

**OFFICE OF ENERGY INFRASTRUCTURE SAFETY** 715 P Street, 15th Floor | Sacramento, CA 95814 916.902.6000 | www.energysafety.ca.gov

Caroline Thomas Jacobs, Director

February 21, 2025

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

SUBJECT: Office of Energy Infrastructure Safety's Report on PacifiCorp's 2023 Substantial Vegetation Management Audit

Pursuant to the requirements of California Public Utilities Code section 8386.3(c)(5)(A), the Office of Energy Infrastructure Safety (Energy Safety) completed its audit of PacifiCorp's 2023 vegetation management work pursuant to its 2023-2025 Wildfire Mitigation Plan.

Energy Safety found that PacifiCorp did not provide information consistent with the completion of the work required for five of the 13 vegetation management initiatives. PacifiCorp must submit its Corrective Action Plan response to the 2023 SVM docket<sup>1</sup> in Energy Safety's e-filing system within 30 days from the issuance of this audit. If you have any questions concerning this audit, please e-mail Karen McLaughlin (Karen.McLaughlin@energysafety.ca.gov) and provide a copy to environmentalsciencedivision@energysafety.ca.gov.

Sincerely,

Sheryl Bilbrey

Sheryl Bulbrey

Program Manager, Environmental Science Division

Office of Energy Infrastructure Safety

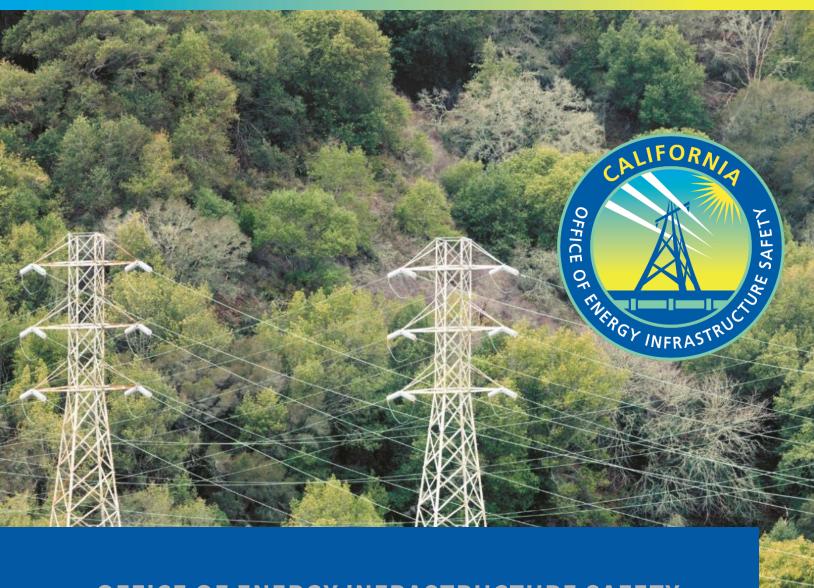
Cc:

Karen McLaughlin, Energy Safety Forest Kaser, CPUC Leslie Palmer, CPUC

<sup>&</sup>lt;sup>1</sup> All documents related to PG&E's 2023 SVM audit are available on Energy Safety's e-filing under the "2023 SVM" docket and available here: (<a href="https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2023-SVM">https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2023-SVM</a>)

Amy McCluskey, PacifiCorp Pooja Kishore, PacifiCorp Tim Clark, PacifiCorp Johnathan Connelly, PacifiCorp

Attachment: PacifiCorp 2023 SVM Audit Report



OFFICE OF ENERGY INFRASTRUCTURE SAFETY
2023 SUBSTANTIAL VEGETATION
MANAGEMENT AUDIT
PACIFICORP

February 2025

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#### **EXECUTIVE SUMMARY**

The Office of Energy Infrastructure Safety (Energy Safety) completed an audit of PacifiCorp's vegetation management commitments from its 2023-2025 Wildfire Mitigation Plan (WMP). The PacifiCorp 2023-2025 WMP had 13 vegetation management initiatives in six programmatic areas.

Energy Safety found that PacifiCorp did not provide information consistent with the completion of all targeted work for five of its thirteen vegetation management initiatives.

For each audit finding for which Energy Safety determined PacifiCorp did not provide information supporting completion of all work commitments in a vegetation management initiative in the WMP, PacifiCorp must address that deficiency as part of a corrective action plan. PacifiCorp must title its response "PacifiCorp 2023 SVM Audit Corrective Action Plan" and submit the response on the 2023 SVM Docket in Energy Safety's E-Filing System within 30 days of receipt of this audit. Requirements for the response are discussed in Section 4 of this document.

Energy Safety is available to meet with PacifiCorp to discuss the audit findings and provide any clarification necessary for PacifiCorp to timely respond to Energy Safety's audit.

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>1</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 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). Specifically, the Vegetation Management and Inspections requirements audited in this document are in Section 8.2 of the WMP. Vegetation Management and Inspections include the following programmatic areas:

- Vegetation inspections
- Vegetation and fuels management
- Vegetation management enterprise system
- Quality assurance / quality control
- · Open work orders
- Workforce planning

The WMP identifies the electrical corporation's objectives in each of these programmatic areas as well as the initiatives that will achieve the stated objectives. Initiatives include one or more specific work commitments. These commitments include both quantitative targets (e.g., completion of a specified number of inspections) and verifiable narrative statements (e.g., implementation of personnel training programs). Work commitments for each initiative may include only quantitative targets, both quantitative targets and narrative statements, or only narrative statements. Energy Safety assessed completeness of all relevant targets and statements.

The substantial vegetation management (SVM) audit includes Energy Safety's analysis of the electrical corporation's work products over the audit year and determines if the electrical corporation provided documentation sufficient to determine if all work commitments were completed for each initiative in its WMP. While the WMP lists the initiatives under programmatic headings, Energy Safety assessed work completion at the initiative level.

#### 2023 PacifiCorp Substantial Vegetation Management Audit

PacifiCorp submitted its 2023 SVM completion notification on January 26, 2024.<sup>2</sup>

Energy Safety has completed its SVM audit of PacifiCorp's vegetation management program activities for 2023. As part of the SVM audit process, Energy Safety identified both vegetation management quantitative commitments and verifiable statements from PacifiCorp's 2023-2025 WMP. Energy Safety then compared the WMP vegetation management commitments and statements to the work performed by PacifiCorp in 2023 using Quarterly Data Reports (QDR), non-spatial data tables, and data request responses submitted by PacifiCorp.

Table 1 of this report includes a list of all vegetation management initiatives and Energy Safety's findings of whether PacifiCorp completed all required work.

The appendix includes a summary of targets and/or commitments, supporting information and analysis, conclusions, and findings for each initiative.

<sup>&</sup>lt;sup>2</sup> <u>PacifiCorp 2023 Notification of Completion of Substantial Vegetation Management Initiatives</u> (January 26, 2024) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56219&shareable=true).

#### 2. 2023 SVM AUDIT FINDINGS

The PacifiCorp 2023-2025 WMP had 13 vegetation management initiatives in six programmatic areas. Energy Safety's findings regarding completion of work for each initiative are shown in Table 1. Audit findings in bold indicate that PacifiCorp was unable to provide sufficient documentation demonstrating that all work was completed for that initiative. A detailed analysis of quantitative targets and narrative statements, supporting information, conclusions and findings for each initiative are included in the appendix.

