



July 17, 2024

To: PacifiCorp  
Allen Berreth  
VP of T&D Operations  
825 NE Multnomah, Suite 2000  
Portland, OR 97232

**SUBJECT: Office of Energy Infrastructure Safety's Audit on PacifiCorp'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 on PacifiCorp's 2022 vegetation management work pursuant to its 2022 Wildfire Mitigation Plan Update. Energy Safety found that PacifiCorp did not complete the work required for two of the 19 applicable initiatives. PacifiCorp must submit its responsive Corrective Action Plan to the 2022 SVM docket<sup>1</sup> in Energy Safety's e-filing system within 20 business days from the issuance of this audit. If you have any questions concerning this audit, please e-mail Marisa Salazar at [Marisa.Salazar@energysafety.ca.gov](mailto:Marisa.Salazar@energysafety.ca.gov) and provide a copy to [environmentalsciencedivision@energysafety.ca.gov](mailto:environmentalsciencedivision@energysafety.ca.gov).

Sincerely,

A handwritten signature in cursive script that reads "Sheryl Bilbrey".

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

Cc:

Forest Kaser, CPUC  
Leslie Palmer, CPUC  
Amy McClusky, PacifiCorp  
Pooja Kishore, PacifiCorp  
Tim Clark, PacifiCorp

---

<sup>1</sup> All documents related to PacifiCorp'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?doctetnumber=2022-SM> [accessed July 10, 2024])



State of California – A Natural Resources Agency

Gavin Newsom, Governor

**OFFICE OF ENERGY INFRASTRUCTURE SAFETY**  
715 P Street, 20th Floor | Sacramento, CA 95814  
916.902.6000 | [www.energysafety.ca.gov](http://www.energysafety.ca.gov)

Caroline Thomas Jacobs, Director

Johnathan Connelly, PacifiCorp



OFFICE OF ENERGY INFRASTRUCTURE SAFETY  
**2022 SUBSTANTIAL VEGETATION  
MANAGEMENT AUDIT**  
**PACIFICORP**

July 2024

## TABLE OF CONTENTS

Executive Summary .....	1
1. OVERVIEW .....	2
2. AUDIT FINDINGS .....	3
3. PACIFICORP AUDIT RESPONSE .....	5
4. 2022 SVM AUDIT CONCLUSION .....	6
Appendix A.....	A-1
A.1 Initiative 7.3.5.1 Additional Efforts to Manage Community and Environmental Impacts A-2	
A.2 Initiative 7.3.5.2 Detailed Inspections and Management Practices for Vegetation Clearances Around Distribution Electrical Lines and Equipment .....	A-9
A.3 Initiative 7.3.5.3 Detailed Inspections of Vegetation Around Transmission Electric Lines and Equipment .....	A-10
A.4 Initiative 7.3.5.4 Emergency Response Vegetation Management due to Red Flag Warning or Other Urgent Weather Conditions .....	A-11
A.5 Initiative 7.3.5.5 Fuel Management (including all wood management) and Reduction of “slash” from Vegetation Management Activities .....	A-12
A.6 Initiative 7.3.5.6 Improvement of Inspections .....	A-14
A.7 Initiative 7.3.5.7 Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment .....	A-16
A.8 Initiative 7.3.5.8 Remote Sensing Inspections of Vegetation Around Transmission Electric Lines and Equipment .....	A-17
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 .....	A-18
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 .....	A-19
A.11 Initiative 7.3.5.11 Patrol Inspections of Vegetation Around Distribution Electric Lines and Equipment .....	A-19



A.12 Initiative 7.3.5.12 Patrol Inspections of Vegetation Around Transmission Electric Lines and Equipment ..... A-21

A.13 Initiative 7.3.5.13 Quality Assurance / Quality Control of Vegetation Management A-21

A.14 Initiative 7.3.5.14 Recruiting and Training of Vegetation Management Personnel ..A-24

A.15 Initiative 7.3.5.15 Identification and Remediation of “at-risk species” ..... A-28

A.16 Initiative 7.3.5.16 Removal and Remediation of Trees with Strike Potential to Electric Lines and Equipment ..... A-30

A.17 Initiative 7.3.5.17 Substation Inspections ..... A-31

A.18 Initiative 7.3.5.18 Substation Vegetation Management..... A-32

A.19 Initiative 7.3.5.19 Vegetation Management System..... A-33

A.20 Initiative 7.3.5.20 Vegetation Management to Achieve Clearances Around Electric Lines and Equipment ..... A-34

A.21 Initiative 7.3.5.21 Vegetation Management Activities Post-Fire ..... A-35

**LIST OF TABLES**

Table 1. PacifiCorp 2022 SVM Audit Findings ..... 3

# Executive Summary

The Office of Energy Infrastructure Safety (Energy Safety) completed an audit of PacifiCorp's vegetation management commitments from its 2022 Wildfire Mitigation Plan Update (WMP).<sup>1</sup> Energy Safety found that PacifiCorp did not provide information consistent with the completion of work for two of its 19 vegetation management initiatives (Initiatives 7.3.5.17: Substation Inspections, and 7.3.5.19: Vegetation Management System).

A detailed discussion of the audit findings is provided in Appendix A of this document. For each audit finding, PacifiCorp must submit a response to Energy Safety within 20 days of receipt of this audit. PacifiCorp must title its response "PacifiCorp 2022 SVM Audit Corrective Action Plan" and submit the response on the 2022 SVM Docket in Energy Safety's E-Filing System. Requirements for the response are discussed in Section 3 of this document. Energy Safety is available to meet with PacifiCorp to discuss the audit findings and provide any clarification necessary for PacifiCorp to respond in a timely manner to Energy Safety's audit.

---

<sup>1</sup> [PacifiCorp's 2022 WMP Update \(Rev. #1, July 15, 2022\)](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true) (hereafter PacifiCorp's WMP Update), p. 195 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true, accessed June 6, 2024).

# 1. OVERVIEW

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

PacifiCorp submitted its substantial vegetation management (SVM) 2022 completion notification on May 22, 2023. As a result, Energy Safety has completed its SVM audit of PacifiCorp's vegetation management program activities for 2022. The 2022 WMP Update Guidelines included 21 vegetation management initiatives.<sup>3</sup> PacifiCorp's 2022 WMP Update included 19 applicable vegetation management initiatives.<sup>4</sup> Two initiatives were not applicable per PacifiCorp's approved WMP. 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 PacifiCorp 2022 WMP Update. Energy Safety then compared vegetation management commitments and statements to the work performed by PacifiCorp in 2022. Table 1 of this report includes a list of all vegetation management activities and Energy Safety's determination of whether PacifiCorp completed all required work for 2022. The detailed analysis and supporting documents, and findings for each initiative are included in Appendix A.

---

<sup>2</sup> [FindLaw.com - California Code, Public Utilities Code - PUC § 8386.3 \(updated Jan. 2023\)](https://codes.findlaw.com/ca/public-utilities-code/puc-sect-8386-3/), subd. (c)(5)(A) (https://codes.findlaw.com/ca/public-utilities-code/puc-sect-8386-3/, accessed June 11, 2024).

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

<sup>4</sup> [PacifiCorp's 2022 WMP Update \(Rev. #1, July 15, 2022\)](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true) (hereafter PacifiCorp's WMP Update), p. 195 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true, accessed June 6, 2024)..

## 2. AUDIT FINDINGS

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

Table 1. PacifiCorp 2022 SVM Audit Findings

2022 Vegetation Management Initiative	Audit Finding
7.3.5.1 Additional Efforts to Manage Community and Environmental Impacts	Performed Required Work
7.3.5.2 Detailed Inspections and Management Practices or Vegetation Clearances around Distribution Electrical Lines and Equipment	Performed 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
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	Not Applicable Per Approved WMP Update



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	Performed Required Work
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”	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 Inspection	<b>Did Not Perform All Required Work</b>
7.3.5.18 Substation Vegetation Management	Performed Required Work
7.3.5.19 Vegetation Management System	<b>Did Not Perform All Required Work</b>
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. PACIFICORP AUDIT RESPONSE

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

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

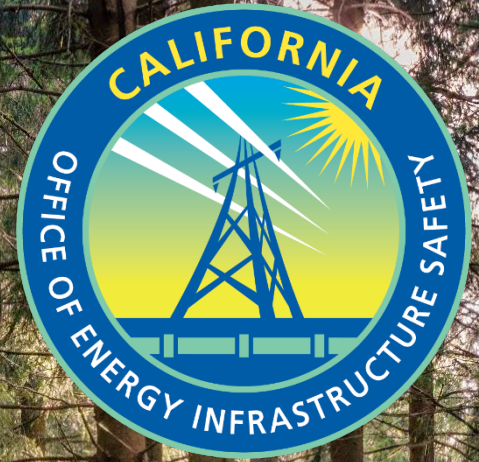
## 4. 2022 SVM AUDIT CONCLUSION

Energy Safety reviewed the 19 applicable vegetation management initiatives detailed in PacifiCorp's 2022 WMP Update and found PacifiCorp could not provide documentation demonstrating completion of two of the 19 applicable vegetation management initiatives. PacifiCorp was unable to provide supporting documentation or information consistent with statements and/or targets regarding substation inspections and its vegetation management system (Initiatives 7.3.5.17: Substation Inspections, and 7.3.5.19: Vegetation Management System).

