State of California – A Natural Resources Agency



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

Caroline Thomas Jacobs, Director

May 30, 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)(C), the Office of Energy Infrastructure Safety (Energy Safety) completed its final report on PacifiCorp's 2023 Substantial Vegetation Management (SVM) audit. Energy Safety finds that PacifiCorp substantially complied with the substantial portion of the vegetation management requirements in its 2023-2025 Wildfire Mitigation Plan for compliance year 2023.

The attached report follows Energy Safety's publication of its SVM audit on February 21, 2025, and PacifiCorp's subsequent response on March 21, 2025. Pursuant to statutory requirements, a copy of this report is issued to PacifiCorp, published on Energy Safety's 2023 SVM Docket¹ and provided to the California Public Utilities Commission.

Sincerely,

Shery Pollowy

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

Cc: Karen McLaughlin, Energy Safety Chelsea Contreras-Valencia, Energy Safety Forest Kaser, CPUC Leslie Palmer, CPUC Amy McCluskey, PacifiCorp Pooja Kishore, PacifiCorp

¹ All documents related to PacifiCorp's 2023 SVM audit are available on Energy Safety's e-filing under the "2023-SVM" docket and available here: (<u>https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2023-</u> <u>SVM</u>

Tim Clark, PacifiCorp Johnathan Connelly, PacifiCorp

Attachment: PacifiCorp 2023 SVM Audit Report



OFFICE OF ENERGY INFRASTRUCTURE SAFETY

2023 SUBSTANTIAL VEGETATION MANAGEMENT AUDIT REPORT PACIFICORP

May 2025



TABLE OF CONTENTS

EXE	ECUTIVE SUMMARY	1
1.	INTRODUCTION	2
2.	2023 SVM AUDIT FINDINGS	3
3.	SVM COMPLIANCE ANALYSIS	4
3	8.1 Initiative Level Assessment	5
	8.2.3.1 Pole Clearing	5
	8.2.3.2 Vegetation and Fuels Management: Wood and Slash Management	7
	8.2.3.3 Vegetation and Fuels Management: Clearance	9
	8.2.3.5 Vegetation and Fuels Management: Substation Defensible Space	12
3	8.2 Programmatic Assessment 1	17
4.	Conclusion	18

EXECUTIVE SUMMARY

The Office of Energy Infrastructure Safety (Energy Safety) completed an audit of PacifiCorp's vegetation management commitments from its approved 2023-2025 Wildfire Mitigation Plan (WMP) on February 21,2025.¹ The PacifiCorp 2023-2025 WMP had 13 vegetation management initiatives in six programmatic areas.² In the PacifiCorp Substantial Vegetation Management Audit (SVM Audit), Energy Safety found that PacifiCorp did not provide information consistent with the completion of all work commitments for five of its 13 vegetation management initiatives.

PacifiCorp submitted its Corrective Action Plan (CAP) addressing the deficiencies identified in the SVM Audit on March 21, 2025.³ Based on an analysis of PacifiCorp's CAP as well as the analysis included in the 2023 SVM Audit, Energy Safety found that PacifiCorp substantially complied with three of the five deficient initiatives by supplying additional information that demonstrated that either PacifiCorp completed all or the majority of the work, or that PacifiCorp completed other work which achieved the same program objective. Given that the 2023 SVM Audit found that PacifiCorp completed all work in eight initiatives and this analysis found that it substantially complied with three of the deficient initiatives, PacifiCorp substantially complied with a total of 11 of the 13 vegetation management initiatives. Thus, Energy Safety found that programmatically, PacifiCorp substantially complied with a substantial portion of the vegetation management requirements in its 2023-2025 WMP for compliance year 2023.

¹ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. 4-5,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ² PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024)

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true). ³ <u>PacifiCorp's 2023 SVM Audit Corrective Action Plan</u>

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true).

