2024 Wildfire Mitigation Plan Independent Evaluator Annual Report on Compliance

Utility:

PacifiCorp

Submitted by:

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Executive Summary

PacifiCorp, operating as Pacific Power, is a multi-jurisdictional utility serving approximately 45,000 customers in the northern California portion of its service territory. PacifiCorp's service area in California covers a vast stretch of forested wildlife habitats encompassing dense vegetation and sparsely populated community centers with an average of approximately four customers served per square mile. Accordingly, PacifiCorp's service territory stretches across numerous expanses of the California Public Utilities Commission (CPUC) defined High Fire Threat Districts (HFTDs), including Tier 2 (elevated) and Tier 3 (extreme) risk areas.

PacifiCorp has undertaken considerable efforts to prevent ignitions and mitigate the impact of wildfire across its substantial service territory. Through emerging technologies, enhanced mitigation practices, and refined quality assurance/quality control (QA/QC) processes, PacifiCorp is working to reduce risk for its communities in the face of the growing threat of increased wildfire events and potential proactive de-energization activations as a wildfire prevention measure of last resort. To achieve this risk reduction, PacifiCorp tracks and monitors activities as they are executed to maintain conditional awareness of controllable risk drivers that may lead to a catastrophic ignition event.

This report includes a review of the wildfire mitigation initiatives that PacifiCorp implemented in 2024 and an accounting of whether PacifiCorp met its performance objective targets, whether it is underfunding any of its initiatives, and whether PacifiCorp is following its QA/QC processes. The independent evaluator (IE) review of these elements determined that PacifiCorp is largely achieving the reviewed initiative objectives, is not failing to fund the portfolio of its initiatives, and appears to be following its QA/QC processes, to the degree that they are documented.

1. Key Takeaways

PacifiCorp's **2023-2025 Wildfire Mitigation Plan R6 ("2024 WMP")**, **2025 Wildfire Mitigation Plan Updates**, **Quarterly Data Reports**, and **2024 Annual Report on Compliance (ARC)** were used to identify 45 initiatives. Of those 45 initiatives, the independent evaluator (IE) identified 12 as "Focus Initiatives", six as "Field Verifiable", 25 as "Quantitative", and 13 as "Qualitative", while seven did not have an associated "Quantitative" or "Qualitative" target. In addition, 43 financial targets were reviewed as part of the evaluation. In total, 10 initiatives had findings of missed targets, and 31 financial targets had funding discrepancies greater than 10% absolute variance. **Table 1-1** below illustrates the IE findings for those initiatives that were deemed insufficient due to a lack/insufficiency of evidence or that showed funding/actuals more than 10% above or below the planned 2024 targets set forth by PacifiCorp's **2024 WMP** and the fourth quarter update to Table 1, Table 11, and Table 12 of the **2024 Q4 Quarterly Data Report (QDR)**.[1] **Table 1-2** shows the funding targets, funding actuals, and explanations of variance for the 43 initiatives with financial targets.

[1] Document "PC_2024_Q4_Tables1-15_R0.xlsx," referred to throughout as "2024 Q4 QDR."

Table 1-1 – Summary of Findings

Initiative ID	Initiative Name	Finding	Detail on Finding
GH-01	Line Rebuild – Covered Conductor Installation	Target Missed	Target missed. PacifiCorp targeted 80 line-miles of covered conductor installation and only completed 72 line-miles due to delays.
GH-04	Installation of System Automation Equipment	Target Missed	Target missed. PacifiCorp targeted 20 device installations and only completed 11. The **2024 ARC** states that this was due to issues with technician availability.
GH-05	Expulsion Fuse Replacement	Progress Misreported	**2024 Q4 QDR** reports 2,673 replacements. According to PacifiCorp, the actual figure was 2,531.
AI-04	Distribution Detail Inspections	Target Missed	Target missed. PacifiCorp targeted 8,672 inspections and only completed 8,628. However, the **2024 ARC** states that this was due to retirements and incorrect labeling of facility points that did not meet the criteria for inspection and PacifiCorp considers this initiative complete.
AI-05	Transmission Intrusive Pole Inspections	Target Missed	Target missed. PacifiCorp targeted 783 inspections and only completed 780. However, the **2024 ARC** states that this was due to retired facility points that did not meet the criteria for inspection and PacifiCorp considers this initiative complete.
AI-06	Distribution Intrusive Pole Inspections	Target Missed	Target missed. PacifiCorp targeted 2,523 inspections and only completed 2,517. However, the **2024 ARC** states that this was due to retirements and incorrect labeling of facility points that did not meet the criteria for inspection and PacifiCorp considers this initiative complete.
AI-07	Enhanced (Infrared) Inspection – Transmission	Target Missed and Progress Misreported	Target missed and misreported as complete in the **2024 Q4 QDR**. PacifiCorp targeted 700 line-miles, and reported this target as complete, but only achieved an actual of 693. However, the target was missed due to the decommissioning of seven line-miles included in the target.
AI-11	Substation Inspections	Target Missed	Target missed. However, the **2024 ARC** states that this was due to the decommissioning of a substation included in the target and PacifiCorp considers this initiative complete.

Initiative ID	Initiative Name	Finding	Detail on Finding
AI-12	Quality Assurance and Quality Control	Progress Misreported	Figure reported in **2024 Q4 QDR** includes one duplicate inspection.
VM-05	Pole Clearing	Initiative Not Validated	Due to a failure rate of 24% on field verification, the initiative validation rate for VM-05 fell to 78%, which is below the target threshold of 95%. The IE cannot say with confidence that the clearing was performed, even though the desktop verification showed 100% completion for the initiative.
SA-05	Weather Forecasting	Progress Misreported	**2024 Q4 QDR** should have marked initiative as "completed" rather than "in progress."
CO-01	Public Outreach and Education Awareness Program	Target Missed and Progress Misreported	Target missed. PacifiCorp did not provide medical certificate in an additional language. **2024 ARC** marked this initiative complete erroneously.
RA-01	Risk and Risk Components Calculation	One Target Missed and One Target Not Verified	Missed target of calculating circuit-level Public Safety Power Shutoff (PSPS) risk as reported in **2024 Q4 QDR** due to shifts in priorities and limited staffing. Progress toward this target is ongoing. PacifiCorp could not provide time-stamped evidence of circuit-level wildfire risk updates in 2024, resulting in failure to verify target.
RA-03	Other Key Metrics	Target Missed and Progress Not Verified	Missed target of "effectiveness measures for select mitigations" as reported in **2024 Q4 QDR** and provided insufficient evidence for completion of progress reported**.**
GH-01	Line Rebuild – Covered Conductor Installation	Overfunded	Costs increased due to bringing on a construction project management company to manage the system-hardening projects. Incremental costs include field engineering support, post-construction inspections, extended warranty, etc.
GH-04	Installation of System Automation Equipment	Overfunded	Costs increased due to bringing on a construction project management company to manage the system-hardening projects. Additionally, project work in 2024 included higher costs to extend communications to field devices, increasing the cost per unit completed.

Initiative ID	Initiative Name	Finding	Detail on Finding
GH-05	Expulsion Fuse Replacement	Overfunded	Costs increased due to PacifiCorp establishing a High Fire Risk Area (HFRA), which resulted in an increase in expulsion fuses replaced. PacifiCorp replaced the expulsion fuses in the HFRA consistent with its approach to replacing expulsion fuses in the Tier 2 and Tier 3 High Fire Threat Districts.
AI-01	Transmission Patrol Inspections	Underfunded	The actual costs to complete the planned work were lower than anticipated when the 2024 plan costs were projected prior to 2023.
AI-02	Distribution Patrol Inspections	Underfunded	The actual costs to complete the planned work were lower than anticipated when the 2024 plan costs were projected prior to 2023.
AI-03	Transmission Detail Inspections	Underfunded	The actual costs to complete the planned work were lower than anticipated when the 2024 plan costs were projected prior to 2023.
AI-04	Distribution Detail Inspections	Overfunded	The actual costs to complete the planned work were higher than anticipated when the 2024 plan costs were projected prior to 2023.
AI-05	Transmission Intrusive Pole Inspections	Underfunded	The actual costs to complete the planned work were lower than anticipated when the 2024 plan costs were projected prior to 2023.
AI-06	Distribution Intrusive Pole Inspections	Overfunded	The actual costs to complete the planned work were higher than anticipated when the 2024 plan costs were projected prior to 2023.
AI-12	Quality Assurance and Quality Control (QA/QC)	Underfunded	Asset inspection QA/QC costs were not charged out to work orders for 2024 and the actuals for this initiative were not tracked separately. As a result documentation is not available to evaluate adequate funding of this initiative.
GO-02	Grid Response Procedures and Notifications	Overfunded	Encroachment patrols were not originally included in the 2024 plan when this initiative was forecast in 2023.
MA-01	Equipment Maintenance and Repair	Overfunded	The original forecast for this initiative did not include the costs associated with the weather station data plans.

Initiative ID	Initiative Name	Finding	Detail on Finding
VM-01	Detailed Inspection – Distribution	Overfunded	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the High Fire Risk Area (HFRA) for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in the Tier 2 and Tier 3 High Fire Threat Districts.
VM-02	Detailed Inspection – Transmission	Overfunded	PacifiCorp increased vegetation management activity for 2024 due to establishment of the High Fire Risk Area (HFRA) for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in the Tier 2 and Tier 3 High Fire Threat Districts.
VM-04	Patrol Inspection – Transmission	Overfunded	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the High Fire Risk Area (HFRA) for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in the Tier 2 and Tier 3 High Fire Threat Districts.
VM-06	Clearance – Distribution	Overfunded	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the High Fire Risk Area (HFRA) for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in the Tier 2 and Tier 3 High Fire Threat Districts.
VM-07	Clearance – Transmission	Overfunded	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the High Fire Risk Area (HFRA) for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in the Tier 2 and Tier 3 High Fire Threat Districts.
VM--08	Fall-in Mitigation	Underfunded	This program was discontinued before 2024 and no activity or spend occurred.
VM-11	Quality Assurance / Quality Control – Post-Audit	Overfunded	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the High Fire Risk Area (HFRA) for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in the Tier 2 and Tier 3 High Fire Threat Districts.

Initiative ID	Initiative Name	Finding	Detail on Finding
SA-01	Environmental Monitoring Systems	Overfunded	PacifiCorp installed two more stations than the base **2023-2025 WMP** originally planned for 2024.
SA-02	Grid Monitoring Systems	Overfunded	The original forecast for this initiative did not include the costs associated with the data connections for the distribution fault anticipators (DFAs).
SA-05	Weather Forecasting	Overfunded	The original forecast was for a limited scope and the domain expansion costs were not included in PacifiCorp's original forecast.
SA-06	Fire Potential Index	Underfunded	The actual costs for this initiative were included in the actuals for SA-05.
EP-01	Emergency Preparedness Plan	Overfunded	Original projections did not include all related emergency management and meteorology personnel for 2024 when the plan was created prior to 2023.
EP-02	External Collaboration and Coordination	Underfunded	PacifiCorp did not require as much funding for this initiative in 2024 as originally forecast prior to 2023.
CO-01	Public Outreach and Education Awareness Program	Overfunded	PacifiCorp did more outreach in 2024 than originally forecast prior to 2023. The actual costs for 2024 were more aligned with actual costs from 2023.
RA-01	Risk and Risk Components Calculation	Overfunded	PacifiCorp included the spend for RA-03 in the expenditure total for RA-01 due to a change in the work breakdown structure alignment. PacifiCorp also did not include calculation of risk reduction in the original projected expenditure for RA-01.
RA-03	Other Key Metrics	Underfunded	PacifiCorp included the spend for RA-03 in the expenditure total for RA-01 due to a change in the work breakdown structure alignment
PS-01	Protocols on PSPS	Underfunded	PacifiCorp did not have any Public Safety Power Shutoff (PSPS) events in 2024.
WP-01	Wildfire Mitigation Strategy Development	Overfunded	The costs for independent evaluation were not included in PacifiCorp's plan for 2024 when its costs were originally forecast in 2023.