Table 1. PacifiCorp 2023 SVM Audit Finding Summary

Programmatic Area	Vegetation Management Initiative	Audit Finding
8.2.2. Vegetation Management Inspections	8.2.2.1-3 Vegetation Management Inspections	Completed all work
8.2.3. Vegetation and Fuels Management	8.2.3.1 Pole Clearing	Did not complete all work
8.2.3. Vegetation and Fuels Management	8.2.3.2 Wood and Slash Management	Did not complete all work
8.2.3. Vegetation and Fuels Management	8.2.3.3 Clearance	Did not complete all work
8.2.3 Vegetation and Fuels Management	8.2.3.4 Fall-In Mitigation	Completed all work
8.2.3. Vegetation and Fuels Management	8.2.3.5 Substation Defensible Space	Did not complete all work
8.2.3 Vegetation and Fuels Management	8.2.3.6 High-Risk Species	Did not complete all work
8.2.3 Vegetation and Fuels Management	8.2.3.7 Fire Resilient Right-of-Ways	Completed all work
8.2.3 Vegetation and Fuels Management	8.2.3.8 Emergency Response Vegetation Management	Completed all work
8.2.4 Vegetation Management Enterprise System	8.2.4. Vegetation Management Enterprise System	Completed all work
8.2.5 Quality Assurance and Quality Control	8.2.5. Quality Assurance and Quality Control	Completed all work

Programmatic Area	Vegetation Management Initiative	Audit Finding
8.2.6 Open Work Orders	8.2.6 Open Work Orders	Completed all work
8.2.7 Workforce Planning	8.2.7 Workforce Planning	Completed all work

#### 3. 2023 SVM AUDIT CONCLUSION

Energy Safety reviewed the 13 vegetation management initiatives in PacifiCorp's 2023-2025 WMP and found PacifiCorp provided documentation or information demonstrating it performed all work in eight vegetation management initiatives but was unable to provide supporting documentation or information demonstrating completion of work described in statements and/or targets for the remaining five vegetation management initiatives.

For each audit finding for which Energy Safety determined that PacifiCorp did not provide documentation or information demonstrating completion of all work in its vegetation management commitments, PacifiCorp must submit a response per the requirements outlined in Section 4 to Energy Safety within 30 days of receipt of this audit.

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

#### 4. PACIFICORP AUDIT RESPONSE

PacifiCorp must provide Energy Safety with a response for each initiative in Table 1 with a finding of "did not complete all work" that includes a response addressing the following criteria as described in the Compliance Guidelines<sup>3</sup>:

- Should PacifiCorp disagree with an audit finding that all work was not performed per the WMP, PacifiCorp must provide the basis for that conclusion including detailed supporting documentation and rationale for that response.
- 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 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 compliance period, a detailed accounting of any corrective action measures implemented since the end of the 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. The response must be titled "PacifiCorp's 2023 SVM Audit Corrective Action Plan YYYYMMDD." 4

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57320&shareable=true)

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<sup>&</sup>lt;sup>3</sup> Energy Safety Compliance Guidelines (September 2024), pgs. 12-13

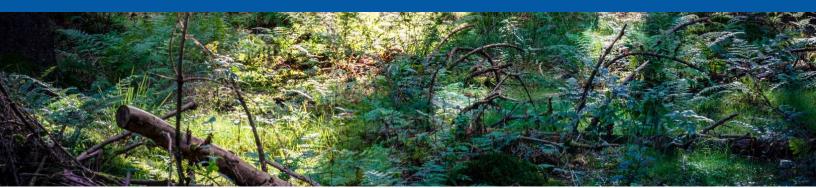
<sup>&</sup>lt;sup>4</sup> "YYYYMMDD" represents the date of submission.

# DATA DRIVEN FORWARD-THINKING INNOVATIVE SAFETY FOCUSED





## APPENDIX TARGETS, SUPPORTING INFORMATION AND ANALYSIS, CONCLUSIONS, AND FINDINGS



#### **APPENDIX SUMMARY**

Energy Safety analyzed each of the thirteen vegetation management initiatives listed in PacifiCorp's 2023-2025 WMP as part of this audit. Energy Safety identified the vegetation management work commitments, including quantitative targets and narrative statements, relevant to each initiative and compared that to the work performed by PacifiCorp in 2023. Determination of whether all work was complete for each initiative was based on documentation submitted by PacifiCorp. For any commitment or statement for which PacifiCorp was not able to provide documentation or information to support completion, PacifiCorp must submit a response as part of a corrective action plan per the requirements outlined in Section 4.

#### **INITIATIVE ANALYSIS**

For each initiative in Section 8.2 (Vegetation Management and Inspections) of PacifiCorp's 2023-2025 WMP, Energy Safety assessed completion of all quantitative targets as well as verifiable, narrative statements. For each target/statement, Energy Safety reviewed and analyzed the supporting information provided by PacifiCorp and reached a conclusion regarding completion of work described by the target/statement. Energy Safety then provided a finding for each initiative. A finding of "Completed all work" was given only if PacifiCorp provided sufficient documentation or supporting information demonstrating completion of all targets and/or statements within that initiative. If any target or statement was incomplete or insufficiently documented, the overall finding for the initiative was "did not complete all work."

#### 8.2.2 Vegetation Management Inspections

The purpose of this initiative is to describe the "Inspections of vegetation around and adjacent to electrical facilities and equipment that may be hazardous by growing, blowing, or falling into electrical facilities or equipment." Inspection activities along Distribution and Transmission lines included Detailed Vegetation Inspections and Off-Cycle Patrol Inspections, which are analyzed in the sub-sections below.

## 8.2.2.1 Detailed Inspections and Management Practices for Vegetation Clearances around Distribution Electrical Lines and Equipment

### **Quantitative Target or Commitment, Supporting Information & Analysis, and Conclusion**

PacifiCorp provided the following target in its 2023-2025 WMP.<sup>6</sup> For ease of comparison, the WMP target and work completed are summarized below:

Initiative Activity	PacifiCorp's 2023 Target	Completed in 2023
Detailed Inspection – Distribution	829 circuit miles	830 circuit miles

<u>Supporting Information and Analysis:</u> PacifiCorp provided its 2023 miles tracker which recorded detailed inspections along approximately 830 distribution circuit miles.<sup>7</sup> Thus, PacifiCorp achieved its Detailed Inspection-Distribution (VM-01) target in 2023.

PacifiCorp's 2023-2025 WMP states that "Detailed inspections are designed to identify vegetation conditions for correction that are inconsistent with distribution specifications in the company's Vegetation Management Standard Operating Procedures (Vegetation SOP)." 8 These actions are audited in 8.2.3.3 Clearance below.

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>5</sup> Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines (hereafter Technical Guidelines) (December 6, 2022), p. A-24

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>&</sup>lt;sup>6</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 185-187

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>7</sup> Data Request 261, Questions 2 and 8; attachment: "Attach Energy Safety 2-1.xlsx."

<sup>&</sup>lt;sup>8</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 190

<u>Conclusion:</u> PacifiCorp provided information consistent with the completion of work for this target.

