State of California – A Natural Resources Agency
Gavin Newsom, Governor

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Caroline Thomas Jacobs, Director

August 15, 2025

Dear Stakeholders,

Enclosed is the Office of Energy Infrastructure Safety's (Energy Safety's) Annual Report on Compliance regarding PacifiCorp's execution of its 2023 Wildfire Mitigation Plan.

This Annual Report on Compliance is published as of the date of this letter. PacifiCorp may, if it wishes to do so, file a public response to this Annual Report on Compliance within 14 calendar days of the date of publication. Comments must be submitted to the Energy Safety E-Filing system in the 2023 Annual Report on Compliance docket.[1]

Sincerely,

Patrick Doherty
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Office of Energy Infrastructure Safety

[1] Submit responses to the 2023-ARC docket via the Office of Energy Infrastructure Safety's E-Filing system here: https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2023-ARC.

OFFICE OF ENERGY INFRASTRUCTURE SAFETY

2023 ANNUAL REPORT ON COMPLIANCE

PACIFICORP

August 2025

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Executive Summary

The Office of Energy Infrastructure Safety (Energy Safety) is tasked with evaluating and either approving or denying Wildfire Mitigation Plans (WMPs) annually filed by electrical corporations pursuant to Public Utilities Code section 8386 *et seq*. The law also directs Energy Safety to ensure that the electrical corporations have complied with their WMPs.

Pursuant to Government Code section 15475.1, Energy Safety's primary objective is to ensure that electrical corporations reduce wildfire risk and comply with energy infrastructure safety measures. Energy Safety's annual compliance assessment of PacifiCorp's execution of its 2023 WMP is a comprehensive look at whether PacifiCorp's completion of its 2023 WMP initiatives reduced the risk of its equipment igniting a catastrophic wildfire.

Energy Safety's assessment found that PacifiCorp completed 34 of 44 (77%) of its 2023 targets for initiative activities and objectives in its 2023-2025 Base WMP (2023 WMP), including seven of the 10 initiatives with the largest planned expenditure. However, PacifiCorp failed to meet targets for 10 of its 2023 WMP initiative activities and objectives, with planned work at least partially impacted by the Head Fire and Smith River Complex Fire in August of 2023. Both fires were ignited by lightning.

In general, PacifiCorp spent above the planned amounts on its 2023 WMP initiatives by nearly $6 million in capital expenditures and approximately $2.25 million in operating expenditures for a total of $8.25 million in the aggregate. Of its planned expenditure for 2023, 83% was allocated to the 10 initiatives that failed to meet their targets. These 10 initiatives included work such as covered conductor installation, and transmission and distribution pole replacement.

In 2023, PacifiCorp's ignition counts declined by 71% as compared to 2020, and outage counts in High Fire Threat District areas followed a similar pattern. However, PacifiCorp experienced an increase in wires down in 2023 compared to previous years.

Energy Safety conducted its compliance review process through a variety of means including audits, field inspections, and analysis of data submitted by PacifiCorp to Energy Safety. Energy Safety also evaluated several performance metrics, including metrics that reveal the risk on PacifiCorp's system. Energy Safety additionally reviewed PacifiCorp's self-assessment in its PacifiCorp Annual Report on Compliance (EC ARC) and the findings of its independent evaluator.

Energy Safety identifies areas for improvement for PacifiCorp in this report, such as in the accuracy of documenting its WMP implementation. Energy Safety expects PacifiCorp to improve the accuracy of its documentation going forward.

Energy Safety acknowledges that in 2023, PacifiCorp undertook efforts to reduce its wildfire risk, and in many instances achieved its WMP initiative activity targets. On balance, PacifiCorp was moderately successful in executing its plan for wildfire risk mitigation. However, there

are still areas for improvement and continued learning. While the impact of fires in its territory impacted its ability to complete its 2023 WMP targets, this kind of fire activity is not unforeseeable, and PacifiCorp should accordingly adjust its planning processes to account for it.

1. Introduction

This Annual Report on Compliance presents the Office of Energy Infrastructure Safety's (Energy Safety's) statutorily mandated assessment of PacifiCorp's compliance with its 2023 targets for initiatives and objectives in its 2023-2025 Base Wildfire Mitigation Plan (2023 WMP). While the 2023-2025 Base WMP considers activities over a three- and ten-year horizon, this report only addresses targets established for initiatives and objectives for the 2023 compliance year. Therefore, this report uses the term "2023 WMP" to refer to portions of the 2023-2025 Base WMP addressed by this report.

In the sections that follow, Energy Safety describes the statutory regulatory basis for its reporting, the information supplied by the electrical corporation, and the independent evaluation conducted by Energy Safety to examine PacifiCorp's execution of its 2023 WMP and how its infrastructure performed in 2023 relative to wildfire risk. Finally, Energy Safety provides its conclusions, observations, and recommendations for further actions by PacifiCorp.

1.1 Compliance Process

The statutory objective of electrical corporation wildfire mitigation planning efforts is to ensure that electrical corporations are constructing, maintaining, and operating their infrastructure in a manner that will minimize the risk of catastrophic wildfire.[1]

Energy Safety's 2024 Compliance Process, as approved by the California Public Utilities Commission, establishes the parameters for this Annual Report on Compliance. Consistent with the 2024 Compliance Process, this report considers the totality of all compliance assessments completed with respect to PacifiCorp's 2023 WMP. This includes all inspection, audit, investigation, and data analysis work performed by Energy Safety, as well as separate electrical corporation and independent third-party evaluations of compliance.[2]

Energy Safety evaluated whether the electrical corporation met the 2023 WMP targets for initiatives and objectives, looking specifically at whether the electrical corporation funded and performed the work stated for each initiative.[3]

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[1] Pub. Util. Code § 8386(a).
[2] Compliance Process, page 8.
[3] Compliance Process, page 8.

2. PacifiCorp's 2023 Wildfire Mitigation Plan

PacifiCorp submitted a comprehensive WMP in 2023 covering a three-year term from 2023 through the end of 2025.

Energy Safety approved PacifiCorp's 2023 WMP on February 12, 2024.[4] PacifiCorp's 2023 WMP highlighted its plan to enhance the work in existing programs through new deployment technologies. Planned mitigation efforts covered a wide range of programs, including:

- Advancing capabilities in risk assessment and prioritization, ensuring more efficient allocation of resources for wildfire mitigation. PacifiCorp planned to explore expanding mitigation programs beyond existing High Fire Threat Districts (HFTDs), using new risk modeling insights.
- Continuing to deploy grid hardening plans and technology with elevated fire risk (EFR) settings. PacifiCorp planned to continue infrared (IR) inspections in transmission systems and evaluate pilot projects such as distribution IR inspections.
- Continuing to progress its vegetation inspection and maintenance activities and implementing the Enhanced Overhang Reduction pilot program.
- Deploying wildfire cameras, and smoke sensors, expand its weather station coverage, and complete its implementation the Fire Potential Index (FPI). PacifiCorp planned to explore the use of Distribution Fault Anticipators (DFA) tools.
- Engaging with public safety partners to further Public Safety Power Shutoff (PSPS) preparedness, supported by a functional exercise based on past collaborations; and continuing customer support initiatives, including a portable battery program and generator rebates.[5] PacifiCorp planned to invest in data management software to improve event management and reporting through its Public Safety Partner (PSP) Portal.[6]

The 2023 WMP also contained three- and ten-year objectives. Selected three-year objectives included:

- Replacing all expulsion fuses within the HFTD area.
- Continuing planned inspections and maintenance for distribution, transmission, and substation systems.
- Reviewing and revising standard operating procedures for vegetation management.

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[4] WMP Decision.
[5] 2023 WMP, pages 18-19.
[6] 2023 WMP, pages 28-29.

- Completing and implementing outage procedures for restoration purposes.
- Incorporating feedback and industry best practices into emergency management practices.
- Evaluating an expansion of the portable battery and backup power rebate programs.[7]

Selected ten-year objectives included:

- Improving EFR settings and capabilities.
- Completing system automation upgrades on all identified relays.
- Completing line rebuilds of all identified overhead line miles within the HFTD area.
- Continuing to improve quality assistance/quality control (QA/QC) programs for vegetation management work.
- Continuing to leverage artificial intelligence (AI) and machine learning to create a more automated weather and risk forecasting system.
- Including hazard-specific annexes for all of PacifiCorp's service territory in its Emergency Response Plan (ERP).
- Continuing to meet every two-three years with other utilities to discuss the best practices and lessons learned.
- Increasing availability of wildfire and PSPS resources in multiple languages
- Automating collection and dissemination of key PSPS data.[8]

Descriptions of the activities and objectives of the programs and initiatives contained in PacifiCorp's 2023 WMP are listed in the table in Appendix A.

3. PacifiCorp Annual Report on Compliance

Public Utilities Code section 8386.3(c)(1) directs electrical corporations to file a report addressing the electrical corporation's compliance with their WMP during a compliance year. This document is known as the Electrical Corporation Annual Report on Compliance (EC ARC).

Energy Safety's 2023 Compliance Guidelines outlined the requirements for an EC ARC prepared to address the 2023 compliance year and filed by the electrical corporation in early 2024. The EC ARC was required to detail the electrical corporation's self-assessment of its compliance with the 2023 WMP during the 2023 compliance period.[9]

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[7] 2023 WMP, pages 128-129.
[8] 2023 WMP, pages 128-129.
[9] Compliance Guidelines, pages 6-10.

PacifiCorp submitted its EC ARC to Energy Safety on April 2, 2024.[10] The following is a narrative summary of the EC ARC.

In general, PacifiCorp asserted that it was "[u]nable to calculate % risk reduction within 2023 for its WMP activities,"[11] but also added that its "[W]ildfire Risk Reduction Model (WRRM) is currently in use and will help calculate [future] risk reduction for various mitigation efforts and initiatives."[12]

According to PacifiCorp's 2023 EC ARC, PacifiCorp implemented and tracked the progress of 24 WMP objectives outlined in its 2023 WMP.[13] Energy Safety understands the 24 WMP objectives included WMP activity initiatives (i.e., expulsion fuse replacement), and groupings of WMP initiative activities into programs (i.e., execution of grid hardening plans).

PacifiCorp reported the following for the 2023 compliance period:

- Continued refining of its PSPS risk assessment, with completion expected in 2024.[14]
- Advanced grid hardening efforts including pole replacements, system automation, and IR inspections on transmission and distribution lines, expanding coverage in high fire-threat areas.[15]
- Progressing vegetation management with routine clearing and a pilot overhang reduction project.[16]
- Enhanced situational awareness through use of the FPI, deployed wildfire detection cameras and smoke sensors, and expanded its weather station network.[17]
- Improved emergency preparedness including tabletop exercises and the Public Safety Partner Portal. Community outreach efforts were strengthened by incorporating feedback from wildfire surveys and increasing focus on Access and Functional Needs (AFN) populations.[18]

PacifiCorp stated that it "continues to evaluate and refine programs and measures to ensure that it is taking actions that will reduce wildfire risk without imposing unnecessary costs and burdens on customers."[19]

[10] EC ARC.
[11] EC ARC, pages 10-20.
[12] EC ARC, page 7.
[13] EC ARC, pages 6-9.
[14] EC ARC, page 3.
[15] EC ARC, page 3.
[16] EC ARC, page 4.
[17] EC ARC, page 4.
[18] EC ARC, pages 4-5.
[19] EC ARC, page 26.

In addition to PacifiCorp's assessment of compliance with its 2023 WMP initiatives, PacifiCorp provided an analysis of planned vs. actual initiative expenditures. The main location for this information is in Section 3 of the EC ARC, and it is summarized in Section 3.2 below.[20]

3.1 EC ARC Information on Initiative Completion

Although PacifiCorp noted it was unable to quantify risk reduction for initiative achievements in 2023,[21] PacifiCorp highlighted the following for the 2023 compliance year:

- PacifiCorp expanded the IR inspection program in 2023 to include the inspection of distribution lines in the HFTD areas.
- FPI was procured and implemented in 2023.
- Deployment of Wildfire Detection Network (wildfire detection cameras and smoke sensors) – PacifiCorp installed and deployed two wildfire detection cameras and 20 smoke sensors in 2023.
- The company expanded its weather station network by installing 15 additional weather stations in 2023.
- For emergency preparedness, PacifiCorp participated in workshops, international and national forums, consortiums, and advisory boards in 2023 to maintain an understanding of existing best practices and collaborate with industry experts regarding new technologies and research.[22]

3.2 EC ARC Information on Initiative Funding

PacifiCorp's EC ARC reported spending above the planned amounts on its 2023 WMP initiatives by approximately $9.5 million in aggregate, 7% above the planned expenditure.[23] However, this accounting was inclusive of several programs and projects that were not included as targets or objectives in its 2023 WMP, for example:

- 7.1.2: Wildfire Mitigation Strategy Development: $818,000 actual spend.
- 7.1.4.1: Identifying and Evaluating Mitigation Initiatives: $428,000 actual spend.[24]

When eliminating spending on those activities not included as targets for 2023, PacifiCorp spent above its planned amounts by $6 million in capital expenditures and approximately $2.25 million in operating expenditures for a total of $8.25 million in the aggregate. PacifiCorp did not make any general claims as to the impact of this on its ability to meet its 2023 WMP initiative targets.[25]

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[20] EC ARC, pages 22-25
[21] EC ARC, pages 10-22.
[22] EC ARC, pages 2-5.
[23] EC ARC, page 25.
[24] EC ARC, page 25.
[25] EC ARC, page 25.

As described below, Energy Safety found PacifiCorp met its targets for seven of the 10 initiatives with the largest planned expenditures. Energy Safety also found PacifiCorp did not meet its targets for three of the 10 initiatives with the largest planned expenditure; however, PacifiCorp exceeded its planned expenditure for these three initiatives in spite of the missed targets. PacifiCorp attributed greater than planned spending on the three unmet initiatives to the cost of materials, permit delays, and construction labor. The actual expenditure for these three unmet initiatives contributed to 82% of actual expenditure on all 2023 WMP initiative activities.

4. Independent Evaluator ARC for PacifiCorp

Energy Safety, in consultation with the Office of the State Fire Marshal, annually publishes a list of entities qualified to serve as independent evaluators of WMP compliance.[26] Each electrical corporation is then required to hire an independent evaluator (IE) from the list to perform an independent WMP compliance assessment.[27]

The IE reviews and assesses the electrical corporation's compliance with its approved WMP. As part of its evaluation, the IE must determine whether the electrical corporation failed to fund any activities included in its plan.

On July 1st of each year, the IE issues its Independent Evaluator Annual Report on Compliance (IE ARC) for a given electrical corporation.[28]

The 2023 IE ARC for PacifiCorp was prepared by NV5, Inc. and Guidehouse, Inc. The IE ARC included a review of the wildfire mitigation initiatives and activities implemented in 2023, and an accounting of whether PacifiCorp met its performance targets, underfunded any of its initiatives, and followed its quality assurance and quality control (QA/QC) processes.

The IE determined that PacifiCorp largely achieved its initiative activities and objectives outlined in the approved PacifiCorp 2023 WMP.[29] The IE also evaluated PacifiCorp's funding of initiatives and determined that PacifiCorp did not fail to fund its initiative activities. The IE further determined that PacifiCorp appeared to follow "[i]ts QA/QC processes to the degree that they are documented."[30]

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[26] Pub. Util. Code § 8386.3(c)(2)(A).
[27] Pub. Util. Code § 8386.3(c)(2)(B)(i).
[28] Pub. Util. Code § 8386.3(c)(2)(B)(i).
[29] IE ARC, page 1.
[30] IE ARC, page 1.

The IE reviewed PacifiCorp's 2023-2025 Final Wildfire Mitigation Plan, Quarterly Data Reports, and Annual Report on Compliance, identifying 39 individual initiatives for assessment.[31] These initiatives were categorized as:

- Quantitative targets that are field verifiable (5)
- Quantitative targets that are not field verifiable (21)
- Qualitative and not field verifiable (13)

The IE's review found that PacifiCorp did not meet targets for seven of its 2023 WMP initiatives.[32]

For its evaluation, the IE utilized a variety of techniques, including inspecting a sample of PacifiCorp's field verifiable WMP initiatives to analyze PacifiCorp's progress toward meeting its WMP commitments.

As a result of the work conducted, the Independent Evaluator made some observations and recommendations to PacifiCorp in certain areas, as listed below:

- With respect to distribution pole replacement and reinforcements, the IE verified that only 1,565 pole replacements out of a target of 2,600 were completed.[33] The IE noted that the missed target was due to material delays and constraints related to disruptions caused by two wildfires, which prompted the redirection of resources towards evacuations and emergency response efforts. Additionally, there were delays in permitting and construction for certain planned replacements.[34]
- For some other initiatives, the IE noted several incomplete targets, most of which were tied to material delays, permitting issues, and supply shortages. These included:
    - Covered conductor installation – IE verified only 101 out of 130 targeted line miles were replaced.
    - Expulsion fuse replacement – IE verified only 4,147 out of 5,000 targeted expulsion fuses were replaced.
- The IE identified several 2023 WMP initiatives where targets were missed by margins of less than 5%. These included:
    - Transmission Patrol inspections - IE verified 11,678 out of 11,754 targeted patrol inspections of transmission lines and equipment.
    - Distribution Patrol inspections – IE verified 50,444 out of 50,474 targeted detailed inspections of distribution lines and equipment.
    - Distribution Intrusive Pole Inspections – IE verified 2,398 out of 2,404 targeted.

[31] The IE ARC referenced progress on 39 specific initiatives, whereas the EC ARC referenced progress on 24 broader objectives.
[32] IE ARC, page 1.
[33] IE ARC, page 2.
[34] IE ARC, page 17.

