a result, Energy Safety has completed its SVM audit of BVES's vegetation management program activities for 2022.

The 2022 WMP Update Guidelines included 21 vegetation management initiatives. ³ BVES's 2022 WMP Update included 17 applicable vegetation management initiatives. ⁴ Four initiatives were not applicable per BVES's approved WMP Update. 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 BVES 2022 WMP Update. Energy Safety then compared vegetation management commitments and statements to the work performed by BVES in 2022.

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

¹ Public Utilities Code - PUC § 8386.3 (c)(5)(C)

² <u>BVES's 2022 WMP Update</u> (Rev. #1, Aug. 29, 2022)(hereafter BVES's 2022 WMP Update) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

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).

⁴ BVES's 2022 WMP Update

2. AUDIT FINDINGS

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

Table 1. BVES 2022 SVM Audit Findings

Table 1. BVES 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 for Vegetation Clearances around Distribution Electrical Lines and Equipment	Performed Required Work		
7.3.5.3 Detailed Inspections and Management Practices for Vegetation Clearances Around Transmission Electric Lines and Equipment	Not Applicable Per Approved WMP Update		
7.3.5.4 Emergency Response Vegetation Management due to Red Flag Warning or Other Urgent Climate Conditions	Performed Required Work		
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	Not Applicable Per Approved WMP Update		
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		
7.3.5.10 Other Discretionary Inspections of Vegetation Around Transmission Electric Lines and Equipment, Beyond Inspections Mandated by Rules and Regulations	Not Applicable Per Approved WMP Update		

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	Not Applicable Per Approved WMP Update
7.3.5.13 Quality Assurance / Quality Control of Vegetation Management	Did Not Perform All 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"	Performed 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
7.3.5.18 Substation Vegetation Management	Performed 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. 2022 SVM AUDIT AND REPORT CONCLUSION

Energy Safety reviewed the 17 applicable vegetation management initiatives detailed in BVES's 2022 WMP Update and found BVES was unable to provide supporting documentation or information consistent with statements and/or targets for one of the 17 applicable vegetation management initiatives (Initiative 7.3.5.13 Quality Assurance / Quality Control of Vegetation Management). BVES provided Energy Safety with documentation demonstrating that the work associated with initiative 7.3.5.13 was completed shortly after the 2022 compliance year (January 2023). Energy Safety determined that a corrective action is not required for initiative 7.3.5.13. However, BVES must demonstrate that the January 2023 work completed for initiative 7.3.5.13 is not also counted toward the completion metrics for the 2023 compliance year.

Energy Safety finds that BVES substantially complied with the substantial portion of the vegetation management requirements in its 2022 WMP Update.



APPENDIX / ANALYSIS, SUPPORTING DOCUMENTATION AND FINDING



Appendix A

Each vegetation management initiative listed in Bear Valley Electric Service, Inc.'s (BVES's) 2022 Wildfire Mitigation Plan (WMP) Update was analyzed by the Office of Energy Infrastructure 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 vegetation management work performed by BVES in 2022. BVES's 2022 WMP Update included 17 applicable vegetation management initiatives. Four initiatives were not applicable per BVES's approved WMP Update.⁵ 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 found BVES could not provide supporting documentation or information demonstrating completion of one of the 17 applicable vegetation management initiatives in its 2022 WMP Update. Following 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.

⁵ BVES's 2022 WMP Update

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."

Statements, Supporting Information and Analysis, and Conclusions

Statement 1

<u>Statement:</u> "BVES targets engagement with customers living in the "high risk areas" that BVES has identified."⁷

<u>Supporting Information and Analysis:</u> BVES states that because all its customers reside in High Fire Thread District (HFTD) Tier 2 areas, it "identifies its entire service territory as high risk." This resulted in BVES targeting engagement with all its customers in 2022.

In 2022, BVES engaged with its customers via Facebook posts. BVES provided 3 screenshots of Facebook posts published on BVES's Facebook page in 2022 related to wildfire prevention outreach. The posts included a link to BVES's 2022 WMP Update plan, tree trimming schedules within BVES's service territory, and an illustration of recommended vegetation clearances to achieve defensible space around structures.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 2

<u>Statement:</u> "BVES will continue outreach, support, and participate in community-based fuels management and defensible space programs and establish communications with the USFS to

⁶ 2022 Wildfire Mitigation Plan Update Guidelines (published Dec. 2021) (hereafter 2022 Update Guidelines), attachment 2, p. 92 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true, accessed May 10, 2024).

⁷ BVES's 2022 WMP Update, p. 219

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁸ Response to DR-225, question 1; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 4.

⁹ Response to DR-225, question 5; attachment "5. Wildfire Mitigation Posts."

determine interest in working cooperatively on fuels reduction and defensible space efforts. BVES will look to develop collaborative efforts in 2022 as noted above."¹⁰

<u>Supporting Information and Analysis:</u> BVES provided a screenshot of a Facebook post published by BVES in December 2022. The post informed customers on the importance of creating a defensible space around their homes to mitigate the spread of wildfires.¹¹

BVES also states that it uses Facebook ads, radio ads, and attends community events to educate customers throughout the service territory. 12

BVES also supplied a screenshot of email correspondence from 2022 documenting collaboration between BVES and the U.S. Forest Service (USFS) to remove dead and hazardous trees near BVES power lines on USFS land.¹³ The email correspondence documents BVES confirming with the USFS that BVES will remove all slash from dead trees felled by BVES in 2022 near USFS cabin leases.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 3

<u>Statement:</u> "BVES has supported Fuels Management and Defensible Space Community Programs to enable more collaborative activities within the mountainous service area and to bolster existing fuels management activities." ¹⁴

<u>Supporting Information and Analysis:</u> BVES provided a screenshot of a Facebook post published by BVES in December 2022. ¹⁵ The advertisement informed customers on the importance of creating a defensible space around their homes to mitigate the spread of wildfires.

BVES also provided a screenshot of an email between BVES and the Mountain Rim Fire Safe Council. The email indicates that BVES sent out an inspector to assess and prescribe work to a dead tree that had strike potential to BVES's facilities that was identified by the Mountain Rim

¹⁰ BVES's 2022 WMP Update, p. 219

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹¹ Response to DR-225, question 2; attachment "2. Defensible Space outreach.pdf."

¹² Response to DR-231, question 92; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 4.

¹³ Response to DR-225, question 3; attachment "3. USFS Collaboration.pdf."

¹⁴ BVES's 2022 WMP Update, p. 219

¹⁵ Response to DR-225, question 2; attachment "2. Defensible Space outreach.pdf."

Fire Safe council in 2022. The email indicates that BVES collaborated with other community organizations within BVES's service territory to improve defensible space to properties.¹⁶

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 4

<u>Statement:</u> "BVES will continue [to] conduct outreach with the USFS, CAL FIRE and Big Bear Fire Department in an effort to develop collaborative measures in the area of fuels management in 2022." ¹⁷

<u>Supporting Information and Analysis:</u> BVES provided screenshots of several BVES Facebook posts related to defensible spaces, scheduled tree trimming (including dates and locations), and BVES's 2022 Wildfire Mitigation Plan.¹⁸ BVES also provided a screenshot of email correspondence that documents BVES scheduling meetings with CALFIRE and Big Bear Fire Department in May and August 2022. BVES also included emails showing BVES's coordination with the USFS to remove hazard trees on National Forest land in August 2022.¹⁹

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 5

<u>Statement:</u> "BVES will be supporting the establishment of the Big Bear Fire Safe Council to help educate the community in wildfire prevention activities that the community can be involved [in] to increase wildfire risk awareness and step[s] that the community can take of support to mitigate the threat of wildfire."²⁰

<u>Supporting Information and Analysis:</u> BVES confirmed that the Big Bear Fire Safe Council was not established in 2022.²¹ Although the Council was not established, BVES did provide screenshots of an invitation for the Inland Empire Fire Safe Alliance (IEFSA) meeting in November 2022.²² IEFSA was hosted consistently throughout 2022 to bring fire safe councils,

¹⁶ Response to DR-252, question 1; attachment "DR 252 Q1 Re_ MRFSC Hazardous Dead Tree - possible BVES.pdf."