1. INTRODUCTION

Pursuant to Public Utilities Code section 8386.3(c)(5), Energy Safety must annually audit the vegetation management work performed by, or on behalf of, an electrical corporation. The SVM Audit shall specify any failure of the electrical corporation to fully comply with the vegetation management commitments in its Wildfire Mitigation Plan (WMP).⁴ Energy Safety then provides the SVM Audit to the electrical corporation and grants it a reasonable time to correct and eliminate any deficiency therein. The electrical corporation submits its response to the SVM Audit in a Corrective Action Plan (CAP). Following receipt and review of the electrical corporation's CAP, Energy Safety completes an analysis of the CAP and issues an Audit Report to the electrical corporation identifying whether it substantially complied with a substantial portion of the vegetation management requirements in the compliance year.^{5,6}

Energy Safety published the 2023 PacifiCorp SVM Audit on February 21, 2025.⁷ The Audit concluded that PacifiCorp did not perform all the work specified in five out of the 13 vegetation management initiatives in its 2023-2025 WMP. In response to the SVM Audit, PacifiCorp submitted its CAP on March 21, 2025.⁸ Energy Safety reviewed PacifiCorp's CAP and supporting information to determine whether it substantially complied with a substantial portion of their vegetation management requirements in its WMP for compliance year 2023.

This document is Energy Safety's Report on the 2023 SVM Audit of PacifiCorp. The document is organized as follows:

- Section 2 is a summary of the 2023 SVM findings published in the February 21, 2025 audit.
- Section 3 includes Energy Safety's initiative level (3.1) and programmatic (3.2) compliance analysis of PacifiCorp's CAP and supporting documentation and information.
- Section 4 provides the basis for Energy Safety's conclusion that PacifiCorp substantially complied with a substantial portion of the vegetation management requirements in its 2023-2025 WMP.

⁴ Pub. Util. Code, § 8386.3(c)(5)(A).

⁵ Pub. Util. Code, § 8386.3(c)(5)(C).

⁶ <u>2024 Compliance Guidelines</u>, Section 8.1, (September 2024), p. 13.

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57320&shareable=true). ⁷ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. 4-5,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ⁸ <u>PacifiCorp's 2023 SVM Audit Corrective Action Plan</u>

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true).

2. 2023 SVM AUDIT FINDINGS

The 2023 SVM Audit found that PacifiCorp performed all work in eight of the 13 initiatives and was deficient in the remaining five. Table 1 below is reproduced from Energy Safety's 2023 SVM Audit.⁹

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
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

⁹ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. 4-5,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7).

3. SVM COMPLIANCE ANALYSIS

Energy Safety must assess whether the electrical corporation substantially complied with a substantial portion of the vegetation management requirements in the compliance year.¹⁰ The determination of substantial compliance is based on an analysis of both the electrical corporation's compliance with each vegetation management initiative as well as the program overall.

The initiative level analysis includes:

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

The programmatic level analysis includes:

3) **Completeness-** Determination of whether the electrical corporation completed the large majority of the vegetation management requirements in its approved WMP.

Energy Safety synthesizes the initiative and programmatic analyses to formulate the conclusion regarding substantial compliance with a substantial portion of the vegetation management requirement in PacifiCorp's WMP, which is described in Section 4.

¹⁰ Pub. Util. Code, § 8386.3(c)(5)(C).

3.1 Initiative Level Assessment

Summary of Initiative Level Compliance

Table 2 includes the five initiatives from PacifiCorp's 2023-2025 WMP for which Energy Safety's 2023 SVM Audit found that PacifiCorp did not complete all work. The table includes Energy Safety's determination of substantial compliance for each initiative based on the analysis below. Energy Safety found that PacifiCorp substantially complied with three of the five deficient initiatives.