  - Transmission Intrusive Pole Inspections - IE verified 932 out of 935 targeted.
  - Substation Inspections - IE verified 449 out of 451 targeted.[35]
- After reviewing the financial data, and holding weekly status calls and interviews, the IE confirmed that PacifiCorp tracked its spending appropriately.[36]
- While the IE believed that PacifiCorp maintains a robust QA/QC program for its asset inspection activities, the IE noted that PacifiCorp's vegetation management QA/QC program could use more structure and follow guidelines similar to those developed for asset inspections.
- The IE found that PacifiCorp's wildfire risk mitigation program lacked centralized oversight and a comprehensive view of WMP activities, but noted that this may be addressed through PacifiCorp's WMP centralized database initiatives.[37]

5. Energy Safety Assessment of WMP Initiative Completion

Energy Safety's assessment of PacifiCorp's performance in 2023 indicates that PacifiCorp attained 34 of its 44 targets (77%) for its 2023 WMP initiative activities and objectives and did not attain 10 of 44 targets (23%). The subsections below describe Energy Safety's assessment of PacifiCorp's execution of its 2023 WMP.

5.1 PacifiCorp 2023 WMP Initiative Activities Assessed by Energy Safety

Energy Safety assessed 44 wildfire mitigation initiative from 2023 WMP. The initiatives are grouped into eight main categories:

1. Asset Inspections with 10 initiatives assessed and a funding budget of $1,432,000 for the assessed initiatives.
2. Community Outreach with one initiative assessed and a funding budget of $90,000 for the assessed initiatives.
3. Emergency Preparedness Plan with four initiatives assessed and a funding budget of $340,000 for the assessed initiatives.

[35] IE ARC, pages 2-5.
[36] IE ARC, page 68.
[37] IE ARC, page 72.

4. Grid Design and System Hardening with five initiatives assessed and a funding budget of $103,313,000 for the assessed initiatives.
5. Maintenance and Repair with one initiative assessed and a funding budget of $245,000 for the assessed initiatives.
6. Public Safety with one initiative assessed and a funding budget of $850,000 for the assessed initiatives.
7. Situational Awareness and Forecasting with five initiatives assessed and a funding budget of $887,000 for the assessed initiatives.
8. Vegetation Management with 17 initiatives assessed and a funding budget of $19,174,000 for the assessed initiatives.

A complete list of initiatives appears in Appendix A.

The initiative assessment process included comparing the actual initiative completion figures reported by PacifiCorp in the QDR, the EC ARC, and as reported by the IE in the IE ARC.[38] In some cases, Energy Safety issued a data request to answer specific questions. If data request information is used in the assessment, a citation for the particular instance is provided. Finally, Energy Safety's Substantial Vegetation Management (SVM) Audit and SVM Audit Report also contributed to Energy Safety's ARC assessment.[39]

5.2 Energy Safety Analysis of Substantial Vegetation Management Audit

Public Utilities Code section 8386.3(c)(5) requires Energy Safety to perform an audit of the work performed by, or on behalf of, an EC with respect to the vegetation management requirements in its WMP.[40] Energy Safety refers to this audit as the SVM Audit. Pursuant to section 8386.3(c)(5), Energy Safety conducted an audit of PacifiCorp's work with respect to its vegetation management requirements for the 2023 compliance year.

On February 21, 2025, Energy Safety issued its SVM Audit for PacifiCorp.[41] In the SVM Audit, Energy Safety reviewed 13 vegetation management initiatives detailed in PacifiCorp's 2023 WMP and found that PacifiCorp did not perform all the work specified for five of 13 vegetation management initiatives and required PacifiCorp to provide a Corrective Action Plan (CAP) response within 30 days from the issuance of the SVM Audit.[42] On March 21, 2025, PacifiCorp submitted its Corrective Action Plan to Energy Safety.[43] Energy Safety issued a SVM Audit

[38] QDR; EC ARC; IE ARC.
[39] SVM Audit; SVM Audit Report.
[40] Pub. Util. Code § 8386.3(c)(5).
[41] SVM Audit.
[42] SVM Audit, page 2.
[43] SVM Audit CAP.

Report on May 30, 2025, which found that PacifiCorp substantially complied with 11 of the 13 vegetation management initiatives its 2023-2025 WMP.[44]

Of the five initiatives for which Energy Safety identified deficiencies in the SVM Audit, PacifiCorp was able to provide additional information demonstrating substantial compliance for three of them in its CAP. PacifiCorp failed to provide sufficient information to support the completion of its Wood and Slash Management and High-Risk Species initiatives, and therefore PacifiCorp was found not to be substantially compliant with those two initiatives.[45] Overall, the SVM Audit Report found that PacifiCorp substantially complied with a substantial portion of the vegetation management requirements in its 2023 WMP.[46]

The specific findings from Energy Safety's SVM Audit Report are detailed in Appendix B.

5.3 PacifiCorp WMP Objective and Initiative Activity Attainment in 2023

Energy Safety assessed 44 initiative activities from the 2023 WMP and found that 10 initiative activities were not completed (23%). The initiative activities that were not attained accounted for 83% of the planned 2023 WMP budget. Of the top ten largest initiatives by planned budgeted amount, three were incomplete.

A complete list of the initiative activities and objectives that were not attained, along with their risk impact goal attainment, is shown in Table 1.

At the time of reporting on 2023 performance, PacifiCorp did not yet have risk modeled for all circuits. PacifiCorp plans to implement a Risk Spend Efficiency model starting in late 2023 to measure wildfire risk, with results to be shared in late 2024. PacifiCorp's 2023 WMP states that the report will include the current and expected wildfire ignition risk for the highest risk circuits after safety actions are taken, along with the percent change.[47]

[44] SVM Audit Report, pages 7-9.
[45] SVM Audit Report, pages 14 16.
[46] SVM Audit Report, page 5.
[47] 2023 WMP, pages 130-131.

Table 1: PacifiCorp Non-attainment of WMP Initiative Activities

2023 WMP Initiative Name and Tracking IDs	2023 Initiative Activity	Details of Non-attainment and Rationale	Risk Goal Achieved
Line Rebuild - Covered conductor installation 8.1.2.1	Complete line rebuilds of all identified overhead line miles within the HFTD	Target: 130 Line miles Actual: 101 Line miles Unit and permitting costs were higher than planned due to an increase in projects with expedited schedules.[48] Also, PacifiCorp encountered mandatory evacuations and resource constraints due to the Head Fire and Smith River Complex Fire in Q3 2023.[49]	No, 78% complete.
Distribution Pole Replacement 8.1.2.3	Replace wooden poles with stronger non-wooden solutions such as fiberglass or steel.	Target: 2,600 poles Actual: 1,592 poles PacifiCorp encountered mandatory evacuations and resource constraints due to the Head Fire and Smith River Complex Fire that occurred in Q3 2023.[50]	No, 61% complete.

[48] EC ARC, page 23.
[49] EC ARC, page 11.
[50] EC ARC, page 10.

2023 WMP Initiative Name and Tracking IDs	2023 Initiative Activity	Details of Non-attainment and Rationale	Risk Goal Achieved
Transmission Pole Replacement 8.1.2.4	Replace wooden poles with stronger non-wooden solutions such as fiberglass or steel.	Target: 260 poles Actual: 165 poles PacifiCorp encountered mandatory evacuations and resource constraints due to the Head Fire and Smith River Complex Fire that occurred in Q3 2023. PacifiCorp also dealt with a delay in critical permitting and mobilization of design and construction resources.[51]	No, 63% complete.
Installation of system automation equipment 8.1.2.8	Complete system automation upgrades on all identified relays	Target: 40 devices Actual: 36 devices PacifiCorp encountered mandatory evacuations and resource constraints due to the Head Fire and Smith River Complex Fire that occurred in Q3 which resulted in reduced work.[52]	No, 90% complete.

[51] EC ARC, page 11.
[52] EC ARC, page 11.

2023 WMP Initiative Name and Tracking IDs	2023 Initiative Activity	Details of Non-attainment and Rationale	Risk Goal Achieved
Expulsion Fuse Replacement 8.1.2.12	Install new and CAL FIRE-approved non-expulsion fuses, including power fuses and current limiting fuses, to replace existing expulsion fuse equipment	Target: 5,000 Fuses Actual: 4,147 Fuses Due to a delay in material delivery, not all the planned work for expulsion fuses occurred.[53]	No, 83% complete.
Enhanced IR Inspections in distribution lines 8.1.3.5	Expand an IR inspection pilot to include all distribution line miles within the HFTD to evaluate how the program might work on a larger scale.	Target: 810 line-miles Actual: 757 line-miles These inspections were impacted by limited access due to the Head Fire.[54]	No, 93% complete.

[53] EC ARC, page 12.
[54] IE ARC, page 2.

2023 WMP Initiative Name and Tracking IDs	2023 Initiative Activity	Details of Non-attainment and Rationale	Risk Goal Achieved
Vegetation and Fuels Management – Wood and Slash Management 8.2.3.2	PacifiCorp was to manage slash in developed areas by chipping or removing (recycles where practicable) forestry waste where accessible, unless the property owner indicates otherwise. In rural, off-road areas PacifiCorp was to use a lop and scatter and chipping (where accessible) practice to reduce the volume of available fuel within the right-of-way and adhere with land managing agency requirements.[55]	PacifiCorp failed to provide sufficient information to establish the completion of this initiative.	No.

[55] 2023 WMP, page 200.

2023 WMP Initiative Name and Tracking IDs	2023 Initiative Activity	Details of Non-attainment and Rationale	Risk Goal Achieved
Vegetation and Fuels Management – High-Risk Species 8.2.3.6	Within the HFTD, PacifiCorp was to perform pruning to prevent vegetation from breaching a 4-foot minimum clearance within one year. Additional pruning for at-risk species with very fast growth rates may have been used. Pre-listers also identify discretionary removals of at-risk species to eliminate ignition risk and need for cyclical pruning.[56]	PacifiCorp failed to provide sufficient information to establish the completion of this initiative.	No.

[56] 2023 WMP, pages 204-205.

2023 WMP Initiative Name and Tracking IDs	2023 Initiative Activity	Details of Non-attainment and Rationale	Risk Goal Achieved
Public emergency communication strategy PSPS 8.4.4.2	Improve a web-based application that hosts key information from PacifiCorp's IT systems about customers identified as critical facilities or infrastructure for use by public safety partners during PSPS events.[57]	Project milestones for the PSPS portal shifted from 2023 to 2024. The IE stated that "PacifiCorp continues to work through improvements to the Public Safety Partner Portal."[58]	N/A
Customer support in wildfire and PSPS emergencies 8.4.6	Evaluate expansion of the free portable battery and backup electric power.	The QDR refers to targeting 44 customers to receive batteries. However, there were only seven eligible medical baseline customers.[59]	N/A

6. Ignition Risk, Outcome Metrics, and Inspections

Energy Safety assessed the performance of PacifiCorp's infrastructure relative to its wildfire risk, as measured by changes in the occurrence of events that correlate to wildfire risk.

Energy Safety requires PacifiCorp to report data, such as ignitions, that help Energy Safety assess whether PacifiCorp reduced its wildfire risk while also reducing its reliance on PSPS

[57] 2023 WMP, page 287.
[58] IE ARC, page 64.
[59] EC ARC, page 23.

events. For 2023, Energy Safety assessed PacifiCorp's infrastructure performance for the calendar years 2016 through 2023 with particular attention on the 2023 outcomes.

The collection of metrics evaluated are grouped into two categories: Ignition Risk Metrics, and Outcome Metrics. A list of all the metrics in each category is described fully in their respective following sections. For these sections, Energy Safety relied on data reported in the third quarter 2022 QDR for the years 2016 through 2021, the fourth quarter 2022 QDR for the 2022 values, and the fourth quarter 2023 QDR for 2023 values.[60]

Normalizing Metrics

For applicable performance metrics, the normalizing metrics Energy Safety uses are: "Overhead Circuit Miles" (OCM), "High Wind Warning Overhead Circuit Mile Days" (High Wind Warning Days or HWWOCMD), and "Red Flag Warning Overhead Circuit Mile Days" (Red Flag Warning Days or RFWOCMD). To see the values for each year used, see Appendix C, Figure 17 through Figure 25.[61]

Energy Safety uses these normalizing metrics to ensure a more nuanced interpretation of wildfire risk outcomes. For example, the outcome metric of "acres burned" may be impacted by the presence of hot dry winds and, thus, this metric is presented in both raw counts and normalized by RFWOCMD. In this way, the acres burned are presented "accounting for" year by year variances in weather conditions that may influence the outcome.

Findings

Ignition risk and outcomes metrics findings include:

- Ignition counts decreased in 2023 relative to 2019-2022.
- Equipment failure and vegetation contact were the primary causes of ignition events from 2016 to 2023, accounting for approximately 75% of all incidents.
- Wire down events decreased from 2019 to 2022 but increased in 2023. Similarly, outage events fluctuated from 2016 to 2023, with an increase observed in 2023 relative to 2022, with HFTD Tier 3 areas contributing most to the 2023 increase when normalized.
- Zero PSPS events occurred in 2023.

6.1 Ignition Risk Metrics

Energy Safety reviewed the following metrics associated with ignition risk:

1. *Ignitions* – Incidents in which PacifiCorp infrastructure was involved in an ignition,

[60] 2022 Q3 QDR; 2022 Q4 QDR; 2023 Q4 QDR.
[61] 2022 Q3 QDR, Tables 6 and 8; 2023 Q4 QDR, Tables 4 and 7.

2. *Wire Down Events* – Incidents in which overhead electrical lines fall to the ground, land on objects, or become disconnected from their moors,
3. *Unplanned Outages* – All unplanned outages experienced,
4. *PSPS Events* – Planned outages called PSPS events.

6.1.1 Ignition Data Analysis

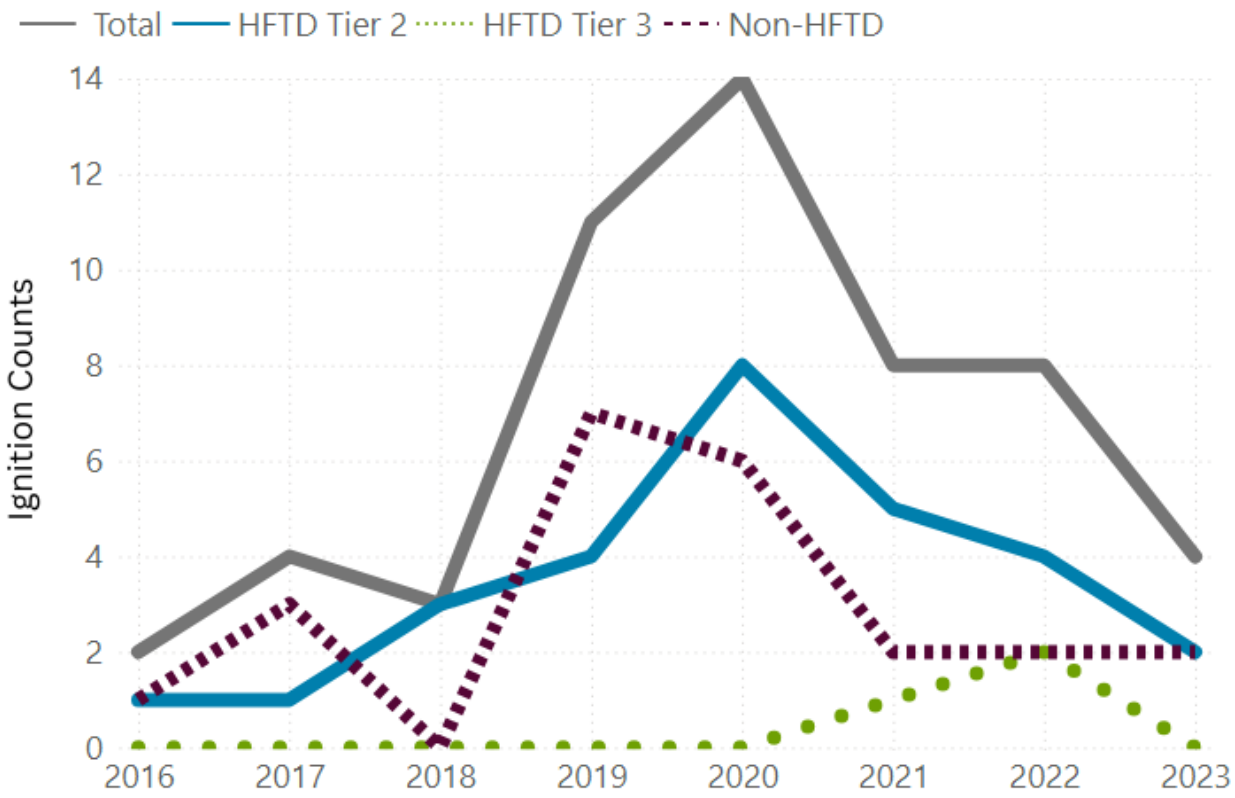
The ignition data analysis section examines ignitions stemming from distribution and transmission lines with particular attention paid to HFTD Tier 2 and HFTD Tier 3 areas.[62] In addition to showing raw ignition counts, ignitions are normalized by OCM, HWWOCMD, and RFWOCMD. PacifiCorp's service territory is divided into three primary area designations: Non-HFTD, HFTD Tier 2, and HFTD Tier 3. For a sense of scale, the percentage of OCM for each territory type is as follows: non-HFTD = 64%, HFTD Tier 2 = 34%, and HFTD Tier 3 = 2%.[63]

[62] 2022 Q3, Table 7.2; 2023 Q4 QDR, Table 6.
[63] 2023 Q4 QDR, Table 7; DR 283, Table 7.

Raw Ignition Counts

Raw ignitions in HFTD Tier 3 areas remained below two from 2016 to 2023 (Figure 1). In contrast, ignitions in HFTD Tier 2 and non-HFTD areas fluctuated, peaking in 2019 for non-HFTD areas and in 2020 for HFTD Tier 2. Overall, total ignition counts declined from 2021 to 2023.