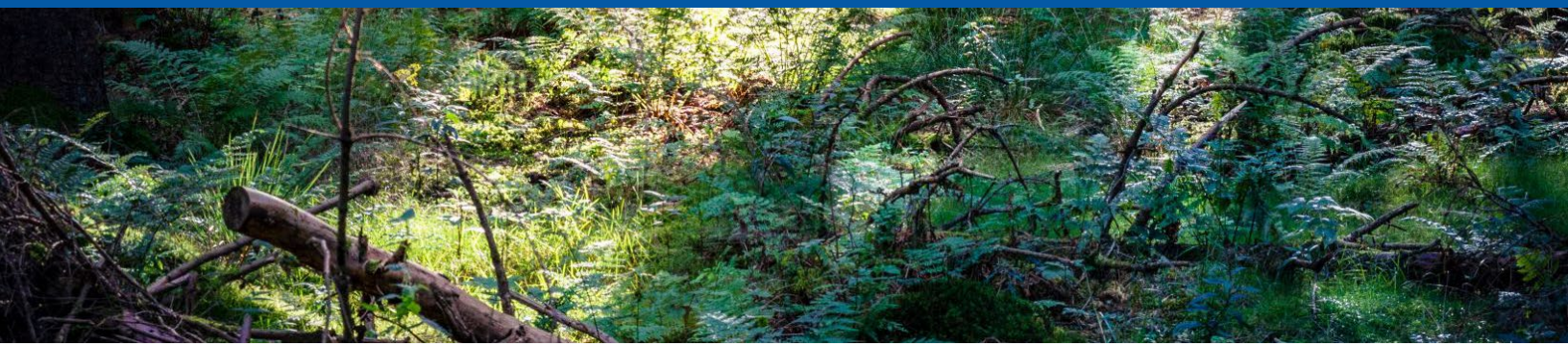
For each audit finding, PacifiCorp must submit a response to Energy Safety within 20 days of receipt of this audit.

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





# APPENDIX / ANALYSIS, SUPPORTING DOCUMENTATION AND FINDINGS





## Appendix A

Each vegetation management initiative listed in PacifiCorp'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 PacifiCorp in 2022. PacifiCorp's WMP Update included 19 applicable vegetation management initiatives. Energy Safety conducted an audit of all commitments and/or statements for each initiative; therefore, determination of whether all work was complete for each initiative was based on verification that all WMP numeric commitments or qualitative statements were completed for each initiative.

As shown in Table 1, Energy Safety found PacifiCorp could not provide supporting documentation or information demonstrating completion of two of the 19 applicable vegetation management initiatives in its 2022 WMP Update. Below is a summary of each WMP vegetation management initiative commitment or statement, the data or supporting documentation used to verify the commitment or statement, and the associated finding.



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

The purpose of this initiative is the “Plan and execution of strategy to mitigate negative impacts from utility vegetation management to local communities and the environment, such as coordination with communities, local governments, and agencies to plan and execute vegetation management work.”<sup>5</sup>

### Statements, Supporting Information and Analysis, and Conclusions

#### Statement 1

**Statement:** “Customers are typically notified, as a courtesy, at least five business days in advance of vegetation management work. Notification includes personal notification, door hangers, mail and consent forms.”<sup>6</sup>

**Supporting Information and Analysis:** Energy Safety requested at least five examples of stamped documentation proving customers were notified in advance of vegetation management work. PacifiCorp provided an Excel file which listed four examples of notifying customers in advance of vegetation management work on customer private property. The examples include the date of inspection, date of work completed, and customer’s notification as well as the contact type provided – door hangers, personal, letter, and telephone.<sup>7</sup> For the fifth example, PacifiCorp included a Property Owner Permission consent form, which permits PacifiCorp to perform vegetation management services, such as tree removal, on a customer’s property.<sup>8</sup> The consent form was signed the same day work was completed.

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

#### Statement 2

**Statement:** “When a tree is identified to be removed or herbicide or growth regulators are to be used, PacifiCorp makes reasonable attempts to obtain customer consent and has a robust

---

<sup>5</sup> [Update Guidelines](#), attachment 2, p. 92

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

<sup>6</sup> [PacifiCorp’s 2022 WMP Update](#), p. 195

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>7</sup> Response to DR-228, question 1; attachment “SVM\_1\_Inventory\_Report.xlsx.”

<sup>8</sup> Response to DR-228, question 1; attachment “SVM\_1\_Owner\_Permission\_Redacted.pdf.”

escalation process. The goal is to find resolution between the customer and the company. If this coordination is unsuccessful, PacifiCorp will determine course in conducting the required work.”<sup>9</sup>

Supporting Information and Analysis: PacifiCorp provided an Excel file which listed two examples of when PacifiCorp personnel made reasonable attempts to contact customers to obtain consent to perform vegetation management work on their property.<sup>10</sup> In both examples, the inspectors identified the mitigation work and recorded the dates of several unsuccessful attempts to contact the customers via phone or mail.

PacifiCorp also provided a customer refusal example when a customer refused vegetation management work to be performed on their property.<sup>11</sup> The report includes the customer’s contact information, property address, number of trees identified for work, and a description of the customer’s refusal or complaint. PacifiCorp also included email correspondence of the example refusal, which highlights PacifiCorp’s actions to complete the required work despite the customer’s refusal and includes the timeline of communication attempts and date of work completed.<sup>12</sup>

Conclusion: PacifiCorp provided information consistent with the completion of work identified in these statements.

### Statement 3

Statement: “Through this [unsuccessful or refusal] customer interaction, PacifiCorp takes opportunities to provide or discuss educational materials regarding tree-power line conflicts and planting the right tree in the right place.”<sup>13</sup>

Supporting Information and Analysis: PacifiCorp provided a brochure which informs customers about the importance of tree pruning and safety practices.<sup>14</sup> The brochure includes visual images and contact information for customers with questions or concerns. PacifiCorp provided additional educational material distributed to customers regarding planting the “right tree in the right place” when adjacent to distribution and transmission lines.<sup>15</sup>

---

<sup>9</sup> [PacifiCorp’s 2022 WMP Update](#), p. 195

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>10</sup> Response to DR-228, question 2; attachment “SVM\_2\_Inventory\_Report.xlsx.”

<sup>11</sup> Response to DR-228, question 3; attachment “SVM\_3\_PropertyOwnerRefusal\_Redacted.pdf.”

<sup>12</sup> Response to DR-228, question 4; attachment “SVM\_4\_RefusalLetter\_Redacted.pdf.”

<sup>13</sup> [PacifiCorp’s 2022 WMP Update](#), p. 195

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>14</sup> Response to DR-228, question 5; attachment “SVM\_5\_Brochure.pdf.”

<sup>15</sup> Response to DR-228, question 5; attachment “SVM\_5\_Small\_Trees\_Small\_Places.pdf.”

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

#### Statement 4

Statement: “Where work will take place on municipal, county, state or federal properties, the appropriate authorizing officer or agency representative is notified.”<sup>16</sup>

Supporting Information and Analysis: PacifiCorp notified representatives of the Klamath National Forest (KNF) of Class IV emergency removal work of hazard trees in May 2022.<sup>17</sup> PacifiCorp collaborated with the representatives to establish an appropriate work plan to remove the hazard trees with minimal impact on the protected resources nearby. Additionally, PacifiCorp provided the post-activity report summarizing the work completed in the KNF in August 2022 in response to hazard trees and damage caused by a fire.<sup>18</sup>

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

#### Statement 5

Statement: “PacifiCorp routinely collaborates with local land managers in obtaining permits, scheduling work, and addressing issues as they arise...Annual meetings are held with agencies where applicable, to enhance communication, discuss scope of work, and identify permit requirements and potential environmental impacts of scheduled vegetation management work.”<sup>19</sup>

Supporting Information and Analysis: PacifiCorp provided email correspondence showing its collaboration with representatives of the KNF to respond to a Class IV emergency hazard tree removal.<sup>20</sup> Both parties worked together to establish an approach to mitigate the hazard trees while upholding resource protection requirements and limiting impacts to resources. PacifiCorp also included the agenda and minutes from its annual meeting with the KNF on June 14, 2022. The purpose of the annual meeting was to discuss PacifiCorp’s plan processes and the potential impact of upcoming projects on sensitive resources within the KNF.<sup>21</sup>

---

<sup>16</sup> [PacifiCorp’s 2022 WMP Update](#), p. 195

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>17</sup> Response to DR-228, question 8; attachment “SVM\_8\_Email\_Notification\_Redacted.pdf.”

<sup>18</sup> Response to DR-228, question 7; attachment “SVM\_7\_Post-Activity\_Report\_Redacted.pdf.”