Vegetation Management Initiative with Deficiency	Determination of Substantial Compliance
8.2.3.1 Pole Clearing	Substantially Complied
8.2.3.2 Wood and Slash Management	Did not substantially comply
8.2.3.3 Clearance	Substantially Complied
8.2.3.5 Substation Defensible Space	Substantially Complied
8.2.3.6 High-Risk Species	Did not substantially comply

8.2.3.1 Pole Clearing

Summary of Initiative Work Commitments and Activities

The purpose of this initiative was 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)."¹¹ PacifiCorp's pole clearing activities included a quantitative target to brush 3,126 poles in Local Responsibility Areas (LRA) in High Fire Thread Districts (HFTD) beyond the PRC 4292 requirements in the 2023 compliance year. PacifiCorp was able to

¹¹ <u>Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines</u> (December 6, 2022), p. A-24 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

provide documentation demonstrating that it cleared 3,100 poles in LRA HFTD. Thus, PacifiCorp fell short of its Fuels Management - Pole Clearing target by 26 poles.¹²

2023 SVM Audit Finding

Energy Safety's 2023 SVM Audit found that PacifiCorp did not meet its target to brush 3,126 poles in LRA HFTD areas for 2023. Therefore, PacifiCorp did not provide information consistent with the completion of work required under initiative 8.2.3.1 Pole Clearing.¹³

PacifiCorp's CAP Response

PacifiCorp's CAP response does not dispute that it did not meet its 2023 Pole Clearing target. PacifiCorp stated that it "revised its pole clearing tracking process to more accurately capture poles that are inspected and not worked or are exempt. PacifiCorp stated that this change would allow for "increased accuracy of pole counts and ability to account for impacts of other WMP initiatives."¹⁴ PacifiCorp indicated that the process changes were implemented in 2024.

Analysis of Substantial Vegetation Management Compliance with the 2023-2025 WMP

Criteria 1: Achievement of Objective

PacifiCorp completed 99% of its pole clearing target the 2023 compliance year, falling short of its commitment by 26 poles. While PacifiCorp did not explain why the shortfall occurred, it committed to revising its tracking processes to prevent future shortfalls in its CAP. Because PacifiCorp completed the majority of the work, Energy Safety found that it achieved the objective of the pole clearing initiative for the 2023 compliance year.

Criteria 2: Good Faith Effort

PacifiCorp completed the majority of its commitment to brush non-PRC 4292 poles in LRAs in HFTD. This represents a good faith effort to meet its pole clearing target.

¹² Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A6-A7,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ¹³ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A6-A7,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ¹⁴ <u>PacifiCorp's 2023 SVM Audit Corrective Action Plan</u>. P. 6

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true).

Initiative Level Determination

PacifiCorp completed the majority of the work related to its 2023 pole clearing target and has committed to implementing new processes that will improve its ability to track this work in 2024. Energy Safety expects PacifiCorp to continue to mature its pole brushing program by implementing the process changes it has commited to in its CAP. Energy Safety will audit the results of these processes in the 2024 compliance year. Because over 99% of the target for brushing poles beyond its 4292 requirements was completed, Energy Safety found that PacifiCorp substantially complied with this initiative.

8.2.3.2 Vegetation and Fuels Management: Wood and Slash Management

Summary of Initiative Work Commitments and Activities

The purpose of this initiative was to take actions "to manage all downed wood and 'slash' generated from vegetation management activities."¹⁵ PacifiCorp's 2023 wood and slash management activities included a narrative commitment to manage "slash in developed areas by chipping or removing (recycles where practicable) it where accessible, unless the property owner indicates otherwise"¹⁶ and in rural, off-road areas to use "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."¹⁷ PacifiCorp provided documentation demonstrating that 366 loads of chips were transported to off-site locations for slash management removal. However, the off-load chip report did not include the location of origin¹⁸ and Energy Safety could not verify that the slash management work was associated with PacifiCorp's vegetation management work. PacifiCorp also provided some documentation demonstrating that lop and scatter methods were applied at some locations. While the documents provided indicated that some work on wood and slash removal was completed, PacifiCorp was unable to provide documentation demonstrating that it removed wood and slash from its vegetation management activities in all or most instances for compliance year 2023. While PacifiCorp's WMP allows for circumstances where removal is not

¹⁵ <u>Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines</u> (December 6, 2022), p. A-24 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

¹⁶ PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 200

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

¹⁷ PacifiCorp's 2023-2025 WMP (Rev. #2, February 22, 2024), p. 200

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true). ¹⁸ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A8-A9,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7).

practicable or accessible, PacifiCorp did not provide documentation demonstrating constraints.