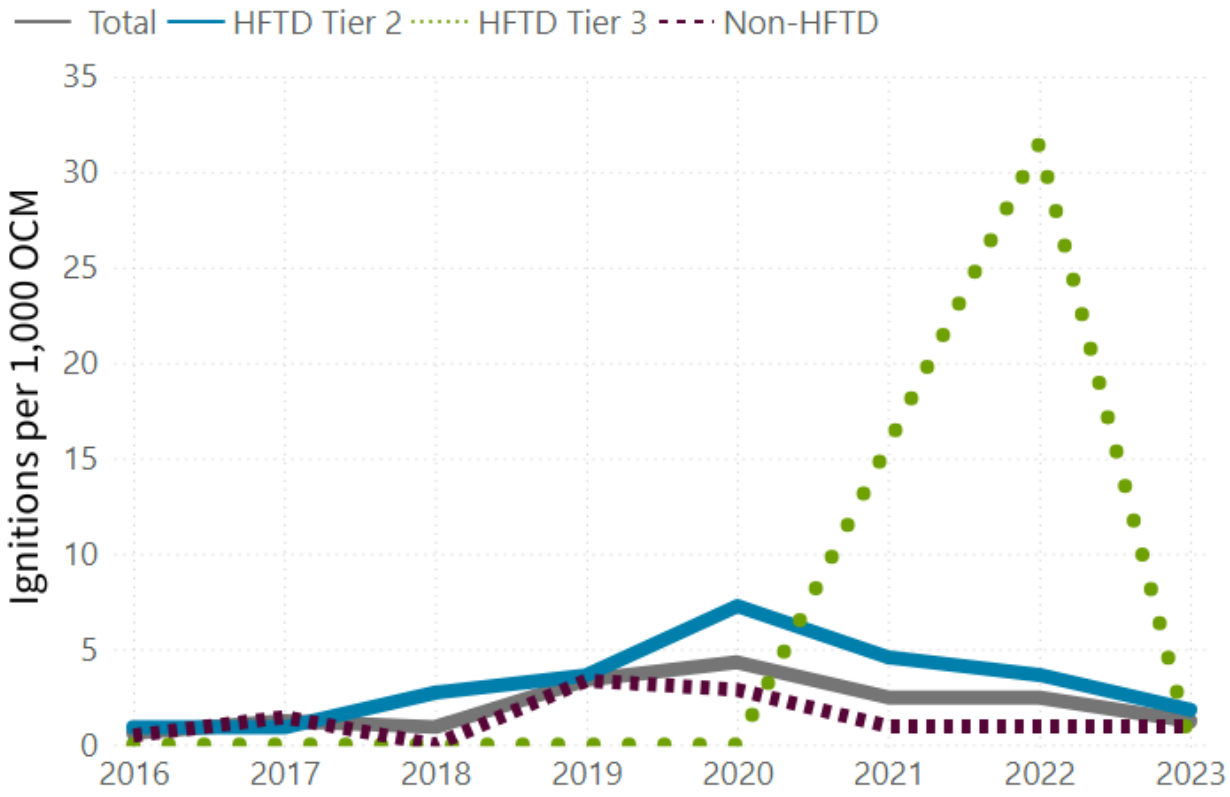
Figure 1. PacifiCorp Ignition Counts (2016-2023) by HFTD Tier



Ignitions Normalized by Overhead Circuit Miles

The normalized ignition totals remained consistent from 2016 to 2020 (Figure 2). Between 2020 and 2023, normalized ignition counts increased in HFTD Tier 3 areas while decreasing elsewhere. Non-HFTD normalized ignitions remained steady from 2022 to 2023, whereas HFTD Tier 2 normalized ignitions declined by 74.83% from 2020 to 2023. HFTD Tier 3 normalized ignitions peaked in 2022 before dropping to zero in 2023. Because HFTD Tier 3 encompasses fewer circuit miles than the non-HFTD region, normalizing ignitions by overhead circuit miles yields higher per-mile rates, making Tier 3's peaks appear more pronounced even though the raw ignition trend mirrors those of the other areas.

Figure 2. PacifiCorp Ignitions Normalized by OCM (2016-2023) by HFTD Tier

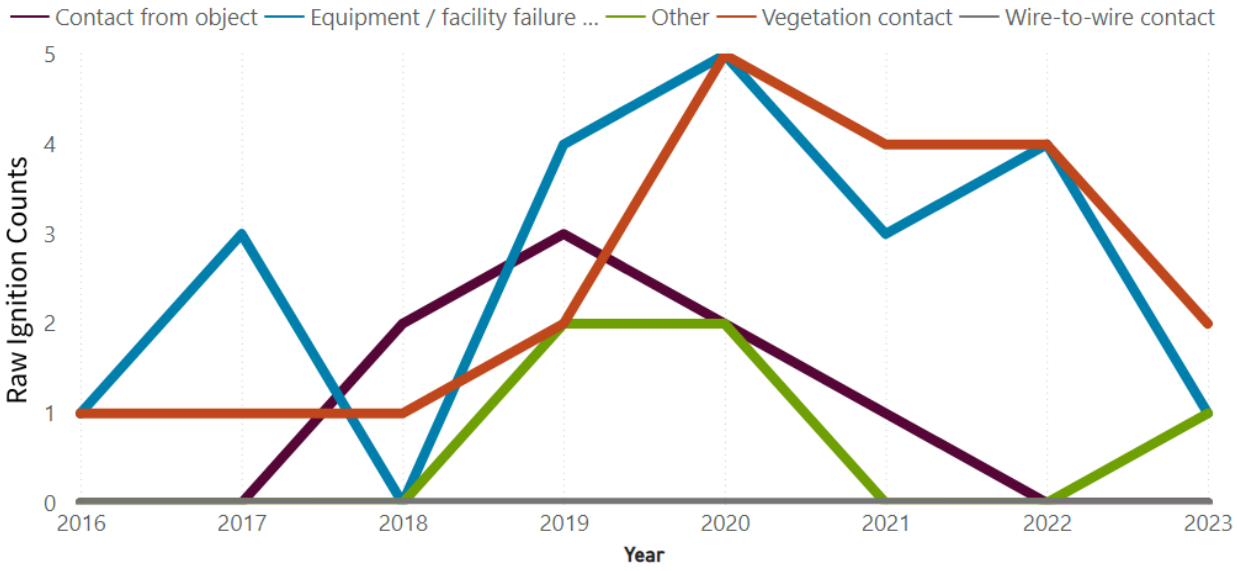


Ignition Counts Delineated by Risk Driver

For insights into the causes of ignitions, ignitions are categorized by risk driver (Figure 3). From 2016 to 2023, ignitions were primarily attributed by PacifiCorp to equipment or facility failures and vegetation contact, with those categories contributing to approximately 75% of the events.

During the 2020–2023 reporting period, vegetation contact and equipment or facility failures were the primary causes of ignitions. In contrast, equipment or facility failures alone were the most frequently reported cause in earlier reporting periods.

Figure 3. PacifiCorp Ignition Counts (2016-2023) by Risk Drivers



Ignitions by HFTD Tier Normalized by High Wind Warning Overhead Circuit Mile Days and Red Flag Warning Overhead Circuit Mile Days

To see more details on ignitions by HFTD tier normalized by HWWOCMD and RFWOCMD, see Appendix C (Figure 20 and Figure 21).

6.1.2 Wire Down Events Data Analysis

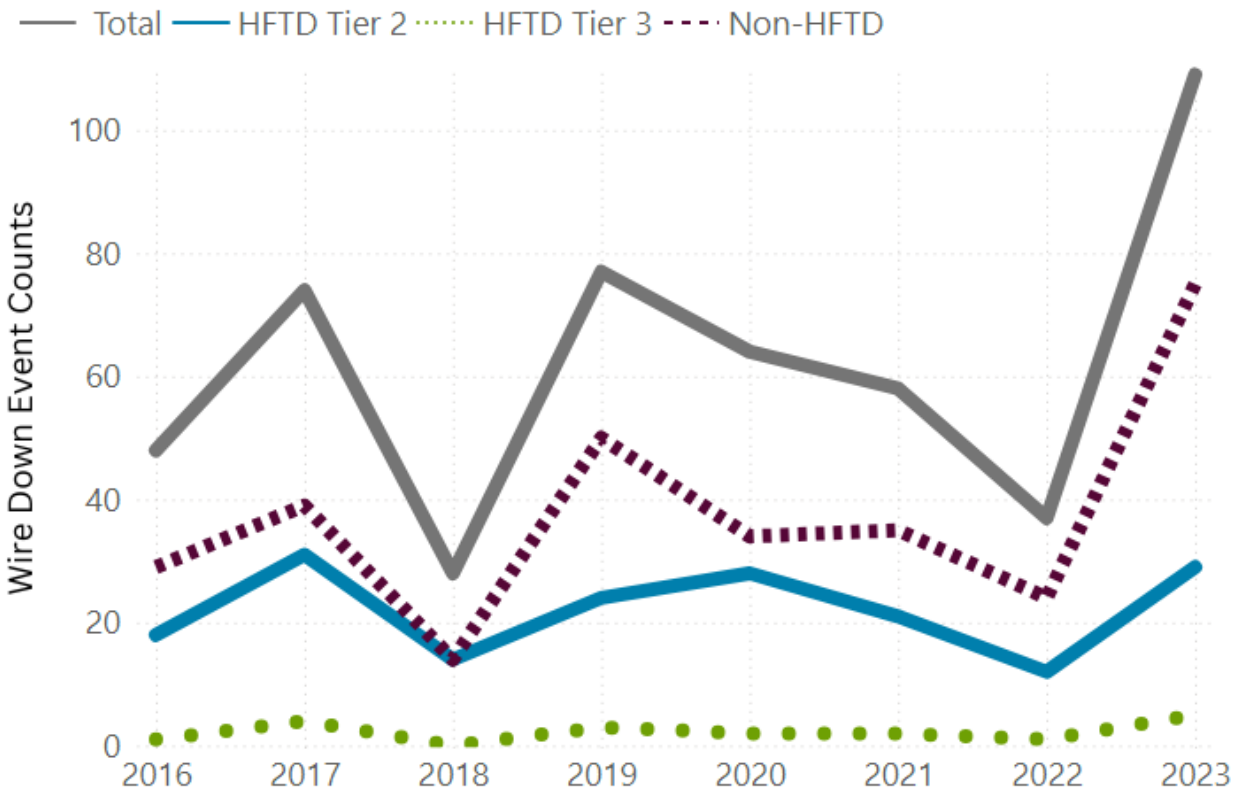
Wire down events are events where a wire is touching the ground, touching an object, or has become disconnected from its mooring. This type of event poses a risk of ignition or a danger to people if that wire is also energized with electricity. The data source for wire down information is the QDRs.[64]

[64] 2022 Q3 QDR, Table 7.1; 2023 Q4 QDR, Table 5.

Raw Wire Down Events

The PacifiCorp wire down event counts shows fluctuations across HFTD Tier 2 and non-HFTD areas from 2016 to 2023 (Figure 4). Total wire down events were greatest in 2017, 2019, and 2023, with lower numbers observed in other years. Wire down events were highly variable between 2016 and 2019 but experienced an increase in 2023 compared to 2022. The HFTD Tier 3 areas consistently contained the lowest number of events from 2016 to 2023.

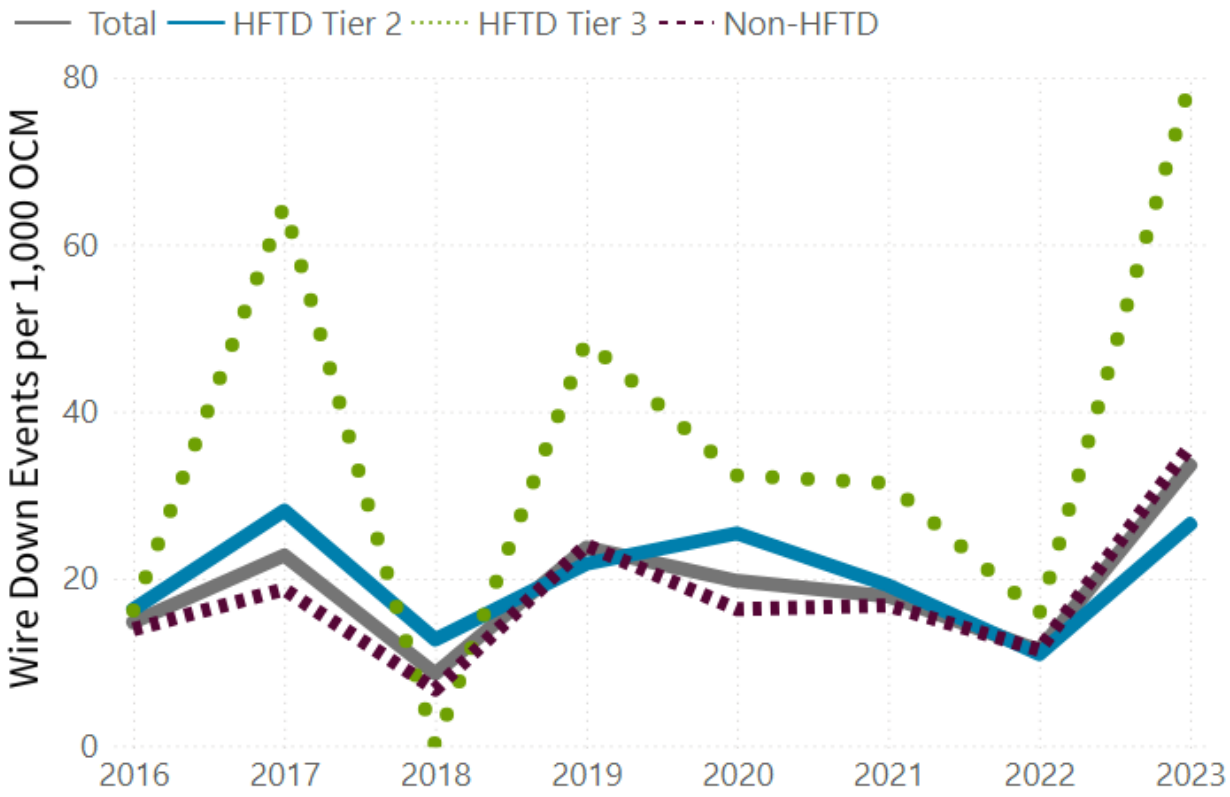
Figure 4. PacifiCorp Wire Down Event Counts (2016-2023) by HFTD Tier



Wire Down Events Normalized by Overhead Circuit Miles

The PacifiCorp wire down event counts shows fluctuations across HFTD Tier 2, HFTD Tier 3, and non-HFTD areas from 2016 to 2023 (Figure 5). Total wire down events peaked in 2017, 2019, and 2023, with lower numbers observed in other years. The normalized data show that HFTD Tier 3 areas consistently experienced the highest rate of wire-down events per 100 circuit-miles, culminating in a pronounced spike in 2023. The HFTD Tier 2 and non-HFTD areas exhibited more modest fluctuations in normalized rates.

Figure 5. PacifiCorp Wire Down Events Normalized by OCM (2016-2023) by HFTD Tier



Wire Down Events Normalized by High Wind Warning Overhead Circuit Mile Days and Red Flag Warning Overhead Circuit Mile Days

Please see Appendix C (Figure 22 and Figure 23) for wire down events normalized by HWWOCMD and RFWOCMD.

6.1.3 Outage Event Data Analysis

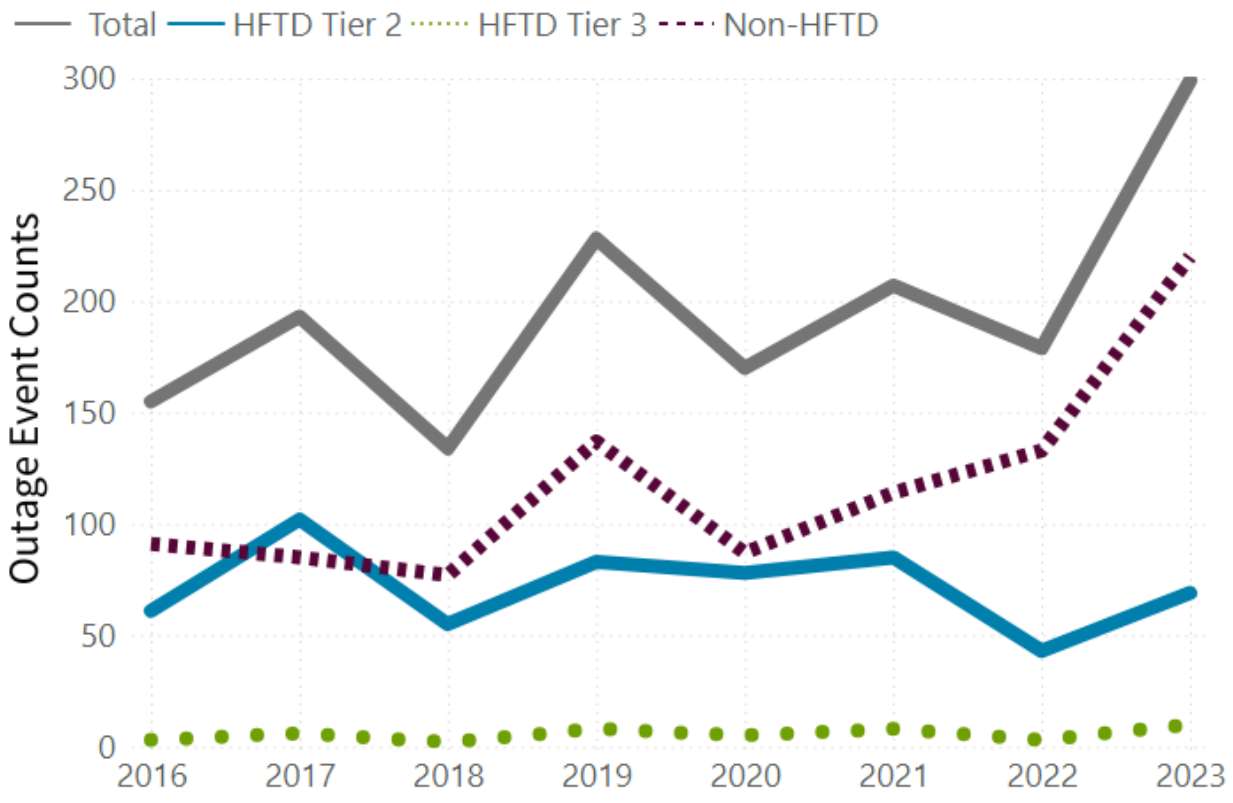
Power outages are unplanned power outage events (does not include PSPS events) tabulated by circuits and not by number of customers impacted. Outage events are tracked as

outcomes that both may cause ignitions and impact on the customer's quality of life. The data sources for outage event information are the QDRs.[65]

Raw Outage Event Counts

Total unplanned outage event counts fluctuated between 2016 and 2023, with notable spikes in 2019 and 2022 (Figure 6). Outage events in non-HFTD areas were consistently higher than those in HFTD Tier 2 and Tier 3 areas. In 2018, total outage events were at the lowest. The HFTD Tier 2 and Tier 3 area outage counts remained relatively stable with minor fluctuations, while non-HFTD area outages saw more pronounced variation, with an increase in 2023.