Initiative ID	Initiative Name	Finding	Detail on Finding
WP-02	Identifying and Evaluating Mitigation Initiatives	Overfunded	The grant study included in this initiative was not included in the 2024 plan when its costs were originally forecast in 2023.

Table 1-2 – Summary of Funding

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
GH-01	Line Rebuild – Covered Conductor Installation	Y	$62,313	$115,729	86%	Costs increased due to bringing on a construction project management company to manage the system-hardening projects. Incremental costs included field engineering support, post-construction inspections, extended warranty, etc.
GH-04	Installation of System Automation Equipment	Y	$5,000	$12,796	156%	Costs increased due to bringing on a construction project management company to manage the system-hardening projects. Additionally, project work in 2024 included higher costs to extend communications to field devices, increasing the cost per unit completed.
GH-05	Expulsion Fuse Replacement	Y	$1,000	$5,324	432%	Costs increased due to PacifiCorp establishing a High Fire Risk Area (HFRA), which resulted in an increase in expulsion fuses replaced. Consistent with PacifiCorp's approach to replacing expulsion fuses in HFTD Tiers 2 and 3, the company also replaced the expulsion fuses in the HFRA.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
AI-01	Transmission Patrol Inspections	N	$93	$63	-32%	The actual cost to complete the planned work was lower than anticipated when the 2024 plan was projected prior to 2023.
AI-02	Distribution Patrol Inspections	N	$308	$266	-14%	The actual cost to complete the planned work was lower than anticipated when the 2024 plan was projected prior to 2023.
AI-03	Transmission Detail Inspections	Y	$137	$57	-58%	The actual cost to complete the planned work was lower than anticipated when the 2024 plan was projected prior to 2023.
AI-04	Distribution Detail Inspections	Y	$203	$231	14%	The actual cost to complete the planned work was higher than anticipated when the 2024 plan was projected prior to 2023.
AI-05	Transmission Intrusive Pole Inspections	Y	$171	$95	-44%	The actual cost to complete the planned work was lower than anticipated when the 2024 plan was projected prior to 2023.
AI-06	Distribution Intrusive Pole Inspections	Y	$90	$103	14%	The actual cost to complete the planned work was higher than anticipated when the 2024 plan was projected prior to 2023.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
AI-07	Enhanced (Infrared) Inspection – Transmission Lines	N	$90	$85	-6%	Not provided or requested – absolute variance less than 10%.
AI-08	Enhanced (Infrared) Inspection – Distribution Lines	N	$130	$129	-1%	Not provided or requested – absolute variance less than 10%.
AI-11	Substation Inspections	N	$179	$181	1%	Not provided or requested – absolute variance less than 10%.
AI-12	Quality Assurance and Quality Control	N	$36	$0	-100%	Asset inspection QA/QC costs were not charged out to work orders for 2024 and the actuals for this initiative were not tracked separately.
GO-01	Equipment Settings to Reduce Wildfire Risk	N	$0	$482	N/A – no planned spend to compare with actuals	Equipment settings and spending for this initiative were not projected for 2024 at the time of the creation of the base **2023-2025 WMP**. PacifiCorp was still determining the scope of this initiative for 2024 based on 2023 results.
GO-02	Grid Response Procedures and Notifications	N	$600	$3,751	525%	Encroachment patrols were not originally included in the 2024 plan when this initiative was forecast in 2023.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
MA-01	Equipment Maintenance and Repair	N	$285	$387	36%	The original forecast for this initiative did not include the costs associated with the weather station data plans.
VM-01	Detailed Inspection – Distribution	N	$294	$492	67%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-02	Detailed Inspection – Transmission	N	$157	$201	28%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-03	Patrol Inspection – Distribution	N	$316	$333	5%	Not provided or requested – absolute variance less than 10%.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
VM-04	Patrol Inspection – Transmission	N	$20	$25	25%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-05	Pole Clearing	Y	$374	$413	10%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-06	Clearance – Distribution	N	$15,087	$18,295	21%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
VM-07	Clearance – Transmission	N	$1,904	$2,498	31%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-08	Fall-in Mitigation	N	$30	$0	-100%	Budget was provided in the event that a third-party contractor was needed to conduct or augment PacifiCorp's follow-up work, assessments, or inspections following implementation of the expanded overhang specification. Follow-up reviews of completed work did not require a third-party contractor and reviews were completed by PacifiCorp internal staff.
VM-11	Quality Assurance / Quality Control – Post-Audit	N	$135	$171	27%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
SA-01	Environmental Monitoring Systems	N	$160	$209	31%	PacifiCorp installed two more stations than the base **2023-2025 WMP** originally planned for 2024.
SA-02	Grid Monitoring Systems	Y	$39	$108	177%	The original forecast for this initiative did not include the costs associated with the data connections for the DFAs.
SA-03	Smoke and Air Quality Sensors	N	$15	$14	-7%	Not provided or requested – absolute variance less than 10%.
SA-04	Ignition Detection Systems	Y	$1,065	$1,031	-3%	Not provided or requested – absolute variance less than 10%.
SA-05	Weather Forecasting	N	$115	$267	132%	The original forecast was for a limited scope and did not include domain expansion costs.
SA-06	Fire Potential Index	N	$97	$0	-100%	The actual costs for this initiative were included in the actuals for SA-05.
EP-01	Emergency Preparedness Plan	N	$50	$253	406%	Original projections did not include all related emergency management and meteorology personnel for 2024 when the plan was created prior to 2023.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
EP-02	External Collaboration and Coordination	N	$30	$7	-77%	PacifiCorp did not require as much funding for this initiative in 2024 as originally forecast prior to 2023.
EP-03	Public Emergency Communication Strategy	N	$0	$2.5	N/A – no planned spend to compare with actuals	The original forecast did not account for annual upkeep of the portal.
EP-05	Customer Support in Wildfire and PSPS Emergencies	N	$0	$140	N/A – no planned spend to compare with actuals	Spend was not forecast for 2024 because the portable battery and rebate program was in a pilot phase and results from 2023 were still being evaluated.
CO-01	Public Outreach and Education Awareness Program	N	$90	$100	11%	PacifiCorp did more outreach in 2024 than originally forecast prior to 2023. The actual costs for 2024 are more aligned with actual costs from 2023.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
RA-01	Risk and Risk Components Calculation	N	$130	$368	183%	PacifiCorp included the spend for RA-03 in the expenditure total for RA-01 due to a change in the work breakdown structure alignment. PacifiCorp also did not include calculation of risk reduction in the original projected expenditure for RA-01.
RA-02	Top Risk Areas within the HFRA	N	$0	$6.5	N/A – no planned spend to compare with actuals	Spend for this initiative was not projected for 2024 at the time of the creation of the base **2023-2025 WMP**.
RA-03	Other Key Metrics	N	$40	$0	-100%	PacifiCorp included the spend for RA-03 in the expenditure total for RA-01 due to a change in the work breakdown structure alignment.
RA-04	Enterprise System for Risk Assessment	N	$157	$157	0%	Not provided or requested – absolute variance less than 10%.
PS-01	Protocols on PSPS	N	$800	$0	-100%	PacifiCorp did not have any PSPS events in 2024.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
WP-01	Wildfire Mitigation Strategy Development	N	$520	$949	83%	The costs for independent evaluation were not included in PacifiCorp's plan for 2024 when it was originally forecast in 2023.
WP-02	Identifying and Evaluating Mitigation Initiatives	N	$100	$666	566%	The grant study included in this initiative was not included for the 2024 plan when it was originally forecast in 2023.

2. Introduction

The state of California has seen an increase in disastrous wildfires in recent years. Over the last decade, the California Department of Forestry and Fire Protection (CAL FIRE) reports that larger and more aggressive fires have occurred year-over-year due to prolonged drought conditions, a hotter climate, historic fire suppression, forest management, and bark beetle infestations. Several of the most damaging fires have been ignited by utility equipment and operations. This has spurred California to pass legislation and supporting regulations requiring electrical corporations (ECs) to develop and implement an annual wildfire mitigation plan (WMP), submit periodic filings on the implementation of initiatives under the WMP, and submit to a qualified independent evaluator (IE)[2] to review and assess the EC's compliance with its WMP.[3]

Wildfire Mitigation Plan Independent Evaluation Engagement

This document serves as the IE Annual Report on Compliance ("Report") that aligns with the scope set forth by the California Office of Energy Infrastructure Safety ("Energy Safety"), a department under the California Natural Resources Agency, on April 11, 2025.[4] All California ECs are required to contract with a qualified IE to perform the assessment and deliver a report before July 1, 2025. The IE was contracted to complete this assessment and began work on April 11, 2025.

This Report aims to verify WMP activities performed by PacifiCorp, operating as Pacific Power, as they compare to the initiative targets the investor-owned utility planned to accomplish in 2024, to determine whether those activities were funded appropriately, and to describe the EC's quality assurance/quality control (QA/QC) programs and validate to a degree of reasonable assurance that these efforts were completed as described and reported.

The Report is the product of the IE's assessments of the EC's WMP, publicly available documentation submitted to Energy Safety, data request responses, field visits, and interviews with the EC's subject matter experts (SMEs).

To perform this assessment, the IE adopted the following approach:

- **Review publicly available information, including the WMP:** The IE reviewed publicly available information to prepare for the assessment, including PacifiCorp's WMP and other publicly released or submitted documents.
- **Prepare initial and subsequent data requests:** The first data request focused on programmatic level documentation about the utility's vegetation management program, asset inspection program, grid-hardening programs, etc. Additional information requested included any non-public WMP-related

[2] NV5 and Guidehouse were designated as an eligible Qualified Independent Evaluator for WMPs on January 27, 2025, as part of the *Independent Evaluator List for 2024 Wildfire Mitigation Plans.*

[3] California Public Utilities Code (PUC) § 8386.3.

[4] California Office of Energy Infrastructure Safety, *Request for Qualifications RFQ No.:24-033680*

submissions and supplemental geographic information system (GIS) spatial data. This provided the IE with a baseline understanding of available documentation beyond publicly available sources.

- **Document discovery review:** The IE reviewed supplemental information about WMP initiatives in the Quarterly Data Reports (QDRs) and Annual Report on Compliance (ARC). The IE reviewed each data request response for completeness, responsiveness, and thoroughness. These materials are meant to address all three subject areas addressed in the report – implementation of initiatives, initiative funding, and QA/QC material.
- **Perform risk assessments for field inspections:** Using GIS data submitted by the EC, the IE identified areas across the utility's service territory where there was a substantial overlap between WMP initiative activities and risk designations, including High Fire Threat Districts (HFTDs) defined by the California Public Utilities Commission (CPUC) and the wildland-urban interface. The IE used this analysis to select meaningful locations for possible site visits to verify initiative activities performed in 2024.
- **Conduct a field inspection survey:** The IE conducted visual patrol assessment of identified circuits and electrical assets within the selected areas. Results were captured on site and integrated with the findings of the document discovery tasks.
- **Interpret documents and field inspection results:** Utilizing the WMP and other related compliance documents submitted to Energy Safety, the IE reviewed the field inspection site notes, data request responses, and other evidence of the performed WMP activities and prepared findings surrounding each scoped initiative activity. The IE also conducted interviews, as needed, with SME personnel to gain additional details and address questions on program and project targets and QA/QC performance.

3. Site and Sample Selection and Discussion

The IE approach to sampling formalizes a strategy to achieve a statistically valid, objective, and representative sample of the progress reported under certain WMP initiatives.