## 8.2.2.2 Detailed Inspections and Management Practices for Vegetation Clearances around Transmission Electrical Lines and Equipment

## **Quantitative Target or Commitment, Supporting Information & Analysis, and Conclusion**

PacifiCorp provided the following target in its 2023-2025 WMP.<sup>9</sup> For ease of comparison, the WMP target and work complete are summarized below:

Initiative Activity	PacifiCorp's 2023 Target	Completed in 2023
Detailed Inspection -	264 line miles	265 line miles
Transmission		

<u>Supporting Information and Analysis:</u> PacifiCorp provided its 2023 miles tracker, based on its annual work plan, which recorded detailed inspections along 265 transmission line miles in 2023. Thus, PacifiCorp achieved its Detailed Inspection-Transmission (VM-02) target in 2023.

PacifiCorp's 2023-2025 WMP states that "Detailed inspections are designed to identify vegetation conditions for correction that are inconsistent with distribution specifications in the company's Vegetation Management Standard Operating Procedures (Vegetation SOP)." <sup>11</sup> These actions are audited in 8.2.3.3 Clearance below.

<u>Conclusion:</u> PacifiCorp provided information consistent with the completion of work for this target.

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>9</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 185-187 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>10</sup> Data Request 261, Questions 3 and 8; attachment: "Attach Energy Safety 2-1.xlsx."

<sup>&</sup>lt;sup>11</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 190

## **8.2.2.3 Patrol Inspections of Vegetation around Distribution Electrical Lines and Equipment**

## **Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion**

PacifiCorp provided the following target in its 2023-2025 WMP.<sup>12</sup> For ease of comparison, the WMP target and work complete are summarized below:

Initiative Activity	PacifiCorp's 2023 Target	Completed in 2023
Patrol Inspection – Distribution	1,027 circuit miles	1,027 circuit miles
Patrol Inspection – Transmission	329-line miles	329-line miles

#### **Patrol Inspection - Distribution**

<u>Supporting Information and Analysis:</u> PacifiCorp provided an Excel file of its 2023 miles tracker demonstrating that it conducted patrol inspections along 1,027 distribution circuit miles.<sup>13</sup> The file included the line identification, location, contractor and forester names, and number of miles inspected on each line. This file demonstrated that PacifiCorp achieved its Patrol Inspection - Distribution (VM-03) target in 2023.

PacifiCorp also included inventory reports of work prescribed as a result of patrol inspections along distribution lines. Completion of this work is addressed under section 8.2.3.3 Clearance below.<sup>14</sup>

<u>Conclusion:</u> PacifiCorp provided information consistent with the completion of work for this target associated with Patrol Inspections – Distribution (VM-03).

#### **PATROL INSPECTION - TRANSMISSION**

<u>Supporting Information and Analysis:</u> PacifiCorp provided an Excel file of its 2023 miles tracker demonstrating that it conducted patrol inspections along 329 transmission line miles.<sup>15</sup> The file included the line identification, location, contractor and forester names, and

<sup>&</sup>lt;sup>12</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 185-187

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>13</sup> Data Request 261, Question 4; attachment: "Attach Energy Safety 4-1.xlsx."

<sup>&</sup>lt;sup>14</sup> Data Request 261, Questions 4, 5, and 13; attachments: "Attach Energy Safety 4-2.xlsx".

<sup>&</sup>lt;sup>15</sup> Data Request 261, Questions 4, 5, and 13; attachments: "Attach Energy Safety 4-1.xlsx," "Attach Energy Safety 5-1.xlsx," and "Attach Energy Safety 13.xlsx."

number of miles inspected on each line. This file demonstrated that PacifiCorp achieved its Patrol Inspection - Transmission (VM-04) target in 2023.

PacifiCorp also included inventory reports of the work prescribed as a result of the patrol inspections along transmission lines, including the inspection date, district, line identifier, and work description and summary (of the mitigation work performed). <sup>16</sup> Completion of this work is addressed under section 8.2.3.3 Clearance below. <sup>17</sup>

<u>Conclusion:</u> PacifiCorp provided information consistent with the completion of work for this target associated with Patrol Inspections – Transmission (VM-04).

#### **Finding – 8.2.2 Vegetation Management Inspections**

PacifiCorp provided information consistent with the completion of work identified in 8.2.2.1 Detailed Vegetation Inspections, 8.2.2.2 Off-Cycle Patrol Inspections, and 8.2.2.3 Patrol Inspections of Vegetation Around Distribution Electrical Lines and Equipment. Therefore, Energy Safety concludes that PacifiCorp completed all work related to Initiative 8.2.2 Vegetation Management Inspections.

<sup>&</sup>lt;sup>16</sup> Data Request 261, Questions 4, 5, and 13; attachments: "Attach Energy Safety 4-2.xlsx" and "Attach Energy Safety 5-2.xlsx."

<sup>&</sup>lt;sup>17</sup> Data Request 261, Questions 4, 5, and 13; attachments: "Attach Energy Safety 4-2.xlsx".

## 8.2.3.1 Vegetation and Fuels Management – Pole Clearing

The purpose of this initiative is to describe the "Plan and execution of vegetation removal around poles per Public Resources Code section 4292 and outside the requirements of Public Resources Code section 4292 (e.g., pole clearing performed outside of the State Responsibility Area)."<sup>18</sup>

#### **Quantitative Target or Commitment, Supporting Information & Analysis, and Conclusion**

PacifiCorp provided the following target in its 2023-2025 WMP.<sup>19</sup> For ease of comparison, the WMP target and work complete are summarized below:

Initiative Activity	PacifiCorp's 2023 Target	Completed in 2023
Fuels Management – Pole	3,126 Poles brushed in LRA	3,100 Poles brushed in LRA
Clearing beyond PRC 4292	HFTD areas	HFTD areas

<u>Supporting Information and Analysis:</u> PacifiCorp provided an Excel file reporting the number of poles brushed in Local Responsibility Areas (LRA) HFTD areas beyond PRC 4292 requirements in 2023 and included the following characteristics of each pole brushed: pole ID, HFTD designation, LRA designation, PRC 4292 exemption status, inspection date, and work prescribed, if applicable.<sup>20</sup> Additionally, PacifiCorp provided pole treatment reports from 2023, which included images of the pole/work site in compliance with vegetation clearances from the pole clearing activities.<sup>21</sup> These reports also included the date of pole treatment completion, application area, and the number of poles cleared and treated.

From these reports, PacifiCorp demonstrated that it cleared 3,100 poles in LRA HFTD areas. Thus, PacifiCorp fell short of its Fuels Management - Pole Clearing beyond PRC 4292 (VM-05) target by 26 poles.

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

<sup>&</sup>lt;sup>18</sup> Technical Guidelines (December 6, 2022), p. A-24

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>&</sup>lt;sup>19</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 185-187

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>20</sup> Data Request 261, Question 18; attachments: "Attach Energy Safety 1-1.xlsx" and "Attach Energy Safety 18-1.xlsx."

<sup>&</sup>lt;sup>21</sup> Data Request 261, Question 18; attachment: "Attach Energy Safety 18-2.xlsx."

#### Finding - 8.2.3.1 Pole Clearing

PacifiCorp did not provide information consistent with the completion of work identified in 8.2.3.1 Pole Clearing. PacifiCorp must provide a corrective action plan addressing the deficiency identified relative to its pole clearing target.