Figure 6. PacifiCorp Outage Events (2016-2023) by HFTD Tier

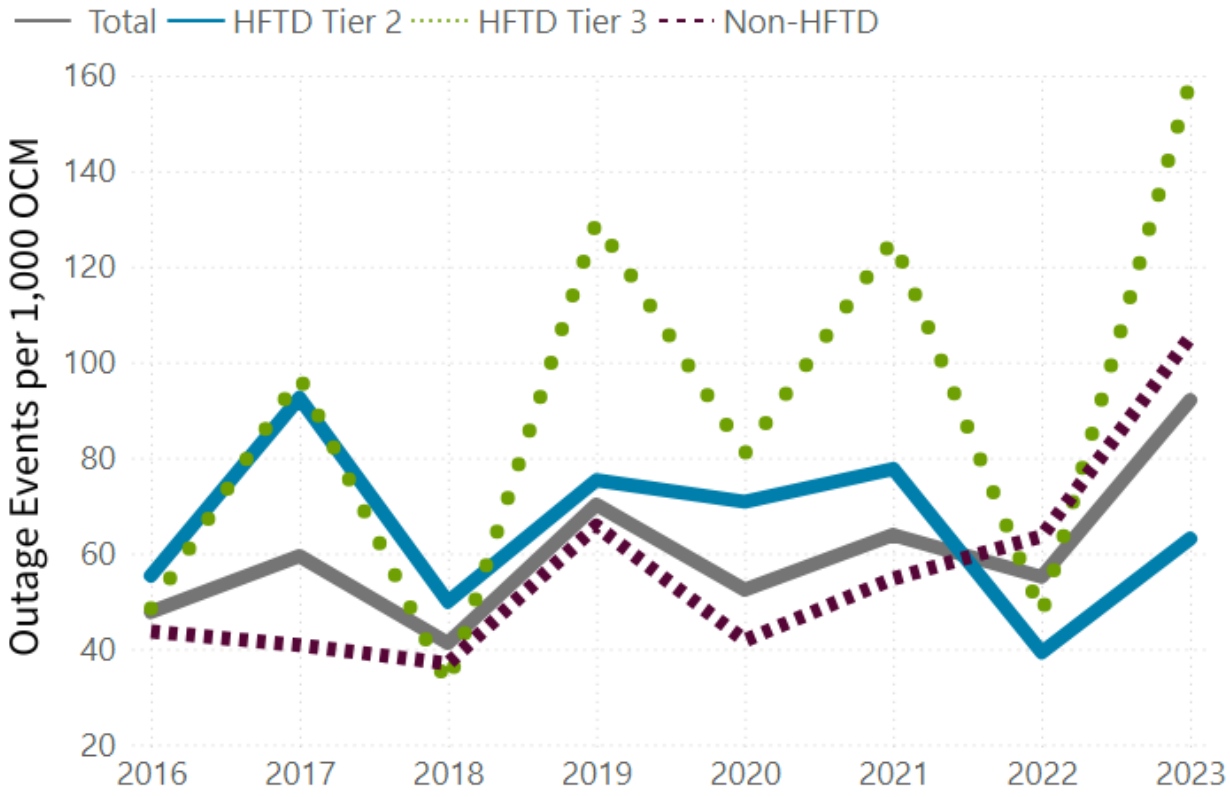


[65] 2022 Q3 QDR, Table 7.1; 2023 Q4 QDR, Table 5.

Outage Events Normalized by Overhead Circuit Miles

Normalized unplanned outage events varied between 2016 and 2023, with higher values observed in 2019 and 2023 (Figure 7). Normalized outages in non-HFTD areas were consistently lower from 2019 to 2021 than in HFTD Tier 2 and Tier 3 areas, with the largest rise occurring in 2023. In 2022, normalized outage events in HFTD Tier 2 and 3 areas decreased across before rising again in 2023. The HFTD Tier 3 area contained a sharp decline of normalized outages in 2022 and the largest increase of normalized outages in 2023.

Figure 7. PacifiCorp Outage Events Normalized by OCM (2016-2023) by HFTD Tier



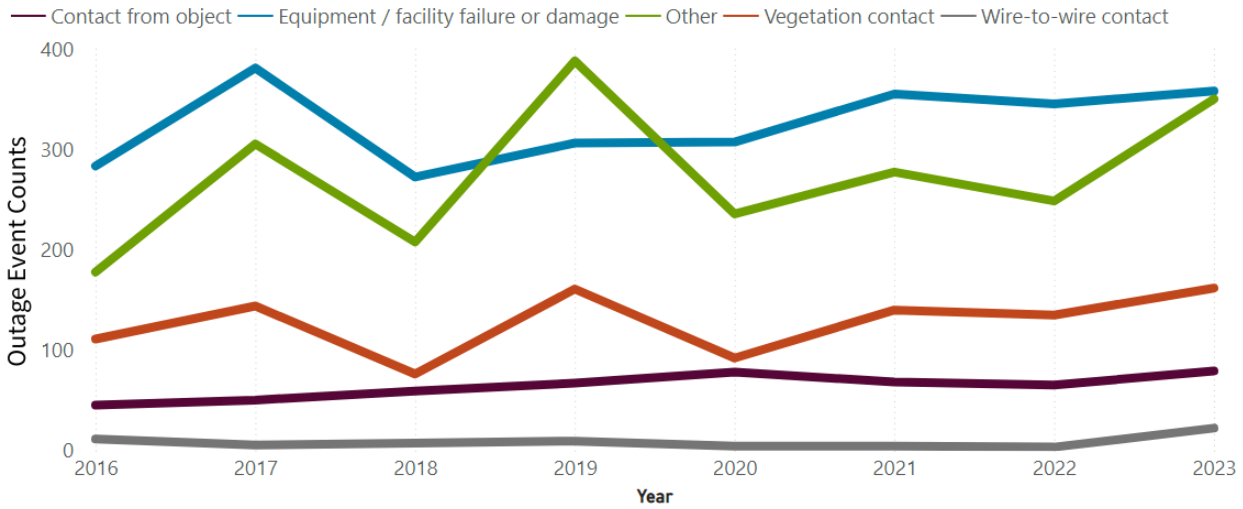
Outage Events Normalized by High Wind Warning Overhead Circuit Mile Days and Red Flag Warning Overhead Circuit Mile Days

Please see Appendix C (Figure 24 and Figure 25) for outage events normalized by HWWOCMD and RFWOCMD.

Outage Events by Risk Driver

The largest drivers of unplanned outage events over the period are equipment and facility failures and the category of "Other." The category of "Other" contains several sub-categories such as emergency repairs, fire, lightning, government requests, and vandalism. However, the "Other" category is dominated by the sub-category of unknown (>96%). Energy Safety recommends that PacifiCorp determine how it can better define and record the driver of unknown outage causes to allow for more effective planning to reduce such outages. This is especially important as PacifiCorp may use the outage data to determine the effectiveness of WMP mitigations reported in their proposed WMPs submitted to Energy Safety (Figure 8).

Figure 8. PacifiCorp Outage Events (2016-2023) by Risk Driver



6.1.4 Public Safety Power Shutoff Event Data Analysis

PSPS events are planned outages used as a wildfire mitigation tool during extreme fire conditions such as hot, dry, and windy days. While useful as a wildfire mitigation measure, PSPS events carry their own risks and adverse impacts on customers – particularly vulnerable customers who need electricity to survive. As such, electrical corporations take mitigating actions to reduce the frequency, scope, duration, and impacts of PSPS events.

As PSPS events are typically implemented during extreme fire conditions, the PSPS outcomes are presented first in raw count form and then normalized by RFWOCMD to account for variances in weather across years.

The following five PSPS event parameters are presented by year and comprise the PSPS event data analysis:

- *Frequency* is measured as the number or count of all PSPS events,
- *Scope* is measured as the total number of utility circuits impacted because of all PSPS events,

- *Duration* is measured by the total number of customer-hours because of all PSPS events, and
- *Customer Impacts* - is measured as the total number of customers affected by all PSPS events, and
- *Critical Infrastructure Impacts* - Critical Infrastructure is measured as the total number of critical infrastructure locations affected by all PSPS events.

The data source for PSPS events information is the QDRs.[66]

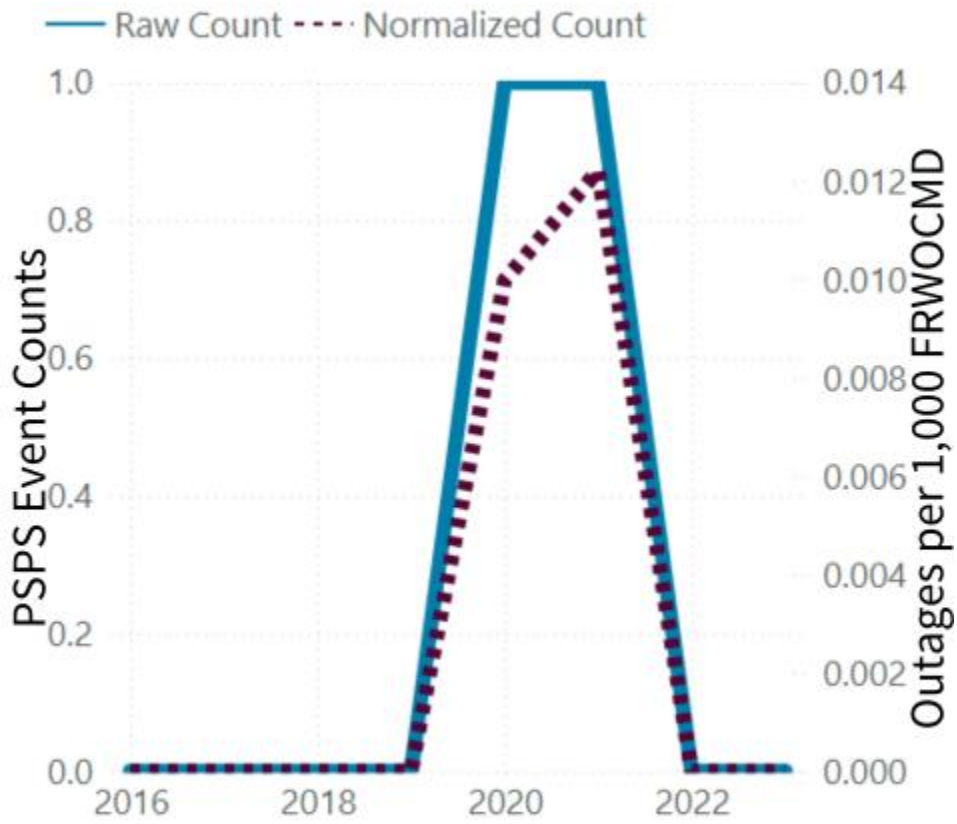
[66] 2022 Q3 QDR, Table 11; 2023 Q4 QDR, Table 10.

Frequency of PSPS Events

PacifiCorp had two PSPS events from 2016 to 2023 – one in 2020 and another in 2021.The weather-normalized count shows a peak in 2021, but a large decrease to zero in 2022 (Figure 9).

For the subsequent PSPS metrics of Scope, Duration, and Impacts, the fact that the weather-adjusted pattern aligns with the pattern of raw counts suggests that the adjustment does not provide additional insights beyond what is already observed in the raw count data. However, the absolute number of RFWOCMD decreased to very low values in 2022 and 2023 for all areas, which results in large fluctuations of the normalized data presented in figures normalized by RFWOCMD throughout this report.

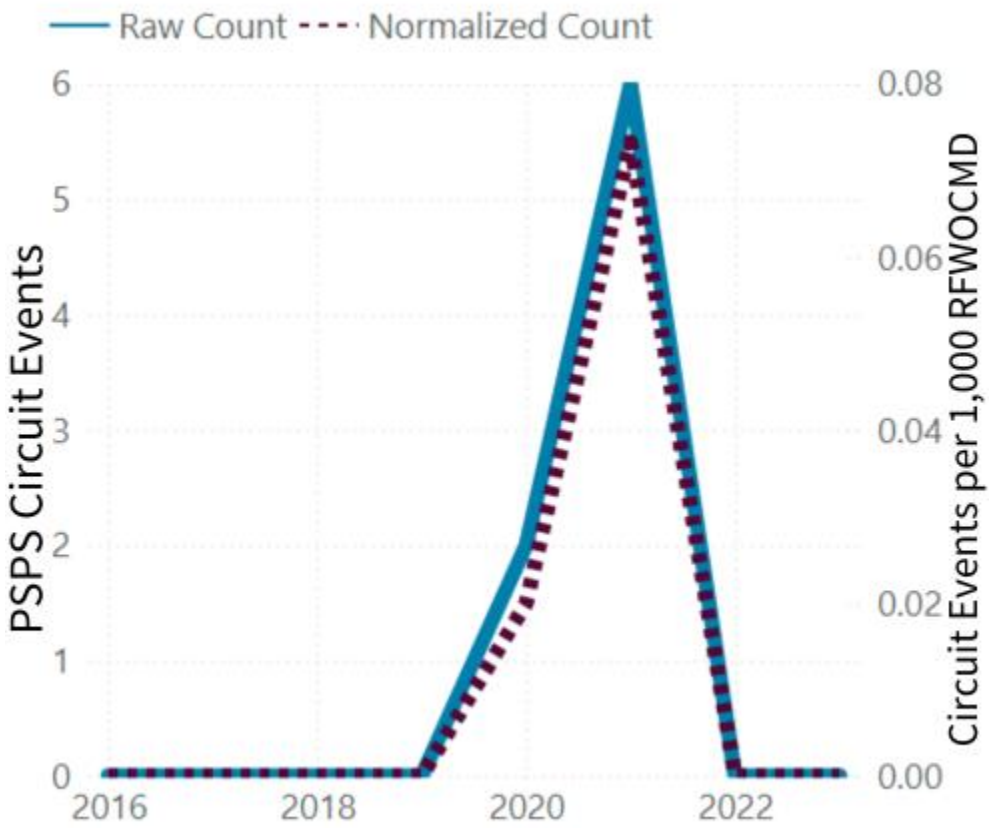
Figure 9. PacifiCorp PSPS Events Frequency Counts and Normalized Counts by RFWOCMD (2016-2023)



Scope of PSPS Events

The number of utility circuits impacted by PSPS events is at a maximum of six circuits in 2021, with zero in 2022 to 2023. When accounting for variances by year in weather, the peak is again in 2021 (Figure 10).

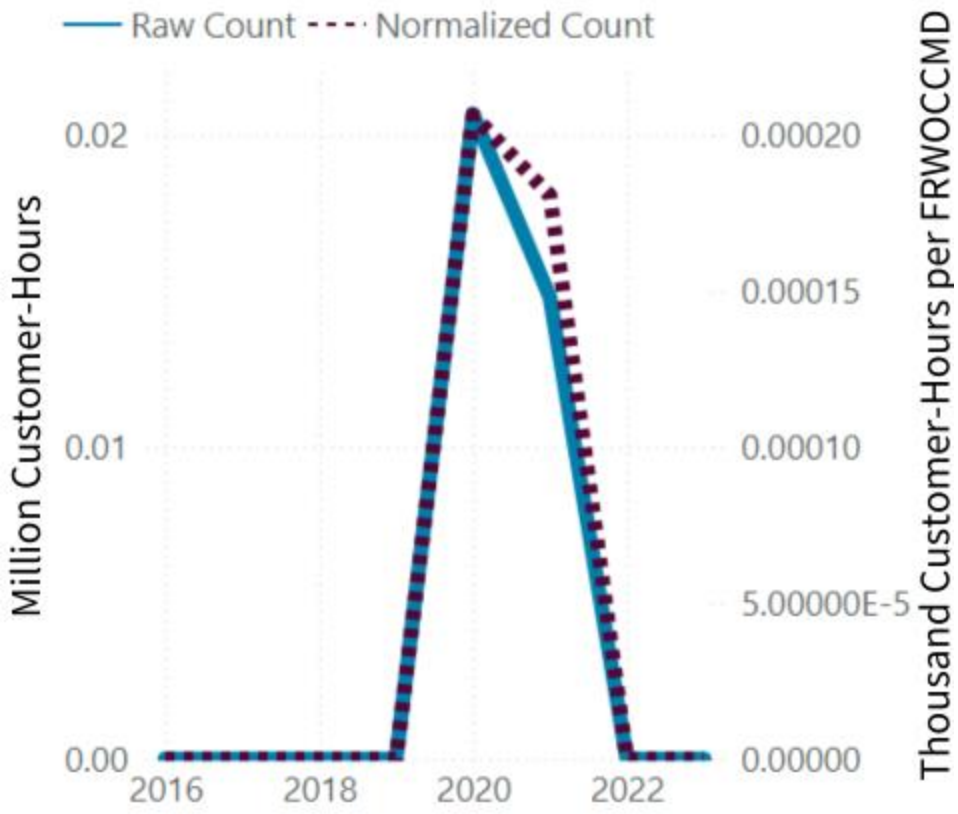
Figure 10. PacifiCorp PSPS Event Scope and Scope Normalized by RFWOCMD (2016-2023)



Duration of PSPS Events

In 2020, PSPS events impacted nearly 20,000 customer-hours, the highest level recorded. This decreased to 10,000 customer-hours in 2021, and by 2022, no customer-hours were affected. Normalized data shows similar patterns, with a raw count of 0.02 million customer-hours in 2020 and a normalized count of 0.000206 per 1,000 RFWOCMDs (Figure 11).