2023 SVM Audit Finding

Energy Safety's 2023 SVM Audit found that PacifiCorp did not record all activities related to wood and slash management. Therefore, PacifiCorp did not provide information consistent with the completion of work under initiative 8.2.3.2 Wood and Slash Management.¹⁹

PacifiCorp's CAP Response

PacifiCorp's CAP stated that it "will benchmark debris management data collection with other California utilities to learn how other utilities conduct and track debris management."²⁰ PacifiCorp indicated it will use this information to "inform potential changes in PacifiCorp's process and additions to the Company's new work management software (GeoDigital)."

Analysis of Substantial Vegetation Management Compliance with the 2023-2025 WMP

Criteria 1: Achievement of Objective

PacifiCorp's CAP response does not dispute Energy Safety's finding that it did not provide sufficient documentation to demonstrate completion of all work related to removal of wood and slash. Because PacifiCorp failed to document wood and slash management, Energy Safety could not verify the work was completed. The improper management of wood and slash creates an unnecessary increase of ground fuels which could exacerbate wildfire spread. Therefore, it is important for PacifiCorp to track its wood and slash management work. Energy Safety found that PacifiCorp's recordkeeping deficiencies detracted from its ability to achieve this initiative's objective which is to manage all downed wood and slash from vegetation management work.

Criteria 2: Good Faith Effort

PacifiCorp did not provide documentation demonstrating that it managed all wood and slash from its vegetation management actions. Furthermore, PacifiCorp did not provide a substantive plan or corrective actions to address this deficiency, only committing to research

¹⁹ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A8-A9,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ²⁰ PacifiCorp's 2023 SVM Audit Corrective Action Plan. P. 6

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true).

what other utilities are doing to track debris management. Therefore, Energy Safety found that PacifiCorp did not make a good faith effort to comply with this initiative.

Initiative Level Determination

PacifiCorp was not able to demonstrate that wood and slash debris resulting from vegetation management activities were managed per the commitments in its 2023-2025 WMP. While the documents provided indicated that some work on slash removal was completed, PacifiCorp was unable to provide sufficient documentation demonstrating that it removed wood and slash from its vegetation management activities in all or most instances for compliance year 2023 and did not provide any documentation of constraints that may have prevented it from doing so. PacifiCorp also did not provide any clear corrective actions to ensure that wood and slash will be properly managed in future compliance years. Because the objective of the initiative was to "to manage all downed wood and 'slash' generated from vegetation management activities,"²¹ Energy Safety finds that PacifiCorp did not substantially comply with this initiative. Energy Safety expects PacifiCorp to improve its recordkeeping of wood and slash management work for all work orders to demonstrate compliance in future years.

8.2.3.3 Vegetation and Fuels Management: Clearance

Summary of Initiative Work Commitments and Activities

The purpose of this initiative was to take actions "after inspection to ensure that vegetation does not encroach upon electrical equipment and facilities, such as tree trimming."²² PacifiCorp's WMP included four statements regarding clearance activities for compliance year 2023. PacifiCorp was able to provide documentation supporting the completion of three of its narrative commitments. ²³ First, PacifiCorp provided documentation demonstrating completion of clearance work assigned during detailed transmission and distribution inspections. Second, PacifiCorp provided documentation demonstrating completion of clearance work assigned during its patrol inspections of its distribution and transmission systems. Third, it provided documentation demonstrating its response to customer requests concerning vegetation conditions along its infrastructure. However, PacifiCorp was unable to

²² Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines (December 6, 2022), p. A-24 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

²¹ <u>Energy Safety's 2023-2025 Wildfire Mitigation Plan Technical Guidelines</u> (December 6, 2022), p. A-24 (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true).