Sample sizes and locations were based on guidance outlined in the **2024 IE Kick-off Deck** and through guidance provided by Energy Safety. Per the scope of work outlined in the RFP, the IE used a simplified version of Cochran's sample size formula with finite population correction to determine sample sizes. For total populations less than or equal to 15, all items were targeted for verification.

The IE identified sample areas with conditions illustrating high fire risk and ignition potential within PacifiCorp's service territory. Areas that could be reasonably accessed for field verification were layered over the service territory of the utility, along with owned and operated assets, and other geographic factors to determine the area where samples would be taken. As the principal map, the IE layered the three tiers within the CPUC's HFTD map. Field verification efforts were concentrated in HFTD Tier 3 (extreme) and Tier 2 (elevated) areas, with less than 10% of field verifications performed in non-HFTD areas. In addition, the IE made efforts to ensure field verifications occurred in geographically dispersed areas within the PacifiCorp's service territory while considering accessibility, observability, and density of assets.

The IE concentrated its field verification efforts within several specific regions. The selected areas were identified through both risk and practical considerations. The practical element focused on the accessibility of the locations for physical, ground-based inspections and on the observability of the work completed. The final regions were selected in accordance with Energy Safety guidelines and focused on areas that (1) had significant numbers of field verifiable activities completed, (2) provided the ability to perform the greatest number of verifications given the time frame allowed, and (3) had conditions that presented high fire risk and ignition potential. The IE then developed and utilized a random sampling tool developed within the NV5 proprietary mapping and auditing tool, INSITE, to randomly select assets for field verification within the chosen zones. The images below illustrate some of the geographical areas visited and the initiatives/assets that were field verified.

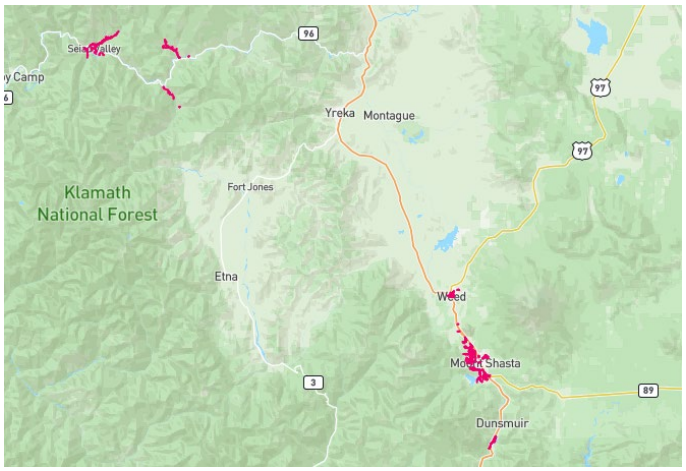


Figure 1 – Covered Conductor Map [GH-01]

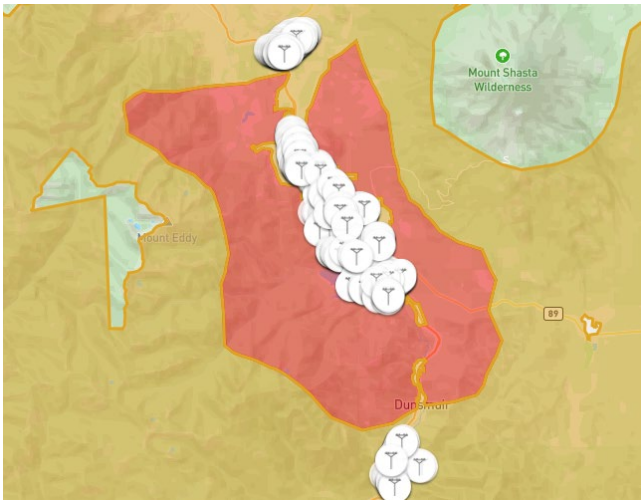


Figure 2.1 – Distribution Pole Replacement Map [GH-02]

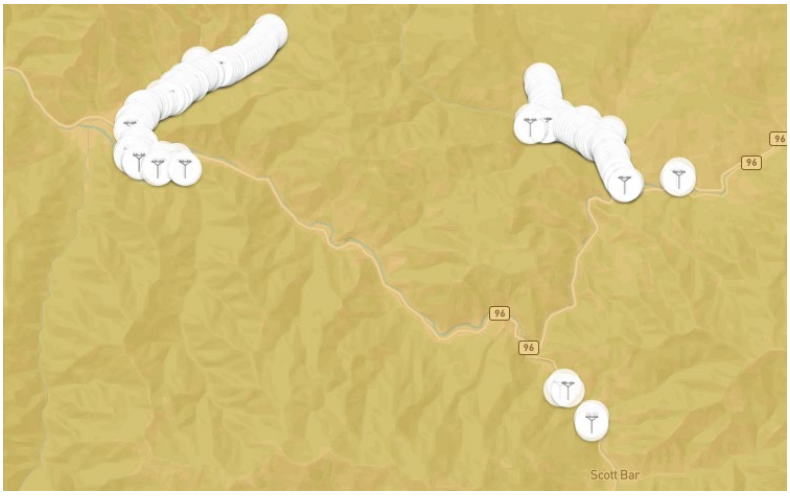


Figure 2.2 – Distribution Pole Replacement Map [GH-02]

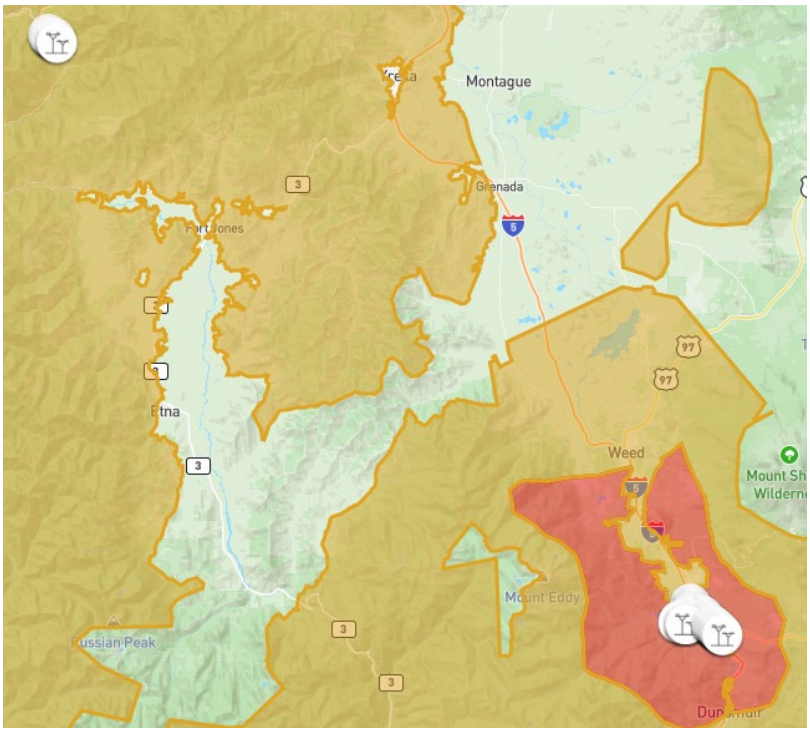


Figure 3 – Transmission Pole Replacement Map [GH-03]

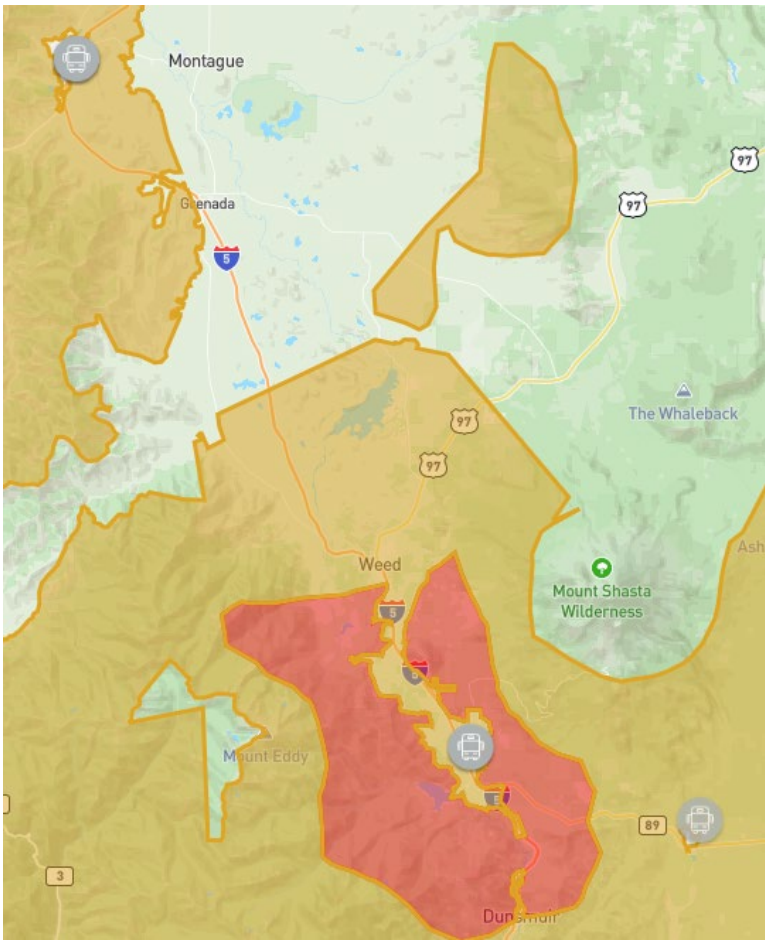


Figure 4 – Installation of System Automation Equipment Map [GH-04]

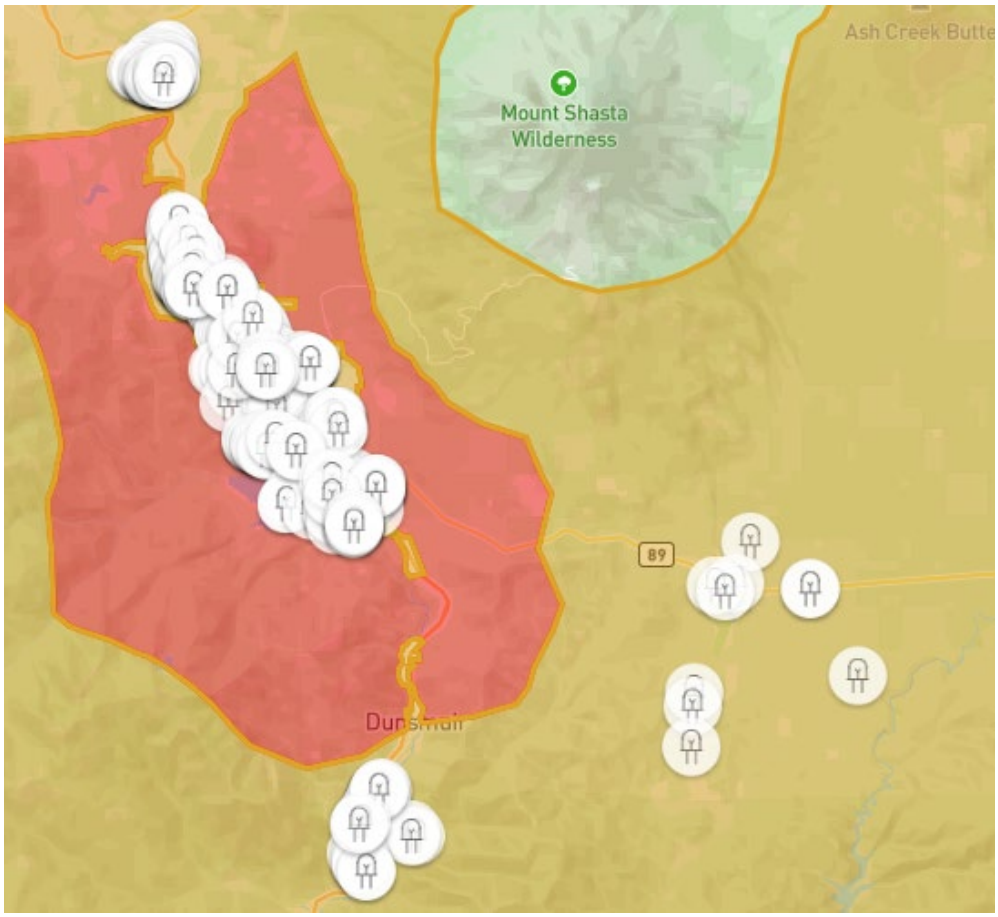


Figure 5.1 – Expulsion Fuse Replacement Map [GH-05]