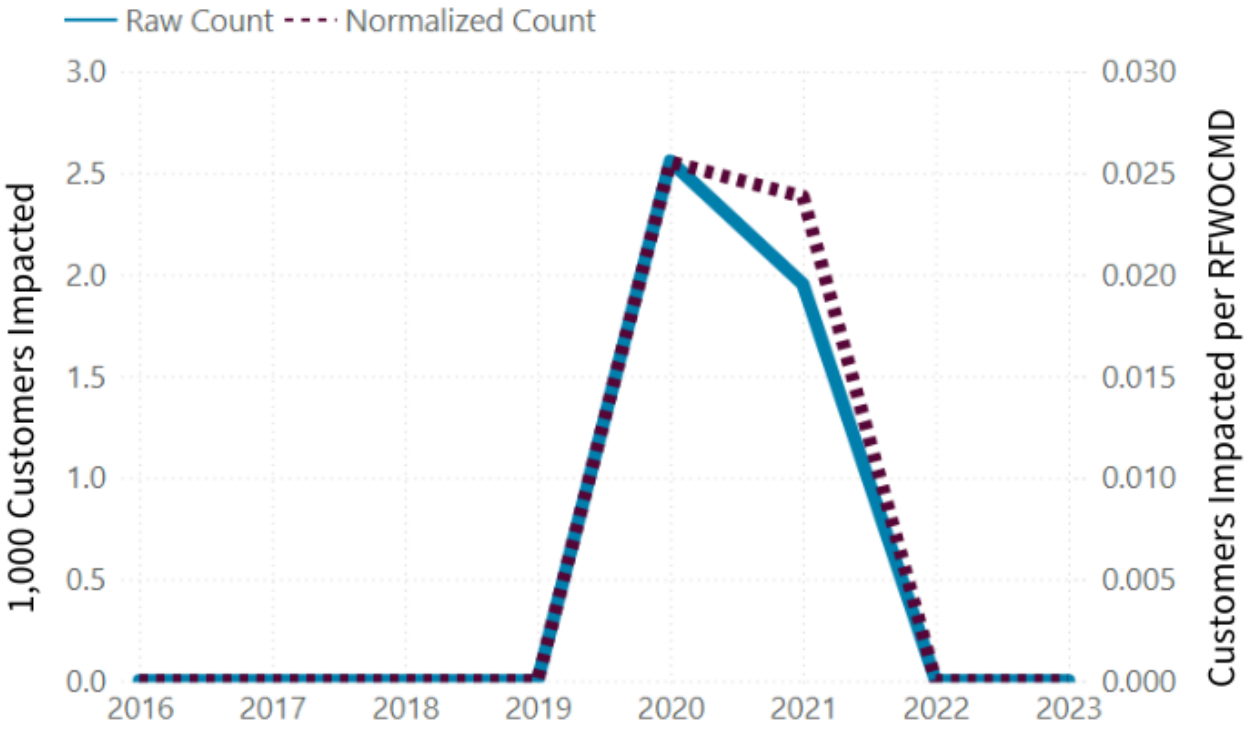
Figure 11. PacifiCorp PSPS Event Duration and Duration Normalized by RFWOCMD (2016-2023)



Customer Impacts of PSPS Events

From 2016 to 2023, customer impacts from PSPS events peaked in 2020, with a raw count of 2,560 customers impacted and a normalized count of 0.025546 customers per 1,000 circuit mile days. After 2020, impacts declined, reaching zero in 2022 and remaining at zero in 2023 (Figure 12).

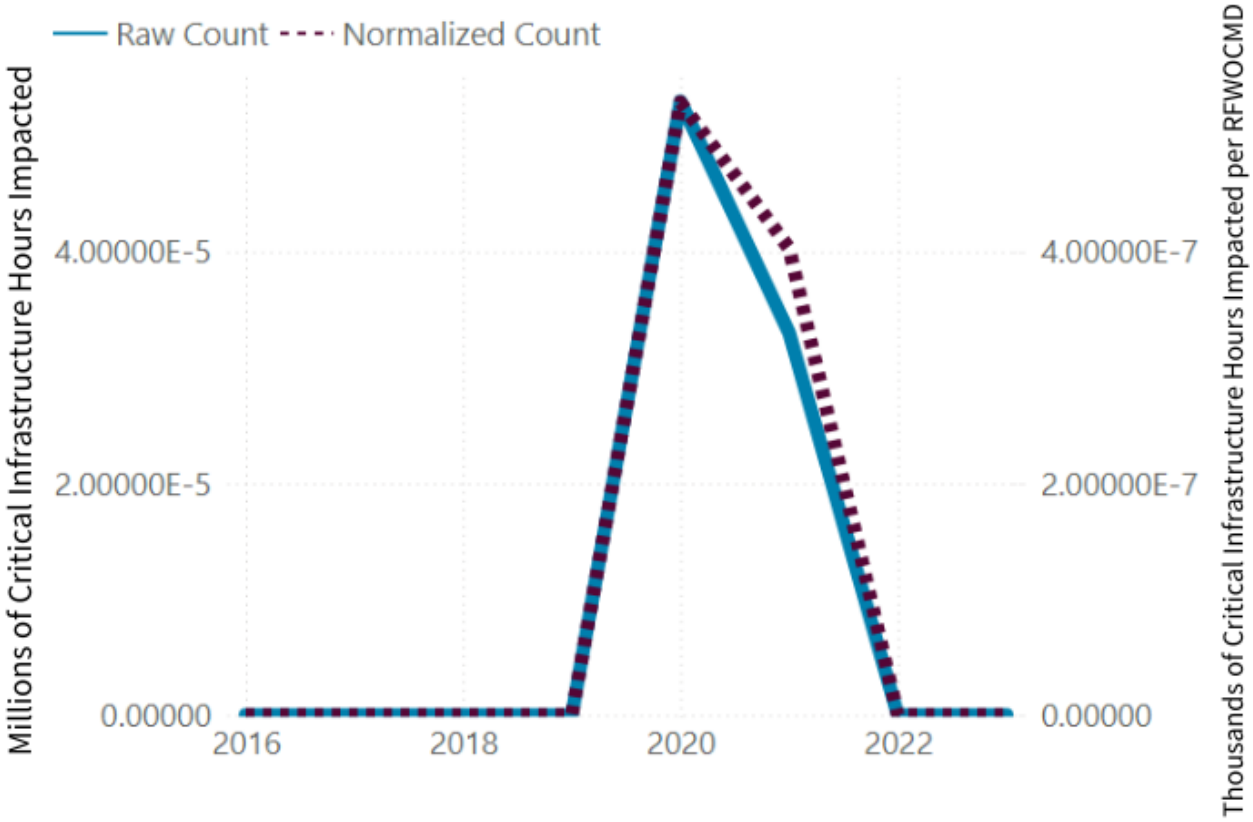
Figure 12. PacifiCorp PSPS Event Impacts on Customers and Event Impacts on Customers Normalized by RFWOCMD (2016-2023)



Infrastructure Impacts of PSPS Events

From 2016 to 2023, critical infrastructure impacts from PSPS events peaked in 2020 and then declined. Between 2021 and 2022, impacts dropped to zero when normalized by RFWOCMD (Figure 13). Normalized data shows a peak in 2021 when accounting for yearly weather changes.

Figure 13. PacifiCorp PSPS Event Impacts on Critical Infrastructure and Event Impacts on Critical Infrastructure Normalized by RFWOCMD (2016-2023)



6.2 Outcome Metrics

This section presents outcome metrics on PacifiCorp-related wildfires including:

1. *Acres burned* – The total number of acres burned due to PacifiCorp caused fires,
2. *Structures damaged/destroyed* - The total number of structures damaged or destroyed due to PacifiCorp caused fires,

3. *Injuries/fatalities* - The total number of injuries and fatalities due to PacifiCorp caused fires.

The data source for outcome metrics information is PacifiCorp's QDR, as well as PacifiCorp's 2025 WMP Update for data related to the Slater Fire.[67] The analysis below does not include the McKinney Fire, which occurred in PacifiCorp service territory in 2022.

The McKinney Fire resulted in 60,138 acres burned, four fatalities, and 196 structures damaged or destroyed. The McKinney Fire and its corresponding outcome metrics were noted by PacifiCorp itself in its 2023-2025 Base WMP, qualified by the statement that the McKinney Fire is "under investigation."[68] A cause for the McKinney fire has not yet been established.

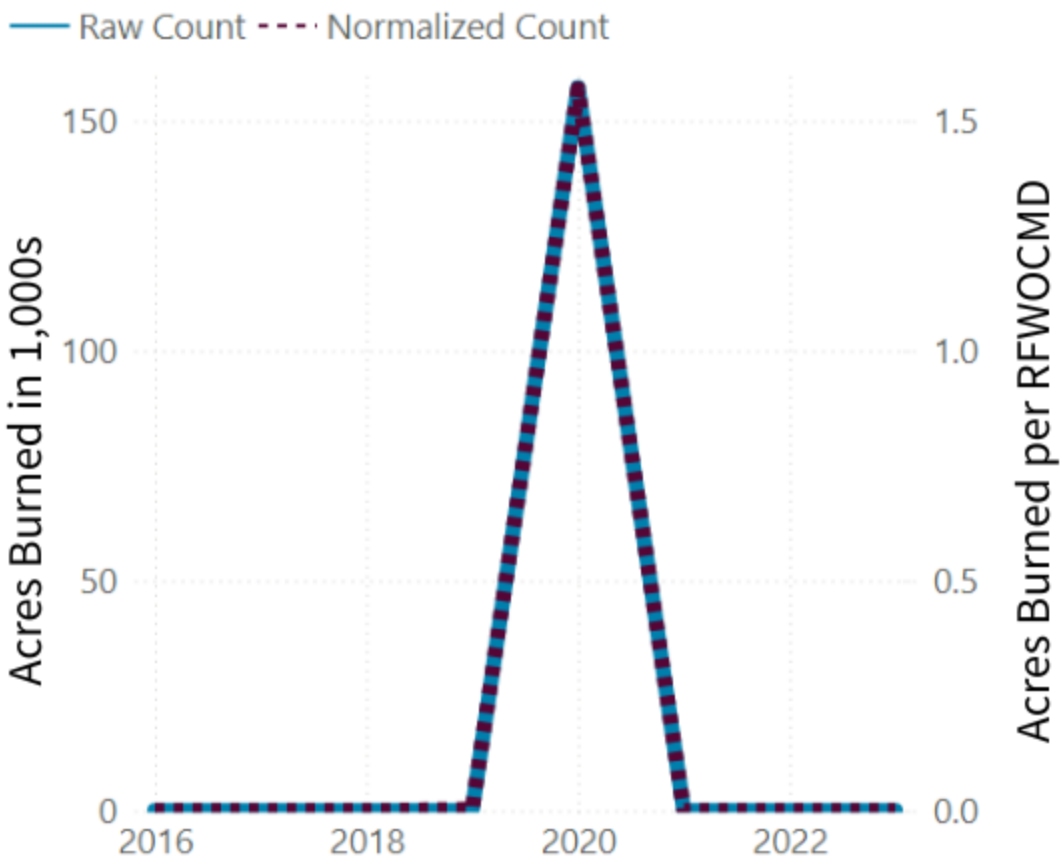
The analysis below may change in subsequent ARCs prepared by Energy Safety if PacifiCorp is ultimately found to be responsible for the McKinney Fire. The figures below include outcomes related to the Slater Fire of 2020, which occurred in PacifiCorp service territory and resulted in 157,220 acres burned, two fatalities, and 451 structures damaged or destroyed.[69] On June 19, 2024, PacifiCorp announced that it settled claims related to the Slater Fire for $150 million.[70]

[67] 2022 Q3 QDR, Table 2; 2023 Q4 QDR, Table 2; 2025 WMP Update, page 40.
[68] 2025 WMP Update, page 40.
[69] 2025 WMP Update, page 40.
[70] PacifiCorp 8-K.

Acres Burned

The total number of acres burned by PacifiCorp-ignited wildfires reached a peak in 2020 (Figure 14). When accounting for yearly variance in the weather, the normalized acres burned showed a similar pattern.

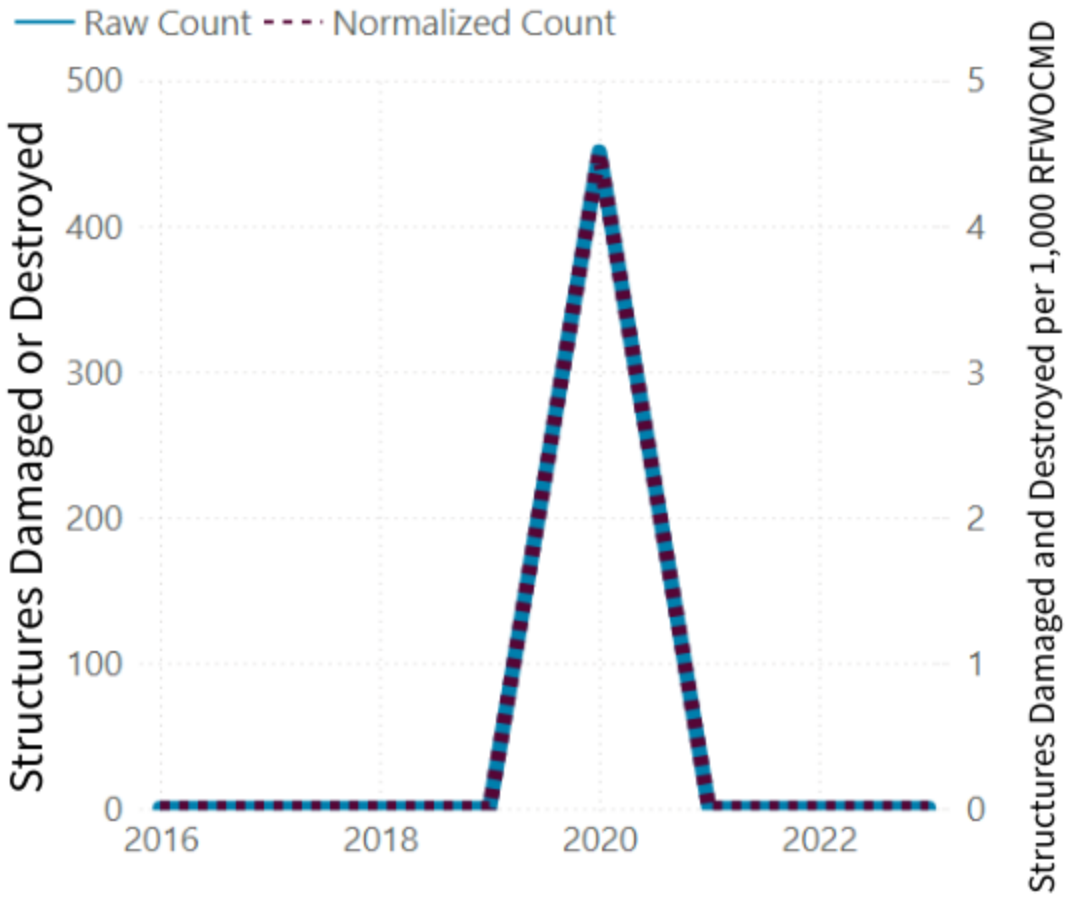
Figure 14. PacifiCorp Total Acres Burned and Acres Burned Normalized by RFWOCMD (2016-2023)



Structures Damaged or Destroyed

The number of structures damaged or destroyed by PacifiCorp-ignited wildfires between 2016 and 2023 is zero, with the exception of 2020 when the Slater fire damaged or destroyed 451 structures (Figure 15). When accounting for variances in yearly weather by normalizing by RFWOCMD, the same pattern is observed.