²³ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A10-A14,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7).

provide information demonstrating that it implemented increased clearance distances beyond minimum required clearance based on growth rate, as stated in its WMP.

2023 SVM Audit Finding

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.²⁴ Therefore, PacifiCorp did not provide information consistent with the completion of work identified in 8.2.3.3 Clearance.

PacifiCorp's CAP Response

In its CAP, PacifiCorp committed to developing a process to identify "cyclebuster" trees or very fast-growing trees (trees generally growing more than 3 feet per year) within its new work management software (GeoDigital). PacifiCorp indicated that this process "will provide specific information regarding locations of cyclebusters that will be reviewed during post-audits to verify clearance distances" and that work locations which pass this post-audit will indicate that adequate post-work clearances have been achieved.²⁵

Analysis of Substantial Vegetation Management Compliance with the 2023-2025 WMP

Criteria 1: Achievement of Objective

PacifiCorp was able to provide documentation supporting the completion of three of its four narrative commitments for the Clearance initiative; demonstrating that it completed clearances identified during its detailed inspections, patrol inspections, those following customer requests.²⁶ However, PacifiCorp was unable to provide information demonstrating that it completed its fourth commitment, application of increased clearance distances beyond minimum required clearance based on growth rate. PacifiCorp did not identify fastgrowing species and as a result, could not document that increased clearances were applied. Because fast-growing species can rapidly encroach upon electrical infrastructure after pruning, additional clearances relieve risk on the system by increasing space and thus time

²⁴ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A12-A14,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ²⁵ PacifiCorp's 2023 SVM Audit Corrective Action Plan. P. 6

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true). ²⁶ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A10-A14,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7).

before the species presents a risk to infrastructure. Failure to apply increased distances would detract from its ability to mitigate wildfire risk to its system.

In its CAP response, PacifiCorp did not dispute the finding but stated that if the location passed the post-audit, then adequate clearance was achieved for all vegetation at the location.²⁷ Energy Safety acknowledges that PacifiCorp's post-audits did not identify clearance issues. Further, PacifiCorp's CAP stated that it was committed to developing a process to identify fast growing trees in its work management software so that they can be reviewed during post-audits to verify that the clearances remain. If implemented, this would provide the recordkeeping mechanism requested by Energy Safety in the 2023 SVM audit. Energy Safety will audit this process in future compliance years.

For compliance year 2023, because PacifiCorp completed three of its commitments for Clearance work and its post-audits did not identify additional clearance issues, Energy Safety finds that it achieved the objective of the initiative. PacifiCorp's recordkeeping deficiencies regarding fast-growing species are discussed in section 8.2.3.6 Vegetation and Fuels Management: High-Risk Species below.

Criteria 2: Good Faith Effort

While PacifiCorp did not provide documentation to support that it tracked fast growing species, it completed clearance work assigned during detailed transmission and distribution inspections, patrol inspections of its distribution and transmission systems, and in response to customer requests concerning vegetation conditions along its infrastructure.²⁸ As a result, Energy Safety found that PacifiCorp made a good faith effort to complete this initiative.

Initiative Level Determination

PacifiCorp provided sufficient documentation to demonstrate the completion of required clearances during its detailed inspections, patrol inspections, and following customer requests.²⁹ PacifiCorp was not able to demonstrate that it tracks moderate- and fast- growing species; however, this recordkeeping deficiency is addressed in section 8.2.3.6 Vegetation and Fuels Management: High-Risk Species below. Because the objective of the initiative was "to

²⁷ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A10-A14,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ²⁸ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A10-A14,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ²⁹ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A10-A14,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7).

ensure that vegetation does not encroach upon electrical equipment and facilities,"³⁰ Energy Safety finds that PacifiCorp substantially complied with this initiative.