<sup>19</sup> [PacifiCorp’s 2022 WMP Update](#), p. 195-196

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>20</sup> Response to DR-228, question 8; attachment “SVM\_8\_Email\_Notification\_Redacted.pdf.”

<sup>21</sup> Response to DR-228, question 9; attachment “SVM\_9\_2022\_Annual\_Mtg\_Minutes\_Redacted.pdf.”

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

#### Statement 6

Statement: “To minimize environmental impacts and impacts to other sensitive resources, PacifiCorp conducts environmental reviews (biological and cultural) of vegetation management activities where warranted.”<sup>22</sup>

Supporting Information and Analysis: PacifiCorp conducted at least five environmental reviews for vegetation management activity in 2022.<sup>23</sup> PacifiCorp provided an example of an environmental review performed in response to hazard tree removal in the KNF. PacifiCorp assessed the potential impact of vegetation management work on the area’s known cultural and biological resources. This example demonstrates PacifiCorp took steps to minimize environmental impacts and impacts to other sensitive resources.<sup>24</sup>

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

#### Statement 7

Statement: “The O&M [Operations and Maintenance] Plan outlines PacifiCorp measures implemented for the protection of sensitive resources based on maintenance activity type, including vegetation management activities. The O&M Plan also includes PacifiCorp and land management agency roles and responsibilities in supporting PacifiCorp’s rapid response to correct conditions identified in a timely manner. Development of these plans also supports company outreach to land managing agencies to inform and educate them on utility practices.”<sup>25</sup>

Supporting Information and Analysis: PacifiCorp provided a copy of the KNF Operations and Maintenance (O&M) Plan which outlines the activities conducted by PacifiCorp to maintain its transmission and distribution lines within the KNF in coordination with Forest Service.<sup>26</sup> The Plan classifies the types of O&M activities, resource protection measures, and the regulatory requirements PacifiCorp and the KNF must follow.

---

<sup>22</sup> [PacifiCorp’s 2022 WMP Update](#), p. 196

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>23</sup> Response to DR-228, question 11.

<sup>24</sup> Response to DR-228, question 10; attachment “SVM\_10\_2022\_Post-Activity\_Report\_Redacted.pdf.”

<sup>25</sup> [PacifiCorp’s 2022 WMP Update](#), p. 196

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>26</sup> Response to DR-228, question 12; attachment “SVM\_12\_KNF\_O&M\_Plan\_Redacted.pdf.”

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

#### Statement 8

Statement: “Notification and coordination are also focused with customers and organizations that have previously requested advanced notice and increased coordination.”<sup>27</sup>

Supporting Information and Analysis: PacifiCorp provided two examples from its Distribution Inventory Report of customers who requested advanced notice prior to vegetation management work.<sup>28</sup> According to the inspectors’ work descriptions, both customers requested two days notification via phone.

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

#### Statement 9

Statement: “To manage environmental compliance PacifiCorp prioritizes environmental reviews and agency coordination based on project schedule considering agency review and permitting timelines. Projects are reviewed and packaged together where feasible to streamline review and coordination with authorizing agencies.”<sup>29</sup>

Supporting Information and Analysis: PacifiCorp provided the following excerpt as a project example that required environmental reviews and multi-agency coordination on a priority basis in December 2022.

In December 2022, a PacifiCorp vegetation management personnel identified a hazard tree with a large nest. The condition was referred to PacifiCorp’s environmental department for guidance. Based on further review, the nest was identified to be a bald eagle nest. PacifiCorp’s environmental department contacted the United States (U.S.) Fish and Wildlife Service (FWS) regarding the urgent need to address the issue, particularly because permits to remove eagle nests are generally difficult and time consuming to obtain. The U.S. FWS understood and agreed with the urgency and worked with Pacific Power to grant a permit to mitigate the hazard tree with the nest and ensure the eagle pair successfully nested on a nearby platform. The tree was located on U.S. Bureau of Land Management (BLM) land and therefore also included

---

<sup>27</sup> [PacifiCorp’s 2022 WMP Update](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true), p. 196

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>28</sup> Response to DR-228, question 13; attachment “SVM\_13\_Inventory\_Report.xlsx.”

<sup>29</sup> [PacifiCorp’s 2022 WMP Update](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true), p. 196

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).



coordination with the U.S. BLM on tree removal and installation of a nesting platform. The coordination began in 2022 and the permit was issued in early 2023.<sup>30</sup>

During the annual meeting with KNF to discuss PacifiCorp's O&M Plan, both parties discussed upcoming projects and addressed requirements associated with environmental reviews.<sup>31</sup> PacifiCorp also referenced its coordination with the KNF in Spring 2022 as an example of streamlining projects for review. PacifiCorp provided email communication showing that PacifiCorp packaged different projects related to a transmission line and distribution circuit to streamline the KNF's review.<sup>32</sup>

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

#### Statement 10

Statement: "PacifiCorp is currently coordinating with the Klamath National Forest (KNF) to develop an O&M Plan. The O&M Plan with the KNF was targeted for completion in 2021 and is now undergoing final reviews by the KNF and other agency stakeholders; and is planned to be finalized in 2022."<sup>33</sup>

Supporting Information and Analysis: PacifiCorp provided a copy of the KNF O&M Plan which outlines the activities conducted by PacifiCorp to maintain its transmission and distribution lines within the KNF in coordination with Forest Service.<sup>34</sup> The Plan classifies the types of O&M activities, resource protection measures, and the regulatory requirements PacifiCorp and the KNF must adhere to. The KNF O&M Plan was implemented in 2022 and formally signed in 2023 due to procedural reviews and delays by the United States Forest Service.<sup>35</sup>

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

#### Statement 11

Statement: "PacifiCorp has initiated discussions with the Region 5 of the USFS to develop strategy for developing O&M Plans for the remaining forests within PacifiCorp's California service territory."<sup>36</sup>

---

<sup>30</sup> Response to DR-228, question 14.

<sup>31</sup> Response to DR-228, question 9; attachment "SVM\_9\_2022\_Annual\_Mtg\_Minutes\_Redacted.pdf."

<sup>32</sup> Response to DR-228, question 8; attachment "SVM\_8\_Email\_Notification\_Redacted.pdf."

<sup>33</sup> [PacifiCorp's 2022 WMP Update](#), p. 197

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>34</sup> Response to DR-228, question 12; attachment "SVM\_12\_KNF\_O&M\_Plan\_Redacted.pdf."

<sup>35</sup> Response to DR-228, question 16.

<sup>36</sup> [PacifiCorp's 2022 WMP Update](#), p. 197

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

Supporting Information and Analysis: PacifiCorp held a meeting with representatives from the Region 5 Office of the United States Forest Service (USFS) on February 1, 2022 to discuss the feasibility of developing an O&M plan at the Region 5 level.<sup>37</sup> The attendees concluded that it was not prudent for USFS Region 5 to lead efforts in developing and coordinating an O&M Plan with PacifiCorp and instead, PacifiCorp would develop O&M Plans in coordination with individual forests within the region.<sup>38</sup>

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

## Statement 12

Statement: “PacifiCorp continues to implement process improvements (standardized biological and cultural reviews) for environmentally screening and evaluating projects to manage environmental compliance and streamline agency reviews.”<sup>39</sup>

Supporting Information and Analysis: PacifiCorp implemented process improvements in the 2022 KNF O&M Plan by standardizing and streamlining processes for performing biological and cultural reviews on land managed by the KNF. The Plan included standardized forms for documenting results of reviews, review time guidelines, and standardized processes for the KNF when reviewing PacifiCorp’s O&M project activities. “Additionally, the Company began an initiative in 2022 to develop a comprehensive geographic information system (GIS) database that is used to screen activities against existing data to further streamline environmental reviews.”<sup>40</sup>

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

## Finding

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

---

<sup>37</sup> Response to DR-228, question 17.

<sup>38</sup> Response to DR-228, question 17; attachment “SVM\_17\_USFS\_Meeting\_Notes\_Redacted.pdf.”

<sup>39</sup> [PacifiCorp’s 2022 WMP Update](#), p. 197

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>40</sup> Response to DR-228, question 18.

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

The purpose of this initiative is “Careful visual inspections and maintenance of vegetation around the distribution right-of-way, where individual trees are carefully examined, visually, and the condition of each rated and recorded. Describe the frequency of inspection and maintenance programs.”<sup>41</sup>

### Statements, Supporting Information and Analysis, and Conclusions

#### Statement 13

Statement: “As part of vegetation program maintenance, PacifiCorp conducts inspections of vegetation around distribution lines and equipment to identify imminent threats or hazards and vegetation conditions that do not meet PacifiCorp’s program standards/specifications. These pre-work inspections are typically conducted within weeks to one to two months by contractors before the scheduled program work. Inspectors/pre-listers use tablets to record vegetation conditions to be corrected.”<sup>42</sup>

Supporting Information and Analysis: PacifiCorp provided three examples of conditions identified for corrective action during pre-work inspections. The three examples were inspected and identified in Spring 2022 on County, USFS, or privately-owned land, respectively <sup>43</sup> and were either pruned or removed within weeks of the inspection date.<sup>44</sup>

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

#### Statement 14

Statement: “The distribution lines are inspected and managed at the circuit level. PacifiCorp senior utility foresters prioritize scheduling inspections and subsequent corrective work

---

<sup>41</sup> [Update Guidelines](#), attachment 2, p. 92

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

<sup>42</sup> [PacifiCorp’s 2022 WMP Update](#), pp. 197-198

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>43</sup> Response to DR-228, question 20; attachment “SVM\_20\_Inventory\_Report.xlsx.”