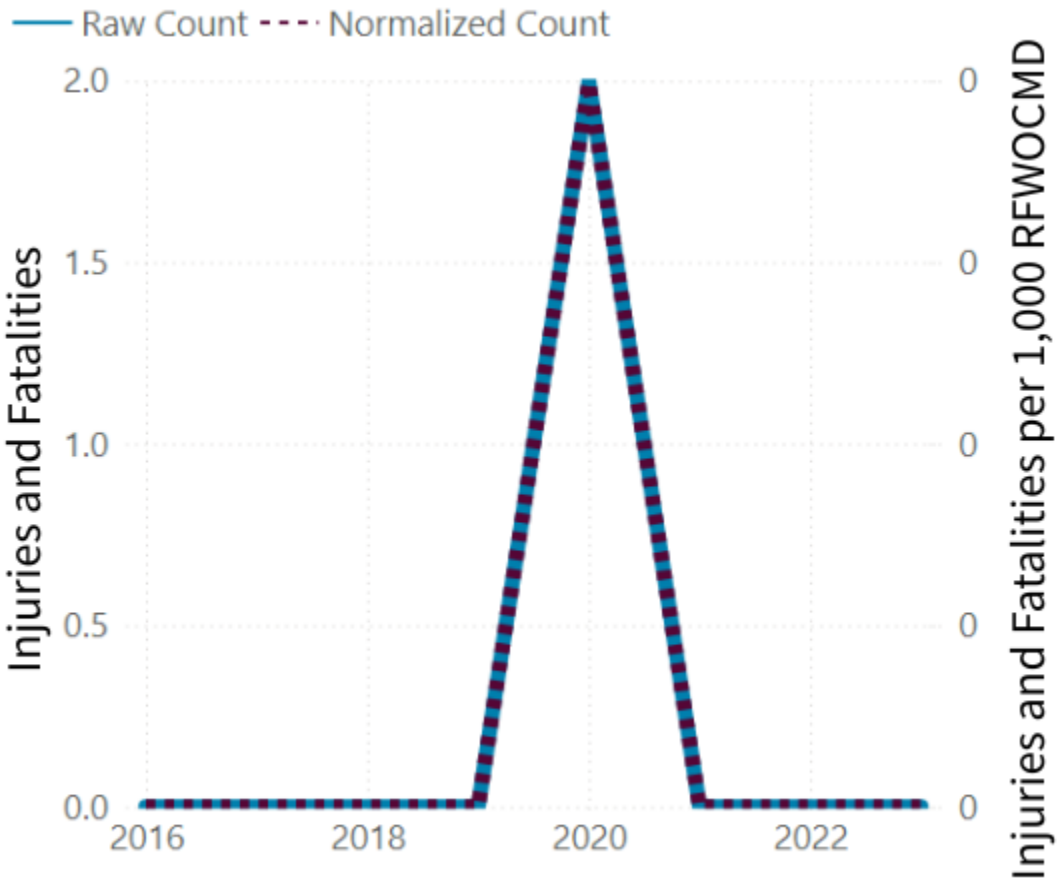
Figure 15. PacifiCorp Structures Damaged or Destroyed Normalized by RFWOCMD (2016-2023)



Injuries and Fatalities

The pattern of injuries and fatalities from 2016 to 2023 mirrors that of structures damaged or destroyed, with a peak in 2020 followed by zero counts in subsequent years (Figure 16). In 2023 there were no reported injuries or fatalities

Figure 16. PacifiCorp Injuries and Fatalities Normalized by RFWOCMD (2016-2023)



6.3 Energy Safety Field Inspection Analysis

Energy Safety performs inspections utilizing PacifiCorp's initiative activity data applicable to the WMP year compliance period. Energy Safety conducts two types of inspections: 1) inspections of grid hardening and other work related to WMP initiatives related to physical infrastructure, and 2) inspections of general wildfire safety (GWS) conditions at an inspection site. The second category of general wildfire safety conditions (GWS Inspections) is not strictly related to WMP initiatives, and these inspections are additional to Energy Safety's WMP initiative-related inspection work.[71]

During the 2023 compliance period, Energy Safety conducted 10,569 GWS inspection activities and 2,076 Wildfire Mitigation Plan inspection activities across 297 distinct locations within PacifiCorp's service territory. Energy Safety distinguishes its inspection activities related to WMP initiatives on grid hardening and physical infrastructure (WMP Inspections) and inspection activities related to GWS Inspections.[72] Energy Safety did not issue any NOVs or NODs to PacifiCorp in 2023.

6.4 Energy Safety Analysis of Reporting Accuracy and Completeness

PacifiCorp's QDR was deficient because it did not include the costs PacifiCorp incurred to perform WMP work. PacifiCorp reported only the projected costs. This made it difficult for Energy Safety to compare the QDR cost data to cost data as reported in the EC ARC in order to confirm the final actual cost for each initiative. Also, some of the budgeted expenditure data in the QDR did not match the EC ARC budgeted expenditure data. The confusion created by PacifiCorp's reporting initially interfered with Energy Safety's analysis.

Furthermore, the EC ARC's cost-variance table identified two initiatives that did not have targets or were otherwise described in the 2023 WMP but were nevertheless associated with significant expenditure in the EC ARC. These two initiatives and their associated costs were:

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[71] If Energy Safety observes a general wildfire safety concern during an inspection activity, then that is recorded as a "Wildfire Safety Concern." Or as it was known prior to 2024, a "defect." If Energy Safety observes noncompliance with a WMP initiative during an inspection activity that an electrical corporation claimed to have occurred at a site, then that is recorded as a "violation."

[72] Energy Safety uses the term "inspection activity" to refer to a specific question or condition assessed during an inspection. For example, if Energy Safety is inspecting a particular utility pole and looking for eight different conditions associated with a WMP initiative, then that would count as eight WMP inspection activities. If a general wildfire safety inspection occurs at the same time at that utility pole, and 20 general wildfire safety conditions are assessed, then that would count as 20 general wildfire safety inspection activities. In this example, a single utility pole inspection would lead to 28 inspection activities.

7.1.2: Wildfire Mitigation Strategy Development ($818,000) and 7.1.4.1: Identifying and Evaluating Mitigation Initiatives ($428,000).[73]

7. Conclusion

PacifiCorp completed 34 of 44 (77%) of its 2023 targets for initiative activities and objectives in its 2023 WMP, including seven of the ten initiatives with the largest planned expenditure. However, PacifiCorp failed to meet targets for 10 of its 2023 WMP initiative activities.

Collectively, 83% of PacifiCorp's planned expenditure in its 2023 WMP Update was dedicated to initiatives that were not met. For example, for work on the 2023 WMP initiative related to covered conductor installation, PacifiCorp spent 12% more than originally planned even while missing its quantitative target by a significant amount.

On balance, PacifiCorp was moderately successful in executing its plan for wildfire risk mitigation. While impacts may have occurred to grid hardening and PSPS initiative work due to the Head Fire and Smith River Complex Fire, the magnitude of the impacts should not have been as significant, given that these types of events were foreseeable.

PacifiCorp's HFTD areas saw decreases in normalized ignitions in 2023. Normalized outages decreased across PacifiCorp's service territory in 2023, particularly those due to vegetation contact and equipment.

On balance, PacifiCorp was moderately successful in executing its plan for wildfire risk mitigation. However, there are still areas for improvement and continued learning, especially regarding PacifiCorp's ability to fulfill important grid hardening targets such as covered conductor installation and distribution pole replacement. Energy Safety will continue to monitor PacifiCorp's implementation of its ongoing wildfire mitigation activities and push PacifiCorp to improve its ability to ultimately achieve the elimination of utility-caused catastrophic wildfires in California.

[73] EC ARC, page 25.

8. References

Table 2. References

Reference	Citation
2022 Q3 QDR	PacifiCorp, "PC_2022_Q3_QDR_R0," Published November 7, 2022, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53216&shareable=true).
2022 Q4 QDR	PacifiCorp, "PC_2022_Q4_Tables1-15_R0," Published February 1, 2023, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53364&shareable=true).
2023 Q4 QDR	PacifiCorp, "PC_2023_Q4_Tables1-15_R1," Published April 19, 2024,URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56519&shareable=true).
2023 SVM Audit CAP	PacifiCorp, "PacifiCorp 2023 SVM Audit Corrective Action PlanRev0 3-21-25," Published March 21, 2025, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58149&shareable=true).
2023 WMP	PacifiCorp, "PacifiCorp 2023 Wildfire Mitigation Plan Update," Published February 22, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56336&shareable=true).
Compliance Guidelines	Office of Energy Infrastructure Safety, "Compliance Guidelines," Published September 2023, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=55586&shareable=true).
Compliance Process	Office of Energy Infrastructure Safety, "Compliance Process," Published September 2024, URL: (https://energysafety.ca.gov/wp-content/uploads/2024/12//2024-wmp-compliance-process.pdf).

Reference	Citation
EC ARC	PacifiCorp, "Annual Report on Compliance Regarding Compliance with its 2023 WMP Update," Published April. 02, 2024, URL:(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56428&shareable=true).
IE ARC	NV5, Inc. and Guidehouse Inc., "2023 Wildfire Mitigation Plan Independent Evaluator Annual Report on Compliance," Published June 30 2024, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57104&shareable=true).
PC 8-K	PacifiCorp, "Form 8-K," Jun 24 2024, URL: https:/www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/about/wildfire_litigation/PACIFICORP_JUNE_2024_WILDFIRES_SETTLEMENT_8-K.pdf.
Pub. Util. Code § 8386	Public Utilities Code section 8386, Effective January 1, 2022, URL: (https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PUC&sectionNum=8386).
Response to Data Request 283	PacifiCorp, "Energy Safety DR-283_PacifiCorp Response," Table 7, Accessed November 22, 2024.
Response to Data Request 317	PacifiCorp, "Energy Safety DR-317_PacifiCorp Response," Accessed January 27, 2025.
SVM Audit	Office of Energy Infrastructure Safety, "PacifiCorp 2023 Substantial Vegetation Management Audit," Published February 21, 2025, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58013&shareable=true).
SVM Audit Report	Office of Energy Infrastructure Safety, "PacifiCorp 2023 Substantial Vegetation Management Audit Report," Published May 30, 2025, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58577&shareable=true).

Reference	Citation
WMP Decision	Energy Safety's "Decision on PacifiCorp's 2023-2025 Wildfire Mitigation Plan," Published February 12, 2024, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=56309&shareable=true).

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APPENDICES

9. Appendices

Appendix A PacifiCorp Information on WMP Initiative Activity Attainment

Table 3 summarizes each of PacifiCorp's 44 initiative activity and objective targets from its 2023 WMP, and PacifiCorp's self-reporting on compliance contained in its QDR submitted in response to Data Request DR- 317, its EC ARC, and the IE ARC and Energy Safety's SVM Audit and Report.[74]

Table 3. PacifiCorp WMP Initiative Activity Attainment Information [75]

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Line Rebuild Covered conductor installation 8.1.2.1 GH-01	130 line-miles	Target: 130 line-miles Actual: 101 line-miles	Target: 130 line-miles Actual: 101 line-miles	Target: 130 line-miles Actual: 101 line-miles	Not Met	$83,313	$93,736
Distribution Pole Replacement	2,600 Poles	Target: 2,600 poles	Target: 2,600 poles	Target: 2,600 poles	Not Met	$-	$-

[74] 2023 Q4 QDR; Response to Data Request -317; EC ARC; IE ARC; SVM Audit and SVM Audit Report.
[75] This table includes all initiative activities that had targets for the 2023 compliance year but does not include initiative activities for which PacifiCorp had planned or actual expenditures and no targets for the 2023 compliance year.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
8.1.2.3 GH-02		Actual: 1,592 poles	Actual: 1,592 poles	Actual: 1,565 poles			
Transmission Pole Replacement 8.1.2.4 GH-03	260 Poles	Target: 260 poles Actual: 165 poles	Target: 260 poles Actual: 175 poles	Target: 260 poles Actual: 165 poles	Not Met	$-	$-
Installation of system automation equipment 8.1.2.8 GH-04	40 Devices	Target: 40 devices Actual: 36 devices	Target: 40 devices Actual: 36 devices	Target: 40 units Actual: 36 units	Not Met	$10,000	$10,782
Expulsion Fuse Replacement 8.1.2.12 GH-05	5,000 Fuse Locations	Target: 5,000 fuses Actual: 4,147 fuses	Target: 5,000 fuses Actual: 4,147 fuses	Target: 5,000 fuses Actual: 4,147 fuses	Not Met	$10,000	$7,976
Transmission Patrol inspections 8.1.3.1 AI-01	11,754 Inspections	Target: 11,754 inspections Actual: 11,678 inspections	Target: 11,754 inspections Actual: 11,754 inspections	Target: 11,754 inspections Actual: 11,678 inspections	Met	$93	$119

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Distribution Patrol Inspections 8.1.3.1 AI-02	50,474 Inspections	Target: 50,474 inspections Actual: 50,444 inspections	Target: 50,474 inspections Actual: 50,474 inspections	Target: 50,474 inspections Actual: 50,444 inspections	Met	$308	$286
Transmission Detail Inspections 8.1.3.2 AI-03	2,715 Inspections	Target: 2,715 inspections Actual: 2,714 inspections	Target: 2,715 inspections Actual: 2,715 inspections	Target: 2,715 inspections Actual: 2,714 inspections	Met	$137	$92
Distribution Detail Inspections 8.1.3.2 AI-04	8,662 Inspections	Target: 8,662 inspections Actual: 8,627 inspections	Target: 8,662 inspections Actual: 8,662 inspections	Target: 8,627 inspections Actual: 8,627 inspections	Met	$203	$182
Transmission Intrusive Pole Inspections 8.1.3.3 AI-05	935 inspections	Target: 935 inspections Actual: 935 inspections	Target: 935 inspections Actual: 935 inspections	Target: 935 inspections Actual: 932 inspections	Met	$171	$106

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Distribution Intrusive Pole Inspections 8.1.3.3 AI-06	2,404 Inspections	Target: 2,404 inspections Actual: 2,398 inspections	Target: 2,404 inspections Actual: 2,404 inspections	Target: 2,404 inspections Actual: 2,398 inspections	Met	$90	$90
Substation Inspections 8.1.3.4 AI-11	451 Inspections	Target: 451 inspections Actual: 451 inspections	Target: 451 inspections Actual: 451 inspections	Target: 451 substation inspections Actual: 449 substation inspections	Met	$179	$237
Enhanced IR Inspections in distribution lines 8.1.3.5 AI-08	810 Miles	Target: 810 line-miles Actual: 757 line-miles	Target: 810 line-miles Actual: 757 line-miles	Target: 810 line-miles Actual: 757 line-miles	Not Met	$125	$165
Enhanced IR Inspections in transmission lines 8.1.3.6	700 Miles	Target: 700 line-miles Actual: 700 line-miles	Target: 700 line-miles Actual: 700 line-miles	Target: 700 line-miles Actual: 700 line-miles	Met	$90	$81

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
AI-07							
Maintenance: Weather Station 8.1.4 MA-01	Continued maintenance annually	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Target: 93 stations Actual: 93 stations	Met	$245	$323
Quality assurance/ quality control 8.1.6 AI-12	736 Inspections	Target: 736 inspections Actual: 775 inspections	Target: Missing Actual: Missing	Target: 736 inspections Actual: 775 inspections	Met	$36	$32
Vegetation Inspections: Detailed Inspection – Distribution 8.2.2.1 VM-01	Develop Weather Research and Forecasting (WRF) ensemble configuration and self-organizing map forecast system	Target: 829 line-miles Actual: 829 line-miles	Target: 829 circuit miles Actual: 829 circuit miles	Target: 829 circuit miles Actual: 829 circuit miles	Met	$280	$344
Clearance – Distribution 8.2.2.1	Vegetation is inspected according to a cycle per	Target: Missing Actual: Missing	Target: Missing	Target: Missing	Met	$15,915	$15,506

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
VM-06	circuit, and vegetation requiring work is identified for pruning or removal.		Actual: Missing	Actual: Missing			
Vegetation Inspections: Detailed Inspection - Transmission 8.2.2.2 VM-02	264 circuit miles inspected	Target: 264 line-miles Actual: 264 line-miles	Target: 264 miles inspected Actual: 264 miles inspected	Target: 264 circuit miles Actual: 264 circuit miles	Met	$70	$83
Vegetation Inspections: Patrol Inspection - Distribution 8.2.2.3 VM-03	1,027 circuit miles inspected	Target: 1,027 line-miles Actual: 1,027 line-miles	Target: 1,027 miles inspected Actual: 1,027 miles inspected	Target: 1,027- line-miles Actual: 1,027 line-miles	Met	$375	$355
Vegetation Inspections: Patrol Inspection - Transmission	329 line-miles	Target: 329 line-miles	Target: 329 miles inspected	Target: 329 line-miles	Met	$120	$68

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
8.2.2.3 VM-04		Actual: 329 line-miles	Actual: 329 miles inspected	Actual: 329 line-miles			
Pole clearing Fuels management – Pole clearing beyond Public Resource Code (PRC) 8.2.3.1 VM-05	3,126 Poles	Target: Missing Actual: Missing	Target: 3,126 poles Actual: 3,126 poles	Target: 3,126 poles Actual: 3,126 poles	Met	$374	$575
Vegetation and Fuels Management Wood and Slash Management 8.2.3.2	PacifiCorp chips or removes slash in developed areas and uses lop and scatter or chipping in rural areas, following land agency rules.	N/A	N/A	N/A	Not Met[76]	$-	$-

[76]SVM Audit Report, page 9.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Clearance – Transmission 8.2.3.3 VM-07	Identifying hazard trees and maintaining clearances beyond FAC-003-04 MVCD, aided by wider transmission rights-of-way	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Met[77]	$1,405	$1,885
Fall-in mitigation 8.2.3.4 VM-08	Enhanced overhang reduction work is targeted for implementation and completion. Overhang reduction work will be post-	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Met[78]	$500	$501

[77] SVM Audit, page 3.
[78] SVM Audit, page 3.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
	audited to ensure overhang reduction specifications are implemented and document if not achieved						
Vegetation and Fuels Management Substation Defensible Space 8.2.3.5	Inspect substations to remove necessary vegetation, and addresses hazard trees to reduce fall-in risk.[79]	N/A	N/A	N/A	Met[80]	$-	$-
Vegetation and Fuels Management	In HFTDs, vegetation is maintained to	N/A	N/A	N/A	Not Met[82]	$-	$-

[79] 2023 WMP, page 204.
[80] SVM Audit, page 3.
[82] SVM Audit Report, page 5.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
High-Risk Species 8.2.3.6	a four-foot clearance for one year, with more clearing of fast-growing, high-risk species as needed.[81]						
Vegetation and Fuels Management Fire Resilient Right-of-Ways 8.2.3.7	PacifiCorp utilizes integrated vegetation management (IVM) best practices to manage vegetation in which undesirable vegetation is identified and selected control(s) are	N/A	N/A	N/A	Met[84]	$-	$-

[81] 2023 WMP, page 205.
[84] SVM Audit, page 3.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
	implemented, consistent with the American National Standards Institute guidance[83]						

[83] 2023 WMP, page 205.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Vegetation and Fuels Management Emergency Response of Vegetation Management 8.2.3.8	After wildfires, PacifiCorp inspects fire-impacted trees near power lines, removes those posing immediate risk, and plans further mitigation based on risk, land ownership, and environmental factors.[85]	N/A	N/A	N/A	Met[86]	$-	$-

[85] 2023 WMP, page 206.
[86] SVM Audit, page 3.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Vegetation Management Enterprise System 8.2.4	Pacific Power improves MDMS data collection by updating forms to fill data gaps and support better vegetation management decisions.[87]	N/A	N/A	N/A	Met[88]	$-	$-
Quality assurance / quality control Post-Audits Distribution (Patrol) 8.2.5.1 VM-11	1,027 line-miles	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Met[89]	$135	$146
Quality assurance / quality control	329 line-miles	Target: Missing	Target: Missing	Target: Missing	Met[90]	This initiative's	This initiative's budget was