In its CAP, PacifiCorp committed to developing a process to identify "cyclebuster" trees (fastgrowing trees) within its new work management software which would allow for more specific tracking of species that present a risk to infrastructure, ³¹ but did not provide any information on when and how this would be implemented in service of achieving the clearance objective. Energy Safety expects PacifiCorp to improve its recordkeeping of moderate- and fast-growing species to demonstrate compliance in future years.

8.2.3.5 Vegetation and Fuels Management: Substation Defensible Space

Summary of Initiative Work Commitments and Activities

The purpose of this initiative is to take actions "to reduce ignition probability and wildfire consequence due to contact with substation equipment."³² PacifiCorp included one narrative commitment to perform substation inspections for vegetation and manage vegetation identified as fall-in risk in its 2023-2025 WMP.³³ Energy Safety's 2023 SVM Audit found that PacifiCorp's vegetation management department does not track substation perimeter inspections because they are combined with other routine inspections. PacifiCorp stated it was unable to provide documentation of vegetation mitigation work conducted as a result of substation inspections.³⁴

2023 SVM Audit Finding

Because vegetation management inspections and corrective actions were not sufficiently documented, the information PacifiCorp provided did not demonstrate that the work associated with this statement was completed. Defensible space protects the substation from

³² <u>Technical Guidelines</u> (December 6, 2022), p. A-25

³⁰ <u>Technical Guidelines</u> (December 6, 2022), p. A-24

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true). ³¹ <u>PacifiCorp's 2023 SVM Audit Corrective Action Plan</u>. P. 6

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true).

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true). ³³ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A16-A17,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ³⁴ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A16,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7).

wildfire and can limit the 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. Therefore, PacifiCorp did not provide information consistent with the completion of work identified in 8.2.3.5 Substation Defensible Space.

PacifiCorp's CAP Response

PacifiCorp's CAP response stated that it received project reports of work completed from the Company's weed abatement vendor at its substations, including photographs and progress reports for the substations where the abatement was performed. ³⁵ PacifiCorp provided these reports and photographs which document weed abatement activities occurring on April 21, 2023, May 9, 2023, May 10, 2023, and May 11, 2023. ³⁶ The progress reports state that Victory weed control was sprayed at most of PacifiCorp's substations except for when a substation was inaccessible due to snow or due to construction activities at the station.

Analysis of Substantial Vegetation Management Compliance with the 2023-2025 WMP

Criteria 1: Achievement of Objective

In its CAP, PacifiCorp was able to provide documentation demonstrating that it completed weed abatement activities at its substations, providing vendor progress reports and photographs. Therefore, Energy Safety found that it achieved the objective of the initiative.

Criteria 2: Good Faith Effort

The documentation provided by PacifiCorp in its CAP demonstrated that it successfully completed weed abatement activities. Therefore, Energy Safety found that PacifiCorp made a good faith effort to maintain defensible space around its substations.

Initiative Level Determination

PacifiCorp provided documentation in its CAP demonstrating that weed abatement activities occurred at each of its substations in compliance year 2023. Because the purpose of this initiative is to take actions "to reduce ignition probability and wildfire consequence due to

³⁵ PacifiCorp's 2023 SVM Audit Corrective Action Plan. P. 6

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true). ³⁶ PacifiCorp's 2023 SVM Audit Corrective Action attachments.

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58158&shareable=true)

contact with substation equipment,"³⁷ and the documentation provided demonstrated that PacifiCorp completed activities in service of this objective, Energy Safety found that PacifiCorp substantially complied with this initiative.

8.2.3.6 Vegetation and Fuels Management: High-Risk Species

Summary of Initiative Work Commitments and Activities

The purpose of this initiative was to take actions "to reduce the ignition probability and wildfire consequence attributable to high-risk species of vegetation."³⁸ PacifiCorp included one narrative commitment to perform additional pruning for at-risk species to prevent vegetation from breaching a 4-foot minimum clearance within one year in its 2023-2025 WMP.³⁹ PacifiCorp provided documentation for all pruning and removal activities performed during off-cycle patrols and detailed inspections to maintain the minimum 4-foot clearance distance in compliance year 2023. However, PacifiCorp did not independently track pruning related to at-risk species and could not provide information demonstrating it performed additional pruning for fast-growing species.⁴⁰

2023 SVM Audit Finding

While PacifiCorp was able to demonstrate that it completed clearance work 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. The Excel files 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.