<sup>44</sup> Response to DR-228, question 20; attachment “SVM\_20\_Work\_Complete.xlsx.”

considering the HFTD, efficient workload distribution, weather conditions and resource availability.”<sup>45</sup>

Supporting Information and Analysis: PacifiCorp provided a weekly report from November 2022 summarizing coordination meetings with vegetation management contractors to schedule distribution and transmission line inspections and vegetation work. PacifiCorp referred to both feeder and transmission line scheduling in the report. Feeder lines are synonymous with distribution lines in this analysis. Meeting topics included tree crew deployment, equipment requirements, and work type. Meeting attendees also considered additional factors such as bird nesting season.<sup>46</sup>

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

## Finding

PacifiCorp 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 Electrical Lines and Equipment.

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

The purpose of this initiative is the “Careful visual inspections and maintenance of vegetation around the transmission right-of-way, where individual trees are carefully examined, visually, and the condition of each rated and recorded. Describe the frequency of inspection and maintenance programs.”<sup>47</sup>

## Statements, Supporting Information and Analysis, and Conclusions

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

---

<sup>45</sup> [PacifiCorp’s 2022 WMP Update](#), p. 198

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>46</sup> Response to DR-228, question 21; attachment “SVM\_21\_Email\_Redacted.pdf.”

<sup>47</sup> [Update Guidelines](#), attachment 2, p. 92

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

## Finding

See the finding for Initiative 7.3.5.2.

### A.4 Initiative 7.3.5.4 Emergency Response Vegetation Management due to Red Flag Warning or Other Urgent Weather 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.”<sup>48</sup>

## Statements, Supporting Information and Analysis, and Conclusions

### Statement 15

Statement: “PacifiCorp also has emergency response protocols associated with PSPS events. At times of elevated risk, PacifiCorp vegetation management may perform patrols to identify and address potential ignition risks due to vegetation and inform PSPS decision making. These patrols, typically referred to as PSPS alert patrols, may be performed throughout the weather event and/or PSPS event.”<sup>49</sup>

Supporting Information and Analysis: PacifiCorp provided a screenshot of the locations where work was conducted as a result of its risk-based patrols in Crescent City, CA.<sup>50</sup> The risk-based patrols were performed in response to a red flag warning or an impending weather event which Energy Safety considers a time of elevated risk.

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

## Finding

---

<sup>48</sup> [Update Guidelines](#), attachment 2, p. 92

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

<sup>49</sup> [PacifiCorp’s 2022 WMP Update](#), p. 199

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 25, 2024).

<sup>50</sup> Response to DR-228, question 22.



PacifiCorp 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 Weather 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.”<sup>51</sup>

### Statements, Supporting Information and Analysis, and Conclusions

#### Statement 16

Statement: “PacifiCorp conducts fuel management through removal of slash from the tree canopy, chipping debris where accessible, and removes (recycles where practicable) slash in developed areas unless the property owner indicates otherwise. In rural, off-road areas PacifiCorp uses a lop and scatter and chipping practice to reduce the volume of available fuel within the right-of-way and adheres with land managing agency requirements.”<sup>52</sup>

Supporting Information and Analysis: PacifiCorp provided its Inventory Report which documented four examples in which contractors practiced fuels management by chipping brush and branches and removing slash on private properties in 2022.<sup>53</sup> PacifiCorp also provided four examples of property owner permission forms, which were located in rural, off-road work areas, authorizing PacifiCorp to perform vegetation and fuel management services, such as tree removal or brush disposal, in 2022. The permission forms include notes indicating the use of lop and scatter techniques.<sup>54</sup>

---

<sup>51</sup> [Update Guidelines](#), attachment 2, p. 92

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

<sup>52</sup> [PacifiCorp’s 2022 WMP Update](#), p. 200

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>53</sup> Response to DR-228, question 24; attachment “SVM\_2\_Work\_Complete.xlsx.”

<sup>54</sup> Response to DR-228, question 25; attachments “SVM\_25\_1.pdf,” “SVM\_25\_2.pdf,” “SVM\_25\_3.pdf,” and “SVM\_25\_4.pdf.”

Conclusion: PacifiCorp provided information consistent with the completion of work identified in these statements.

#### Statement 17

Statement: “PacifiCorp uses herbicides and tree-growth regulators, where approved by the property owner or land managing agency in targeted areas.”<sup>55</sup>

Supporting Information and Analysis: PacifiCorp provided an Excel file documenting two examples in which PacifiCorp used tree-growth regulators at a private property in November 2022. Both examples note that PacifiCorp received the property owners’ approval to treat trees on feeder 5G7 after the second contact attempt.<sup>56</sup>

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

#### Statement 18

Statement: “In 2022, PacifiCorp plans to clear vegetation at 3,047 poles under the expanded pole clearing project.”<sup>57</sup>

Supporting Information and Analysis: PacifiCorp provided an Excel file listing a total of 3,080 poles that were cleared as part of the expanded pole clearing project.<sup>58</sup>

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

#### Statement 19

Statement: “In 2022, PacifiCorp will continue to seek opportunities to partner with communities and/or agencies to support fuel reduction projects.”<sup>59</sup>

Supporting Information and Analysis: PacifiCorp collaborated with the Michigan California Timber Company (MCTC) on a project involving the clearing and mastication of vegetation within the power line right-of-way in the Black Butte Tract. The planning for this project took place in 2022, and the actual work was conducted in 2023 along transmission Line 2 and Line

---

<sup>55</sup> [PacifiCorp’s 2022 WMP Update](#), p. 200

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>56</sup> Response to DR-228, question 26; attachment “SVM\_26\_Yreka\_5G7\_TGR.xlsx.”

<sup>57</sup> [PacifiCorp’s 2022 WMP Update](#), p. 201

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>58</sup> Response to DR-228, question 27; attachment “SVM\_27\_Statistics\_History\_Report\_LRA.xlsx.”

<sup>59</sup> [PacifiCorp’s 2022 WMP Update](#), p. 201

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

14.<sup>60</sup> PacifiCorp also provided five attachments, which included photos and a map supplied by MCTC during their 2022 collaboration. These documents were part of MCTC's request for partnership to clear a fuel break under the high voltage lines on their property. The map outlines the general project area, and the photos depict areas identified for project implementation.<sup>61</sup>

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

#### Statement 20

Statement: “PacifiCorp intends to implement pole clearing on wildland vegetation in the HFTD around poles that have fuses, air switches, clamps or other devices that could create sparks.”<sup>62</sup>

Supporting Information and Analysis: PacifiCorp provided a work release document authorizing its contractor to conduct distribution pole clearing activities around subject poles along circuit 5G21, a Local Responsibility Area.<sup>63</sup> PacifiCorp also included screenshots of circuit 5G21’s location in relation to Tiers 2 and 3 within the HFTD.

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

### Finding

PacifiCorp 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 inspections protocols and implementation by improving training and the evaluation of inspectors.”<sup>64</sup>

---

<sup>60</sup> Response to DR-228, question 28.

<sup>61</sup> Response to DR-228, question 28; attachments “SVM\_28\_Photo1.jpg,” “SVM\_28\_Photo2.jpg,” “SVM\_28\_Photo3.jpg,” “SVM\_28\_Photo4.jpg,” and “SVM\_28\_MCTC\_Project\_Area\_Map.pdf.”

<sup>62</sup> [PacifiCorp’s 2022 WMP Update](#), p. 202

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>63</sup> Response to DR-228, question 29; attachment, “SVM\_29\_Work\_Release\_LRA\_Redacted.pdf.”

<sup>64</sup> [Update Guidelines](#), attachment 2, p. 93

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

## Statements, Supporting Information and Analysis, and Conclusions

### Statement 21

Statement: “PacifiCorp has initiated incremental inspections before the height of the fire season, see Section 7.3.4.11 on page 188.”<sup>65</sup>

Supporting Information and Analysis: PacifiCorp provided its Distribution Inventory Report, including incremental inspection results, along four circuits.<sup>66</sup> Based on this sample, PacifiCorp initiated nearly 97 percent of its incremental inspections prior to the height of fire season, which PacifiCorp defines as approximately mid-July to mid-August in any given year.<sup>67</sup>

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

### Statement 22

Statement: “PacifiCorp conducts post-audit inspections of completed work and addresses any conditions that do not meet the vegetation program standards/specifications.”<sup>68</sup>

Supporting Information and Analysis: PacifiCorp provided five reports of post-audit inspections completed in 2022, of which three reports identified conditions that did not conform with the vegetation program standards and specifications.<sup>69</sup> The three post-audit exception reports include summaries of corrective actions, such as pruning or tree removal.