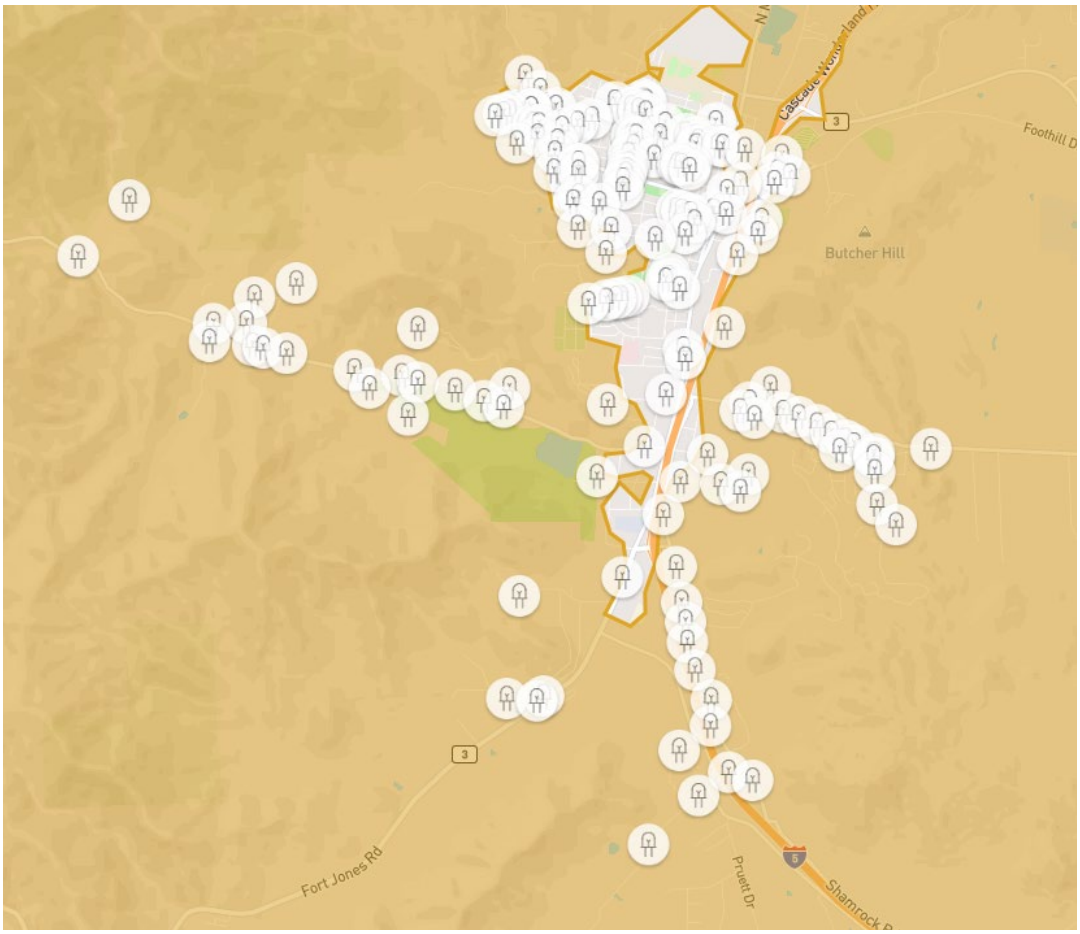


Figure 6.2 – Expulsion Fuse Replacement Map [GH-05]

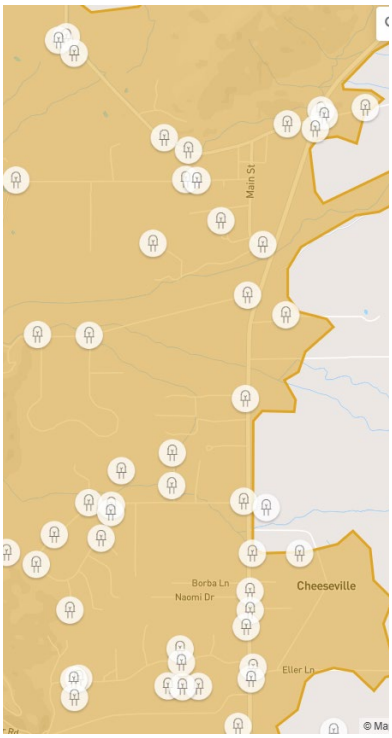


Figure 5.3 – Expulsion Fuse Replacement Map [GH-05]

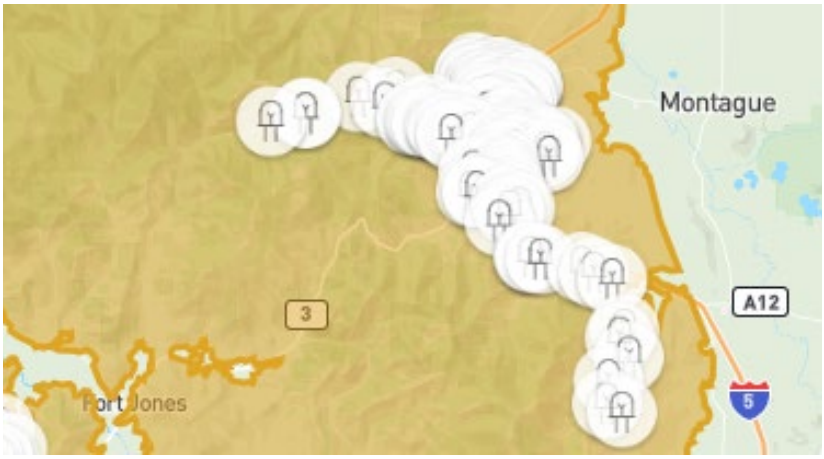


Figure 5.4 – Expulsion Fuse Replacement Map [GH-05]

3.1 Focus Initiatives and Discussion

List of Focus Initiatives Selected for Further Evaluation

Initiative ID	Initiative
AI-03	Transmission Detail Inspections
AI-04	Distribution Detail Inspections
AI-05	Transmission Intrusive Pole Inspections
AI-06	Distribution Intrusive Pole Inspections
GH-01	Line Rebuild - Covered Conductor Installation
GH-02	Distribution Pole Replacement
GH-03	Transmission Pole Replacement
GH-04	Installation of System Automation Equipment
GH-05	Expulsion Fuse Replacement
SA-02	Grid Monitoring Systems
SA-04	Ignition Detection Systems
VM-05	Pole Clearing

Methodology and Criteria for Determining Focus Initiatives

The IE selected the Focus Initiatives for further evaluation based on several criteria. First, the IE heavily weighted initiatives that were identified for field verification. This weighting was determined based on the IE's experience with field verification as well as the updated field verification guidance provided by Energy Safety. Energy Safety's updated guidance reduced the number of initiatives that would have previously been considered field verifiable, but increased sample size requirements leading to the evaluation/verification of a greater number of field verifiable activities. It is also important to note that these initiatives are also deemed significant by PacifiCorp as they are a focus of both the **2024 WMP** as well as the **2024 ARC.**

Initiative ID	Initiative
GH-01	Covered Conductor Installation
GH-02	Distribution Pole Replacement
GH-03	Transmission Pole Replacement
GH-04	Installation of System Automation Equipment
GH-05	Expulsion Fuse Replacement
VM-05	Pole Clearing

The IE selected the remaining Focus Initiatives for further evaluation based on the IE's experience performing WMP evaluations for PacifiCorp and other ECs. The IE also considered the importance of these initiatives for the overall success of the WMP. This process resulted in the selection of the following additional Focus Initiatives:

Initiative ID	Initiative
AI-03	Transmission Detail Inspections
AI-04	Distribution Detail Inspections
AI-05	Transmission Intrusive Pole Inspections
AI-06	Distribution Intrusive Pole Inspections
SA-02	Grid Monitoring Systems
SA-04	Ignition Detection Systems

4. Review of Initiatives across WMP Categories: Compliance and Funding

4.1 Grid Design, Operations, and Maintenance

4.1.1 Summary Table

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[5]
GH-01 8.1.2.1 Line Rebuild - Covered Conductor Installation	80	72	Target not met	31	100%	Field & Desktop	Initiative not validated	90%	62,313	115,739	86%	N/A
GH-02 8.1.2.3 Distribution Pole Replacement	1,600	1,608	Target met	69	97%	Field & Desktop	Initiative validated	97%	Not separately tracked	Not separately tracked	Not separately tracked	N/A
GH-03 8.1.2.4 Transmission Pole Replacement	160	204	Target met	54	100%	Field & Desktop	Initiative validated	128%	Not separately tracked	Not separately tracked	Not separately tracked	N/A
GH-04 8.1.2.8 Installation of System Automation Equipment	20	11	Target not met	11	100%	Field & Desktop	Initiative not validated	55%	5,000	12,796	156%	N/A
GH-05 8.1.2.12 Expulsion Fuse Replacement	500	2,673	Target met	70	97%	Field & Desktop	Initiative validated	516%	1,000	5,324	432%	N/A
AI-01 8.1.3.1 Transmission Patrol Inspections	12,034	12,261	Target met	18	100%	Desktop	Initiative validated	102%	93	63	-32%	N/A
AI-02 8.1.3.1 Distribution Patrol Inspections	46,276	48,403	Target met	18	100%	Desktop	Initiative validated	105%	308	266	-14%	N/A

[5] PacifiCorp did not capture risk reduction goals in its **2023-2025 WMP**. Thus, the IE could not validate if a goal was met.

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[5]
AI-03 8.1.3.2 Transmission Detail Inspections	1,631	1,631	Target met	69	100%	Desktop	Initiative validated	100%	137	57	-58%	N/A
AI-04 8.1.3.2 Distribution Detail Inspections	8,672	8,628	Target met	72	100%	Desktop	Initiative validated	99%	203	231	14%	N/A
AI-05 8.1.3.3 Transmission Intrusive Pole Inspections	783	780	Target met	66	100%	Desktop	Initiative validated	100%	171	95	-44%	N/A
AI-06 8.1.3.3 Distribution Intrusive Pole Inspections	2,523	2,517	Target met	70	100%	Desktop	Initiative validated	100%	90	103	14%	N/A
AI-07 8.1.3.6 Enhanced (Infrared) Inspections in Transmission Lines	700	693	Target met	18	100%	Desktop	Initiative validated	99%	90	85	-6%	N/A
AI-08 8.1.3.5 Enhanced (Infrared) Inspections in Distribution Lines	810	810	Target met	18	100%	Desktop	Initiative validated	100%	130	129	-1%	N/A
AI-11 8.1.3.4 Substation Inspections	451	443	Target met	17	100%	Desktop	Initiative validated	98%	179	181	1%	N/A
AI-12 8.1.6 Quality Assurance and Quality Control	No target	826	Target met	18	100%	Desktop	Initiative validated	N/A - no target	36	0	-100%	N/A
GO-01 8.1.8.1 Equipment Settings to Reduce Wildfire Risk (Grid Ops): EFR and Fault Indicators	No target	Pacific Power continues to deploy ESS on capable devices in the service territory.	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	0	482	N/A – no planned spend to compare with actuals	N/A

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[5]
GO-02 8.1.8.3 Grid Response Procedures and Notifications (Grid Ops): Patrols	Continue to deploy Elevated Fire Risk (EFR) settings [now known as Enhanced Safety Settings (ESS)]	Pacific Power continues to deploy ESS on capable devices in the service territory.	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	600	3,751	525%	N/A
MA-01 8.1.4 Equipment Maintenance and Repair	- Continue planned transmission and distribution wires maintenance - Continue planned substation apparatus maintenance programs	108	Target met	16	100%	Desktop	Initiative validated	N/A - no target	285	387	36%	N/A

4.1.2 Line Rebuild – Covered Conductor Installation (GH-01)

4.1.2.1 Initiative Review

Section 8.1.2.1 of PacifiCorp's **2024 WMP** describes PacifiCorp's line rebuild program. PacifiCorp explains that while overhead distribution equipment and lines are designed to meet current compliance requirements, under certain conditions, such as high wind speeds, these lines can become more vulnerable to "contact by object" risk drivers. PacifiCorp is addressing this risk through the line rebuild program. PacifiCorp's line rebuild program includes deployment of the following main techniques:

- *Reconductor with covered conductor:* Specialized overhead covered conductors can be constructed with additional shielding and enhanced insulating properties to aid in wildfire mitigation.