[87] 2023 WMP, page 207.
[88] SVM Audit, page 3.
[89] SVM Audit, page 3.
[90] SVM Audit, page 3.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Post-Audits Transmission (Patrol) 8.2.5.2 VM-11		Actual: Missing	Actual: Missing	Actual: Missing		budget was included in the same budget for initiative 8.2.5.1, above.	included in the same budget for initiative 8.2.5.1, above.
Open Work Orders 8.2.6	PacifiCorp issues one work release per powerline for vegetation work. In 2023, improvement will track and close open work sites by year-end.[91]	N/A	N/A	N/A	Met[92]	$-	$-

[91] 2023 WMP, page 210.
[92] SVM Audit, page 3.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Workforce Planning 8.2.7	PacifiCorp requires its utility foresters to be International Society of Arboriculture (ISA)-certified but relies on contractors for workforce training, while providing annual environmental training and conducting audits.[93]	N/A	N/A	N/A	Met[94]	$-	$-
Environmental monitoring systems 8.3.2	Install 12 weather stations	Target: 12 units Actual: 15 units	Target: 12 weather stations	Target: 12 weather stations	Met	$240	$442

[93] 2023 WMP, page 210.
[94] SVM Audit, page 3.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
SA-01			Actual: 12 weather stations	Actual: 15 weather stations			
Grid monitoring systems 8.3.3.1 SA-02	Install two DFAs	Target: Two units Actual: Two units	Target: Two devices Actual: Two devices	Target: Two installations Actual: Two installations	Met	$39	$114
Smoke and Air Quality Sensors 8.3.4.1 SA-03	Install 20 sensors	Target: 20 units Actual: 20 units	Target: 20 sensors Actual: 20 sensors	Target: 20 sensors Actual: 20 sensors	Met	$70	$50
Wildfire Detection Cameras 8.3.4.1 SA-04	Installation of two cameras	Target: Two Actual: Two	Target: Two cameras Actual: Two cameras	Target: Two cameras Actual: Two cameras	Met	$320	$335
Fire Potential Index	Calculate Fire Potential Index	Target: Missing Actual: Missing	Target: Missing	Target: Missing	Met[95]	$98	$99

[95] Response to Data Request 317.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
8.3.6.1 SA-06			Actual: Missing	Actual: Missing			
Emergency preparedness plan 8.4.1.1 EP-01	Missing	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Target: complete and implement an outage procedure for the Restoration Annex Actual: completed and implemented an outage procedure for the Restoration Annex	Met	$50	$256

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
External collaboration and coordination 8.4.2.3 EP-02	Conduct one Functional Exercise (FE), one Tabletop Exercise (TTX), and one workshop	Target: Missing Actual: Missing	Target: one functional exercise Actual: one functional exercise	Target: Three events Actual: Three events	Met[96]	$30	$9
Public emergency communication strategy 8.4.4.2 EP-03	Missing	Target: Complete implementation of the full public safety partner portal. Actual: Development work for the full solution is in progress and not complete	Target: Missing Actual: Missing	Target: Missing Actual: Missing	Not Met	$110	$95

[96] IE ARC, pages 56-57.

2023 WMP Initiative/ Objective	2023 WMP Target	QDR	EC ARC	IE ARC	Attainment Status	Planned Expenditure ($ thousand)	Actual Expenditure ($ thousand)
Customer support in wildfire and PSP emergencies 8.4.6 EP-05	Missing	Target: Missing Actual: Missing	Target: 44 customers to receive portable batteries Actual: Seven customers received portable batteries	Target: 44 customers to receive portable batteries Actual: Seven customers received portable batteries	Not Met	$150	$8
Public outreach and education awareness program 8.5.2 CO-01	Implement customer feedback from post season wildfire mitigation surveys into future outreach efforts	Target: Conduct one pre- and post-fire season customer survey Actual: Conducted one pre- and post-fire season customer survey	Target: Perform pre- and post-fire season customer survey Actual: Performed pre- and post-fire season customer survey	Target: one post-fire season customer survey Actual: 1-post-fire season customer survey	Met	$90	$110

Appendix B: Substantial Vegetation Management Audit of PacifiCorp

On February 21, 2025, Energy Safety issued its Substantial Vegetation Management (SVM) Audit for PacifiCorp.

In the SVM Audit, Energy Safety found five initiatives where PacifiCorp did not perform all the required work and required PacifiCorp to provide a response in its Corrective Action Plan.

After reviewing PacifiCorp's Corrective Action Plan, filed on March 21, 2025, Energy Safety issued its SVM Audit Report on May 30, 2025.

The findings from Energy Safety's SVM Audit and SVM Audit Report are detailed in Table 4.

Table 4. Energy Safety Findings from PacifiCorp 2023 SVM Audit and SVM Audit Report of WMP Vegetation Management Initiatives

2023 WMP Initiative Tracking ID	2023 WMP Initiative Name	Audit Determination	Audit Report Determination
8.2.2. Vegetation Management Inspections	8.2.2.1-3 Vegetation Management Inspections	Completed all work	Not addressed in SVM Audit Report
8.2.3. Vegetation and Fuels Management	8.2.3.1 Pole Clearing	Did not complete all work	Substantially complied
8.2.3. Vegetation and Fuels Management	8.2.3.2 Wood and Slash Management	Did not complete all work	Did not substantially comply
8.2.3. Vegetation and Fuels Management	8.2.3.3 Clearance	Did not complete all work	Substantially complied
8.2.3 Vegetation and Fuels Management	8.2.3.4 Fall-In Mitigation	Completed all work	Not addressed in SVM Audit Report

2023 WMP Initiative Tracking ID	2023 WMP Initiative Name	Audit Determination	Audit Report Determination
8.2.3. Vegetation and Fuels Management	8.2.3.5 Substation Defensible Space	Did not complete all work	Substantially complied
8.2.3 Vegetation and Fuels Management	8.2.3.6 High-Risk Species	Did not complete all work	Did not substantially comply
8.2.3 Vegetation and Fuels Management	8.2.3.7 Fire Resilient Right-of-Ways	Completed all work	Not addressed in SVM Audit Report
8.2.3 Vegetation and Fuels Management	8.2.3.8 Emergency Response Vegetation Management	Completed all work	Not addressed in SVM Audit Report
8.2.4 Vegetation Management Enterprise System	8.2.4. Vegetation Management Enterprise System	Completed all work	Not addressed in SVM Audit Report
8.2.5 Quality Assurance and Quality Control	8.2.5. Quality Assurance and Quality Control	Completed all work	Not addressed in SVM Audit Report
8.2.6 Open Work Orders	8.2.6 Open Work Orders	Completed all work	Not addressed in SVM Audit Report
8.2.7 Workforce Planning	8.2.7 Workforce Planning	Completed all work	Not addressed in SVM Audit Report

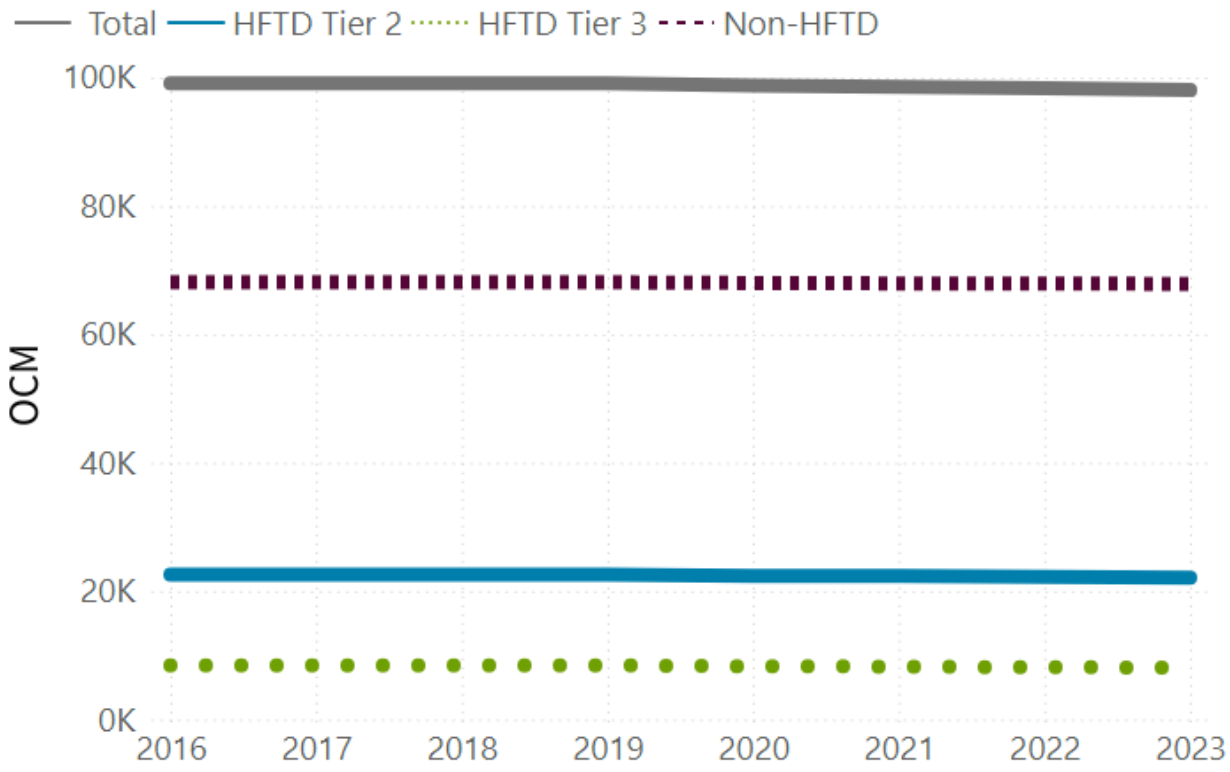
Appendix C: Additional Ignition Risk Analyses

Data for this appendix comes from the QDRs as reported by PacifiCorp.[97]

Overhead Circuit Miles

The number of OCMs remained mostly constant between 2016 to 2023 (Figure 17).

Figure 17. PacifiCorp Overhead Circuit Mile Days (2016-2023) by HFTD Tier

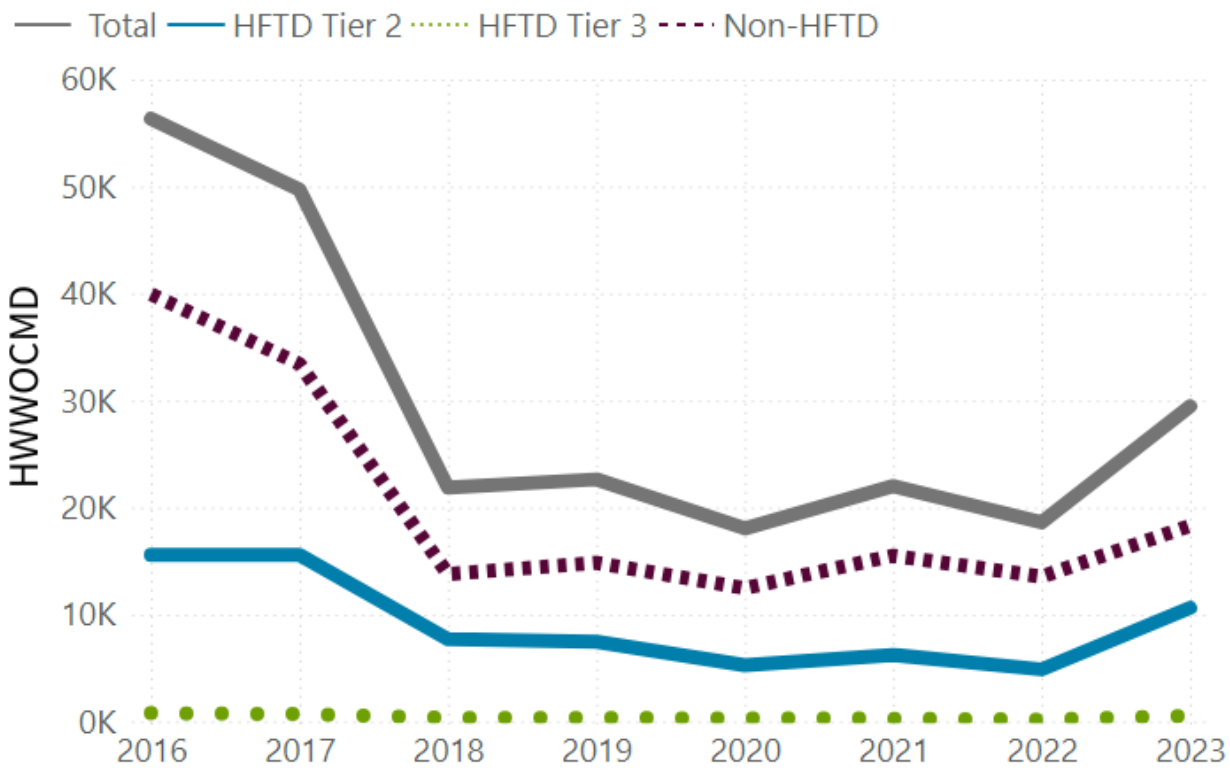


[97] 2022 Q3 QDR, Tables 6, 7.1, 7.2, 8; 2023 Q4 QDR, Tables 4, 5, 6, 7.

High Wind Warning Overhead Circuit Mile Days

From 2016 to 2023, the frequency of HWWOCMD generally decreased (Figure 18). Values peaked in 2016 and declined gradually from 2017 to 2018. They remained consistent between 2018 and 2022, followed by a 58% increase in 2023 compared to 2022.

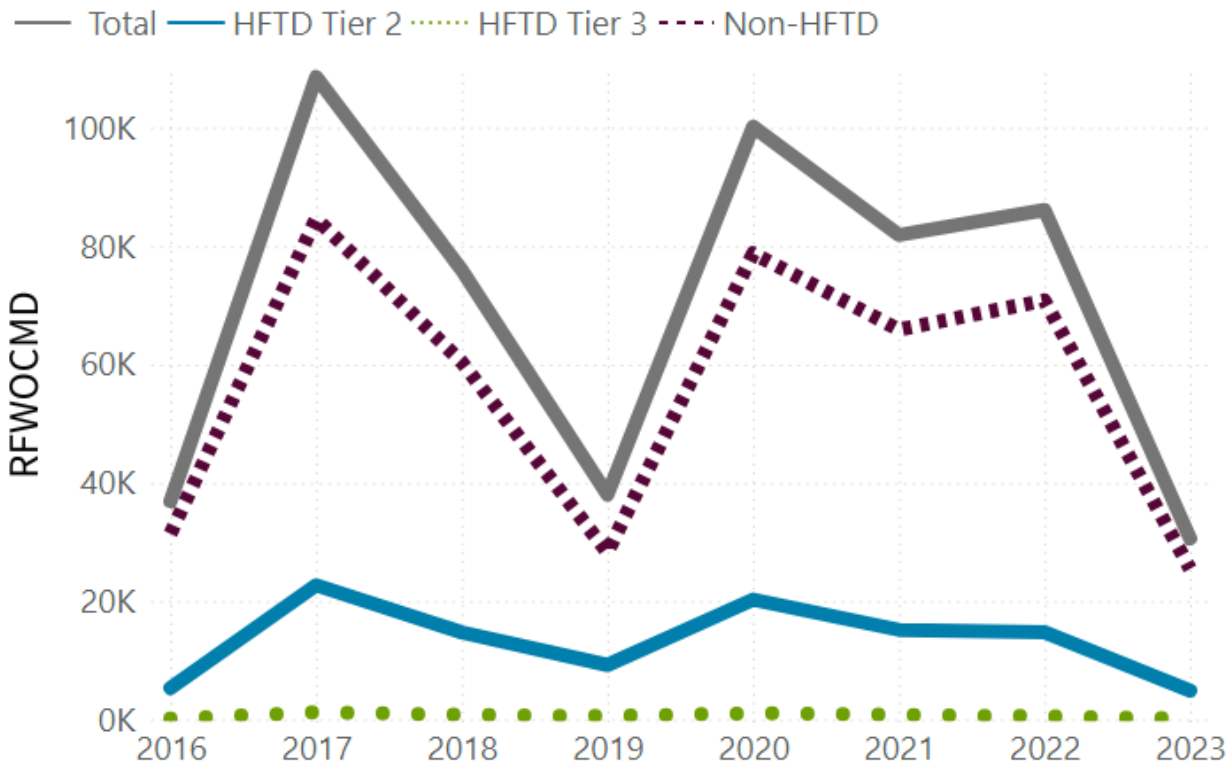
Figure 18. PacifiCorp Ignitions Normalized by HWWOCMD (2016-2023) by HFTD Tier



Red Flag Warning Overhead Circuit Mile Days

The number of red flag warning overhead circuit mile days (RFWOCMD) fluctuated from 2016 to 2023, with declines from 2017 to 2019 and 2022 to 2023 in non-HFTD and HFTD Tier 2 areas (Figure 19). The total RFWOCMDs in 2023 across all areas represented a 72% decrease compared to 2017, contributing to fluctuations in the normalized data presented in this report.