¹⁷ BVES's 2022 WMP Update, p. 220

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹⁸ Response to DR-225, question 5; attachment "5. Wildfire Mitigation Posts.pdf."

¹⁹ Response to DR-225, question 6; attachment "6. Collaboration with CALFIRE, BBFD, and USFS.pdf."

²⁰ BVES's 2022 WMP Update, p. 220

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

²¹ Response to DR-225, question 7; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 6.

²² Response to DR-225, question 8; attachment "8. Inland Empire Fire Safe Alliance meeting for 2022.pdf."

agencies, and other stakeholders together to collaborate and support wildfire risk awareness and mitigation.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES 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 Electric 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." ²³

Statements, Supporting Information and Analysis, and Conclusions

Statement 6

<u>Statement:</u> "Detailed Inspection findings are rated in accordance with GO 95 Rule 18 (level 1, 2, or 3) and entered into the distribution inspection GIS database. Level 1 findings are reported immediately to the Field Operations Supervisor who will direct corrective action as soon as possible to resolve the issue or reduce its severity to Level 2 so that more time is available to perform permanent corrective action." ²⁴

<u>Supporting Information and Analysis:</u> BVES did not report any vegetation related findings during detailed inspections in 2022.²⁵ BVES provided an Excel file listing all findings from its

²³ Update Guidelines, attachment 2, p. 92

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

²⁴ BVES's 2022 WMP Update, p. 221

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

²⁵ Response to DR-225, question 12; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 7.

inspection database in 2022 showing that all findings in 2022 were equipment-related and that zero vegetation-related issues were reported.²⁶

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 7

<u>Statement:</u> "In 2022 BVES's target is to conduct 29 circuit miles of Detailed Inspections of the sub-transmission and distribution system per BVES's five-year Detailed Inspection program as required by GO 165."²⁷

<u>Supporting Information and Analysis:</u> BVES's non-spatial Quarterly Data Report (QDR) submission from Q4 of 2022 shows that BVES completed 32.41 circuit miles of Detailed Inspections related to vegetation management from Q1 to Q4 of 2022. ²⁸ BVES provided an Excel file confirming that the Detailed Inspections were conducted along six circuits, which totaled 32.41 miles. ²⁹

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 8

<u>Statement:</u> "Additionally, BVES will be implementing a new inspection application with mobile device data acquisition. The BVES Field Inspector is working closely with the software developers to ensure the software is customized to BVES's requirements which include compliance with GO 95 and GO 165." ³⁰

<u>Supporting Information and Analysis:</u> BVES provided screenshots of its new mobile device inspection application, which was first implemented in November 2021.³¹ BVES also provided a screenshot of email correspondence between BVES field inspectors collaborating with its third-party vendor to further refine the inspection application to meet requirements set during the beginning of 2022.³²

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

²⁶ Response to DR-231, question 93; attachment "93. iRestore Findings.xlsx."

²⁷ BVES's 2022 WMP Update, p. 222

²⁸ BVES 2022 Q4 Tables1-15R1 submitted on March 13, 2023, Table 1, cell AB45.

²⁹ Response to DR-231, question 94; attachment "94. Detailed Circuit Miles.xlsx."

³⁰ BVES's 2022 WMP Update, p. 222

³¹ Response to DR-225, question 16; attachment "16. iRestore Screenshot Inspection.pdf."

³² Response to DR-225, question 17; attachment "17. Meeting with Software developer.pdf."

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 9

<u>Statement:</u> "BVES is in the process of implementing vegetation inspection software, which will enhance the ability to document inspection findings, assign priorities and corrective action, and track the status of resolving the findings. Additionally, BVES staff will be able to perform higher level analysis of detailed inspection results to determine if systemic issues are impacting BVES's system with respect to vegetation clearance compliance." ³³

Supporting Information and Analysis: BVES provided a screenshot of email correspondence between BVES and the third-party developers discussing requirements of the application.³⁴ The new application will improve data storing capabilities, enabling all users to view inspections and if necessary, assign violations to crews for remediation.³⁵ Further, BVES staff will be able to perform higher levels of analysis as the software provides real-time vegetation inspection data, including alerts, trimming status, and specific information for each unique tree within BVES's service territory.³⁶ BVES will continue to conduct trial inspections and refine requirements until launching the application to all BVES personnel.³⁷

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES provided information consistent with the completion of work identified in Initiative 7.3.5.2: Detailed Inspections and Management Practices for Vegetation Clearances Around Distribution Electric Lines and Equipment.

³³ BVES's 2022 WMP Update, p. 222

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

³⁴ Response to DR-225, question 17; attachment "17. Meeting with Software developer.pdf."

³⁵ Response to DR-225, question 19; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 9.

³⁶ Response to DR-225, question 20; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 9.

³⁷ Response to DR-225, question 18; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 8.

A.3 Initiative 7.3.5.3 Detailed Inspections and Management Practices for Vegetation Clearances 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." ³⁸

Statements, Supporting Information and Analysis, and Conclusions

Per BVES's 2022 WMP update, Initiative 7.3.5.3 does not apply to BVES's vegetation management operations as BVES does not own or operate circuits equal to or greater than 65kV. Therefore, Energy Safety did not conduct analysis for this initiative.

Finding

Not applicable.

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." ³⁹

Statements, Supporting Information and Analysis, and Conclusions

³⁸ <u>Update Guidelines</u>, attachment 2, p. 92

³⁹Update Guidelines, attachment 2, p. 92

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

Statement 10

<u>Statement:</u> "BVES has developed detailed work plans, which facilitates compliance and tracking adherence to CPUC rules as well as state and federal laws." ⁴⁰

<u>Supporting Information and Analysis:</u> BVES provided a "work plan" published in 2022 used by contracted vegetation crews. ⁴¹ The "work plan" utilizes a wildfire mitigation matrix to set requirements that vegetation crews must follow. Daily requirements are dependent on each day's fire index and the area the crew is working in. Crews are required to review fire index ratings each morning and evaluate weather conditions throughout the day. ⁴²

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 11

<u>Statement:</u> "The utility created the vegetation management plan with wildfire prevention in mind, collaborating with the City of Big Bear Lake, local Fire Departments, and the USFS. The plan will be reviewed and updated on an as-needed basis not to exceed three years, depending on changing conditions." ⁴³

<u>Supporting Information and Analysis:</u> BVES provided a screenshot of email correspondence between BVES and the Big Bear Fire Department in October 2022 discussing the use of a new mobile device inspection application during weather events. The application allows "first responders [to] report any issue directly to the utility. These issues could include tree branches on lines, lines down, and many other emergencies that may arise." ⁴⁴The email correspondence also documents that BVES received reports from Big Bear Fire Department during a storm in November 2022. ⁴⁵

In addition, BVES provided meeting agendas including a Public Safety Power Shutoff (PSPS) Functional Exercise and meeting to discuss coordinating with CalOES and CalFire. Both meetings included Big Bear Fire, CalFire, USFS, and San Bernardino County. 46

⁴⁰ BVES's 2022 WMP Update, p. 223

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁴¹ Response to DR-225, question 21; attachment "21. Work Plan.pdf."

⁴² Response to DR-225, question 21; attachment "21. Work Plan.pdf."

⁴³ BVES's 2022 WMP Update, p. 223

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁴⁴ Response to DR-225, question 24; attachment "24. Big Bear Fire Email.pdf."

⁴⁵ Response to DR-225, question 24; attachment "24. Big Bear Fire Email.pdf."