## 8.2.3.2 Vegetation and Fuels Management – Wood and Slash Management

The purpose of this initiative is to take actions "to manage all downed wood and "slash" generated from vegetation management activities."<sup>22</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 1

<u>Statement:</u> "Pacific Power manages slash in developed areas by chipping or removing (recycles where practicable) it where accessible, unless the property owner indicates otherwise. In rural, off-road areas Pacific Power uses a lop and scatter and chipping (where accessible) practice to reduce the volume of available fuel within the right-of-way and adheres with land managing agency requirements." <sup>23</sup>

Supporting Information and Analysis: PacifiCorp provided a report identifying approximately 366 loads of chips transported to off-site locations for slash management removal.<sup>24</sup> However, the off-load chip report did not include the location of origin demonstrating that the loads were removed from developed areas. PacifiCorp clarified that the post-audit of this activity would only identify chips left in urban areas without proper authorization.<sup>25</sup>

In its 2023-2025 WMP, PacifiCorp states: "Pacific Power does not have a separate wood and slash management program or initiative beyond the management practices as identified in its Vegetation SOP." <sup>26</sup> In response to DR 261, PacifiCorp explained that it did not record all activities related to wood and slash management because slash removal was included in its protocols and therefore did not require documentation. However, because wood and slash management is one of the required initiatives in the WMP Technical Guidelines, <sup>27</sup> PacifiCorp must track work completed on this initiative in such a way that Energy Safety can verify work was completed.

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

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<sup>&</sup>lt;sup>22</sup> Technical Guidelines (December 6, 2022), p. A-24

<sup>&</sup>lt;sup>23</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 200

<sup>&</sup>lt;sup>24</sup> Data Request 261, Question 17; attachment: "Attach Energy Safety 17-2.xlsx."

<sup>&</sup>lt;sup>25</sup> Data Request 261, Question 17; attachment: "CA 2023-2025-WMPs Energy Safety 261 (1-35) 9-25-24.pdf," p. 21.

<sup>&</sup>lt;sup>26</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 200

<sup>&</sup>lt;sup>27</sup> Technical Guidelines (December 6, 2022), p. A-24

PacifiCorp did provide a file that detailed nine instances of slash management activities (chipping and/or lop and scatter techniques) that were identified and recorded during inspections in 2023.<sup>28</sup> The file provided coordinates for these entries. For the three instances where the lop and scatter technique was applied, the coordinates confirmed that the locations were generally rural, surrounded by predominantly natural landscapes, and outside of urban or suburban areas.

While the documents provided by PacifiCorp indicate that some work on slash removal was completed, Energy Safety cannot confirm wood and slash were removed in all or most instances. Failure to manage slash debris following tree trimming and removal activities is an ignition risk and would contribute to unnecessary risk on the system. Therefore, documentation of where slash work was completed and the vegetation management activities associated with the removals is necessary for PacifiCorp to demonstrate that it met the objective of the WMP. PacifiCorp must submit documentation identifying the locations and dates where slash was removed or lopped and scattered except when beyond PacifiCorp's control. Without this documentation, PacifiCorp has not demonstrated that the work was completed.

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

#### Finding - 8.2.3.2 Wood and Slash Management

PacifiCorp did not provide information consistent with the completion of work identified in 8.2.3.2 Wood and Slash Management. PacifiCorp must provide a corrective action plan addressing the deficiency identified in Statement 1.

<sup>&</sup>lt;sup>28</sup> Data Request 261, Question 17; attachment: "Attach Energy Safety 17-1.xlsx."

## 8.2.3.3 Vegetation and Fuels Management – Clearance

The purpose of this initiative is to take actions "after inspection to ensure that vegetation does not encroach upon electrical equipment and facilities, such as tree trimming." 29

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 2

<u>Statement:</u> "Detailed inspections are designed to identify vegetation conditions for correction that are inconsistent with distribution specifications in the company's Vegetation Management Standard Operating Procedures (Vegetation SOP). Correcting these conditions, which is discussed in Section 8.2.3.[3] minimizes safety and reliability risks posed by trees and other incompatible vegetation that could encroach upon or grow near power lines." <sup>30</sup>

<u>Supporting Information and Analysis:</u> PacifiCorp provided an inventory report showing 2,953 entries of locations where vegetation work was completed as a result of detailed inspections along distribution circuits (audited in Section 8.2.2.1), which PacifiCorp stated were inconsistent with its SOP and received corrective action. <sup>31</sup> The report included inspection dates, districts, circuit identifiers, and work description and summaries of the mitigation work performed. <sup>32</sup>

Additionally, PacifiCorp included a report of the transmission inspections completed in 2023 (audited in Section 8.2.2.2) as well as an inventory report of vegetation conditions identified during these detailed transmission inspections and vegetation management work prescribed.<sup>33</sup> Both reports included information relating to the inspection date, district, line identifier, and work description and summary of the mitigation work performed. The inventory report showed 103 entries of locations where vegetation work was completed as a result of detailed inspections along transmission circuits. The report included inspection

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>29</sup> Technical Guidelines (December 6, 2022), p. A-24

<sup>&</sup>lt;sup>30</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 190

<sup>&</sup>lt;sup>31</sup> Data Request 261, Questions 2, 8, and 10; attachments: "Attach Energy Safety 2-2.xlsx" and "Attach Energy Safety 8-2.xlsx."

<sup>&</sup>lt;sup>32</sup> Data Request 261, Questions 2, 8, and 10; attachments: "Attach Energy Safety 2-2.xlsx" and "Attach Energy Safety 8-2.xlsx."

<sup>&</sup>lt;sup>33</sup> Data Request 261, Questions 8 and 10; attachments: "Attach Energy Safety 8-3.xlsx" and "Attach Energy Safety 3.xlsx."

dates, districts, circuit identifiers, and work description and summaries (of the mitigation work performed).<sup>34</sup>

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

#### Statement 3

<u>Statement:</u> "Patrol inspections are designed to identify vegetation conditions for correction that are inconsistent with distribution specifications in the company's Vegetation Management Standard Operating Procedures (Vegetation SOP). Correcting these conditions, which is discussed in Section 8.2.3.[3] minimizes safety and reliability risks posed by trees and other incompatible vegetation that could encroach upon or grow near power lines." <sup>35</sup>

Supporting Information and Analysis: PacifiCorp provided an Excel file of its 2023 miles tracker demonstrating that it conducted patrol inspections along 1,027 distribution circuit miles (audited in Section 8.2.2.3).<sup>36</sup> The file included the line identification, location, contractor and forester names, and number of miles inspected on each line. PacifiCorp also included inventory reports of work prescribed as a result of patrol inspections along distribution lines, including the inspection date, district, line identifier, and work description and summary (of the mitigation work performed).<sup>37</sup>

PacifiCorp also provided an Excel file of its 2023 miles tracker demonstrating that it conducted patrol inspections along 329 transmission line miles (audited in Section 8.2.2.3). The file included the line identification, location, contractor and forester names, and number of miles inspected on each line. PacifiCorp also included inventory reports of the work prescribed as a result of the patrol inspections along transmission lines, including the inspection date, district, line identifier, and work description and summary (of the mitigation work performed). <sup>39</sup>

<u>Conclusion:</u> PacifiCorp provided information consistent with the completion of work for this statement.

<sup>&</sup>lt;sup>34</sup> Data Request 261, Questions 2, 8, and 10; attachments: "Attach Energy Safety 2-2.xlsx" and "Attach Energy Safety 8-2.xlsx."

<sup>&</sup>lt;sup>35</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 195-196

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>36</sup> Data Request 261, Question 4; attachment: "Attach Energy Safety 4-1.xlsx."