- *Undergrounding*: Under the line rebuild program, PacifiCorp is also considering undergrounding. While an underground design does not eliminate every source of ignition potential (i.e., because of aboveground junctions), it is considered the most effective strategy for reducing the risk of utility-related ignition. Unfortunately, the cost of underground construction often makes it difficult to apply on a widespread basis. Therefore, PacifiCorp evaluates the potential to convert overhead lines to underground lines for rebuild projects on a project-by-project basis. Through the design process, each individual project is assessed to determine whether sections of the rebuild should be completed with underground construction. For example, a more remote, heavily forested location with few customer connections could be an ideal candidate for undergrounding.

- *Line Removal*: Overhead lines may become idle facilities due to changes in customer need or construction of alternate feeds. When an overhead line is determined no longer to be needed, the line will be removed, fully removing the ignition risks associated with the line.

The **2024 WMP** identified an annual line rebuild target of 80 line-miles and the **2024 Q4 QDR** indicated that 72 line-miles were completed in 2024, a shortfall of eight line-miles. According to the **2024 ARC**, PacifiCorp "experienced delayed mobilization on one project that moved work into poor weather months which required helicopter set poles. Sub-contractors were mobilized but poor weather impacted their ability to complete the work before the end of the year. The remaining eight miles of work were completed in Q1 of 2025".

To validate the 72 line-miles of covered conductor that were installed, the IE requested in *DR 4* a list of the full population of line-miles reported in 2024. In response, PacifiCorp provided evidence document **Item 11 covered conductor.xlsx**, which listed a record of 43 grid-hardening IDs accounting for the 72 line-miles of covered conductor. From this list, coupled with GIS data provided by PacifiCorp, the IE selected a random sample of 31 grid-hardening IDs on which to perform a field verification, using location data and risk assessment to select fuses that could reasonably be reached for field

inspection. For the field verifications, the IE physically verified that the covered conductor installations were completed by visiting the site and noting the upgraded materials. As result of the field verification, 31 instances of covered conductor installation were verified and determined to be compliant in the field.

To further validate the work completed, the IE requested detailed documentation demonstrating completion for the sample set of covered conductor installations in *DR 9*. PacifiCorp provided **Covered Conductor.zip**, which contained folders for each work order accounting for the line-miles completed. The IE reviewed the work orders, pull section tracker spreadsheets, and pull section checklists and determined that additional discussion with the PacifiCorp SME would be needed to validate completion of the 72 line-miles. During the SME interview, PacifiCorp provided a detailed explanation of the material and agreed to provide additional detail in the form of updated files so that the IE could complete its validation. PacifiCorp provided the detailed files as part of *DR 14* in documents **DR14 Item 1.docx** and **DR14 Item 2.docx.** Item 1, a memo, highlighted projects delayed due to permitting issues and the line-miles associated with each delay as validation for the missed line-miles. Item 2, an update to **Item 11 covered conductor.xlsx,** provided data on the line-miles of covered conductor installed in prior years and in 2024 for all covered conductor projects. The combination of the two additional files provided clear evidence that PacifiCorp completed the 72 line-miles of covered conductor installation in 2024.

Finding

With a desktop verification validation rate of 100% and a field verification validation rate of 100% for the 31 instances of covered conductor installation, the IE has reasonable assurance that PacifiCorp completed 72 line-miles of covered conductor installation in 2024. However, PacifiCorp did not meet its **2024 WMP** target of 80 line-miles due to delays.

4.1.2.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $62,000 and OPEX ($ Thousands) of $313 for a total expenditure projection of $62,313 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $115,391 and OPEX of $348 for a total expenditure of $115,739. The projected expenditure of $62,313 and total expenditure of $115,739 were validated in the **2024 ARC**. PacifiCorp's reasons for the expenditure variance of 86% were the need to bring on a third-party construction management company and unforeseen incremental costs.

4.1.3 Distribution Pole Replacement (GH-02)

4.1.3.1 Initiative Review

Section 8.1.2.3 of PacifiCorp's **2024 WMP** describes PacifiCorp's distribution pole replacement program. PacifiCorp explains that it included the pole replacement program within the line rebuild program as an efficient use of resources. Only poles replaced

under the line rebuild program are counted in the WMP. In some cases, poles need to be replaced to accommodate the additional weight of covered conductor, while replacing wooden poles with stronger nonwooden solutions such as fiberglass or steel also increases grid resiliency and eliminates the need to return later. This approach also ensures that pole replacements are prioritized effectively.

The **2024 WMP** identified an annual target of 1,600 distribution pole replacements and the **2024 Q4 QDR** indicated that 1,608 pole replacements were conducted in 2024, surpassing the target by eight pole replacements.

To validate the 1,608 distribution poles that were replaced, the IE requested in *DR 4* a list of the full population of poles reported as replaced in 2024. In response, PacifiCorp provided evidence document **Item 12 distribution poles.xlsx**, which listed a record of 1,608 distribution pole replacements with unique identifiers. From this list, the IE selected a random sample of 86 poles on which to perform a field verification, using location data and risk assessment to select poles that could reasonably be reached for field inspection. For the field verifications, the IE physically verified that the distribution pole replacements were completed by visiting the site and noting the upgraded materials. As result of the field verification, 83 poles were verified and determined to be compliant in the field. The field technician was not able to verify three of the poles due to there being no match in the field. Compliant/Not Compliant was determined through both PRC 4293 standards and WMP descriptions of minimum standards.

To further validate the work completed, the IE requested detailed documentation demonstrating completion for the sample set of 86 distribution pole replacements (69 with a margin of error of 17) in *DR 9*. PacifiCorp provided several evidence documents, including a map for each project, documentation matching work sequences to the segment of new conductor, and the pull section checklist/work completion forms to verify the work performed. The IE reviewed the project-level documentation for the nine work orders associated with the 86 sampled poles and was able to validate the pole replacements based on the work order documentation and associated pull section checklist/work completion forms.

Finding

With a desktop verification validation rate of 100%, a field verification validation rate of 100% for the 83 poles that could be validated, and a validation rate of 96.5% when considering the entire sample of 86 poles, the IE has reasonable assurance that PacifiCorp completed its **2024 WMP** target of 1,600 distribution pole replacements in 2024 by completing 1,608 replacements.

4.1.3.2 Funding Verification

There was no expenditure associated with this initiative. PacifiCorp noted in its **2024 ARC** that spending on this initiative is captured as part of GH-01.

4.1.4 Transmission Pole Replacement (GH-03)

4.1.4.1 Initiative Review

Section 8.1.2.4 of PacifiCorp's **2024 WMP** describes PacifiCorp's transmission pole replacement program. PacifiCorp explains that it included the pole replacement program within the line rebuild program as an efficient use of resources. Only poles replaced under the line rebuild program are counted in the WMP. In some cases, poles need to be replaced to accommodate the additional weight of covered conductor, while replacing wooden poles with stronger nonwooden solutions such as fiberglass or steel also increases grid resiliency and eliminates the need to return later. This approach also ensures that pole replacements are prioritized effectively.

The **2024 WMP** identified an annual target of 160 transmission pole replacements and the **2024 Q4 QDR** indicated that 204 pole replacements were conducted in 2024, surpassing the target by 44 pole replacements.

To validate the 204 transmission poles that were replaced, the IE requested in *DR 4* a list of the full population of poles reported as replaced in 2024. In response, PacifiCorp provided evidence document **Item 13 transmission poles.xlsx**, which listed a record of 204 transmission pole replacements with unique identifiers. From this list, the IE selected a random sample of 68 poles on which to perform a field verification, using location data and risk assessment to select poles that could reasonably be reached for field inspection. For the field verifications, the IE physically verified that the transmission pole replacements were completed by visiting the site and noting the upgraded materials. As a result of the field verification, 68 poles were verified and determined to be compliant in the field. Compliant/Not Compliant was determined through both PRC 4293 standards and WMP descriptions of minimum standards.

To further validate the work completed, the IE requested detailed documentation demonstrating completion for the sample set of 68 transmission pole replacements (54 with a margin of error of 14) in *DR 9*. PacifiCorp provided several evidence documents, including a map for each project, the work sequences to the segment of new conductor, and the pull section checklist/work completion forms to verify the work performed. The IE reviewed the project-level documentation for the nine work orders associated with the 68 sampled poles and was able to validate the pole replacements based on the work order documentation and associated pull section checklist/work completion forms.

Finding

With a desktop verification validation rate of 100% and a field verification validation rate of 100% for the 68 poles sampled, the IE has reasonable assurance that PacifiCorp completed its **2024 WMP** target of 160 transmission pole replacements in 2024 by completing 204 replacements.

4.1.4.2 Funding Verification

There was no expenditure associated with this initiative. PacifiCorp noted in its **2024 ARC** that spending on this initiative is captured as part of GH-01.

4.1.5 Installation of System Automation Equipment (GH-04)

4.1.5.1 Initiative Review

Section 8.1.2.8 of PacifiCorp's **2024 WMP** describes PacifiCorp's installation of system automation equipment program. PacifiCorp cites the deployment of distribution and transmission protection and control schemes and equipment, such as relays, circuit breakers, reclosers, and communications equipment. These measures enhance fault detection capabilities, reduce fault isolation time, improve fault location and record availability, and speed up restoration efforts.

The **2024 WMP** identified an annual target of 20 device installations and the **2024 Q4 QDR** indicated that 11 devices were installed in 2024, a shortfall of nine installations. According to the **2024 ARC**, PacifiCorp "faced challenges regarding the availability of internal and contracted relay technicians and was unable to complete the planned target by end of year. Pacific Power has contracted additional relay technicians for 2025, and technicians will remain on the project until the outstanding 2024 work is complete."

To validate the 11 installations of system automation devices, the IE requested in *DR 4* a list of the full population of devices reported as installed in 2024. In response, PacifiCorp provided evidence document **Item 14 system automation 2024.xlsx**, which listed a record of 11 system automation devices with unique identifiers. Since the population was under 15, the IE performed a field verification on the entire population, physically verifying that the device installations were completed by visiting the site and noting that the devices were present. As result of the field verification, all 11 devices were verified and determined to be compliant in the field.

To further validate the work completed, the IE requested detailed documentation demonstrating completion for the sample set of 11 system automation device installations in *DR 9*. PacifiCorp provided **System Automation.zip**, which contained T&D Project Charging Authorization Forms for 10 of the 11 requested devices. One of the forms was for a project completed in 2025 and the IE had to request the appropriate form for the 11th system automation device. PacifiCorp provided the correct record following the secondary request. The IE reviewed the T&D Project Charging Authorization Forms associated with the 11 sampled devices and was able to validate the installation of the entire sample.