⁴⁶ Response to DR-231, question 95; attachment "95. Collaborations with Local Fire Departments."

Lastly, BVES provided its "Bear Valley Electric Service, Inc. Emergency & Disaster Response Plan" (EDRP). ⁴⁷ The plan is provided to all BVES employees "to ensure an efficient, effective and uniform response during an emergency situation." ⁴⁸ The plan goes on to state "The EDRP outlines BVES' philosophy and procedures for managing major emergencies that may disrupt electric service to our customers or threaten the health and safety of the people in the communities we serve. The EDRP further establishes the structure, processes, and protocols for the BVES's emergency response and identifies departments and individuals that are directly responsible for that response and critical support services. In addition, it provides a management structure for coordination and deployment of the essential resources necessary for the response." ⁴⁹

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 12

<u>Statement:</u> "When high fire threat weather is forecasted, BVES will consult with its vegetation contractor to ensure slash from work in progress is removed; to determine if there is any work in progress or planned that should be suspended due to the risk of causing an ignition in the process of conducting the work; and to determine if there is any short-term work that should be completed before the high fire threat weather occurs (such as, completing a tree removal that was already in progress, etc.)." ⁵⁰

<u>Supporting Information and Analysis:</u> BVES experienced one red flag warning in 2022, which occurred when no vegetation management related activities took place.⁵¹ Thus, there were no instances in which BVES activities were stopped or redirected because of high fire threat weather.

BVES also provided a "work plan" containing a wildfire mitigation matrix that contractors are required to review each morning before work takes place. The wildfire mitigation matrix outlines requirements contractors must take during High/R3, Very High/R4, and Extreme/R5 ratings to mitigate the chance of ignition during daily work activities.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁴⁷ Response to DR-231, question 116; attachment "116. BVES INC Emergency Response and Disaster Plan.pdf."

⁴⁸ Bear Valley Electric Service, Inc. Emergency & Disaster Response Plan, p. 6.

⁴⁹ Bear Valley Electric Service, Inc. Emergency & Disaster Response Plan, p. 6.

⁵⁰ BVES's 2022 WMP Update, p. 223

⁵¹ Response to DR-225, question 25; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 21.

⁵² Response to DR-225, question 21; attachment "21. Work Plan.pdf."

Statement 13

<u>Statement:</u> "The Wildfire Mitigation and Reliability Engineer and the Forester have weekly meetings with the vegetation management contractor to review planned work, status of work completed or in progress, and upcoming issues such as high fire threat weather." ⁵³

<u>Supporting Information and Analysis:</u> BVES provided a screenshot of email correspondence between BVES personnel, vegetation management contractors, and the BVES forester discussing policies and procedures for vegetation management crews during high fire threat days in 2022.⁵⁴

In addition, BVES informed Energy Safety that meetings between BVES's Wildfire Mitigation and Reliability Engineer and Forester take place over phone call or face-to-face in the field weekly.⁵⁵

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES provided information consistent with the completion of work identified in Initiative 7.3.5.4: Emergency Response Vegetation Management due to Red Flag Warning or Other Urgent Climate Conditions.

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." ⁵⁶

⁵³ BVES's 2022 WMP Update, p. 224

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁵⁴ Response to DR-225, question 26; attachment "26. High Fire Threat Weather Work.pdf."

⁵⁵ Response to DR-231, question 97. p. 7.

⁵⁶ Update Guidelines, attachment 2, p. 92

Statements, Supporting Information and Analysis, and Conclusions

Statement 14

<u>Statement:</u> "BVES's vegetation clearance contractor clears vegetation and removes all vegetation waste and slash from the area. If the property owner wants the vegetation waste (for firewood, chipping, etc.), the contractor will assist the property owner in removing the vegetation waste from the rights-of-way for their use. BVES collaborates with the US Forest Service to remove trees near lines and removes the slash as agreed upon by the local US Forest Ranger.⁵⁷

<u>Supporting Information and Analysis:</u> BVES provided a sample contract which outlines BVES's vegetation waste and slash removal procedures.⁵⁸ The scope of work requires the contractor to dispose of all wood and waste generated by the contractor's services and work activities per BVES procedure.

BVES also included an invoice displaying the contractor's use of a chipper for vegetation waste removal in October 2022.⁵⁹

Lastly, BVES provided a screenshot of email correspondence between BVES and the US Forest Service in October 2022 to remove hazard trees within falling distance of BVES powerlines.⁶⁰

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 15

Statement: "BVES conducts vegetation management on a cycle schedule." 61

<u>Supporting Information and Analysis:</u> BVES provided its three-year trim cycle for its vegetation management programs.⁶² The document highlights the areas in BVES service territory that are scheduled for vegetation management in 2021, 2022, and 2023. This

⁵⁷ BVES's 2022 WMP Update, p. 224

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁵⁸ Response to DR-225, question 27; attachment "27. Policy of Fuel Management and Reduction of Slash.pdf."

⁵⁹ Response to DR-225, question 28; attachment "28. Invoice with Chipper.pdf."

⁶⁰ Response to DR-225, question 29; attachment "29. Hazard Tress Mill Creek Rd.pdf."

⁶¹ BVES's 2022 WMP Update, p. 225

⁶² Response to DR-225, question 30; attachment "30. Trim cycle for 2021, 2022, and 2023.pdf."

statement is evaluated in greater detail in section 7.3.5.20 Vegetation management to achieve clearances around electric lines and equipment.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 16

<u>Statement:</u> "BVES will work to improve its collaboration with the USFS to remove slash from the areas around the power lines and how BVES may support some of the USFS efforts to reduce fuel in USFS-owned areas." ⁶³

<u>Supporting Information and Analysis:</u> BVES improved its collaboration with the USFS through email communication about at-risk trees that pose risk to BVES lines, ⁶⁴ as well as through partnerships on multiple projects that took place on USFS land. ⁶⁵

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES provided information consistent with the completion of work identified in Initiative 7.3.5.5: Fuel management (including all wood management) and Reduction of "slash" from Vegetation Management Activities.

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

⁶³ BVES's 2022 WMP Update, p. 225

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁶⁴ Response to DR-225, question 29; attachment "29. Hazard Tress Mill Creek Rd.pdf."

⁶⁵ Response to DR-231, question 98; attachment "98. Projects with USFS" for two email chains that discuss two different projects that take place on USFS land."

⁶⁶ Update Guidelines, attachment 2, p. 93

Statement 17

<u>Statement:</u> "BVES maintains routine training and assessment of vegetation management practices." ⁶⁷

<u>Supporting Information and Analysis:</u> BVES's annual Vegetation Management training outlined the state vegetation clearance standards, internal policies and procedures, staff responsibilities, and other information regarding BVES's quality assurance, quality control, and audit programs.⁶⁸

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 18

<u>Statement:</u> "BVES also applies annual lessons learned or identified improvements and tracks developing inspection practices in the industry." ⁶⁹

<u>Supporting Information and Analysis:</u> BVES provided a screenshot of email correspondence from 2022 between BVES and a UAV contractor indicating BVES's identified improvements to its LiDAR collection process. ⁷⁰ Instead of collecting LiDAR data via a quad drone, BVES leveraged a fixed wing drone to collect data in areas that are difficult to access in 2022. ⁷¹ The fixed wing drone improved the accuracy and speed of the collection process and did not require line of sight by a pilot, as was needed previously.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 19

Statement: "BVES performs inspection improvement activities across all of its inspections." 72

⁶⁷ BVES's 2022 WMP Update, p. 226

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁶⁸ Response to DR-225, question 32; attachment "32. Vegetation Management Training.pdf."

⁶⁹ BVES's 2022 WMP Update, p. 226

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁷⁰ Response to DR-225, question 33; attachment "33. LIDAR Drone.pdf."

⁷¹ Response to DR-225, question 33; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 13.