<sup>&</sup>lt;sup>37</sup> Data Request 261, Questions 4, 5, and 13; attachments: "Attach Energy Safety 4-2.xlsx".

<sup>&</sup>lt;sup>38</sup> Data Request 261, Questions 4, 5, and 13; attachments: "Attach Energy Safety 4-1.xlsx," "Attach Energy Safety 5-1.xlsx," and "Attach Energy Safety 13.xlsx."

<sup>&</sup>lt;sup>39</sup> Data Request 261, Questions 4, 5, and 13; attachments: "Attach Energy Safety 4-2.xlsx" and "Attach Energy Safety 5-2.xlsx."

#### **Statement 4**

<u>Statement:</u> "Additionally, limited inspections may be conducted/triggered associated with customer requests, agencies, and Pacific Power T&D Operations requests based on observed conditions and/or reliability metrics." 40

<u>Supporting Information and Analysis:</u> PacifiCorp provided its customer request report which documented 13 requests where customers were concerned with vegetation conditions in 2023 and PacifiCorp responded with an inspection and, when necessary, a corrective action. The request number, processing completion date, district, feeder or line number, inspection date, description of work, and completion date were included. Based on this report, pruning or removal services to PacifiCorp's distribution lines occurred within about a week of the customers' requests. PacifiCorp also provided a report of the distribution work completed in 2023 due to customer, agency, and/or internal operations' requests. This report includes the district, feeder number, and date and summary of the work completed.

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

#### Statement 5

<u>Statement:</u> "Pacific Power also prunes vegetation beyond minimum required clearances in multiple ways as presented in the Vegetation SOP. First, Pacific Power uses increased clearance distances on distribution lines for certain species of trees, depending on tree growth rate. Pacific Power separates vegetation into three categories: (a) slow growing; (b) moderate growing; and (c) fast growing. In all cases, Pacific Power applies the 12-foot minimum post-work clearance for slow-growing species. In certain cases, Pacific Power applies an increased clearance for moderate growing and fast-growing species."

Supporting Information and Analysis: PacifiCorp provided distribution, including patrol corrective maintenance, and transmission work complete reports for 2023. 44 According to these files, PacifiCorp conducted reliability pruning for 9,136 and 752 vegetation species identified along distribution and transmission lines, respectively. The reports included the vegetation management activity's tracking ID, date of work completed, feeder or line identifier, species identification, and summaries of the work performed on specific species types. However, PacifiCorp was unable to provide documentation showing how vegetation

<sup>&</sup>lt;sup>40</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 195

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>41</sup> Data Request 261, Question 12; attachment: "Attach Energy Safety 12-1.xlsx."

<sup>&</sup>lt;sup>42</sup> Data Request 261, Question 12; attachment: "Attach Energy Safety 12-2.xlsx."

<sup>&</sup>lt;sup>43</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 202

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>44</sup> Data Request 261, Question 21; attachments: "Attach Energy Safety 20.xlsx" and "Attach Energy Safety 21.xlsx."

growth rate was classified (slow, moderate, or fast) and did not record the clearance distances completed at the time of pruning. Because moderate- and fast-growing species can rapidly encroach upon electrical infrastructure after pruning, additional clearances relieve risk on the system by increasing space and thus time before the species presents a risk to infrastructure. To demonstrate completion of this commitment, PacifiCorp should have provided growth rate classifications for the species removed and identified whether increased clearances were applied for moderate- and fast-growing species.

PacifiCorp explained that inspectors use these classifications to help crews decide which vegetation needs pruning and determine the minimum post-work clearance distance that must be achieved. PacifiCorp also stated that contractors establish post-work clearance distances based on professional judgment and field observations of growth rates. <sup>45</sup> PacifiCorp did state that clearance distances were subject to verification during post-audit assessments <sup>46</sup> and provided an Excel file entitled 'Audit Exceptions 2022' <sup>47</sup> of all post-audit results for detailed and patrol inspections in 2023. <sup>48</sup> This file showed post-audit assessments for corrective and routine maintenance work for patrol and detailed inspections among distribution and transmission lines. Additionally, the file contained 16 instances of audit exceptions, under the exception type 'conductor', which related to tree conductor clearance issues recorded. However, the file does not include the classifications or whether increased clearances were applied. <sup>49</sup>

While PacifiCorp was able to demonstrate that it completed clearance work on transmission and distribution lines in the reports provided, it could not demonstrate that it implemented the expanded clearances for fast growing species. Because fast-growing species require increased clearances to minimize risk of encroachment on electrical lines and facilities, PacifiCorp must demonstrate it classified vegetation by growth rate and implemented appropriate clearances based on those classifications. The information PacifiCorp submitted did not demonstrate that the work described in this statement was completed. In its CAP response, PacifiCorp should provide documentation showing that increased clearances were achieved based on the growth rate, or the steps it will take to record this information in future years to minimize the risk of encroachment of fast-growing species on its electrical infrastructure.

<sup>45</sup> Data Request 261, Question 21; attachment: "CA 2023-2025-WMPs Energy Safety 261 (1-35) 9-25-24.pdf," p. 26.

<sup>&</sup>lt;sup>46</sup> Data Request 261, Question 21; attachment: "CA 2023-2025-WMPs Energy Safety 261 (1-35) 9-25-24.pdf," p. 26.

<sup>&</sup>lt;sup>47</sup> This attachment represents PacifiCorp's Audit Exception Report for calendar year 2023. The report was revised in 2022 and the name changed to "PpAuditException2022" to draw a distinction between this report and previous versions.

<sup>&</sup>lt;sup>48</sup> Data Request 261, Question 32; attachment: "Attach Energy Safety 32.xlsx".

<sup>&</sup>lt;sup>49</sup> Data Request 261, Supplemental Response to Energy Safety 32;"CA 2023-2025-WMPs Energy Safety DR-261 (1-35)

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

#### Finding - 8.2.3.3 Clearance

PacifiCorp did not provide information consistent with the completion of work identified in 8.2.3.3 Clearance. PacifiCorp must provide a corrective action plan addressing the deficiency identified in Statement 5.

## 8.2.3.4 Vegetation and Fuels Management – Fall-In Mitigation

The purpose of this initiative is to take actions "to identify and remove or otherwise remediate trees that pose a high risk of failure or fracture that could potentially strike electrical equipment."<sup>50</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### **Statement 6**

<u>Statement:</u> "Pacific Power identifies and addresses fall-in risk, or hazard trees as part of routine maintenance (detailed inspections) and annual patrols (circuits within or partially within HFTD). Hazard trees identified during inspections are removed or pruned sufficiently to eliminate the hazard. In addition to inspections conducted by vegetation management contractors/personnel, Pacific Power district operations (through line inspections they conduct), customers, agencies, etc., may identify fall-in risk conditions that are vetted by vegetation management and mitigated as warranted."<sup>51</sup>

<u>Supporting Information and Analysis:</u> PacifiCorp provided two Excel files which identified potentially hazardous vegetation conditions along distribution and transmission lines during detailed inspections and annual patrols in 2023.<sup>52</sup> Based on these reports, PacifiCorp removed 5,095 hazard trees, of which 3,699 (73%) were removed along distribution lines and 1,396 (27%) were removed along transmission lines. PacifiCorp also conducted reliability pruning on 740 trees within strike distance of conductor, of which 677 (91%) were along distribution lines and 63 (9%) were along transmission lines.