Finding

With a desktop verification validation rate of 100% and a field verification validation rate of 100% for the 11 devices sampled, the IE has reasonable assurance that PacifiCorp completed 11 system automation device installations in 2024 as reported. However, due

to issues with technician availability, PacifiCorp did not meet the **2024 WMP** target of 20 installations in 2024.

4.1.5.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $5,000 for a total expenditure projection of $5,000 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $12,796 for a total expenditure of $12,796. The projected expenditure of $5,000 and total expenditure of $12,796 were validated in the **2024 ARC**. PacifiCorp's reasons for the expenditure variance of 156% were the need to bring on a third-party construction management company and increased costs to extend communication to field devices.

4.1.6 Expulsion Fuse Replacement (GH-05)

4.1.6.1 Initiative Review

Section 8.1.2.12 of PacifiCorp's **2024 WMP** describes PacifiCorp's expulsion fuse replacement program as a project to install new and CAL FIRE-approved non-expulsion fuses, including power fuses and current limiting fuses, to replace existing expulsion fuse equipment. PacifiCorp is proactively replacing expulsion fuses throughout the HFTD and, where practical, is completing replacement of expulsion fuses concurrent with line rebuild to utilize resources most efficiently.

The **2024 WMP** identified an annual target of 500 expulsion fuse replacements and the **2024 Q4 QDR** indicated that 2,673 replacements were conducted in 2024, surpassing the target by 2,173 replacements.

To validate the 2,673 expulsion fuses that were replaced, the IE requested in *DR 4* a list of the full population of poles reported as replaced in 2024. In response, PacifiCorp provided evidence document **Item 15 fuse replacements.xlsx**, which listed a record of 2,531 replacements with unique identifiers. In an interview, a PacifiCorp SME indicated that 2,531 was the accurate number of completions and that the reported 2,673 was an error being addressed through the formal QA/QC process.

From this list, the IE selected a random sample of 88 fuses on which to perform a field verification, using location data and risk assessment to select fuses that could reasonably be reached for field inspection. For the field verifications, the IE physically verified that the expulsion fuse replacements were completed by visiting the site and noting the upgraded devices. As a result of the field verification, 85 fuses were verified and determined to be compliant in the field, one fuse could not be verified due to its location on private property with no clear line of sight, and two fuses could not be verified due to time/resource constraints. Compliant/Not Compliant was determined via visual inspection by the field inspector.

To further validate the work completed, the IE requested detailed documentation demonstrating completion for the sample set of 88 expulsion fuse replacements (70 with

a margin of error of 18) in *DR 9*. PacifiCorp provided **Item 3 Attachment - Expulsion Fuses.xlsx**. The IE reviewed the Excel file and determined that additional discussion with the PacifiCorp SME would be needed to validate completion for the 88 sampled fuses. Following the interview, the IE requested updated documentation for the 88 randomly sampled fuses as part of *DR 14*. PacifiCorp, in response to *DR14,* provided **DR14 Item 3.xlsx** and **DR14 Item4.zip**. Item 3 was an update to *DR 4* document **Item 15 fuse replacements.xlsx** that included completion dates for the 2,531 fuse replacements, while Item 4 was an update to **Item 3 Attachment - Expulsion Fuse.xlsx** that included the completion dates for the randomly sampled fuses and the corrected work order numbers and evidence for validation of completion. The IE reviewed the additional material and was able to validate the completion of 86 of the 88 randomly sampled expulsion fuses.

Finding

With a desktop verification validation rate of 97.7%, a field verification validation rate of 100% for the 85 expulsion fuses that could be validated, and a validation rate of 96.6% when considering the entire sample of 88 fuses, the IE has reasonable assurance that PacifiCorp completed its **2024 WMP** target of 500 expulsion fuse replacements in 2024 by completing 2,531 replacements. However, the IE notes that this number was misreported as 2,673 in the **2024 Q4 QDR.**

4.1.6.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $1,000 for a total expenditure projection of $1,000 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $5,324 for a total expenditure of $5,324. The projected expenditure of $1,000 and total expenditure of $5,324 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 432% was the establishment of a High Fire Risk Area (HFRA). To remain consistent with the approach taken for HFTD Tiers 2 and 3, PacifiCorp replaced the expulsion fuses in the newly established HFRA.

4.1.7 Transmission Patrol Inspections (AI-01)

4.1.7.1 Initiative Review

Section 8.1.3.1 of PacifiCorp's **2024 WMP** describes the transmission patrol inspections program as being consistent with California GO 95 and 165 regulations and states that the inspections are conducted by viewing each facility from a vantage point allowing reasonable viewing access. These inspections are intended to identify damage or defects to the transmission system or other potential hazards or right-of-way encroachments that may endanger the public or adversely affect the integrity of the electric system, including items that could potentially cause a spark.

The **2024 WMP** identified an annual target of 12,034 patrol inspections and the **2024 Q4 QDR** indicated that 12,261 inspections were conducted in 2024, surpassing the target by 227 inspections.

To confirm that 12,261 transmission patrol inspections were conducted, the IE requested in *DR 4* a full population list of the 12,261 transmission inspections with unique identifiers. In response, PacifiCorp provided a list of all 12,261 transmission inspections with dates and unique identifiers within the evidence document **CA_2024_AI-01_INSPECTIONS.xlsx**.

The IE then requested evidence for a random sample of 23 transmission inspections (18 with a margin of error of five) in *DR 6* to further verify that the inspections were conducted. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of the 23 transmission patrol inspections sampled. PacifiCorp also provided a document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

The IE reviewed the 23 PDFs to verify that for each asset inspection ID sampled, a patrol inspection (categorized as "SAFETY") was performed on the date in 2024 reported in *DR 4*. The IE noted that in two instances, the inspection type was listed as "DETAIL" or "DTLTRT" rather than "SAFETY." However, PacifiCorp stated that this inspection type fulfills the patrol inspection requirement.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp exceeded its **2024 WMP** target of 12,034 transmission patrol inspections in 2024 by performing 12,261 such inspections.

4.1.7.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $95 for a total expenditure projection of $95 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $62.5 for a total expenditure of $62.5. The projected expenditure of $95 and total expenditure of $62.5 (rounded to $63) were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -32% was that the actual costs to complete the planned work were lower than anticipated.

4.1.8 Distribution Patrol Inspections (AI-02)

4.1.8.1 Initiative Review

Section 8.1.3.1 of PacifiCorp's **2024 WMP** describes the distribution patrol inspections program as being consistent with California GO 95 and 165 regulations and states that the inspections are conducted by viewing each facility from a vantage point allowing reasonable viewing access. These inspections are intended to identify damage or defects to the distribution system or other potential hazards or right-of-way

encroachments that may endanger the public or adversely affect the integrity of the electric system, including items that could potentially cause a spark.

The **2024 WMP** identified an annual target of 46,276 inspections and the **2024 Q4 QDR** indicated that 48,403 distribution patrol inspections were conducted in 2024, surpassing the target by 2,127 inspections.

To confirm that the 48,403 distribution patrol inspections were conducted, the IE requested in *DR 4* a full population list of the inspections with unique identifiers. In response, PacifiCorp provided a list of all 48,403 distribution patrol inspections with dates and unique identifiers within the evidence document **CA_2024_AI-02_INSPECTIONS.xlsx**.

The IE then requested evidence for a random sample of 23 distribution patrol inspections (18 with a margin of error of five) in *DR 6* to further verify that the inspections were conducted. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of the 23 distribution patrol inspections sampled. PacifiCorp also provided a document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

The IE reviewed the 23 PDFs to verify that for each asset inspection ID sampled, a patrol inspection (categorized as “SAFETY”) was performed on the date in 2024 reported in *DR 4*. The IE noted in one instance that the inspection type was listed as “DETAIL.” However, PacifiCorp stated that this inspection type fulfills the patrol inspection requirement. Additionally, the IE noted that one PDF had no inspections listed and stated: “Facility Point Not Found.” For this facility, PacifiCorp provided screenshots from another database demonstrating the facility’s inspection and the fact that it was out of commission, which explained its removal from the Facility Point Inspection database.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp exceeded its **2024 WMP** target of 46,276 distribution patrol inspections in 2024 by performing 48,403 such inspections.

4.1.8.2 Funding Verification

PacifiCorp’s **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $308 for a total expenditure projection of $308 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $266 for a total expenditure of $266. The projected expenditure of $308 and total expenditure of $266 were validated in the **2024 ARC**. PacifiCorp’s reason for the expenditure variance of -14% was that the actual costs to complete the planned work were lower than anticipated.

4.1.9 Transmission Detail Inspections (AI-03)

4.1.9.1 Initiative Review

Section 8.1.3.2 of PacifiCorp's **2024 WMP** describes the transmission detail inspections program as being consistent with California GO 95 and 165 regulations. PacifiCorp states that the inspections involve a careful visual inspection accomplished by visiting each structure, as well as inspecting adjacent spans between structures, which is intended to identify potential nonconformance with GO or other applicable state requirements, infringement by other utilities or individuals, defects, potential safety hazards, and deterioration of the facilities that need to be corrected to maintain reliable and safe service.

The **2024 WMP** identified an annual target of 1,631 transmission detail inspections and the **2024 Q4 QDR** indicated that 1,631 transmission detail inspections were conducted in 2024, meeting the target.

To verify that the 1,631 transmission detail inspections were conducted, the IE requested a full population list of the inspections with unique identifiers in *DR 4*. In response, PacifiCorp provided evidence document **CA_2024_AI-03_INSPECTIONS.xlsx**, which contained 1,631 unique asset IDs for the inspections performed.

The IE then requested evidence for a sample size of 86 transmission detail inspections (69 with a margin of error of 17) in *DR 6* to further verify that the inspections were conducted. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of the 86 transmission detail inspections sampled. PacifiCorp also provided a document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

Through review of the evidence provided in responses to *DR 6,* the IE was able to verify the completion of all 86 sampled transmission detail inspections.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp met its **2024 WMP** target of 1,631 transmission detail inspections.

4.1.9.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $137 for a total expenditure projection of $137 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $57 for a total expenditure of $57. The projected expenditure of $137 and total expenditure of $57 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -58% was that the actual costs to complete the planned work were lower than anticipated.

4.1.10 Distribution Detail Inspections (AI-04)

4.1.10.1 Initiative Review

Section 8.1.3.2 of PacifiCorp's **2024 WMP** describes the distribution detail inspections program as being consistent with California GO 95 and 165 regulations. PacifiCorp states that the inspections involve a careful visual inspection accomplished by visiting each structure, as well as inspecting adjacent spans between structures, which is intended to identify potential nonconformance with GO or other applicable state requirements, infringement by other utilities or individuals, defects, potential safety hazards, and deterioration of the facilities that need to be corrected to maintain reliable and safe service.

The **2024 WMP** identified an annual target of 8,672 distribution detail inspections and the **2024 Q4 QDR** indicated that 8,628 distribution detail inspections were conducted in 2024, a shortfall of 34 inspections. According to the **2024 ARC**, "the remaining inspection locations were determined to be either retired facility points or incorrectly labeled in the system and did not meet the criteria for inspection as part of this initiative. Pacific Power considers this initiative complete for 2024 and does not have any corrective actions for the variance."

To verify that the 8,628 distribution detail inspections were conducted, the IE requested a full population list of the 8,628 inspections with unique identifiers in *DR 4*. In response, PacifiCorp provided evidence document **CA_2024_AI-04_INSPECTIONS.xlsx**, which contained evidence that 8,628 distribution detail inspections were performed. These inspections were listed with unique identifiers.