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

### Statement 23

Statement: “To move toward improved transparency, efficiency and data analytics, PacifiCorp incorporated the use of a work planning and tracking system. Inspectors use

---

<sup>65</sup> [PacifiCorp’s 2022 WMP Update](#), p. 203

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>66</sup> Response to DR-228, question 30; attachment “SVM\_30\_Inventory\_Report.xlsx.”

<sup>67</sup> Response to DR-228, question 31.

<sup>68</sup> [PacifiCorp’s 2022 WMP Update](#), p. 203

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>69</sup> Response to DR-228, questions 32 and 33; attachments “SVM\_32\_5G21\_Audit\_Exception\_Report.xlsx,”

“SVM\_32\_5G77\_Audit\_Exception\_Report.xlsx,” “SVM\_32\_5L87\_Audit\_Exception\_Report.xlsx,”

“SVM\_32\_6G101\_Audit\_Exception\_Report.xlsx,” and “SVM\_32\_5G2\_Audit\_Exception\_Report.xlsx.”

tablets to document vegetation maintenance activity requirements by location (for example, parcel or parcels). This information is then available to maintenance contractors, which allows for improved planning and documentation.”<sup>70</sup>

Supporting Information and Analysis: In 2022, PacifiCorp used MapIt Fast as its work management system, which replaces paper-based documentation and PacifiCorp states improves transparency, efficiency, and data analytics. PacifiCorp’s contractors utilize MapIt Fast software in the field and have varying types of access and permissions.<sup>71</sup> PacifiCorp describes the geospatial-based software platform in detail:

Data collected in the field is inputted in the software through the “dropping” a pin at a work location using a tablet and attaching various forms to the pin, describing the work identified and work completed. This information is available close to real-time and allows more vision and transparency in work activities taking place. Vegetation Management contractors utilize the software to assign work to crews more efficiently and track work progress. Data inputted into MapIt Fast is stored in a database, which is accessible through a user interface called VMOptix where canned reports can be run and allows for more effective review of data compared to previous paper-based methods.<sup>72</sup>

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

## Finding

PacifiCorp provided information consistent with the completion of work identified in Initiative 7.3.5.6: Improvements 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.”<sup>73</sup>

---

<sup>70</sup> [PacifiCorp’s 2022 WMP Update](#), p. 203

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>71</sup> Response to DR-228, question 35; attachment “SVM\_35\_MIF\_Permission\_Group\_Matrix.xlsx.”

<sup>72</sup> Response to DR-228, question 34.

<sup>73</sup> [Update Guidelines](#), attachment 2, p. 93

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



## Statements, Supporting Information and Analysis, and Conclusions

Per PacifiCorp’s 2022 WMP Update, “PacifiCorp evaluated several forms of technology pilots to support and streamline vegetation inspection processes. At this time, the technology has not resulted in reduced visits; it has, however, proven viable for other pilot efforts outlined in the company’s WMP, as outlined in Section 4.4.2.2 on page 53. The company recently completed a pilot using satellite imagery trained with LiDAR data to produce vegetation and strike tree maps. Assessment showed high accuracy on strike tree locations, with significant cost savings over LiDAR. Vegetation height and canopy coverage maps have higher resolution and less masking than publicly available data, resulting in more accurate and extensive tree capture.”<sup>74</sup>

PacifiCorp did not have a measurable statement in initiative 7.3.5.7: Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment. Therefore, Energy Safety did not conduct analysis for this initiative.

### Finding

Not applicable.

## 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.”<sup>75</sup>

## Statements, Supporting Information and Analysis, and Conclusions

PacifiCorp’s 2022 WMP Update, Initiative 7.3.5.8 Remote Sensing Inspections of Vegetation Around Transmission Electric Lines and Equipment, directs readers to Initiative 7.3.5.7. Therefore, Energy Safety did not conduct a separate analysis of the work performed for this initiative.

---

<sup>74</sup> [PacifiCorp’s 2022 WMP Update](#), pp. 204-205

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>75</sup> [Update Guidelines](#), attachment 2, p. 93

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

## Finding

See the finding for Initiative 7.3.5.7.

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

The purpose of this initiative is “inspecting the distribution rights-of-ways and the adjacent vegetation that may be hazardous, which goes beyond the minimum standards in rules and regulations.”<sup>76</sup>

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

Per PacifiCorp’s 2022 WMP Update, “PacifiCorp does not have any specific vegetation management and inspection wildfire mitigation programs focused on other discretionary inspection of vegetation that grows around distribution lines.”<sup>77</sup> Therefore, Energy Safety did not conduct analysis for this initiative.

## Finding

Not applicable.

---

<sup>76</sup> [Update Guidelines](#), attachment 2, p. 93

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

<sup>77</sup> [PacifiCorp’s 2022 WMP Update](#), p. 205

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

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

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

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

Per PacifiCorp’s 2022 WMP Update, “PacifiCorp does not have any specific vegetation management and inspection wildfire mitigation programs focused on other discretionary inspection of vegetation that grows around transmission lines.”<sup>79</sup> 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.”<sup>80</sup>

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

---

<sup>78</sup> [Update Guidelines](#), attachment 2, p. 93

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

<sup>79</sup> [PacifiCorp’s 2022 WMP Update](#), p. 205

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>80</sup> [Update Guidelines](#), attachment 2, p. 93

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

**Statement 24**

Statement: “To further reduce wildfire risk in the HFTD, PacifiCorp vegetation management implemented annual vegetation patrols incremental to scheduled program routine maintenance on lines within the HFTD. Correction work is subsequently conducted based on those inspection results.”<sup>81</sup>

Supporting Information and Analysis: PacifiCorp provided an Excel file listing 1,174.4 miles inspected in 2022 within the HFTD (Tier 2). Of these inspections, correction work for distribution and transmission maintenance was identified and conducted. PacifiCorp stated the tracking of inspections and correction work completed was, “incremental to routine maintenance” and that, “the incremental work is tracked using specific work codes”. The work codes include FIN: inspection, FPD: Distribution Control (correction work), and FMD: Distribution Maintenance (correction work). Distribution maintenance was completed on 18 circuits and transmission maintenance was completed on 11 circuits.<sup>82</sup> PacifiCorp included supplemental inventory reports and work completed reports of its transmission and distribution lines respectively, which documented the date of inspection, contractor, circuit, contact type (for landowner), type of property, the work identified, and the work completed. In most cases, contractors pruned or removed trees.<sup>83</sup>

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

## Finding

PacifiCorp 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.

---

<sup>81</sup> [PacifiCorp’s 2022 WMP Update](#), p. 206

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>82</sup> Response to DR-228, question 36; attachment “SVM\_36\_2022\_Contractor\_Miles\_Tracker.xlsx.”

<sup>83</sup> Response to DR-228, question 36; attachments “SVM\_36\_Inventory\_Report\_Distribution.xlsx,” “SVM\_36\_Inventory\_Report\_Transmission.xlsx,” “SVM\_36\_Work\_Complete\_Report\_Distribution.xlsx,” and “SVM\_36\_Work\_Complete\_Report\_Transmission.xlsx.”

## 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.”<sup>84</sup>

### Statements, Supporting Information and Analysis, and Conclusions

#### Statement 25

Statement: “PacifiCorp conducts an additional vegetation management inspection of overhead lines in the HFTD. For transmission, this inspection is specific to the segments of line that are within the HFTD.”<sup>85</sup>

Supporting Information and Analysis: PacifiCorp provided Quarterly Spatial Data, submitted via Energy Safety’s e-filing system, indicating inspections were completed on overhead transmission lines in Tier-2 and Tier-3 of the HFTD.

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

### Finding

PacifiCorp provided information consistent with the completion of work identified in Initiative 7.3.5.12: Patrol Inspections of Vegetation Around Transmission Electric Lines and Equipment.

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

The purpose of this initiative is the “Establishment and function of audit process to manage and oversee the work completed by employees or contractors, including packaging QA/QC information for input to decision-making and workforce management processes. This

---

<sup>84</sup> [Update Guidelines](#), attachment 2, p. 93

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

<sup>85</sup> [PacifiCorp’s 2022 WMP Update](#), p. 207

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

includes identification of the percentage of vegetation inspections that are audited annually, as a program target, as a program target in Table 5.3-1.”<sup>86</sup>

## Statements, Supporting Information and Analysis, and Conclusions

### Statement 26

Statement: “PacifiCorp currently uses internal staff with ISA certifications to conduct post-work audits of routine maintenance, readiness patrol corrective actions, and pole clearing.”<sup>87</sup>

Supporting Information and Analysis: PacifiCorp provided a list of six internal staff and relevant certifications, including ISA certifications, who have vegetation management commitments in the service territory in California.<sup>88</sup>

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

### Statement 27

Statement: “PacifiCorp also conducts ad hoc tree crew audits or crew visits where a PacifiCorp forester engages with the vegetation management contractor, such as a crew leader, and/or supervisor to review work and/or discuss opportunities for improvement.”<sup>89</sup>

Supporting Information and Analysis: PacifiCorp provided email correspondence from a PacifiCorp forester, who provided the vegetation management contractor with feedback and recommendations to improving audits.<sup>90</sup>

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

### Statement 28

Statement: “Instead, audits are conducted after tree work is done. While the audits focus on the execution of the vegetation management actions (e.g., pruning and removals), the post-

---

<sup>86</sup> [Update Guidelines](#), attachment 2, pp. 93-94

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

<sup>87</sup> [PacifiCorp’s 2022 WMP Update](#), p. 208

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>88</sup> Response to DR-228, question 37.