⁷² BVES's 2022 WMP Update, p. 226

<u>Supporting Information and Analysis:</u> BVES improved its inspection activities in 2022 by leveraging a third-party contractor to assist with planning work and vegetation management pre-inspections along power lines.⁷³

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

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

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."⁷⁴

Statements, Supporting Information and Analysis, and Conclusions

Statement 20

<u>Statement:</u> "BVES conducts one LiDAR sweep per year to evaluate the effectiveness of clearance efforts and identify potential wildfire hazards...In 2022, BVES's target is to conduct a LiDAR survey of the entire sub-transmission and distribution system (211 circuit miles) before the fire season Santa Ana wind event period." ⁷⁵

<u>Supporting Information and Analysis:</u> BVES conducted its LiDAR inspections on all BVES aboveground circuits via vehicle in late April and early May of 2022 and completed the remaining LiDAR inspection via drone in late May and early June of 2022. Thus, LiDAR inspections were completed prior to the start of fire season in early Summer and Santa Ana

⁷³ Response to DR-225, question 34; attachment "34. Pre-inspector.pdf."

⁷⁴ Update Guidelines, attachment 2, p. 93

⁷⁵ BVES's 2022 WMP Update, p. 229

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024)...

⁷⁶ Response to DR-225, questions 37 and 39; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 14.

wind event in late Summer and early Fall. 77 BVES also provided files documenting a sample of the LiDAR inspection data collected via drone in 2022. 78

BVES's non-spatial QDR submission from Q4 of 2022 shows that BVES completed 206.7 circuit miles of LiDAR inspections from Q1 to Q4 in 2022. The same QDR data also documents that all LiDAR inspections were completed by Q3 of 2022. The Same QDR data also documents that all 2022 WMP Update patrol inspection target of 211 miles and its actual completion of 206.7 miles due to significant updates to its GIS system in 2022. So

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 21

<u>Statement:</u> "The Wildfire Mitigation and Reliability Engineer reviews the results of LiDAR surveys and assigns corrective action to the vegetation clearance crews. Additionally, the Wildfire Mitigation and Reliability Engineer reviews the result of LiDAR surveys as well as other vegetation inspections to determine if there are systemic issues that must be addressed. Finally, the results of LiDAR surveys are validated against other vegetation inspections to evaluate the quality and effectiveness of each inspection type." ⁸¹

<u>Supporting Information and Analysis:</u> BVES provided an Excel file listing results of LiDAR surveys conducted in 2022, which included information regarding observations of encroachments, species types, and corrective work prescribed, such as trim or removal.⁸²

The LiDAR survey results were validated against the results of Detailed Inspections, Patrol Inspections, UAV Photography, UAV Thermography, and 3rd party inspections. BVES explained that LiDAR inspections are "much more sensitive and effective" at identifying possible encroachments compared to ground-based inspections. For example, detailed inspections and 3rd party ground patrol inspections did not identify any vegetation findings within 4 feet of BVES equipment in 2022 whereas LiDAR inspections identified 154 total encroachments within 4 feet throughout 205 circuit miles. Thus, BVES concluded LiDAR inspections were most effective when inspecting vegetation, and that no systemic issues were identified in 2022.⁸³

⁷⁷ Response to DR-231, question 102; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 9.

⁷⁸ Response to DR-225, questions 38; attachment "LiDAR 2022 Final Delivery.pdf."

⁷⁹ BVES 2022 Q4 Tables1-15R1 submitted on March 13, 2023, Table 1, cells AA48, AB48.

⁸⁰ Response to DR-231, question 100; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 8.

⁸¹ BVES's 2022 WMP Update, p. 229

⁸² Response to DR-225, questions 40; attachment "40. LiDAR finding and prescriptions.xlsx."

⁸³ BVES email to Energy Safety, June 25, 2024; clarifying response to questions 41, 50, and 99 of DR-231.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 22

Statement: "Additionally, BVES will be implementing a new inspection application and will work on how to merge LiDAR data files into the inspection GIS database. The Wildfire Mitigation and Reliability Engineer is working closely with the software developers to ensure the software is customized to BVES's requirements to include LiDAR survey results. BVES is also providing its risk map modeling consultant, Technosylva, with its LiDAR survey results so that BVES's service area may be accurately modeled for the risk of ignitions and wildfire spread."

<u>Supporting Information and Analysis:</u> BVES implemented its new inspection application on the following dates in 2022: August 2nd, August 30th, September 7th, and October 6th. ⁸⁵ The new inspection application imports LiDAR data files into BVES's inspection GIS database and is accessible to all BVES employees. ⁸⁶

BVES provided a screenshot of email correspondence from 2022 between BVES and iRestore, the third-party software developer, regarding the integration of all inspection programs in the new application in 2022, including LiDAR and drone inspections. ⁸⁷ Additionally, BVES provided a screenshot of email correspondence between BVES and its risk map modeling consultant, Technosylva, to ensure that BVES's service area is accurately modeled for the risk of ignitions and wildfire spread based on the up-to-date 2022 LiDAR survey results. ⁸⁸

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES 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.

⁸⁴ BVES's 2022 WMP Update, p. 230

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁸⁵ Response to DR-225, question 42; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 15.

⁸⁶ Response to DR-225, question 43; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 15.

⁸⁷ Response to DR-225, question 44; attachment "44. Contractor Email.pdf."

⁸⁸ Response to DR-225, question 45; attachment "45. Technosylva Communicatoins.pdf."

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."89

Statements, Supporting Information and Analysis, and Conclusions

Per BVES's 2022 WMP update, Initiative 7.3.5.8 does not apply to BVES's vegetation management operations as BVES does not own or operate circuits equal to or greater than 65kV. Therefore, Energy Safety did not conduct analysis for this initiative.

Finding

Not applicable.

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." 90

Statements, Supporting Information and Analysis, and Conclusions

^{89 &}lt;u>Update Guidelines</u>, attachment 2, p. 93

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

⁹⁰ Update Guidelines, attachment 2, p. 93

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

Statement 23

<u>Statement:</u> "BVES contracts experienced and qualified electrical distribution vegetation inspection contractors to perform this ground patrol inspection." ⁹¹

<u>Supporting Information and Analysis:</u> BVES contracted with Davey Resource Group to perform ground patrol inspections in 2022 in alignment with the GO 165 requirements. ⁹² BVES provided the contract between the two parties, which outlines the scope of work, state regulation requirements, and the contractor's qualifications and level of effort required by BVES. ⁹³

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 24

Statement: "The Wildfire Mitigation and Reliability Engineer reviews the results of the 3rd Party Ground Patrol Inspections and assigns corrective action to the vegetation clearance crews. Additionally, the Wildfire Mitigation and Reliability Engineer reviews the results of the 3rd Party Ground Patrol Inspections, as well as other vegetation inspections, to determine if there are systemic issues that must be addressed. Finally, the results of the 3rd Party Ground Patrol Inspections are validated against other vegetation inspections to evaluate the quality and effectiveness of each inspection type." 94

Supporting Information and Analysis: BVES provided an Excel file listing results from 3rd party ground patrol inspections in 2022. ⁹⁵ The Excel file lists results related to vegetation management activities from detailed inspections in 2022 under categories "encroachment within 10", "improper clearance", and "veg/trees". In an email correspondence between BVES and Energy Safety, BVES states "3rd party ground patrol identified no confirmed vegetation findings within 4 feet of BVES equipment, therefore data points between inspections were not comparable for trends. BVES investigated why there were findings on the LiDAR inspection and no findings on the 3rd party ground patrol and detailed inspections. ⁹⁶ BVES concluded that because "3rd party ground patrol is defined as a simple

⁹¹ BVES's 2022 WMP Update, p. 231

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024)...

⁹² Response to DR-225, question 46; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 16.