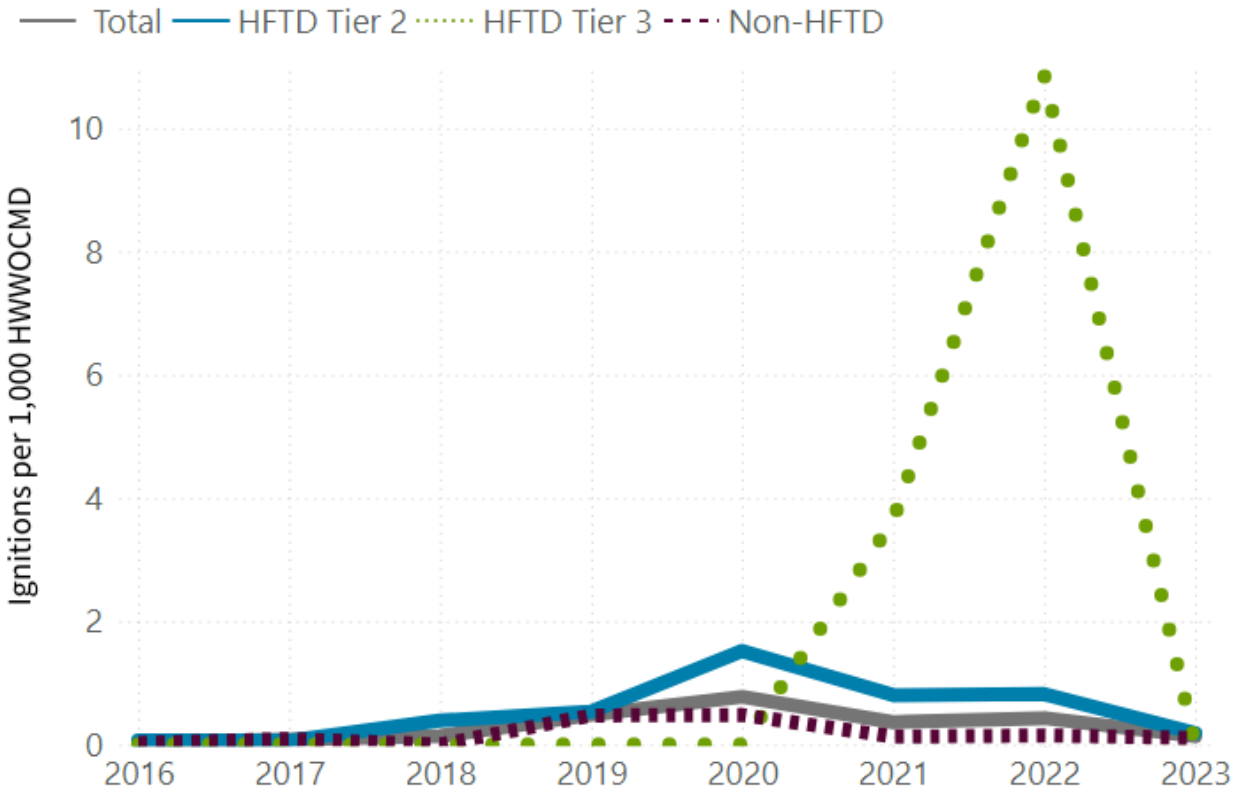
Figure 19. PacifiCorp Red Flag Warning Overhead Circuit Mile Days (2016-2023) by HFTD Tier



Ignitions Normalized by High Wind Warning Overhead Circuit Mile Days by HFTD Tier

When adjusted for weather conditions, the number of ignitions normalized by HWWOCMD experience small changes between 2016 and 2023 across most areas (Figure 20). In HFTD Tier 3, however, there was a notable 198 percent increase in normalized ignitions in 2022, followed by a drop to zero in 2023. However, when the raw ignition counts are normalized by the relatively small number of HFTD Tier 3 HWWOCMDs, the increase in 2021 and 2022 appears more dramatic.

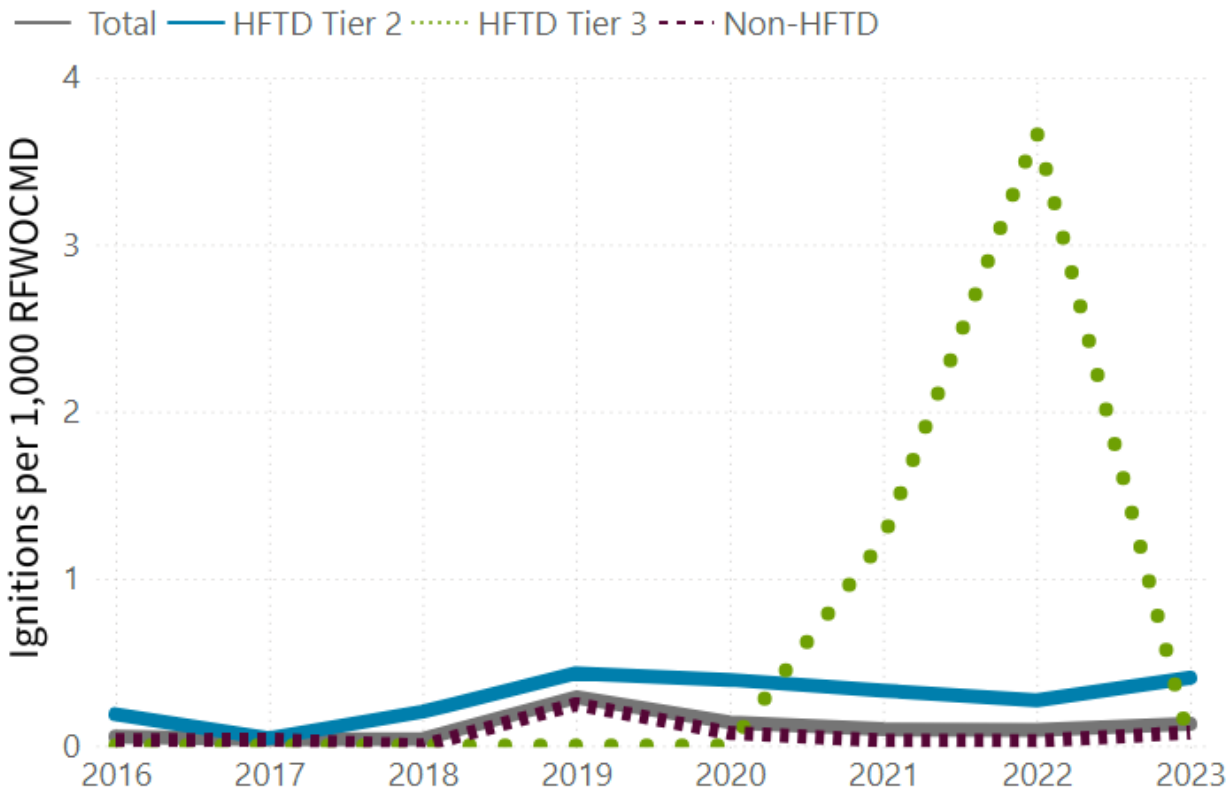
Figure 20. PacifiCorp Ignitions Normalized by HWWOCMD (2016-2023) by HFTD Tier



Ignitions Normalized by Red Flag Warning Overhead Circuit Mile Days by HFTD Tiers

Ignitions normalized by RFWOCMD show little fluctuations from 2016 to 2020, with a small peak in 2019 across HFTD Tier 2 and non-HFTD areas, and a much larger increase in HFTD Tier 3 areas in 2021 and 2022 (Figure 21). However, when the raw ignition counts are normalized by the relatively small number of HFTD Tier 3 RFWOCMDs, the increase in 2021 and 2022 appears more dramatic.

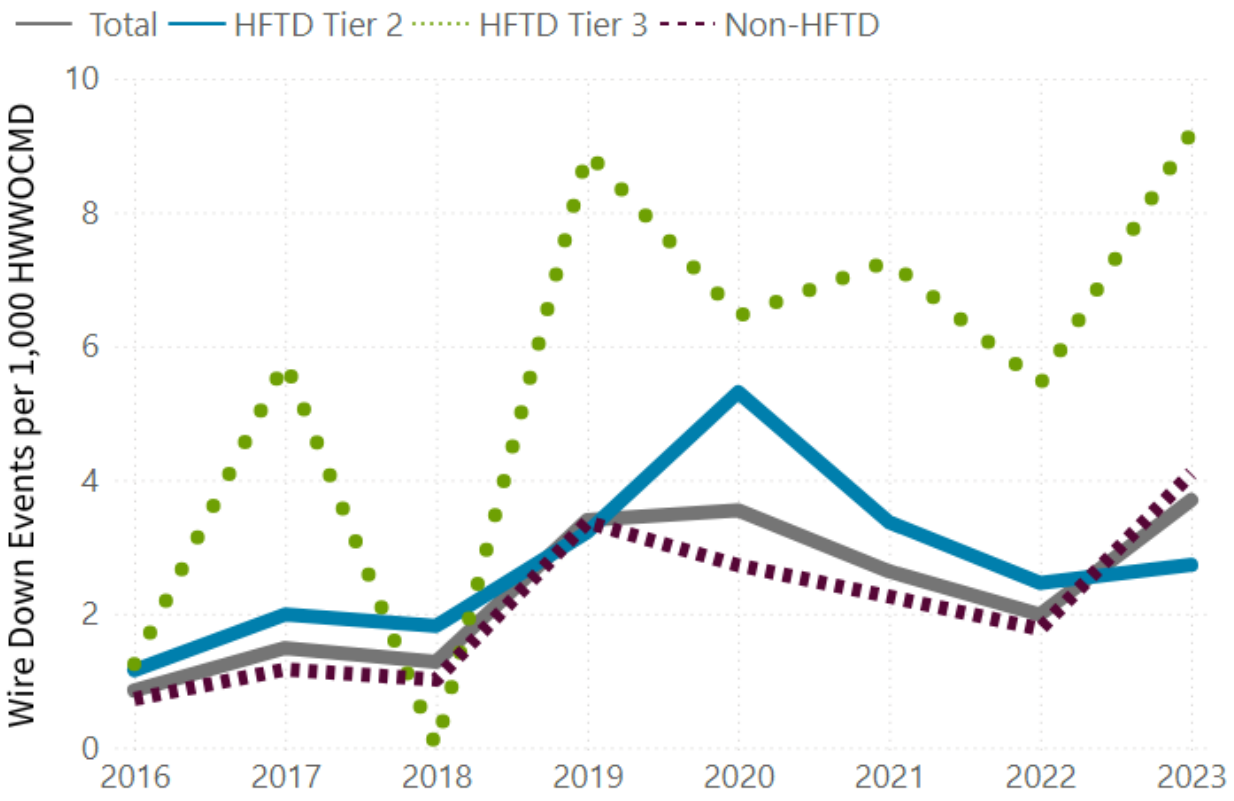
Figure 21. PacifiCorp Ignitions Normalized by RFWOCMD (2016-2023) by HFTD Tier



Wire Down Events Normalized by High Wind Warning Overhead Circuit Mile Days

When accounting for weather conditions, wire down events normalized by HWWOCMD fluctuate similarly from 2016 to 2023, though peaks and valleys vary across HFTD Tier 2, HFTD Tier 3, and non-HFTD areas. The data highlight variability in wire down events relative to high wind conditions, with distinct profiles for each tier (Figure 22).

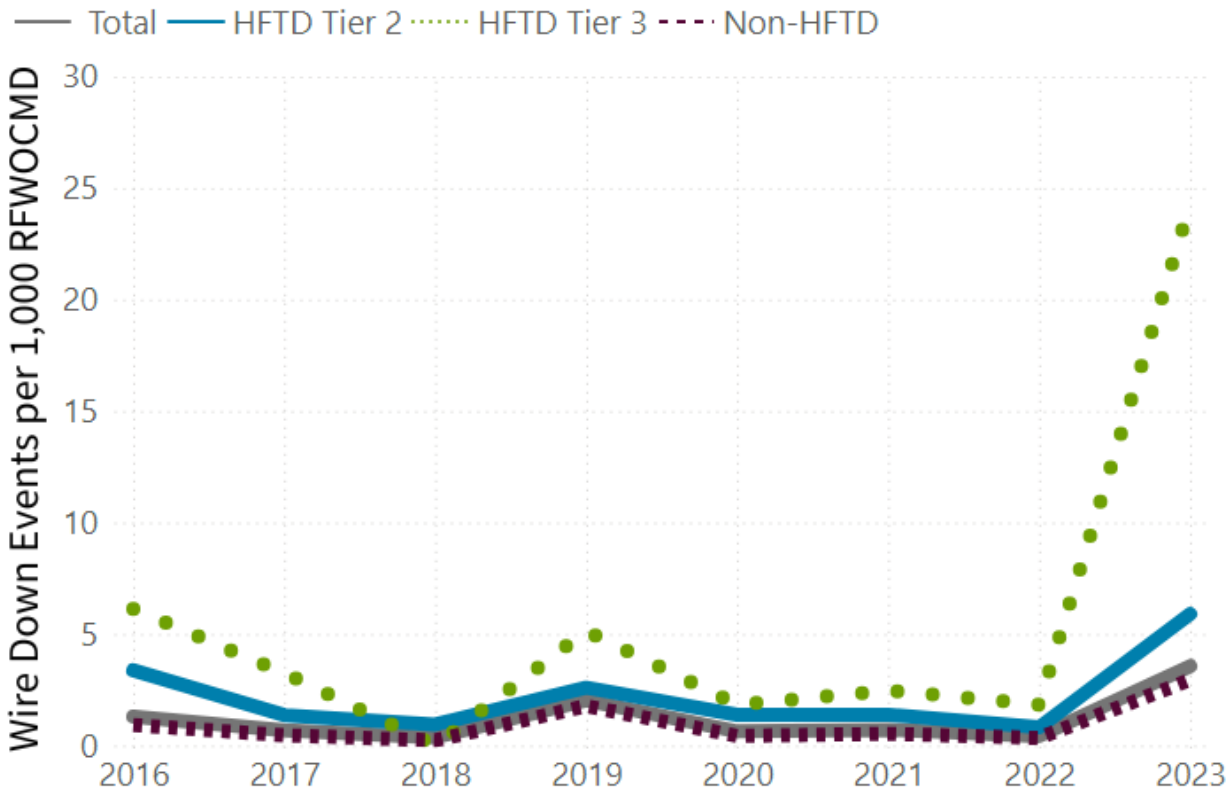
Figure 22. PacifiCorp Wire Down Events Normalized by HWWOCMD (2016-2023) by HFTD Tier



Wire Down Events Normalized by Red Flag Warning Overhead Circuit Mile Days

Wire down events normalized by RFWOCMD show fluctuations from 2016 to 2023, with peaks and valleys in different years across HFTD Tier 2, HFTD Tier 3, and non-HFTD areas. In years such as 2018 and 2022, the total number of RFWOCMDs is nearly zero (Figure 23).

Figure 23. PacifiCorp Wire Down Events Normalized by RFWOCMD (2016-2023) by HFTD Tier

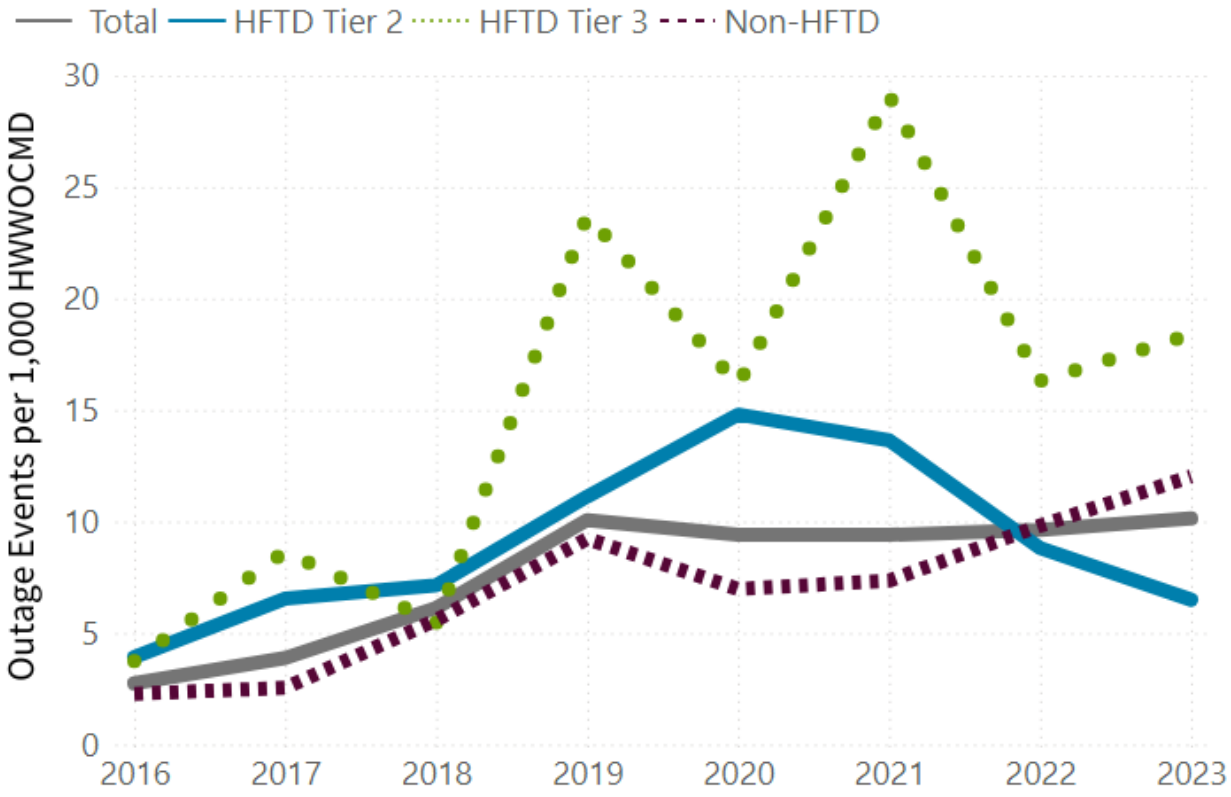


Outage Events Normalized by High Wind Warning Overhead Circuit Mile Days

To view the outage event patterns with respect to year-to-year variations in high wind days, outage event counts have been normalized by HWWOCMD.

After adjusting for year-to-year weather variances, outage event counts fluctuated from 2016 to 2023 (Figure 24).

Figure 24. PacifiCorp Outage Events Normalized by HWWOCMD (2016-2023) by HFTD Tier



Outage Events Normalized by Red Flag Warning Overhead Circuit Mile Days

Unplanned outage events normalized by RFWOCMD show fluctuations from 2016 to 2023, with an increase observed from 2022 to 2023 (Figure 25). The count of unplanned outage events normalized by RFWOCMD has been highly variable since 2015.

Figure 25. PacifiCorp Outage Events Normalized by RFWOCMD (2016-2023) by HFTD Tier