<sup>89</sup> [PacifiCorp’s 2022 WMP Update](#), p. 208

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>90</sup> Response to DR-228, question 38; attachment “SVM\_38\_ACRT\_Coordination\_Email\_Redacted.pdf.”

audits do result in findings that relate to the initial inspection, such as trees needing work that may have been missed by the pre-lister (which ought to also be caught by the work crew). PacifiCorp foresters then address applicable post-audit findings with pre-listers who conducted the inspections.”<sup>91</sup>

Supporting Information and Analysis: PacifiCorp provided three examples of post-audit findings discussions. The first example documents a field training session with ACRT inspection staff where audit findings, specifications, missed trees, over listing, tablet usage, and customer contact were reviewed.<sup>92</sup> The second example documents a meeting held with ACRT inspection staff to review the need for more detail in tree removal authorizations and proper clean-up descriptions and notifications/contacts.<sup>93</sup> The third example documents a discussion with ACRT, including items identified by foresters such as over listing.<sup>94</sup>

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

#### Statement 29

Statement: “During post-audits, observations and instruction about corrections are documented in the mobile data management software system, observations are discussed, and feedback is provided to the vegetation management contractor. Like PacifiCorp’s other programs, if an exception is identified that poses an imminent safety or reliability risk, the audit will be suspended, the exception addressed through corrective actions, and the crew may be shut down.”<sup>95</sup>

Supporting Information and Analysis: PacifiCorp provided an example of a forester identifying a high-risk tree during a post-audit that posed a threat to PacifiCorp’s transmission lines. The forester communicated with the nearest tree crew to mitigate the condition the same day the post-audit occurred and was identified as a high risk prioritized location.<sup>96</sup> PacifiCorp included supplemental images of the high-risk tree<sup>97</sup> as well as screenshots of the data collected in the system<sup>98</sup> and its location tracked in the geospatial software.<sup>99</sup>

---

<sup>91</sup> [PacifiCorp’s 2022 WMP Update](#), p. 208

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>92</sup> Response to DR-228, question 40; attachment “SVM\_40\_ACRT\_BenchmarkTraining.pdf.”

<sup>93</sup> Response to DR-228, question 40; attachment “SVM\_40\_ACRT\_RemovalAuthorizations.pdf.”

<sup>94</sup> Response to DR-228, question 40; attachment “SVM\_40\_ACRT\_MeetingAgenda.pdf.”

<sup>95</sup> [PacifiCorp’s 2022 WMP Update](#), p. 208

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>96</sup> Response to DR-228, question 43.

<sup>97</sup> Response to DR-228, question 41; attachment “SVM\_41\_Photo\_Priority\_Tree.jpg.”

<sup>98</sup> Response to DR-228, question 41; attachment “SVVM\_41\_Screenshot\_Audit\_Exception\_PRIORITY\_Redacted.pdf.”

<sup>99</sup> Response to DR-228, question 41; attachment “SVM\_41\_Screenshot\_PRIORITY\_Location\_Redacted.pdf.”



PacifiCorp also provided email correspondence summarizing PacifiCorp’s completion of a post-audit of one of its circuits in July 2022. The post-audit observations indicated that there were 93 exceptions identified, which resulted in an estimated pre-inspection score of 90%, an estimated removal rating of 7%, and an estimated reliability rating of 82%; overall, tree crews were rated at 99.87% for this given circuit.<sup>100</sup>

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

### Statement 30

Statement: “In 2022, PacifiCorp plans to take steps in expanding its QC capabilities by increasing internal staff resources (supervisor and auditors) to conduct post-audits and other QA/QC functions to help improve and achieve desired outcomes of the vegetation management program. PacifiCorp will continue to develop and refine its QA/QC program.”<sup>101</sup>

Supporting Information and Analysis: PacifiCorp expanded its QC capabilities by hiring three additional foresters in August 2022. The expansion of internal staff resources enabled PacifiCorp to increase its audit and work review capabilities.<sup>102</sup> Additionally, PacifiCorp identified a senior level forester to oversee the QA/QC program. The senior level forester conducted training and oversight of the newly hired foresters and hosted weekly meetings with the QA/QC team to discuss audit findings and expectations.<sup>103</sup>

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

## Finding

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

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

The purpose of this initiative is to facilitate “Programs to ensure that the utility can identify and hire qualified vegetation management personnel and to ensure that both employees and contractors tasked with vegetation management responsibilities are adequately trained to

---

<sup>100</sup> Response to DR-228, question 42; attachment “SVM\_42\_Audit\_Email.pdf.”

<sup>101</sup> [PacifiCorp’s 2022 WMP Update](#), p. 209

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>102</sup> Response to DR-228, question 44.

<sup>103</sup> Response to DR-228, question 45.

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.”<sup>104</sup>

## Statements, Supporting Information and Analysis, and Conclusions

### Statement 31

Statement: “Vegetation management contractors are responsible for providing a trained and competent workforce to address vegetation along PacifiCorp’s transmission and distribution system, in accordance with PacifiCorp’s specifications. They also coordinate training with Joint Apprenticeship Training Committees where present. Contractors also provide training on an as-needed basis to their personnel including herbicide use, fire prevention and suppression, general environmental requirements, customer service/communication, safety practices and tree felling procedures. Contractors have fire suppression tools and equipment in place. Contractors also conduct training in a variety of venues including classroom settings, conference calls or during job briefings at the work site. Contractor personnel are required to have ISA certifications and are required to conduct continuing education to maintain such certifications.”<sup>105</sup>

Supporting Information and Analysis: PacifiCorp provided three attendance records from trainings conducted by vegetation management contractors in 2022 related to electrical hazard awareness,<sup>106</sup> lock out/tag out procedures,<sup>107</sup> and wildland fire preparedness and prevention plans.<sup>108</sup>

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

### Statement 32

Statement: “PacifiCorp facilitates annual environmental awareness training of vegetation management contractors focusing on restrictions and requirements related to laws and regulations pertaining to avian species. PacifiCorp provides informal training and discussion

---

<sup>104</sup> [Update Guidelines](#), attachment 2, p. 94

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

<sup>105</sup> [PacifiCorp’s 2022 WMP Update](#), p. 209

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>106</sup> Response to DR-228, question 47; attachment “SVM\_47\_Electrical\_Hazard\_Awareness\_Redacted.pdf.”

<sup>107</sup> Response to DR-228, question 47; attachment “SVM\_47\_Lock\_Out-Tag\_Out\_2022\_Redacted.pdf.”

<sup>108</sup> Response to DR-228, question 47; attachment

“SVM\_47\_Wildland\_Fire\_Preparedness\_&\_Prevention\_Plan\_2022\_Redacted.pdf.”

on topics including regarding work scope specifications, changes in work scope or PacifiCorp processes, and PacifiCorp’s mobile data management system. PacifiCorp also participates in benchmarking discussions with contractors to review expectations, best practices, and opportunities for improvement. Training opportunities also arise during post-work audits conducted by the foresters.”<sup>109</sup>

Supporting Information and Analysis: PacifiCorp provided attendance records from its annual environmental awareness training with its vegetation management contractors. The training was conducted in March 2022 and discussed topics such as bird management, spill responses, the 2022 schedule, specifications, and Map It Fast.<sup>110</sup>

In addition to formal training, PacifiCorp provided informal training and discussions which primarily occurred during daily work and on-the-job training regarding issues that foresters identified in real-time, such as audit exceptions.<sup>111</sup> For example, PacifiCorp included email correspondence from its forester discussing post work audit results and feedback for the contractor.<sup>112</sup>

PacifiCorp also provided a benchmark training agenda in which both PacifiCorp foresters and inspection contractors reviewed safety topics, tablet usage, tracking inspections, and practiced walking a section of a power line as a group.<sup>113</sup>

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

### Statement 33

Statement: “PacifiCorp has developed a Vegetation Management Process Checklist (contained within its SOP) as a guide for both internal and external personnel to serve as a process job-aid.”<sup>114</sup>

Supporting Information and Analysis: PacifiCorp provided its Vegetation Management Process Checklist dated in 2022 which contained specific job categories for utility and contracted employees. The checklist had tasks completed in the “Authorize Project Work” and “Project Closure” categories and was signed off by the contract supervisor.<sup>115</sup>

---

<sup>109</sup> [PacifiCorp’s 2022 WMP Update](#), p. 209

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>110</sup> Response to DR-228, question 48; attachment

“SVM\_48\_Avian\_Environmental\_Training\_Roster\_Redacted.pdf.”