⁹³ Response to DR-225, question 47; attachment "47. 3rd Party Ground Patrol.pdf."

⁹⁴ BVES's 2022 WMP Update, p. 232

⁹⁵ Response to DR-225, question 48; attachment "48. BVES_Visual_Inspection_2022.xlsx."

⁹⁶ BVES email to Energy Safety, June 25, 2024, clarifying response to questions 41, 50, and 99 of DR-231.

visual inspection designed to identify obvious structural problems and hazards", The nature of the inspection may have led inspectors to miss possible encroachments in 2022. 97

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in these statements.

Statement 25

<u>Statement:</u> "In 2022, BVES's target is to conduct a 3rd Party Ground Patrol Inspection of the entire sub-transmission and distribution system (211 circuit miles) before the fire season Santa Ana wind event period." 98

<u>Supporting Information and Analysis:</u> BVES's non-spatial Quarterly Data Report (QDR) submission from Q4 of 2022 shows that BVES completed 206.7 circuit miles of 3rd party ground patrol inspections.⁹⁹

The 3rd party ground patrol inspections were completed by May 2022, ¹⁰⁰ prior to the start of fire season in early Summer and Santa Ana wind event in late Summer and early Fall. ¹⁰¹ BVES attributed the variance between its 2022 WMP Update patrol inspection target of 211 miles and its actual completion of 206.7 miles due to significant updates to its GIS system in 2022. ¹⁰²

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 26

<u>Statement:</u> "This relatively quick and accurate [UAV HD Photography/Videography] inspection will allow BVES to verify, document and resolve vegetation encroachment and overheating and degrading equipment issues before they make contact with bare conductors." 103

⁹⁷ BVES email to Energy Safety, June 25, 2024, clarifying response to questions 41, 50, and 99 of DR-231.

⁹⁸ BVES's 2022 WMP Update, p. 232

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

⁹⁹ BVES 2022 Q4 Tables1-15R1 submitted on March 13, 2023, Table 1, cells AA49, AB49.

¹⁰⁰ Response to DR-225, question 51; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 17.

¹⁰¹ Response to DR-231, question 102; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 9.

¹⁰² Response to DR-231, question 103; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 10.

¹⁰³ BVES's 2022 WMP Update, p. 233

<u>Supporting Information and Analysis:</u> BVES provided three sample images of BVES's subtransmission and distribution facilities near power lines captured by UAV photography in May 2022 during UAV inspections.¹⁰⁴

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 27

<u>Statement:</u> "BVES performs a UAV HD Photography/Videography survey of all of its circuits each year. It takes an expert contractor approximately six weeks to conduct the inspection and document the findings of the entire BVES system (211 circuit miles of overhead facilities and power lines)." ¹⁰⁵

<u>Supporting Information and Analysis:</u> BVES's non-spatial QDR submission from Q4 of 2022 shows that BVES completed 206.7 circuit miles of UAV HD Photography/Videography Survey fromQ1 to Q4 in 2022. ¹⁰⁶ BVES attributed the variance between its 2022 WMP Update patrol inspection target of 211 miles and its actual completion of 206.7 miles due to significant updates to its GIS system in 2022. ¹⁰⁷

BVES also provided an Excel file of drone inspection findings from 2022, which includes inspection results from approximately 2,756 poles.¹⁰⁸

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES provided information consistent with the completion of work identified in Initiative 7.3.5.9: Other Discretionary Inspection of Vegetation Around Distribution Electric Lines and Equipment, Beyond Inspections Mandated by Rules and Regulations.

¹⁰⁴ Response to DR-225, question 52; attachment "UAV Photos.pdf."

¹⁰⁵ BVES's 2022 WMP Update, p. 233

¹⁰⁶ BVES 2022 Q4 Tables1-15R1 submitted on March 13, 2023, Table 1, cells AA49, AB49.

¹⁰⁷ Response to DR-231, question 103; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 10.

¹⁰⁸ Response to DR-225, question 54; attachment "Drone Findings.xlsx."

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." ¹⁰⁹

Statements, Supporting Information and Analysis, and Conclusions

Per BVES's 2022 WMP Update, Initiative 7.3.5.10 does not apply to BVES's vegetation management operations as BVES does not own or operate circuits equal to or greater than 65kV. Therefore, Energy Safety did not conduct analysis for this initiative.

Finding

Not applicable.

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." ¹¹⁰

Statements, Supporting Information and Analysis, and Conclusions

¹⁰⁹ Update Guidelines, attachment 2, p. 93

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

110 Update Guidelines, attachment 2, p. 93

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

Statement 28

<u>Statement:</u> "BVES's Field Inspector performs the patrol inspections. The Field Inspector is required to be a Journeyman Lineman experienced in inspection of electric transmission and distribution facilities and power lines. The Field Inspector works closely with the contracted Forrester [sic] to ensure he is equipped to properly inspect vegetation around power lines." ¹¹¹

<u>Supporting Information and Analysis:</u> BVES provided three examples of patrol records that were conducted during 2022 by the Field Inspector¹¹² as well as a copy of the Field Inspector's certification as a Journeyman Lineman.¹¹³ BVES also included correspondence about a collaboration QA/QC training in 2022 with the Field Inspector and the Forester.¹¹⁴

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 29

<u>Statement:</u> "In 2022, BVES's target is to conduct a patrol inspection of the entire subtransmission and distribution system (211 circuit miles) as required by GO 165." 115

<u>Supporting Information and Analysis:</u> BVES's non-spatial QDR submission from Q4 of 2022 shows that BVES completed 255 circuit miles of patrol inspections related to vegetation management from Q1-Q4 of 2022. ¹¹⁶ BVES attributed the additional 49 circuit miles (211 vs 255 circuit miles) due to BVES including 3rd Party Ground Patrol Inspection mileage in its Q4 of 2022 QDR submission. ¹¹⁷

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 30

<u>Statement:</u> "Patrol Inspection findings are rated in accordance with GO 95 Rule 18 (Level 1, 2, or 3) and entered into the distribution inspection GIS database. Level 1 findings are reported immediately to the Field Operations Supervisor who will direct corrective action as soon as

¹¹¹ BVES's 2022 WMP Update, p. 235

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹¹² Response to DR-225, question 55; attachment "55. Patrol Records.pdf."

¹¹³ Response to DR-225, question 55; attachment "55. Journeyman Lineman Proof.pdf."

¹¹⁴ Response to DR-225, question 56; attachment "56. Field Inspector Collaboration.pdf."

¹¹⁵ BVES's 2022 WMP Update, p. 236

¹¹⁶ BVES 2022 Q4 Tables1-15R1 submitted on March 13, 2023, Table 1, cell AB46.

¹¹⁷ Response to DR-252, question 2; attachment "Energy Safety DR-252_RESPONSE.pdf."

possible to resolve the issue or reduce its severity to Level 2 so that more time is available to perform permanent corrective action."¹¹⁸

<u>Supporting Information and Analysis:</u> BVES provided an Excel file listing patrol findings from 2022, which included the patrol's priority (Level 1, 2, or 3), date of patrol finding, and date of when the corrective action work was completed. ¹¹⁹ BVES reported a total of four findings during patrol inspections in 2022, none of which were reported as a Level 1 finding. All corrective action work identified appeared to be completed within compliance of the timelines stated in GO 95 Rule 18.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 31

<u>Statement:</u> "The Wildfire Mitigation and Reliability Engineer reviews the results of patrol inspections and assigns corrective action to the vegetation clearance crews. Additionally, the Wildfire Mitigation and Reliability Engineer reviews the results of patrol inspections as well as other vegetation inspections to determine if there are systemic issues that must be addressed. Finally, the results of patrol inspections are cross checked against other vegetation inspections to evaluate the quality and effectiveness of each inspection type. ¹²⁰

<u>Supporting Information and Analysis:</u> BVES explained that because "there were only 4 findings from both patrol and detailed inspections, no systemic issues were identified." ¹²¹ Thus, BVES did not cross check results from detailed inspections and vegetation inspections on quality and effectiveness. ¹²²

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES 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.