The IE then requested evidence for a sample size of 90 distribution detail inspections (72 with a margin of error of 18) in *DR 6* to further verify that the inspections were conducted. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of the 90 distribution detail inspections sampled. PacifiCorp also provided a document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

Through review of the evidence provided in responses to *DR 6,* the IE was able to verify the completion of all 90 sampled transmission detailed inspections.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp conducted the 8,628 distribution detail inspections reported. Although PacifiCorp did not meet the **2024 WMP** target of 8,672 inspections, the **2024 ARC** states that this was due to retirements and incorrect labeling of facility points that did not meet the criteria for inspection.

4.1.10.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $203 for a total expenditure projection of $203 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $231 for a total expenditure of $231. The projected expenditure of $203 and total expenditure of $231 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 14% was that the actual costs of completing the planned work were higher than anticipated.

4.1.11 Transmission Intrusive Pole Inspections (AI-05)

4.1.11.1 Initiative Review

Section 8.1.3.3 of PacifiCorp's **2024 WMP** describes the transmission intrusive pole inspections program. These inspections may include pole-sounding, inspection hole drilling, and excavation tests that are designed to identify decay, wear, or woodpecker damage, assess the condition of wood poles, and identify the need for any treatment, repair, or replacement. Like other inspection programs, intrusive inspections mitigate some wildfire risk by identifying and correcting conditions. In this case, the inspections identify poles for replacement or reinforcement to prevent potential structural failure of a pole that could lead to a potential wire-down event and ignition risk. The intrusive pole inspections are performed consistently with the cycle prescribed in California GO 165.

The **2024 WMP** identified an annual target of 783 transmission intrusive pole inspections and the **2024 Q4 QDR** indicated that 780 transmission intrusive pole inspections were conducted in 2024, a shortfall of three inspections. According to the **2024 ARC**, "the remaining inspection locations were determined to be retired facility points which did not meet the criteria for inspection as part of this initiative. Pacific Power considers this initiative complete for 2024 and does not have any corrective actions for the variance."

To verify that the 780 transmission intrusive pole inspections were indeed conducted, the IE requested a full population list of the inspections with unique identifiers in *DR 4*. In response, PacifiCorp provided evidence document **CA_2024_AI-05_INSPECTIONS.xlsx**, which contained evidence of 780 transmission intrusive pole inspections, each with a unique identifier.

The IE then requested evidence for a sample size of 83 transmission intrusive pole inspections (66 with a margin of error of 17) in *DR 6* to further verify that the inspections were conducted. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of the 83 transmission intrusive pole inspections sampled. PacifiCorp also provided a document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

Through review of the evidence provided in responses to *DR 6* the IE was able to verify the completion of all 83 sampled transmission detailed inspections.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp performed the 780 transmission instructive pole inspections reported. Although PacifiCorp did not meet the **2024 WMP** target of 783 inspections, the **2024 ARC** states that this was due to retired facility points that did not meet the criteria for inspection.

4.1.11.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $171 for a total expenditure projection of $171 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $95 for a total expenditure of $95. The projected expenditure of $171 and total expenditure of $95 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -44% was that the actual costs of completing the planned work were lower than anticipated.

4.1.12 Distribution Intrusive Pole Inspections (AI-06)

4.1.12.1 Initiative Review

Section 8.1.3.3 of PacifiCorp's **2024 WMP** describes the distribution intrusive pole inspections program. These inspections may include pole-sounding, inspection hole drilling, and excavation tests that are designed to identify decay, wear, or woodpecker damage, assess the condition of wood poles, and identify the need for any treatment, repair, or replacement. Like other inspection programs, intrusive inspections mitigate some wildfire risk by identifying and correcting conditions. In this case, the inspections identify poles for replacement or reinforcement to prevent potential structural failure of a pole that could lead to a potential wire-down event and ignition risk. The intrusive poles inspections are performed consistent with the cycle prescribed in California GO 165.

The **2024 WMP** identified an annual target of 2,523 distribution intrusive pole inspections and the **2024 Q4 QDR** indicated that 2,517 distribution intrusive pole inspections were performed in 2024, a shortfall of six inspections. According to the **2024 ARC**, "The remaining inspection locations were determined to be either retired facility points or incorrectly labeled in the system and did not meet the criteria for inspection as part of this initiative. Pacific Power considers this initiative complete for 2024 and does not have any corrective actions for the variance."

To verify that the 2,517 distribution intrusive pole inspections were conducted, the IE requested a full population list of the 2,517 inspections with unique identifiers in *DR 4*. In response, PacifiCorp provided evidence document **CA_2024_AI-06_INSPECTIONS.xlsx**, which contained evidence of 2,517 distribution intrusive pole inspections, each with a unique identifier.

The IE then requested evidence for a sample size of 88 distribution intrusive pole inspections (70 with a margin of error of 18) in *DR 6* to further verify that the inspections

were conducted. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of the 88 distribution intrusive pole inspections sampled. PacifiCorp also provided a document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

Through review of the evidence provided in responses to *DR 6* the IE was able to verify the completion of all 88 sampled transmission detailed inspections.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp performed the 2,517 distribution instructive pole inspections reported. Although PacifiCorp did not meet the **2024 WMP** target of 2,523 inspections, the **2024 ARC** states that this was due to retirements and incorrect labeling of facility points that did not meet the criteria for inspection.

4.1.12.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $90 for a total expenditure projection of $90 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $103 for a total expenditure of $103. The projected expenditure of $90 and total expenditure of $103 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 14% was that the actual costs of completing the planned work were higher than anticipated.

4.1.13 Enhanced (Infrared) Inspection – Transmission Lines (AI-07)

4.1.13.1 Initiative Review

Section 8.1.3.6 of PacifiCorp's **2024 WMP** describes the enhanced (infrared) inspections in transmission lines program. Enhanced transmission line inspections have been implemented with a focus on proactive identification and prevention of equipment failures. The inspections are performed annually with the inspections scheduled during peak loading intervals. The inspections are conducted aerially with a helicopter and a licensed thermographer.

The **2024 WMP** identified an annual target of 700 line-miles inspected and the **2024 Q4 QDR** indicated that 700 line-miles of infrared (IR) inspections of transmission lines were completed in 2024, meeting the target. However, during the evidence review process, PacifiCorp confirmed that the reported figure should have been 693 line-miles due to the decommissioning of three lines accounting for roughly seven line-miles prior to inspection. PacifiCorp provided screenshots from its SAP database for each of these lines showing that it was classified as "retired."

To confirm that 693 line-miles were inspected, the IE requested in *DR 4* a full population list of the 693 line-miles inspected with unique identifiers. The IE and PacifiCorp agreed that inspections were better tracked on a per-pole basis.

The resulting list of poles, evidence document **CA_2024_ENHANCED_INSPECTIONS.xlsx**, included a unique identifier for each pole, although some poles appeared multiple times due to having multiple member positions, resulting in 12,190 total records. PacifiCorp also provided **CA Transmission IR Scope Line Miles in 2024.xlsx**, which mapped the poles in the first evidence document to the 693 line-miles inspected.

The IE then requested evidence for a random sample of 23 transmission poles (18 with a margin of error of five) in *DR 11* to further verify that an IR inspection was conducted for each in 2024. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of 23 transmission poles sampled, representing 13 of 24 lines reportedly inspected. In the seven cases where a sampled pole had multiple member positions, PacifiCorp shared inspections for all these positions, resulting in 30 total PDF reports. PacifiCorp also provided a document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

The IE reviewed each of the 30 PDFs to verify that for each transmission pole sampled, an IR inspection (categorized as “ENHANCED”) was performed in 2024. Additionally, concerning the **2024 WMP** language about scheduling inspections during peak load intervals, the IE notes that the 30 infrared inspections verified were all completed during the inspection season associated with each line in the file **AI-07_2024 Transmission IR Information.xlsx**, or within a few days when PacifiCorp deemed load characteristics similar. PacifiCorp explained that it also schedules IR inspections for certain times of day but does not generally record the time they are completed.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp performed 693 line-miles of transmission IR inspections in 2024. However, the IE notes that this is seven line-miles short of the **2024 WMP** target of 700 line-miles, which was reported as complete in the **2024 Q4 QDR**. While the IE is reasonably assured that the remaining line-miles were decommissioned, this is not reflected in the reported progress in the **2024 Q4 QDR**, which is therefore inaccurate.

4.1.13.2 Funding Verification

PacifiCorp’s **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $90 for a total expenditure projection of $90 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $85 for a total expenditure of $85. The projected expenditure of $90 and total expenditure of $85 were validated in the **2024 ARC**. PacifiCorp’s reason for the expenditure variance of -6% was not provided in the **2024 ARC** or requested due to the absolute variance being less than 10%.

4.1.14 Enhanced (Infrared) Inspection – Distribution Lines (AI-08)

4.1.14.1 Initiative Review

Section 8.1.3.5 of PacifiCorp's **2024 WMP** describes the enhanced (infrared) inspections in distribution lines program. In 2022, PacifiCorp initiated a pilot to build upon the successes of the transmission infrared inspection program described in section 8.1.3.6 and determine whether using infrared at distribution voltages could detect hot spots. For 2023 and 2024, PacifiCorp expanded the 2022 pilot to include all distribution line-miles within the HFTD to evaluate how the program might work on a larger scale.

The **2024 WMP** identified an annual target of 810 line-miles inspected and the **2024 Q4 QDR** indicated that 810 line-miles of infrared (IR) inspections of distribution lines were completed in 2024, meeting the target.

To confirm that 810 line-miles were inspected, the IE requested in *DR 4* a full population list of the 810 line-miles inspected with unique identifiers. In response, PacifiCorp provided a list of the 20,015 distribution poles corresponding to these 810 line-miles, with a unique identifier for each pole, within the evidence document **AI-08_Distribution Infrared Inspection.xlsx**. (PacifiCorp explained that inspections are better tracked on a per-pole basis.) PacifiCorp also provided **Distribution IR CA_AI-08.xlsx**, which mapped the poles in the first evidence document to the 810 line-miles inspected.

The IE then requested evidence for a random sample of 23 distribution poles (18 with a margin of error of five) in *DR 6* to further verify that an IR inspection was conducted for each in 2024. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of 23 distribution poles sampled, representing 15 of the 47 circuits reportedly inspected. PacifiCorp also provided a mapping document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

The IE reviewed each of the 23 PDFs to verify that for each distribution pole sampled, an IR inspection (categorized as "ENHANCED") was performed in 2024. However, the IE noted that this was not the case in 16 out of 23 instances. PacifiCorp explained that for some reason, roughly half the inspections had not been entered into the system. After correcting this error, PacifiCorp resubmitted the inspection reports and the IE was able to verify each inspection.

Additionally, the IE notes that according to the **2024 WMP**, PacifiCorp plans to perform such inspections during anticipated peak loading conditions, which take place during winter in the morning and summer in the afternoon. While PacifiCorp explained that it schedules inspections for these times of day but does not generally record the time they are completed, the dates on the inspections reported (all between June 4 and August 21) are consistent with conducting IR inspections during the summer or winter.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp met its **2024 WMP** target of 810 line-miles of distribution IR inspections in 2024. However, the IE notes that prior to the audit, PacifiCorp's Facility Point Inspection database was missing a significant number of these inspections.

4.1.14.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $130 for a total expenditure projection of $130 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $129 for a total expenditure of $129. The projected expenditure of $130 and total expenditure of $129 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -1% was not provided in the **2024 ARC** or requested due to the absolute variance being less than 10%.

4.1.15 Substation Inspections (AI-11)

4.1.15.1 Initiative Review

Section 8.1.3.4 of PacifiCorp's **2024 WMP** describes the substation inspections program, which assesses both the substation security and the condition of key equipment, identifying potential corrective work or maintenance needed. This corrective work and maintenance mitigate the risk of mis-operations that could negatively impact system operation and protection and control schemes in place. Substation equipment, such as circuit breakers and relays, are critical components of protection and control schemes and system operations and can have an impact on overhead line operation.