³⁷ <u>Technical Guidelines</u> (December 6, 2022), p. A-25

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true). ³⁸ <u>Technical Guidelines</u> (December 6, 2022), p. A-25

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true). ³⁹ <u>PacifiCorp's 2023-2025 WMP</u> (Rev. #2, February 22, 2024), p. 205

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true). ⁴⁰ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A18-A19,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7).

Therefore, PacifiCorp did not provide information consistent with the completion of work identified in 8.2.3.6 High-Risk Species.⁴¹

PacifiCorp's CAP Response

PacifiCorp's CAP stated that "at-risk species" include what it calls "cyclebusters," or trees whose growth rates may result in vegetation encroachment on electrical infrastructure before the species location is revisited during the three-year maintenance cycle if only the minimum clearances are applied. PacifiCorp committed to expanded clearances for such species so that the encroachment is less likely to occur. PacifiCorp's CAP committed to developing a process to identify "cyclebuster" trees, in its new work management software (GeoDigital).⁴² PacifiCorp states that this addition will "provide more specific information regarding locations of cyclebusters that will be reviewed during post-audits to verify clearance distances. If a work location passes the post-audit, it inherently means that adequate postwork clearances have been achieved." ⁴³

Analysis of Substantial Vegetation Management Compliance with the 2023-2025 WMP

Criteria 1: Achievement of Objective

PacifiCorp was unable to provide documentation demonstrating that it tracked "cyclebusters" or fast-growing trees that generally grow more than 3 feet per year. Fastgrowing species can rapidly encroach upon electrical infrastructure after pruning. Therefore, tracking these species is essential to ensuring that the clearances applied to these species are sufficient to relieve risk on the system by increasing space and thus time before the species presents a risk to infrastructure. PacifiCorp's failure to identify fast-growing species and document increased clearances detracts from its ability to mitigate wildfire risk to its system.

In its CAP, PacifiCorp did not dispute the finding, but stated that it was committed to developing a process to identify fast-growing trees in its work management software so that they can be reviewed during post-audits to verify that clearances. If implemented, this would provide the recordkeeping mechanism requested by Energy Safety in the 2023 SVM audit. Energy Safety will audit this process in future compliance years. However, for compliance year 2023, PacifiCorp failed to implement a tracking system for at-risk species and therefore

⁴¹ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A18-A19,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ⁴² PacifiCorp's 2023 SVM Audit Corrective Action Plan. P. 6

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true). ⁴³ PacifiCorp's 2023 SVM Audit Corrective Action Plan. P. 6

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149& shareable=true).

could not demonstrate that it managed ignition risk attributable to high-risk species. While post-audits did not identify clearance issues in 2023, it is unclear if these fast-growing species (cyclebusters) were inspected in a way to ensure that they do not exceed clearance limits before those trees are revisited on a three-year cycle and what actions PacifiCorp has implemented to verify that they will not. If fast-growing species encroach on infrastructure, it could increase risk on its system. Therefore, Energy Safety finds that PacifiCorp did not achieve the objective of the initiative to reduce wildfire ignition risk from high-risk species.

Criteria 2: Good Faith Effort

PacifiCorp did not provide documentation to support that it tracked fast growing, or at-risk, species and applied expanded clearances as necessary. In its CAP response PacifiCorp stated that if the location passes the post-audit, then adequate clearances were achieved for all vegetation at the location. ⁴⁴ However, because it failed to document expanded clearances for fast-growing species, there is no way for Energy Safety to verify that clearances for these species would last until the next inspection cycle in three years. As a result, Energy Safety found that PacifiCorp did not make a good faith effort to complete this commitment.