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

#### Finding – 8.2.3.4 Fall-In Mitigation

PacifiCorp provided information consistent with the completion of work identified in 8.2.3.4 Fall-In Mitigation.

<sup>&</sup>lt;sup>50</sup> Technical Guidelines (December 6, 2022), p. A-24

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>&</sup>lt;sup>51</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 203

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>52</sup> Data Request 261, Question 24; attachments: "Attach Energy Safety 20.xlsx" and "Attach Energy Safety 21.xlsx."

## 8.2.3.5 Vegetation and Fuels Management – Substation Defensible Space

The purpose of this initiative is to take actions "to reduce ignition probability and wildfire consequence due to contact with substation equipment." <sup>53</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### **Statement 7**

<u>Statement:</u> "Pacific Power performs substation inspections for vegetation to remove overhang limbs or climbable vegetation and remove weeds. As part of the detailed and patrol inspections, hazard trees are identified and mitigated to address fall-in risk." <sup>54</sup>

Supporting Information and Analysis: In its response to Data Request 261, PacifiCorp stated that substation perimeter inspections were not tracked by its vegetation management department because they were combined inspections of lines entering and exiting the facility. PacifiCorp further stated that Substation Operations tracks substation inspections, which would flag any vegetation-related concerns to the vegetation management department.<sup>55</sup> PacifiCorp provided an Excel file of substation inspections conducted by its Substation Operations department in 2023.56 However, the file did not have any information regarding completion of vegetation clearance work around substations. PacifiCorp stated it was unable to provide documentation of work conducted as a result of substation inspections because it was "not geospatially tied to the substation within PacifiCorp's database." Because vegetation management inspections and corrective actions were not sufficiently documented, the information PacifiCorp provided did not demonstrate that all work commitments in this statement were completed. Defensible space acts to both protect the substation from wildfire and limit the potential spread of a fire that ignites within the substation into adjacent wildlands. Therefore, completion of vegetation management work to provide this space is necessary to minimize wildfire risk. In its CAP response, PacifiCorp must either provide documentation showing that vegetation management work was completed as a part of its substation inspections or provide information on how it plans to track this work in future years.

<sup>&</sup>lt;sup>53</sup> <u>Technical Guidelines</u> (December 6, 2022), p. A-25

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>&</sup>lt;sup>54</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 204

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>55</sup> Data Request 261, Question 25; attachment: "CA 2023-2025-WMPs Energy Safety 261 (1-35) 9-25-24.pdf," p. 31.

<sup>&</sup>lt;sup>56</sup> Data Request 261, Question 25; attachment: "Attach Energy Safety 25.xlsx."

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

#### Finding - 8.2.3.5 Substation Defensible Space

PacifiCorp did not provide information consistent with the completion of work identified in 8.2.3.5 Substation Defensible Space. PacifiCorp must provide a corrective action plan addressing the deficiency identified in Statement 7.

#### 8.2.3.6 Vegetation and Fuels Management – High-Risk Species

The purpose of this initiative is to take actions "to reduce the ignition probability and wildfire consequence attributable to high-risk species of vegetation."<sup>57</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### **Statement 8**

<u>Statement:</u> "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>58</sup>

Supporting Information and Analysis: PacifiCorp provided a distribution work report which documented all pruning and removals performed during off-cycle patrols and detailed inspections to maintain a minimum 4-foot clearance in 2023. According to this report, PacifiCorp conducted reliability pruning on 677 trees, of which 425 trees (63%) were pruned during off-cycle patrols and 252 trees (37%) were pruned during routine maintenance identified during detailed inspections. Additionally, PacifiCorp performed 1,604 discretionary removals of non-hazard trees, of which 1,115 trees (70%) were identified during detailed inspections and the 489 trees (30%) during off-cycle patrols.

While PacifiCorp was able to demonstrate that it completed clearance work (pruning and removals) on distribution lines, it was unable to provide information related to clearance distance, HFTD tier, or whether additional pruning for at-risk species with very fast growth rates was completed because file provided did not capture data on which species were considered "at-risk." PacifiCorp explained that pruning activities associated with at-risk species were not specifically tracked but rather embedded in other work activities. The objective of this initiative is to reduce wildfire risk from high-risk species and PacifiCorp was unable to provide documentation that it performed additional clearance work in the HFTD for these species.

<sup>&</sup>lt;sup>57</sup> Technical Guidelines (December 6, 2022), p. A-25

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>&</sup>lt;sup>58</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 205

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>59</sup> Data Request 261, Question 26; attachment: "Attach Energy Safety 20.xlsx."

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

#### Finding - 8.2.3.6 High-Risk Species

PacifiCorp did not provide information consistent with the completion of work identified in 8.2.3.6 High-Risk Species. PacifiCorp must provide a corrective action plan addressing the deficiency identified in Statement 8.

## 8.2.3.7 Vegetation and Fuels Management – Fire Resilient Right-of-Ways

The purpose of this initiative is to take actions "to promote vegetation communications that are sustainable, fire-resilient, and compatible with the use of the land as an electrical corporation right-of-way." <sup>60</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### **Statement 9**

<u>Statement:</u> "Pacific Power utilizes integrated vegetation management (IVM) best practices to manage vegetation in which undesirable vegetation is identified and selected control(s) are implemented, consistent with the American National Standards Institute guidance." <sup>61</sup>

Supporting Information and Analysis: PacifiCorp explained that, as defined by American National Standards Institute (ANSI A300 Part 7), IVM practices were utilized to support the achievement of objectives such as controlling incompatible species, maintenance of right-ofway (ROW), and identifying and removing hazardous trees. 62 In 2023, PacifiCorp applied IVM methods in practice throughout its vegetation management program via chemical and physical treatment activities. Specifically, it utilized chemical control via pesticide application during routine maintenance on distribution lines and annual patrol corrective actions. According to its Pesticide Application Record report, PacifiCorp documented 56 instances where chemical application was applied on distribution lines during routine maintenance and 23 instances where chemical application was applied on transmission lines during patrol corrective actions. 63 Additionally, PacifiCorp provided a Transmission Work Complete report which recorded 152 instances of physical control being used for transmission ROW mowing.<sup>64</sup> Based on this report, PacifiCorp cleared approximately 143 acres through the use manual and mechanical control. PacifiCorp also provided an invoice associated with the work identified in the Transmission Work Complete report, specifically for transmission line Copco 2-Delta 115kV Ln #14 (MG), verifying that specialized equipment (i.e., mower) was used to assist with the physical and mechanical control activities.

<sup>&</sup>lt;sup>60</sup> Technical Guidelines (December 6, 2022), p. A-25

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>61</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 205

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>62</sup> Data Request 261, Question 27.

<sup>63</sup> Data Request 261, Question 3; attachment: "Attach EnergySafety 3-1.xlsx."

<sup>&</sup>lt;sup>64</sup> Data Request 261, Question 3; attachment: "Attach EnergySafety 3-2.xlsx."