¹¹⁸ B<u>VES's 2022 WMP Update</u>, p. 235

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹¹⁹ Response to DR-225, question 9; attachment "9. 2022 Patrol Findings.xlsx."

¹²⁰ BVES's 2022 WMP Update, p. 221

¹²¹ Response to DR-225, question 13; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 13.

¹²² Response to DR-225, question 14; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 7.

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."123

Statements, Supporting Information and Analysis, and **Conclusions**

Per BVES's 2022 WMP Update, Initiative 7.3.5.10 does not apply to BVES's vegetation management operations as BVES does not own or operate circuits equal to or greater than 65kV. Therefore, Energy Safety did not conduct analysis for this initiative.

Finding

Not applicable.

Initiative 7.3.5.13 Quality Assurance / **A.13 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 in Table 5.3-1."124

Statements, Supporting Information and Analysis, and **Conclusions**

Statement 32

Statement: "In 2022, BVES aims to continue to execute vegetation management QA/QC per its vegetation management QA/QC procedures (provided in Appendix E), which were last updated in 2021. In 2022, BVES set a QC target to conduct 72 QCs, four quarterly QA

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true, accessed May 10, 2024). ¹²⁴ Update Guidelines, attachment 2, p. 93

¹²³ Update Guidelines, attachment 2, p. 93

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

assessments, and one annual program audit. QCs are to be conducted by qualified staff designated in the BVES vegetation management procedures manual. Quarterly audits will be conducted by the Wildfire Mitigation and Reliability Engineer, and the annual program audit by the contracted Forester." 125

<u>Supporting Information and Analysis:</u> BVES provided an Excel file listing the inspector names, dates, locations, number of trees inspected, and results (pass or fail) for the 132 QC inspections conducted in 2022. ¹²⁶ Approximately 1,754 trees were inspected by BVES staff, of which 8 trees failed QC.

BVES also provided a report of the outcomes and results from four quarterly QA assessments. BVES completed three of the four QA assessments in 2022 on the following dates: April 18th, July 17th, and October 17th. BVES did not fully complete its target of four QA assessments in 2022; the fourth assessment was conducted shortly after on January 24th, 2023. ¹²⁷

<u>Conclusion:</u> BVES did not provide information consistent with the completion of work identified in this statement.

Finding

BVES did not provide 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." 128

Statements, Supporting Information and Analysis, and Conclusions

¹²⁵ BVES's 2022 WMP Update, p. 237

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹²⁶ Response to DR-225, question 57; attachment "57. Vegetation Management QC.pdf."

¹²⁷ Response to DR-225, question 36; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 13.

¹²⁸ Update Guidelines, attachment 2, p. 94

Statement 33

<u>Statement:</u> "The Forester trains BVES staff on vegetation management specifications and inspection techniques." ¹²⁹

<u>Supporting Information and Analysis:</u> Approximately six BVES employees attended vegetation management training in 2022. ¹³⁰ The training outlined state vegetation clearance standards, internal policies and procedures, staff responsibilities, and other information regarding BVES's quality assurance, quality control, and audit programs related to vegetation management. ¹³¹

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 34

Statement: "BVES Field Operations works very closely with Human Capital Management (HCM) to recruit and retain staff involved in the vegetation management area. Job postings are reviewed by both Field Operations and HCM to ensure the proper skills are being sought. HCM frequently reviews pay ranges for vegetation management staff to ensure the Company's pay ranges are competitive in the market to attract and retain qualified personnel." 132

<u>Supporting Information and Analysis:</u> BVES did not recruit new staff in 2022 for vegetation management related positions.¹³³ BVES explained that it performs annual performance reviews of vegetation management personnel, which helps management and HCM determine if there are any needs for additional personnel or training throughout the vegetation management program. HCM reviews pay scales annually to ensure the company's pay ranges are competitive.¹³⁴

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in these statements.

¹²⁹ BVES's 2022 WMP Update, p. 241

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹³⁰ Response to DR-225, question 58; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 19.

¹³¹ Response to DR-225, question 32; attachment "32. Vegetation Management Training.pdf."

¹³² BVES's 2022 WMP Update, p. 241

¹³³ Response to DR-225, question 59; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 19.

¹³⁴ Response to DR-231, question 105; attachment ""Energy Safety DR-231 BVES_RESPONSE.pdf," pp. 10-11.

Statement 35

<u>Statement:</u> "As a supplement, BVES routinely trains internal personnel and ensures all contracted resources retain proper certifications and licenses to perform accurate work in accordance with vegetation management requirements." ¹³⁵

<u>Supporting Information and Analysis:</u> BVES provided one training session to internal personnel in 2022 in which six BVES employees attended. ¹³⁶ Approximately 12 BVES staff hold certification and licenses in addition to the contracted certified forester and contracted vegetation management crews. ¹³⁷

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 36

<u>Statement:</u> "BVES holds periodic meetings with the vegetation management contractor and ensure that they are able to provide the necessary qualified crews to achieve the required scope of work safety. BVES will work with HCM should an opening develop in a vegetation management position at BVES." ¹³⁸

<u>Supporting Information and Analysis:</u> BVES communicated with the vegetation management contractor daily in 2022, including daily emails about crew work locations and high-priority work as well as in-person meetings. ¹³⁹ BVES included an example email communication with a contractor that includes a request for vegetation crews on a project. ¹⁴⁰

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

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

¹³⁵ BVES's 2022 WMP Update, p. 241

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹³⁶ Response to DR-225, questions 60 and 61; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 19.

¹³⁷ Response to DR-225, question 62; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 19.

¹³⁸ BVES's 2022 WMP Update, p. 242

¹³⁹ Response to DR-225, question 64; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 20.

¹⁴⁰ Response to DR-231, question 106; attachment "106. Vegetation Management Crew Needs."

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." ¹⁴¹

Statements, Supporting Information and Analysis, and Conclusions

Statement 37

Statement: "BVES will consider the removal of any fast-growing trees, such as Poplars, Aspens, or Cottonwood, rotten or diseased trees, and healthy trees hanging over or leaning towards bare lines. All such trees will be trimmed to at least 12 feet minimum (or more if warranted) and evaluated for removal in each case. This information will be tracked in BVES's tree tracking program." 142

<u>Supporting Information and Analysis:</u> BVES provided an Excel file documenting the removal of 5 Aspens and 2 Poplars in 2022.¹⁴³

BVES also provided a screenshot of BVES's 2022 tree tracking program. ¹⁴⁴ The screenshot documents the locations of three tree trimming events that occurred in BVES's service territory in 2022.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

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

¹⁴¹ Update Guidelines, attachment 2, p. 94

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

142 BVES's 2022 WMP Update, p. 242

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹⁴³ Response to DR-225, question 65; attachment "65. 2022 BVES Tree Removals of Fast Growing Trees.xlsx."

¹⁴⁴ Response to DR-231, question 66; attachment "66. Tree Tracking System.pdf."

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." ¹⁴⁵

Statements, Supporting Information and Analysis, and Conclusions

Statement 38

<u>Statement:</u> "BVES performs strike potential tree removal as identified during vegetation management patrols and inspections. Typically, these types of trees receive immediate or readily available remediation or removal in order to reduce ignition risk and maintain the structural integrity of the ROW." ¹⁴⁶

<u>Supporting Information and Analysis:</u> BVES provided an Excel file documenting the removal of 137 trees with strike potential to BVES electric lines in 2022. ¹⁴⁷ BVES also provided a screenshot of email correspondence from 2022 between BVES and contractor staff confirming the removal of a dead tree with strike potential to BVES electric lines. The email correspondence indicates that the dead tree was removed within 30 days of initial inspection. ¹⁴⁸

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 39

<u>Statement:</u> "Based on past experience and past inspections, BVES expects to remove approximately 88 hazard trees along its lines. Additionally, as discussed in Section 7.3.5.19. BVES is working to install an improved tree database. This database will document exempted

¹⁴⁵ Update Guidelines, attachment 2, p. 94

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

146 BVES's 2022 WMP Update, p. 243

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹⁴⁷ Response to DR-225, question 67; attachment "67. and 69. 2022 BVES Tree Removals.xlsx."