<sup>111</sup> Response to DR-228, question 49.

<sup>112</sup> Response to DR-228, question 49; attachment “SVM\_42\_Audit\_Email.pdf.”

<sup>113</sup> Response to DR-228, question 50; attachment “ACRT\_BenchmarkTraining\_Dunsmuir\_2022\_Redacted.pdf.”

<sup>114</sup> [PacifiCorp’s 2022 WMP Update](#), p. 210

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>115</sup> Response to DR-228, question 51; attachment “SVM\_51\_5G2\_Completed\_Checklist\_Redacted.pdf.”

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

#### Statement 34

Statement: “PacifiCorp also provides annual training to foresters including environmental awareness, wildfire preparedness, prevention and response and safety.”<sup>116</sup>

Supporting Information and Analysis: PacifiCorp’s foresters attended environmental awareness/compliance and avian trainings in March 2022.<sup>117</sup> These trainings discussed environmental matters such as cultural resources, sensitive species and habitat, and spills as well as bird management regulations, reporting, and nest management issues.<sup>118</sup>

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

#### Statement 35

Statement: “In 2022, PacifiCorp will provide training and discussion on PacifiCorp’s wildfire mitigation plan to both internal and external vegetation management personnel.”<sup>119</sup>Supporting Information and Analysis: PacifiCorp provided a report from its Learning Management System (LMS) which showed the list of internal personnel that completed the Wildfire Preparedness, Prevention, & Response training in 2022.<sup>120</sup> PacifiCorp also included attendance records from the training conducted in April 2022 for its vegetation management contractors regarding the Wildland Fire Preparedness & Prevention Plan.<sup>121</sup> Additionally, PacifiCorp provided a roster for a training that involved Bird Management<sup>122</sup>

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

---

<sup>116</sup> [PacifiCorp’s 2022 WMP Update](#), p. 210

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>117</sup> Response to DR-228, question 52; attachments

“SVM\_52\_2022\_VegMgmt\_Roster\_Env\_Awareness\_Redacted.pdf” and  
“SVM\_52\_2022\_VegMgmt\_Roster\_Avian\_Redacted.pdf.”

<sup>118</sup> Response to DR-228, question 52; attachments

“SVM\_52\_2022\_Other\_Environmental\_Issues\_Veg\_Agenda\_Slide.pdf” and  
“SVM\_52\_2022\_PP\_Avian\_Agenda\_Slide.pdf”

<sup>120</sup> Response to DR-228, question 53; attachment “SVM\_53\_LMS\_Report\_Redacted.pdf.”

<sup>120</sup> Response to DR-228, question 53; attachment “SVM\_53\_LMS\_Report\_Redacted.pdf.”

<sup>121</sup> Response to DR-228, question 47; attachment

“SVM\_47\_Wildland\_Fire\_Preparedness\_&\_Prevention\_Plan\_2022\_Redacted.pdf.”

<sup>122</sup> Response to DR-228, question 48; attachment “SVM\_48\_Avian\_Environmental\_Training\_Roster\_Redacted.pdf.”

## Finding

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

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

The purpose of this initiative is that “Specific actions, not otherwise described in other WMP initiatives, taken to reduce the ignition probability and wildfire consequence attributable to “at-risk species”, such as trimming, removal, and replacement.”<sup>123</sup>

## Statements, Supporting Information and Analysis, and Conclusions

### Statement 36

Statement: “Vegetation inspections categorize growth by species as: slow, moderate, fast (cycle-buster). Within the HFTD, pruning is performed to prevent vegetation from breaching a 4-foot minimum clearance within one year. This may require additional pruning for at-risk species with very fast growth rates. Pre-listers also identify discretionary removals of at-risk species to eliminate ignition risk and need for cyclical pruning.”<sup>124</sup>

Supporting Information: PacifiCorp does not formally record the categorization of vegetation during inspections and thus, was unable to provide documentation about the growth of species (slow, moderate, fast) identified during vegetation inspections. PacifiCorp explained that inspectors use these categorizations more so as definitions to help them decide which vegetation needs pruning or to determine the minimum post-work clearance distance that must be achieved.<sup>125</sup> Additionally, PacifiCorp records trees that have been pruned. PacifiCorp explained these pruning operations refer to off-cycle patrol inspections and correction work. However, when contractors are performing these inspections, their work releases instruct them to, “identify and address” trees meeting this requirement and to prune them by the end of the year. PacifiCorp provided an example of a contractor work release with this specific instruction for its contractors.<sup>126</sup>

---

<sup>123</sup> [Update Guidelines](#), attachment 2, p. 94

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

<sup>124</sup> [PacifiCorp’s 2022 WMP Update](#), p. 211

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>125</sup> Response to DR-228, question 54.

<sup>126</sup> Response to DR-243, question 74; attachment “5G21\_FIN\_Work\_Release.pdf.”

Conclusion: PacifiCorp provided information consistent with the completion of work identified in this statement. Energy Safety requests that future inspection work include categorization of vegetation to ensure that the 4-foot minimum clearance is maintained within one year.

### Statement 37

Statement: “At-risk species inspection is performed along with other vegetation maintenance inspections. These are performed annually in the HFTD, and in accordance with routine maintenance schedules in other areas.”<sup>127</sup>

Supporting Information and Analysis: PacifiCorp provided multiple Excel files which listed inspections that took place within the HFTD (Tier 2) and associated reliability removals and/or reliability prunes that were conducted in 2022. Reliability removals and prunes are synonymous with high risk and/or hazard tree removals. PacifiCorp completed corrective work as needed if high-risk, or hazard trees were identified during the inspections. The Excel files documented the dates of the inspections, contractors, districts, circuits, contact type (for landowner), type of property, the work identified, and the work completed.<sup>128</sup>

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

## Finding

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

---

<sup>127</sup> [PacifiCorp’s 2022 WMP Update](#), p. 211

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>128</sup> Response to DR-228, question 36; attachments “SVM\_36\_Inventory\_Report\_Distribution.xlsx,” “SVM\_36\_Inventory\_Report\_Transmission.xlsx,” “SVM\_36\_Work\_Complete\_Report\_Distribution.xlsx,” and “SVM\_36\_Work\_Complete\_Report\_Transmission.xlsx.”

## A.16 Initiative 7.3.5.16 Removal and Remediation of Trees with Strike Potential to Electric Lines and Equipment <sup>129</sup>

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.”<sup>130</sup>

### Statements, Supporting Information and Analysis, and Conclusions

#### Statement 38

Statement: “All areas within PacifiCorp’s California service territory are inspected for hazard trees and mitigated during detailed inspections (routine maintenance). In addition, areas within the HFTD are inspected for hazard trees annually as a part of the annual patrols described in sections 7.3.5.11 and 7.3.5.12.”<sup>131</sup>

Supporting Information and Analysis: As discussed in Section 7.3.5.11, 7.3.5.12, and 7.3.5.15, PacifiCorp provided an Excel file listing the total miles inspected in 2022 within the HFTD (Tier 2 and Tier 3). Additionally, PacifiCorp provided Excel files describing identification of reliability (high-risk or hazard trees) removals and/or prunes, as well as safety tips for vegetation at risk of hitting powerlines during annual inspections.<sup>132</sup>

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

---

<sup>129</sup> In [PacifiCorp’s 2022 WMP Update](#), PacifiCorp did not include a section titled “Removal and Remediation of Trees with Strike Potential to Electric Lines and Equipment,” and incorrectly numbered the headings for initiatives 7.3.5.16 through 7.3.5.21. For consistency with the 2022 WMP Guidelines and other audits, Energy Safety has re-numbered the initiatives in this audit.

<sup>130</sup> [Update Guidelines](#), attachment 2, p. 94

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

<sup>131</sup> [PacifiCorp’s 2022 WMP Update](#), p. 215

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>132</sup> Response to DR-228, question 36; attachments “SVM\_36\_Inventory\_Report\_Distribution.xlsx,” “SVM\_36\_Inventory\_Report\_Transmission.xlsx,” “SVM\_36\_Work\_Complete\_Report\_Distribution.xlsx,” and “SVM\_36\_Work\_Complete\_Report\_Transmission.xlsx.”



## Finding

PacifiCorp 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.”<sup>133</sup>

## Statements, Supporting Information and Analysis, and Conclusions

### Statement 39

Statement: “PacifiCorp performs regular inspections on all substations. Substations within the HFTD are inspected for vegetation annually and other substations are inspected biannually.”<sup>134</sup>

Supporting Information and Analysis: PacifiCorp provided an Excel file documenting its monthly inspections of substations completed in 2022. In most cases, substations within both the HFTD and non-HFTD were inspected monthly.<sup>135</sup> PacifiCorp reports a total number of substations as 61. Energy Safety requested the number of annual inspections on substations within the HFTD, as well as biannual inspections on other substations. PacifiCorp stated it conducted 28 substation inspections in the HFTD and 27 substation inspections in the non-HFTD in 2022.<sup>136</sup> Based on the total number of 61 Substations and the completion of work at 55 substations, this leaves 6 substations that are not accounted for in the inspection table. As a result, Energy Safety finds that PacifiCorp did not complete all the work for substation inspections.