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

#### Statement 10

<u>Statement:</u> "In addition, Pacific Power promotes right tree in right place or small trees for small places concepts with customers coupled with our tree replacement voucher program. Tree replacement vouchers may be provided to customers on a case-by-case basis to offset removal of incompatible species within or adjacent to the right-of-way. Pacific Power provides information to customers regarding vegetation that is compatible with utility rights-of-way and coordinates with communities through Arbor Day functions or other educational outreach opportunities.<sup>65</sup>

Supporting Information and Analysis: PacifiCorp provided a report listing all the tree replacement coupons and vouchers distributed to customers and stakeholders monthly in 2023. 66 This report indicates that PacifiCorp distributed 65 coupon reimbursements to customers, with 64 of these distributed along distribution lines. PacifiCorp also provided a brochure and booklet that informed customers about safe practices near power lines, including pruning practices and compatible vegetation recommendations for utility rights-of-way. 67

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

#### Finding – 8.2.3.7 Fire Resilient Right-of-Ways

PacifiCorp provided information consistent with the completion of work identified in 8.2.3.7 Fire Resilient Right-of-Ways.

<sup>65</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 205

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>66</sup> Data Request 261, Question 28; attachment: "Attach Energy Safety 28-1.xlsx."

<sup>&</sup>lt;sup>67</sup> Data Request 261, Question 28; attachments: "Pacific Power Small Trees for Small Places.pdf" and "Pacific Power Trees and Power Lines.pdf."

## 8.2.3.8 Vegetation and Fuels Management – Emergency Response of Vegetation Management

The purpose of this initiative is the "planning and execution of vegetation activities in response to emergency situations including weather conditions that indicate an elevated fire threat and post-wildfire service restoration." <sup>68</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 11

<u>Statement:</u> "Regarding response to wildfires, Pacific Power 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 were topped or felled to eliminate the risk as soon as practicable. Depending on the risk identified and considering other factors such as land ownership and environmental concerns, other mitigation efforts to address remaining fire-impacted trees may occur." <sup>69</sup>

<u>Supporting Information and Analysis:</u> PacifiCorp conducted vegetation management activities (inspections and mitigation of fire impacted trees) in response to two wildfires in its service territory in 2023; the Head fire which burned approximately 3,500 acres and the Smith River Complex fire which burned approximately 95,107 acres. PacifiCorp provided supplemental inventory reports of patrol inspections conducted along its distribution and transmission lines in response to these fires. These inventory reports included the date of patrol as well as a work description and summary detailing the risk categorization (Priority 1 or Priority 2, if applicable), corrective actions identified, and dates of mitigation.

Regarding the Head fire, PacifiCorp removed 2,282 and 505 trees, consisting of various conifer and hardwood species, along distribution and transmission lines, respectively.<sup>71</sup>

<sup>&</sup>lt;sup>68</sup> Technical Guidelines (December 6, 2022), p. A-25

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>&</sup>lt;sup>69</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 206

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>70</sup> Data Request 261, Question 30; attachments: "Attach Energy Safety 30-1.xlsx," "Attach Energy Safety 30-2.xlsx," and "Attach Energy Safety 30-6.xlsx."

 $<sup>^{71}</sup>$  Data Request 261, Question 30; attachments: "Attach Energy Safety 30-3.xlsx" and "Attach Energy Safety 30-4.xlsx."

Regarding the Smith River Complex Fire, PacifiCorp's contractors removed 3,652 and 2,471 trees, consisting of various conifer and hardwood species, along distribution and transmission lines, respectively. Of the trees removed along transmission lines, 51 were categorized as Priority 1 and 2,420 trees were categorized as Priority 2. Inspector notes indicated heavy base scorching, canopy removal, and in some cases, active tree burning at the time of inspection.<sup>72</sup>

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

#### Finding - 8.2.3.8 Emergency Response of Vegetation Management

PacifiCorp provided information consistent with the completion of work identified in 8.2.3.8 Emergency Response of Vegetation Management.

 $<sup>^{72}</sup>$  Data Request 261, Question 30; attachments: "Attach Energy Safety 30-5.xlsx" and "Attach Energy Safety 30-7.xlsx."

#### 8.2.4 Vegetation Management Enterprise System

The purpose of this initiative is the "Operation of and support for centralized vegetation management and inspection enterprise system(s) updated based upon inspection results and activities such as hardening, maintenance, and remedial work."<sup>73</sup>

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 12

<u>Statement:</u> "Pacific Power seeks opportunities to refine the MDMS [mobile data management software] data collection process through creating new forms or updating existing forms to capture additional data fields as data gaps are identified to allow for informed vegetation management program decision making. Pacific Power has updated several forms including the inventory, work complete, adder request, audit exception, tree coupon (voucher) and property owner refusal to enhance data collection and tracking capabilities."

<u>Supporting Information and Analysis:</u> PacifiCorp explained that it developed two forms to refine the MDMS: "Pole Clearing Notification" and "Pole Treatment Detail." These forms were intended to improve PacifiCorp's ability to track poles and plan for future maintenance as well as reduce time spent entering data in the field. PacifiCorp provided email correspondence between an internal arborist and forester discussing PacifiCorp's pole clearing forms to substantiate the implementation. The Energy Safety requested that PacifiCorp provide documentation of any data gaps identified to support the need for the new forms. No data gaps were identified.

Additionally, PacifiCorp provided copies of two other reports developed and implemented in 2023: "Notification Report" and "Treatment Detail Report". PacifiCorp explained that these reports helped to improve the data collection process through enhanced headers and data fields. <sup>76</sup>

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

<sup>&</sup>lt;sup>73</sup> Technical Guidelines (December 6, 2022), p. A-25

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>&</sup>lt;sup>74</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 207

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>75</sup> Data Request 261, Question 31; attachment: "Attach Energy Safety 31-1.pdf."

<sup>&</sup>lt;sup>76</sup> Data Request 261, Question 31; attachments: "Attach Energy Safety 31-2.xlsx" and "Attach Energy Safety 31-3.xlsx."

#### Finding - 8.2.4 Vegetation Management Enterprise System

PacifiCorp provided information consistent with the completion of work identified in Initiative 8.2.4 Vegetation Management Enterprise System.

#### 8.2.5 Quality Assurance and Quality Control

The purpose of this initiative is the "Establishment and function of audit processes to manage and confirm work completed by employees or contractors, including packaging QA/QC information for input to decision-making and related integrated workforce management processes." 77

## **Quantitative Targets or Commitments, Supporting Information & Analysis, and Conclusion**

PacifiCorp provided the following targets in its 2023-2025 WMP.<sup>78</sup> For ease of comparison, the WMP target and work complete are summarized below:

Initiative Activity	PacifiCorp's 2023 Target	Completed in 2023
QAQC – Post-Audits Distribution (Patrol)	1,027 circuit miles	1,027 circuit miles
QAQC – Post-Audits Transmission (Patrol)	329 line miles	329 line miles

Supporting Information and Analysis: PacifiCorp provided its 2023 miles tracker which recorded post-audits completed along PacifiCorp's distribution and transmission lines in 2023. PacifiCorp completed post-audits along approximately 1,027 distribution circuit miles and 329 transmission line miles in 2023. Thus, PacifiCorp achieved its QAQC Post-Audits (Patrol) targets along both distribution and transmission lines (VM-11) in 2023.

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

(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>77</sup> Technical Guidelines (December 6, 2022), p. A-25

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>&</sup>lt;sup>78</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), pp. 185-187

<sup>&</sup>lt;sup>79</sup> Data Request 261, Question 5; attachments: "Attach Energy Safety 5-1.xlsx" and "Attach Energy Safety 5-2.xlsx."