¹⁴⁸ Response to DR-225, question 68; attachment "68. Strike Potential Tree Removal.pdf."

trees (tree trunk exemption per GO 95) and track their condition such that if they become a hazard they may be removed."¹⁴⁹

<u>Supporting Information and Analysis:</u> BVES provided an Excel file documenting the removal of 137 trees in 2022 that threatened BVES facilities.¹⁵⁰

BVES was unable to launch the tree inventory system in 2022 but was able to document 836 trees as exempt per GO 95.¹⁵¹ BVES stated that the iRestore application implementation was a multi-year and multi-step process. The application was in a beta test in 2022 and was officially implemented in 2023.¹⁵²

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 40

<u>Statement:</u> "Tree trunks and major limbs that encroach within 48 inches of bare conductors are evaluated in accordance with BVES's Trees and Major Limbs in Close Proximity to Bare Conductors flowchart." ¹⁵³

Supporting Information and Analysis: BVES's "Trees and Major Limbs in Close Proximity to Bare Conductors" flowchart is provided in BVES's 2022 WMP Update. ¹⁵⁴ The flowchart serves as a step-by-step guide for inspectors to determine if tree trunks and major limbs should be reported as either an exemption, level 1, or level 2 finding. The flowchart also provides instruction on follow up actions that must be taken after a finding is reported. BVES states that 836 trees were inspected and identified as exempt using BVES's "Trees and Major Limbs in Close Proximity to Bare Conductors" flowchart in 2022. ¹⁵⁵

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024)..
¹⁵⁴ BVES's 2022 WMP Update, p. 244

¹⁴⁹ BVES's 2022 WMP Update, p. 244

 $⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981\& shareable=true, accessed \ May\ 10, 2024).$

¹⁵⁰ Response to DR-225, question 69; attachment "67. and 69. 2022 BVES Tree Removals.xlsx."

¹⁵¹ Response to DR-225, questions 70 and 71; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 22.

¹⁵² Response to DR-231, question 108; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 12.

¹⁵³ BVES's 2022 WMP Update, p. 244

¹⁵⁵ Response to DR-225, question 72; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 22.

BVES provided information consistent with the completion of work identified in Initiative 7.3.5.16: Removal and Remediation of Trees with Strike Potential to Electric Lines and Equipment.

A.17 Initiative 7.3.5.17 Substation Inspections

The purpose of this initiative is to inspect "vegetation surrounding substations." 156

Statements, Supporting Information and Analysis, and Conclusions

Statement 41

<u>Statement:</u> "BVES will continue with ongoing maintenance activities and schedules in 2022. BVES inspects each of its 13 substations on a monthly basis per GO-174. When a substation is removed from service for long-term maintenance (de-energized), periodic inspections may be suspended if deemed appropriate by Field Operations Supervisor." ¹⁵⁷

<u>Supporting Information and Analysis:</u> BVES provided an Excel file documenting the dates of inspection and inspection findings from each of BVES's 13 substations. ¹⁵⁸ The Excel file indicates that all substations were inspected on a monthly schedule in 2022 resulting in 12 documented inspections for each substation.

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES provided information consistent with the completion of work identified in Initiative 7.3.5.17: Substation Inspections.

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

157 BVES's 2022 WMP Update, p. 245

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024). Response to DR-225, questions 73 and 74; attachment "Substation Inspections.pdf."

¹⁵⁶ Update Guidelines, attachment 2, p. 94

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." ¹⁵⁹

Statements, Supporting Information and Analysis, and Conclusions

Statement 42

<u>Statement:</u> "BVES will continue ongoing vegetation clearance activities as deemed necessary by the substation inspections in 2022. BVES [will also] look for opportunities to install weed barriers in some of its substations that do not have weed barriers." ¹⁶⁰

<u>Supporting Information and Analysis:</u> BVES provided a line-item invoice from a contractor documenting weed abatement and cleanup on the interior and exterior for six of BVES's substations in 2022.¹⁶¹

BVES stated that all BVES substations had some type of weed barriers installed in 2022, thus, BVES did not install any additional weed barrier at its substations in 2022. 162

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES provided information consistent with the completion of work identified in Initiative 7.3.5.18: Substation Vegetation Management.

¹⁵⁹ Update Guidelines, attachment 2, p. 94

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

160 BVES's 2022 WMP Update, p. 246

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹⁶¹ Response to DR-231, question 111; attachment "Energy Safety DR-231 BVES_Response.pdf," p. 13.

¹⁶² Response to DR-231, question 110; attachment "Energy Safety DR-231 BVES_Response.pdf," p. 13.

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 updated based upon inspection results and management activities such as trimming and removal of vegetation." ¹⁶³

Statements, Supporting Information and Analysis, and Conclusions

Statement 43

<u>Statement:</u> "BVES uses contracted services to perform the detailed vegetation management work described in Section 7.3.5.2. Activities recorded under this WMP initiative support routine vegetation patrols and inspection schedules. Recordkeeping practices to document ongoing activities in the field as well as general vegetation risk and growth tracking are also captured under this initiative." ¹⁶⁴

<u>Supporting Information and Analysis:</u> BVES provided a screenshot of a digital recordkeeping "portal" that BVES utilized to input inspection data in 2022. ¹⁶⁵ The screenshot of the "portal" shows inspecton findings from 2022 organized into four categories: "pole," "pole top," "underground," and "other." Vegetation related findings were logged under the "pole" category in 2022. ¹⁶⁶

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 44

<u>Statement:</u> "BVES has been enhancing its GIS capabilities thus supporting data collection and mapping associated with the WMP. Data tracked under this WMP initiative will have valuable future use in supporting fuel inventory mapping and lead to better forecasting of fuel loading in parallel with other resources described under Sections 7.3.1 and 7.3.2." ¹⁶⁷

¹⁶³ Update Guidelines, attachment 2, p. 94

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

164 BVES's 2022 WMP Update, p. 247

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹⁶⁵ Response to DR-225, question 78; attachment "Inspection Recordkeeping Documentation.pdf."

¹⁶⁶ Response to DR-231, question 112; attachment "Energy Safety DR-231 BVES_Response.pdf," p. 14.

¹⁶⁷ BVES's 2022 WMP Update, p. 247

<u>Supporting Information and Analysis:</u> BVES enhanced its GIS capabilities in 2022 by integrating LiDAR data into the GIS system and leveraging KMZ files for field users. ¹⁶⁸ BVES provided a KMZ file that documents all electric primary line encroachments using LiDAR data. ¹⁶⁹

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 45

<u>Statement:</u> "BVES is working to install an improved tree database that creates a unique ID for each tree and holds extensive data on each tree (such as species, height, condition, etc.). The database will provide real-time vegetation inspection data available to users, trimming status, geolocation, among other things. The software will provide alerts on trees that require revisit based on growth rates. Additionally, the software will alert when a tree is about to exceed its review time based on the cycle schedule." ¹⁷⁰

<u>Supporting Information and Analysis:</u> BVES states "in 2022, BVES worked diligently with software developers to create and roll out the iRestore application. The inspection portion of the application came online in 2022. In 2022, the tree inventory app went through beta test for the tree database. The tree inventory database launched in early 2023."¹⁷¹

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

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

¹⁶⁸ Response to DR-225, question 79; attachment "79. GIS Capabilities.pdf."