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

## Finding

---

<sup>133</sup> [Update Guidelines](#), attachment 2, p. 94

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

<sup>134</sup> [PacifiCorp's 2022 WMP Update](#), p. 213

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>135</sup> Response to DR-228, question 56; attachment “SVM\_56\_Substation\_Inspection\_Data.xlsx.”

<sup>136</sup> Response to DR-228, question 57.

PacifiCorp did not provide information consistent with the completion of work identified in Initiative 7.3.5.17: Substation Inspections.

## 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.”<sup>137</sup>

### Statements, Supporting Information and Analysis, and Conclusions

#### Statement 40

Statement: “PacifiCorp removes or prunes any vegetation identified in the substation inspection consistent with cycle work.”<sup>138</sup>

Supporting Information and Analysis: PacifiCorp states that it removes or prunes any vegetation identified during substation inspections, however, PacifiCorp explained that it “does not track [vegetation] work conducted separate from powerlines within the mobile data management software.”<sup>139</sup> Although PacifiCorp was unable to provide an individual list of substations with vegetation work completed in 2022,<sup>140</sup> PacifiCorp provided an Excel file which documents work completed along transmission or distribution lines, including substation and vegetation work completed if needed.<sup>141</sup>

Conclusion: PacifiCorp provided information consistent with the completion of work identified in this statement. Energy Safety requests that PacifiCorp track all vegetation pruning for substations inspections separate from other vegetation management work.

### Finding

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

---

<sup>137</sup> [Update Guidelines](#), attachment 2, p. 94

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

<sup>138</sup> [PacifiCorp's 2022 WMP Update](#), p. 213

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>139</sup> Response to DR-228, question 58.

<sup>140</sup> Response to DR-228, question 59.

<sup>141</sup> Response to DR-228, question 58; attachment “SVM\_58\_Work\_Complete\_Report.xlsx.”

## 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.”<sup>142</sup>

### Statements, Supporting Information and Analysis, and Conclusions

#### Statement 41

**Statement:** “PacifiCorp began implementing more detailed records system in 2020 and have implemented updates to the forms and information collected for 2022...The company also began characterizing general vegetation location and volume near assets using publicly available data on tree canopy and more specific information from remote sensing pilot programs.”<sup>143</sup>

**Supporting Information and Analysis:** PacifiCorp updated various forms – including its Inventory, Work Completed, Alder, Audit Exception, and Property Owner Refusal Forms – in 2022 to collect additional information, such as identified species and work codes. PacifiCorp also developed new forms, such as the facility point inspection (FPI) Form, which tracks the correction of vegetation conditions identified during FPI. Further, PacifiCorp transitioned its Crew Visits, Safety Inspection, and Tree Coupon forms from paper-based forms to electric versions.<sup>144</sup>

Additionally, PacifiCorp stated it incorporated publicly available data in its Localized Risk Assessment Model (LRAM) to characterize general vegetation location and volume near assets in 2022. Although PacifiCorp provided a user guide of the LRAM, which stated, “tree canopy coverage was integrated into the fire risk model”, PacifiCorp admitted it could not provide additional clarification regarding its statement. The user guide provides instructions for using the model but is not itself evidence that PacifiCorp used the model. Further, PacifiCorp could not provide any documents indicating that it used the model.**Conclusion:** PacifiCorp did not provide information consistent with the completion of work identified in this statement.

---

<sup>142</sup> [Update Guidelines](#), attachment 2, p. 94

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

<sup>143</sup> [PacifiCorp’s 2022 WMP Update](#), p. 214

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>144</sup> Response to DR-228, question 60.

## Finding

PacifiCorp did not provide information consistent with the completion of work identified in Initiative 7.3.5.19: Vegetation Management System.

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

The purpose of this initiative is that “Actions taken to ensure that vegetation does not encroach upon the minimum clearances set forth in Table 1 of GO 95, measured between line conductors and vegetation, such as trimming adjacent or overhanging tree limbs.”<sup>145</sup>

## Statements, Supporting Information and Analysis, and Conclusions

### Statement 42

Statement: “PacifiCorp conducted vegetation management activities consistent with its Vegetation SOP and this WMP in 2021 and will continue implementing this initiative in 2022.”<sup>146</sup>

Supporting Information and Analysis: PacifiCorp provided a current copy of its Vegetation Standard Operating Procedures (SOP), which provides an overview of PacifiCorp’s vegetation management program for its transmission and distribution facilities. The SOP includes program descriptions, specifications, and protocols for multiple vegetation management activities. The SOP specifically identifies many vegetation management programs and activities included in this audit such as high-risk tree removals, discretionary tree removals, slash disposal and lop and scatter techniques, emergency response restoration, and pole clearing.<sup>147</sup> PacifiCorp provided documentation for these activities in statements 15, 16, 18, 37, and 38.

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

### Statement 43

---

<sup>145</sup> [Update Guidelines](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true), attachment 2, p. 95 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51912&shareable=true, accessed May 10, 2024).

<sup>146</sup> [PacifiCorp’s 2022 WMP Update](https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true), p. 216 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true, accessed June 6, 2024).

<sup>147</sup> Response to DR-228, question 62; attachment “SVM\_62\_SOP.pdf.”

Statement: “In 2022, PacifiCorp will identify a distribution circuit or portion of a distribution circuit to implement enhanced overhang clearances, as indicated in Section 4.4.1 starting on page 48 with the intent to identify resources needed to execute this enhanced practice including equipment, vegetation management crews, increased customer coordination, work management and tracking. Species prone to limb failure would be targeted for enhanced overhang clearances.”<sup>148</sup>

Supporting Information and Analysis: PacifiCorp provided an Excel file which identifies portions of circuits that were piloted for the implementation of the overhang reduction project in 2022. The piloted enhanced clearance project identified various species along the 2.35 miles of circuits in the Mount Shasta district and was completed in December 2022. Based on PacifiCorp’s Localized Risk Assessment Model (LRAM), the average forester score for the four areas of the circuits totaled to about 0.659.<sup>149</sup> PacifiCorp utilized a three-member crew, a chipper, and cutting tools to conduct the enhanced clearance project.<sup>150</sup>

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

## Finding

PacifiCorp 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 its assessment tool/standard.”<sup>151</sup>

## Statements, Supporting Information and Analysis, and Conclusions

---

<sup>148</sup> [PacifiCorp’s 2022 WMP Update](#), p. 217

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>149</sup> Response to DR-228, question 63; attachment “SVM\_63\_Overhang\_Reduction\_Pilot\_Areas.xlsx.”

<sup>150</sup> Response to DR-228, question 64.

<sup>151</sup> [Update Guidelines](#), attachment 2, p. 95

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

**Statement 44**

Statement: “PacifiCorp foresters and/or vegetation management contractors patrol wildfire impacted areas adjacent to electrical infrastructure to identify trees impacted by fire within strike distance of electrical infrastructure, determine risk, and determine strategy for mitigating the identified risk. Trees that pose an imminent risk are topped or felled to eliminate the risk as soon as practicable.”<sup>152</sup>

Supporting Information and Analysis: PacifiCorp provided three examples of foresters and/or vegetation management contractors patrolling wildfire impacted areas that were adjacent to electrical infrastructure in 2022. These examples include work summaries of the patrols along PacifiCorp’s circuits and transmission lines in response to the McKinney Fire and Mill Fire in August and September 2022, respectively.<sup>153</sup> As a result of these two fires, PacifiCorp identified approximately 2,178 trees in need of mitigation through either removal or pruning.<sup>154</sup>

PacifiCorp also provided an example of a tree that was an imminent risk to PacifiCorp’s electrical facilities. PacifiCorp removed this hazard pine tree within 1.5 hours of its identification in August 2022.<sup>155</sup>

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

## Finding

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

---

<sup>152</sup> [PacifiCorp’s 2022 WMP Update](#), p. 217

(<https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56804&shareable=true>, accessed June 6, 2024).

<sup>153</sup> Response to DR-228, question 65; attachments “SVM\_65\_5G40\_WRK\_Inventory\_2022\_McKinney\_Fire.xlsx,” “SVM\_65\_5G83\_WRK\_Inventory\_2022\_Mill\_Fire.xlsx,” and “SVM\_65\_YRE668075\_WRK\_Inventory\_2022\_Mill\_Fire.xlsx.”

<sup>154</sup> Response to DR-228, question 66.

<sup>155</sup> Response to DR-228, question 67; attachment “SVM\_67\_5G40\_WRK\_Inventory\_2022\_Imminent\_Location.xlsx.”

**DATA DRIVEN**  
**FORWARD-THINKING**  
**INNOVATIVE**  
**SAFETY FOCUSED**