Initiative Level Determination

PacifiCorp was not able to demonstrate that it tracks moderate- and fast-growing species, which have growth rates that could result in encroachment on PacifiCorp infrastructure and violate required clearances before the location is revisited on PacifiCorp's three-year maintenance cycle. Because the objective of the initiative was to "to reduce the ignition probability and wildfire consequence attributable to high-risk species of vegetation,"⁴⁵ Energy Safety finds that PacifiCorp did not substantially comply with this initiative.

In its CAP, PacifiCorp committed to developing a process to identify "cyclebuster" trees (fastgrowing trees) within its new work management software which would allow for more specific tracking of species that present a risk to infrastructure, ⁴⁶ but did not provide any information on when and how this would be implemented in service of achieving the highrisk species objective. Energy Safety also notes that a lack of documentation during postaudits is not sufficient to verify completion of this initiative. Energy Safety expects PacifiCorp to improve its recordkeeping of moderate- and fast-growing species and documentation practices to verify work completion to demonstrate compliance in future years.

⁴⁴ Energy Safety's 2023 SVM Audit of PacifiCorp, pp. A10-A14,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true 7). ⁴⁵ <u>Technical Guidelines</u> (December 6, 2022), p. A-25

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53286&shareable=true). ⁴⁶ <u>PacifiCorp's 2023 SVM Audit Corrective Action Plan</u>. P. 6

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true).

3.2 Programmatic Assessment

Energy Safety's SVM Audit, dated February 21, 2025, found that PacifiCorp completed all work in eight of the 13 initiatives in its 2023-2025 WMP and was deficient in five. PacifiCorp's CAP, dated March 21, 2025, sufficiently addressed two of the deficient initiatives by supplying additional information which demonstrated that either PacifiCorp completed all or the majority of the work. PacifiCorp was not able to provide sufficient documentation demonstrating it completed two of the initiatives: 8.2.3.2 Wood and Slash Management and 8.2.3.5 High-Risk Species.

Energy Safety identified recordkeeping and documentation issues within several of PacifiCorp's vegetation management programs that led to the initial Audit findings. Energy Safety expects PacifiCorp to implement the commitments made in its CAP to improve its pole clearing tracking process to better document its Pole Clearing target in future compliance years, particularly since failure to meet pole clearing and expanded pole clearing targets have been identified as issues in past SVM Audits. ⁴⁷ Also, while it was able to provide documentation ultimately demonstrating work was completed on vegetation management at its substations, Energy Safety expects PacifiCorp to develop and implement protocols to improve tracking of this work. Failure to adequately document substation inspection work was also identified as a finding in the 2022 SVM Audit. ⁴⁸ Energy Safety also expects PacifiCorp to develop and implement record-keeping and documentation protocols to demonstrate compliance with its wood and slash management, clearance and high-risk species initiatives in future compliance years.

Overall, Energy Safety finds that PacifiCorp has substantially complied with 11 of its 13 vegetation management initiatives. Therefore, programmatically PacifiCorp completed the majority of the work described in its 2023-2025 WMP, has identified deficiencies in its program, and has begun to take actions to correct these deficiencies. Therefore, Energy Safety finds that programmatically, PacifiCorp performed the large majority of the work described in its 2023-2025 WMP.

⁴⁷ Report on 2021 SVM Audit of PacifiCorp, pp. 4-6,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56677&shareable=true). ⁴⁸ PacifiCorp 2022 Audit and Report, pp. 5-6,

⁽https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57413&shareable=true).

4. Conclusion

Based on the analysis discussed in Section 3, Energy Safety concludes that PacifiCorp substantially complied with a substantial portion of the vegetation management requirements in its 2023-2025 WMP for compliance year 2023.

DATA DRIVEN FORWARD-THINKING INNOVATIVE SAFETY FOCUSED



OFFICE OF ENERGY INFRASTRUCTURE SAFETY A California Natural Resources Agency www.energysafety.ca.gov

715 P Street, 15th Floor Sacramento, CA 95814 916.902.6000