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 13

<u>Statement:</u> "The staff conducting post-audits record work exceptions (inconsistencies with Pacific Power specifications or work missed) using the MDMS. The audit exceptions are then visible to the vegetation management contractor within the MDMS and assigned to that contractor, who remains responsible for the work, including any corrective action." <sup>80</sup>

<u>Supporting Information and Analysis:</u> PacifiCorp provided a report, extracted from its MDMS, showing that 2,386 audit exceptions were recorded in 2023 as part of its post-audit activity. <sup>81</sup> The exceptions included work summaries for removals or pruning and any detected cycle-busters. PacifiCorp also included supplemental reports of the work completed along its distribution and transmission lines in response to the audit exceptions identified. <sup>82</sup> The supplemental work completed reports included the date of work completed, work code and summary, and GIS references. The GIS references, specifically the 'map object IDs', recorded for each audit exception reported in MDMS correspond with the corrective work identified and performed on the work completed reports.

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

#### Finding – 8.2.5 Quality Assurance and Quality Control

PacifiCorp provided information consistent with the completion of work identified in Initiative 8.2.5 Quality Assurance and Quality Control.

<sup>80</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 208

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>81</sup> Data Request 261, Question 33; attachment: "Attach Energy Safety 32.xlsx."

<sup>&</sup>lt;sup>82</sup> Data Request 261, Question 33; attachments: "Attach Energy Safety 33-1.xlsx" and "Attach Energy Safety 33-2.xlsx."

#### 8.2.6 Open Work Orders

The purpose of this initiative is to take actions "to manage the electrical corporation's open work orders resulting from inspections that prescribe vegetation management activities."

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

PacifiCorp stated in its 2023-2025 WMP that it did not have specific time frames for resolving vegetation management work orders at the time of filing. <sup>84</sup> The purpose of this initiative is to manage open work orders by setting reasonable timeframes to mitigate hazard trees in both HFTD and non-HFTD areas. <sup>85</sup> In Energy Safety's Decision on PacifiCorp's 2023-2025 Wildfire Mitigation Plan, published in February 2024, it noted several areas of improvement including development of risk-based criteria for determining and assigning priority to work locations, including remediation timelines for each priority level and a plan to operationalize the risk-based criteria that includes milestones that are "specific, measurable, relevant, and timebound." In order to demonstrate that PacifiCorp is managing open work orders, PacificCorp must identify the timeframes in which work orders will be completed and how PacifiCorp prioritizes these work orders.

#### Statement 14

Statement: "Pacific Power issues a work release to the vegetation management contractor to correct vegetation conditions identified in the inventory. Specific work releases or work orders are not issue[d] for each work location, but rather one work release is issued for the entire powerline being worked....In 2022, Pacific Power created a report that links forms (e.g., inventory and work complete) at a work location. In 2023, this report will be reviewed and modified to allow for tracking of open work locations (locations without a work complete form) to help drive completion of any open work locations prior to end of each calendar year."

<u>Supporting Information and Analysis:</u> PacifiCorp provided both a 2022 and 2023 version of a report entitled 'Form Link', which links forms at a work location, via Excel files. <sup>87</sup> PacifiCorp

<sup>83</sup> Technical Guidelines (December 6, 2022), p. A-25

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>84</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 210

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>85</sup> Energy Safety's <u>Decision on PacifiCorp's 2023-2025 Wildfire Mitigation Plan</u> (February 2024). P. 88

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56309&shareable=true)

<sup>86</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 210

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>87</sup> Data Request 261, Question 34; attachments: "Attach Energy Safety 34-1.xlsx" and "Attach Energy Safety 34-2.xlsx."

explained that it enhanced the Form Link file in 2023 to identify open work orders and any data integrity issues and were designed to be run at the individual circuit level. Redditionally, the form type, date of inspection, work completion date, work code, and location were included in the file. The 2022 and 2023 versions of the Form Link files showed obvious differences, indicating that accessibility and identification of open work orders were implemented as an enhanced feature. This information demonstrates that PacifiCorp has upgraded its system of managing work orders.

In its data request response, PacifiCorp ran the updated (2023 version) Form Link file on Circuit 5G33 which detailed 266 Map Object IDs, indicating that in January-March of 2023, there were 266 locations where work was required. Additionally, 167 work complete files were recorded in the file. PacifiCorp explained that when Map Object IDs were created, the work needed was recorded in the respective inventory form. Once complete, work complete forms were attached to the Map Object ID. However, Energy Safety noted that not all entries had a "WC" (work complete) status, suggesting that there were open work orders at the end of the calendar year 2023. In response to Energy Safety's query regarding completion status, PacifiCorp stated: "The report provides information on where there could be outstanding work, not necessarily where there definitively is outstanding work. This is due to the limitations of PacifiCorp's current work management software, as it relies heavily on manual entry for the various disconnected data collection forms and is prone to human error. This report can provide insights for PacifiCorp review and opportunities for continuous improvement but is not relied upon to definitively identify areas of outstanding work." The documentation provided demonstrates completion of the work identified in the statement; however, because the objective of this initiative is to manage open work orders, Energy Safety recommends that PacifiCorp further develop its work order management software to ensure timely completion of all vegetation management activities and use its CAP response to inform Energy Safety of progress on these activities.

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

#### Finding - 8.2.6 Open Work Orders

Despite PacifiCorp providing documentation to show it completed the work as written in its 2023-2025 WMP, Energy Safety believes that to demonstrate continued program maturity PacifiCorp should provide a response describing planned improvements that address the area of continued improvement identified in the Decision on PacifiCorp's 2023-2025 WMP. PacifiCorp provided information consistent with the completion of work identified in Initiative 8.2.6 Open Work Orders.

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<sup>88</sup> Data Request 261, Question 34.

#### 8.2.7 Workforce Planning

The purpose of this initiative is to "ensure that the electrical corporation has qualified vegetation management personnel and to ensure that both employees and contractors tasked with vegetation management responsibilities are adequately trained to perform relevant work."89

#### Narrative Statements, Supporting Information & Analysis, and Conclusion

#### Statement 15

<u>Statement:</u> "Pacific Power requires that its utility foresters are certified arborists and certified utility specialists by the International Society of Arboriculture (ISA). Pacific Power is not directly responsible for the training of the vegetation management workforce, who are employees of an independent contractor, however, does provide annual environmental awareness training and conducts audits and crew visits, which may lead to discussions and opportunities for improvement." <sup>90</sup>

<u>Supporting Information and Analysis:</u> PacifiCorp provided a list of six of its employed California foresters and their International Society of Arboriculture (ISA) certification number and status. <sup>91</sup> According to this list, PacifiCorp's California-assigned foresters possess certifications including ISA Arborist, Utility Specialist, and Tree Risk Assessment Qualification.

PacifiCorp also provided attendance records from annual environmental awareness trainings it conducted in February of 2023 regarding herbicide applications, avian/spill management, and Map It Fast items.<sup>92</sup>

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

#### **Finding - 8.2.7 Workforce Planning**

PacifiCorp provided information consistent with the completion of work identified in Initiative 8.2.7 Workforce Planning.

<sup>89</sup> Technical Guidelines (December 6, 2022), p. A-26

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

<sup>90</sup> PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 210

<sup>(</sup>https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).

<sup>&</sup>lt;sup>91</sup> Data Request 261, Question 35; attachment: "Attach Energy Safety 35-1.xlsx."

<sup>92</sup> Data Request 261, Question 35; attachment: "Attach Energy Safety 35-2.xlsx."