¹⁶⁹ Response to DR-225, question 79; attachment "79. GIS Capabilities.pdf."

¹⁷⁰ BVES's 2022 WMP Update, p. 247

¹⁷¹ Response to DR-225, question 80, attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 24.

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 overhanding tree limbs." ¹⁷²

Statements, Supporting Information and Analysis, and Conclusions

Statement 46

<u>Statement:</u> "Vegetation around electric distribution lines and equipment poses potential risks for safety, compliance, reliability, and wildfire ignitions. To address these risks and establish mitigation programs, BVES executes robust and detailed vegetation management and inspection initiatives according to detailed specifications, scope, and schedules. BVES has developed detailed work plans which enable compliance and track adherence to CPUC rules as well as state and federal laws." ¹⁷³

<u>Supporting Information and Analysis:</u> BVES provided BVES's "Detailed Inspection Plan," which demonstrates robust and detailed vegetation management and inspection initiatives. 174

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 47

<u>Statement:</u> "A third-party contractor executes the vegetation clearing efforts under the direction of BVES. The contractor's work is subject to BVES Quality Control checks." ¹⁷⁵

¹⁷² Update Guidelines, attachment 2, p. 94

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

173 BVES's 2022 WMP Update, p. 248

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).
¹⁷⁴ Response to DR-225, question 81; attachment "BVES Detailed Inspection Plan.pdf."

¹⁷⁵ BVES's 2022 WMP Update, p. 248

<u>Supporting Information and Analysis:</u> BVES provided an Excel file documenting 3,416 occurrences of vegetation clearing work performed by BVES's contractor in 2022. ¹⁷⁶

BVES reported that 132 quality checks of the contractor's work were completed in 2022. BVES also provided a completed "Tree Trimming QC" form completed by BVES documenting the criteria BVES used to perform the quality control checks in 2022. 177

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 48

<u>Statement:</u> "Vegetation management and inspection initiatives are completed throughout the BVES service territory. Special attention is given to BVES high threat areas which have both high vegetation or fuels density and high winds." ¹⁷⁸

<u>Supporting Information and Analysis:</u> BVES states that "all of BVES service territory is in a high fire threat area. Most of the area is classified as high fire threat district 2. BVES does have assets in the high fire district 3 and conducts additional inspections on these assets." ¹⁷⁹

BVES provided a map of the BVES service territory. ¹⁸⁰ BVES highlighted portions of the map inside High Fire Threat District (HFTD) Tier 3 areas. BVES states that detailed patrol, LiDAR patrol, UAV patrol, and 3rd party ground patrol were completed in the HFTD Tier 3 areas of its service territory in 2022. ¹⁸¹

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 49

<u>Statement:</u> "BVES has targeted to ensure 72 circuit miles are visited for vegetation clearance activities in 2022. Additionally, the vegetation contractor shall be responsible for correcting findings from the annual LiDAR survey, UAV photography/videography survey, 3rd party ground patrol, BVES patrols, BVES detailed inspections, and VM QCs." ¹⁸²

¹⁷⁶ Response to DR-225, question 87; attachment "87. Routine work complete.xlsx."

¹⁷⁷ Response to DR-225, question 88; attachment "88. Vegetation QC.pdf."

¹⁷⁸ B<u>VES's 2022 WMP Update</u>, p. 251

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹⁷⁹ Response to DR-231, question 113; attachment "Energy Safety DR-231 BVES_Response.pdf," p. 14.

¹⁸⁰ Response to DR-231, question 113; attachment "113. High Fire Threat Inspections."

¹⁸¹ Response to DR-231, question 113; attachment "Energy Safety DR-231 BVES_Response.pdf," p. 14.

¹⁸² BVES's 2022 WMP Update, p. 252

<u>Supporting Information and Analysis:</u> BVES's non-spatial Quarterly Data Report (QDR) submission from Q4 of 2022 reports that BVES completed 87 circuit miles of vegetation clearance activities in 2022.¹⁸³

BVES provided a map depicting the locations of vegetation management activities and inspections in 2022. ¹⁸⁴ BVES also provided an Excel file documenting all 3,416 vegetation management activities related to BVES's routine vegetation management work that were performed by a vegetation contractor in 2022. ¹⁸⁵

Lastly, BVES provided an Excel file documenting all 717 vegetation management activities related to findings from BVES's annual LiDAR survey, UAV photography/videography survey, 3rd party ground patrol, BVES patrols, BVES detailed inspections, and VM QCs that were performed by a vegetation contractor in 2022.¹⁸⁶

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

BVES 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.

A.21 Initiative 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 is assessment tool/standard." ¹⁸⁷

Statements, Supporting Information and Analysis, and Conclusions

¹⁸³ BVES 2022 Q4 Tables1-15R1 submitted on March 13, 2023, Table 1, cell AB53.

¹⁸⁴ Response to DR-225, question 87; attachment "BVES response to DR-225 2022 SVM Final.pdf," p. 86.

¹⁸⁵ Response to DR-225, question 87; attachment "87. Work completed in 2022.pdf" and attachment "87. Routine work complete.xlsx."

¹⁸⁶ Response to DR-231, question 115; attachment "115. Non Routine Work.xlsx."

¹⁸⁷ <u>Update Guidelines</u>, attachment 2, p. 95

Statement 50

<u>Statement:</u> "While BVES has not experienced a significant fire, it remains prepared to respond quickly in the even[t] an ignition source impacts adjacent vegetation or threatens public access." ¹⁸⁸

<u>Supporting Information and Analysis:</u> BVES stated that it follows protocols outlined in its Emergency Response and Disaster Plan.. BVES states "in the case of an extreme weather event, BVES may establish an emergency operation center, have vegetation and line crews on standby, and conduct a PSPS event to ensure that no other ignitions occur." ¹⁹⁰

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 51

<u>Statement:</u> "BVES will work to consult with an environmental specialist to assess large scale tree removals on hillsides and the mitigations to implement as a result." ¹⁹¹

<u>Supporting Information and Analysis:</u> BVES reports that because there were no fires that prompted a large-scale tree removal in BVES's service territory in 2022, BVES did not consult with an environmental specialist on the subject. BVES states it will consult with an environmental specialist in the event a large-scale tree removal project is needed in the future. ¹⁹²

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Statement 52

<u>Statement:</u> "BVES will continue to seek out best practices in vegetation management techniques. BVES leadership is performing Job Hazard Analyses (JHAs) on contractors perform vegetation management to ensure their work practices safe for the public and the employees." ¹⁹³

¹⁸⁸ BVES's 2022 WMP Update, p. 252

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹⁸⁹ Response to DR-231, question 116; attachment "116. BVES INC Emergency Response and Disaster Plan."

¹⁹⁰ Response to DR-231, question 116; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 15.

¹⁹¹ BVES's 2022 WMP Update, p. 253

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52981&shareable=true, accessed May 10, 2024).

¹⁹² Response to DR-231, question 117; attachment "Energy Safety DR-231 BVES_RESPONSE.pdf," p. 16.

¹⁹³ BVES's 2022 WMP Update, p. 253

<u>Supporting Information and Analysis:</u> BVES provided five JHAs that were completed in 2022.¹⁹⁴ The JHAs include the evaluator's name, the type of activity being evaluated, date of the evaluation, and a checklist of evaluation criteria. The evaluator did not indicate any corrective actions were needed on any of the five provided JHAs. Each JHA is signed and dated by a "responsible supervisor."

<u>Conclusion:</u> BVES provided information consistent with the completion of work identified in this statement.

Finding

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

¹⁹⁴ Response to DR-225, question 90; attachment "90. Examples of JHA.pdf."

DATA DRIVEN FORWARD-THINKING INNOVATIVE SAFETY FOCUSED