The **2024 WMP** identified the annual target for 2024 as 451 substation inspections, while the **2024 Q4 QDR** reported that 443 inspections were conducted, falling short of the target by eight inspections. According to PacifiCorp's **2024 ARC**, this difference was due to the decommissioning of a substation in 2024 that was included in the original plan. PacifiCorp considers this initiative complete for 2024 and does not have any corrective actions for the variance. PacifiCorp provided the IE evidence of this decommissioning in the form of an email thread discussing the removal of equipment.

To confirm that 443 substation inspections were conducted, the IE requested the full population list of inspections with unique identifiers in *DR 4*. In response, PacifiCorp provided a list of the 443 substation inspections performed with dates, substations, and unique identifiers (in the form of work order numbers) in evidence document **AI-11_CA 2024 Substation Inspections.xlsx**.

The IE then requested evidence for a random sample of 21 substation inspections (17 with a margin of error of four) in *DR 6* to further verify that the inspections were conducted. In response, PacifiCorp provided evidence document **AI-11_CA 2024 Sample Inspection Results.xlsx** containing inspection data from Maximo. This document included details of 21 substation inspections, including the work order number and description, the date of inspection, and the fields inspected (e.g., oil levels, vegetation clearance, alarms, etc.).

The IE reviewed this document to verify that for each work order number sampled, an inspection at the corresponding substation was completed on the date in 2024 reported in *DR 4*. The IE noted that one inspection included elements reported as completed 10 days later than the overall reported inspection date. PacifiCorp attributed this discrepancy to a technical system error between the inspection application and the mainframe system that delayed the population of results in the system and confirmed that the elements were completed on the overall inspection date reported.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp conducted 443 substation inspections in 2024 and that, as stated in the **2024 ARC**, the shortfall of eight inspections relative to the **2024 WMP** target of 451 was due to the retirement of a substation originally included in the target.

4.1.15.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $179 for a total expenditure projection of $179 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $181 for a total expenditure of $181. The projected expenditure of $179 and total expenditure of $181 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 1% was not provided in the **2024 ARC** or requested due to the absolute variance being less than 10%.

4.1.16 Quality Assurance and Quality Control (AI-12)

4.1.16.1 Initiative Review

Section 8.1.6 of PacifiCorp's **2024 WMP** describes quality assurance and quality control (QA/QC) of asset inspections as using a combination of process controls, software tools, company policy, and physical-record checking to quickly identify inaccuracies for corrective action, evaluation, root cause analysis, and system improvements. Engaging in these initiatives is a cost-effective means to minimize the risk that inspection results are inaccurate or unreliable. Inspection results are reviewed continuously to confirm that inspections in the HFTD are meeting acceptable standards of performance. PacifiCorp's main QA/QC components include physical audits of at least 5% of planned inspections of facilities with a focus on fire threats and Tier 2 and Tier 3 prioritization.

According to the **2024 WMP**, there was no annual target for initiative AI-12 in 2023 or 2024, while a target has been set for 2025. However, in its **2024 Q4 QDR**, PacifiCorp reports conducting QA/QC inspections of 826 asset inspections in 2024.

To confirm that 826 QA/QC inspections were completed, the IE requested the full population list of these inspections with unique identifiers in *DR 4*. In response, PacifiCorp provided a list of the 826 inspections, each with a unique identifier and a date, within the evidence document **CA_2024_AI-12_INSPECTIONS.xlsx**. However, the IE noted that two had the same identifier. PacifiCorp confirmed that one of the rows

was included mistakenly, meaning that only 825 unique inspections were listed. Furthermore, although the two rows were largely duplicates, they included different values for one field. This duplication and discrepancy led to confusion in PacifiCorp's reporting.

Additionally, while there was no target in the **2024 WMP** for AI-12, the evidence document provided in response to *DR 4* indicates an initiative target of 681. PacifiCorp explained that although it was not part of the **2024 WMP**, this number represents a QA/QC target of 5% of the detailed/intrusive inspections reported under AI-03, AI-04, AI-05, and AI-06.

The IE then requested evidence for a random sample of 23 QA/QC inspections (18 with a margin of error of five) in *DR 6* to further verify that 825 inspections were conducted. PacifiCorp provided a PDF report generated by its Facility Point Inspection database for each of 23 inspections sampled. PacifiCorp also provided a document to assist the IE in interpreting the PDFs (**UNDERSTANDING_THE_FP22_INSPECTION_SCREEN.PDF**).

The IE reviewed each of the 23 PDFs to verify that for each asset inspection ID in the sample, a QA/QC inspection (categorized as "AUDIT") took place on the inspection date in 2024 reported in *DR 4*.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp performed 825 QA/QC inspections in 2024. However, the IE notes that this number was misreported as 826 in the **2024 Q4 QDR** due to an inspection being counted twice. While there was no **2024 WMP** target against which to assess this performance, the IE notes that the 825 inspections exceed PacifiCorp's internal target of auditing 5% of detailed inspections as mentioned in the **2024 WMP**.

4.1.16.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $36 for a total expenditure projection of $36 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $0 for a total expenditure of $0. The projected expenditure of $36 and total expenditure of $0 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -100% was that asset inspection QA/QC costs were not charged out to work orders, and thus the actuals were not tracked for 2024.

4.1.17 Equipment Settings to Reduce Wildfire Risk (GO-01)

4.1.17.1 Initiative Review

Section 8.1.8.1 of PacifiCorp's **2024 WMP** describes how adjustments to power system operations can help mitigate wildfire risk. System operations adjustments generally include the modification of relay settings for protective devices on distribution lines or

changes to line re-energization testing protocols. These adjustments are not universally applied to power system operations because there are certain disadvantages in their use, especially because they may increase outage frequency and duration experienced by customers. In other words, a balance is required to provide customers with reliable power while still mitigating wildfire risk. To help balance these concerns, PacifiCorp is deploying technologies such as fault indicators.

Neither PacifiCorp's **2024 WMP** nor its **2024 Q4 QDR** cite a 2024 target for GO-01. However, the **2024 WMP** states that PacifiCorp's goal from 2026 to 2032 is to improve its Elevated Fire Risk (EFR) settings capabilities. According to the **2024 ARC**, EFR settings are now known as Enhanced Safety Settings (ESS) and "Pacific Power continues to deploy ESS on capable devices in the service territory."

The IE requested evidence to validate whether PacifiCorp had begun deploying ESS in *DR 7*. In response, PacifiCorp provided evidence document **PacifiCorp_ESS_EMS Record_2024_05-15-25.xlsx**.

The file provided demonstrated deployment of ESS on PacifiCorp's devices by providing a list of device names, ESS occurrences, and the dates associated with those occurrences.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp has begun deployment of ESS as described in the **2024 WMP**. The IE notes that it did not identify a target against which to evaluate this performance in the **2024 Q4 QDR** or the **2024 WMP**.

4.1.17.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $0 for a total expenditure projection of $0 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $482 for a total expenditure of $482. Since the projected expenditure of $0 and total expenditure of $482 could not be validated in the **2024 ARC**, the IE requested in *DR 7* validation of the spend and the reason for the variance. PacifiCorp validated the spend and stated that the reason for the variance was that it had not yet determined a project scope at the time of drafting the **2023-2025 WMP**. Following plan completion, a scope was determined, and project spend is now being tracked and recorded.

4.1.18 Grid Response Procedures and Notifications (GO-02)

4.1.18.1 Initiative Review

Section 8.1.8.3 of PacifiCorp's **2024 WMP** describes its personnel work procedures and training in conditions of elevated fire risk. During fire season, PacifiCorp modifies field

operations and work practices to further mitigate wildfire risk. Additionally, PacifiCorp invests in tools and equipment to mitigate wildfire risk.

Neither PacifiCorp's **2024 WMP** nor its **2024 Q4 QDR** cite a 2024 target for GO-02. However, the **2024 WMP** describes an ongoing objective from 2023 to 2025 of continuing to deploy Elevated Fire Risk (EFR) settings in conditions of elevated wildfire risk. According to the **2024 ARC**, EFR settings are now known as Enhanced Safety Settings (ESS) and "Pacific Power continues to deploy ESS on capable devices in the service territory."

The IE requested documentation to support PacifiCorp's continued deployment of ESS as part of *DR 7*. In response, PacifiCorp provided evidence document **PacifiCorp_ESS_EMS Record_2024_05-15-25.xlsx**.

The provided file demonstrated deployment of ESS on PacifiCorp's devices by providing a list of device names, ESS occurrences, and the dates associated with those occurrences.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp continued to deploy ESS in 2024 as described in the **2024 WMP**. The IE notes that it did not identify a target against which to evaluate this performance in the **2024 Q4 QDR** or the **2024 WMP**.

4.1.18.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $600 for a total expenditure projection of $600 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $3 and OPEX of $3,748 for a total expenditure of $3,751. The projected expenditure of $600 and total expenditure of $3,751 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 525% was that encroachment patrols were not part of the projections when they were made during the drafting of the **2023-2025 WMP**.

4.1.19 Equipment Maintenance and Repair (MA-01)

4.1.19.1 Initiative Review

Section 8.1.4 of PacifiCorp's **2024 WMP** states that equipment maintenance and repair activities are a key component of ensuring that in-service equipment on the system remains reliable and operates properly. As part of these activities, PacifiCorp performs annual maintenance and calibration of its weather station fleet to ensure that each weather station is operational and reporting correct and accurate data.

The **2024 WMP** stated that PacifiCorp's annual target under MA-01 from 2023 to 2025 was to continue planned transmission and distribution wires maintenance, as well as

planned substation apparatus maintenance programs. The **2024 Q4 QDR** reported weather station maintenance on 108 units as part of MA-01 and marked the initiative complete, although it did not identify a specific target.

To verify that weather stations were maintained in accordance with PacifiCorp's reporting, the IE requested a full list of the 108 weather stations where maintenance or calibration was performed with unique identifiers in *DR 4*. In response, PacifiCorp provided evidence document **MA-01_Weather Station Information.**

The IE then randomly sampled 20 stations (16 with a margin of error of four) from this document and requested evidence of maintenance records for each in *DR 6*. In response, PacifiCorp provided maintenance forms for 18 of the 20 weather stations listed and a Certificate of Conformance document issued by Intellisense for a 19th station. The IE did not receive the maintenance form for the remaining station (PAC-3416) in the initial data request but received the form via email upon additional follow-up.

The maintenance forms included key identifiers such as the weather station ID and the station name as well as critical checks to verify proper function, such as wind speed and signs of damage. The IE verified site identifiers and reviewed the checklists for completeness. The Certificate of Conformance included the station identifier and described the maintenance performed on the station.

To validate completion of the ongoing qualitative targets of "continue planned transmission and distribution wires maintenance" and "continue planned substation apparatus maintenance programs," the IE requested evidence of such efforts in *DR 14*. In response, PacifiCorp provided **Item 5_MA-01 Wires Equipment Maintenance_2024.xlsx**, which documented recloser maintenance on distribution lines in 2024 in addition to weather station maintenance on transmission and distribution.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp performed maintenance or calibration on 108 weather stations in 2024 as reported in the **2024 Q4 QDR**. The IE also has reasonable assurance that PacifiCorp met the qualitative targets related to continued maintenance specified in the **2024 WMP**. The IE notes that it did not identify a quantitative target against which to evaluate this performance in the **2024 Q4 QDR** or the **2024 WMP**.

4.1.19.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $285 for a total expenditure projection of $285 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $387 for a total expenditure of $387. The projected expenditure of $285 and total expenditure of $387 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 36% was that the original forecasting amount did not include the cost of data plans for the weather stations.

4.1.20 Synthesis of Findings

4.1.20.1 Initiative Review

The IE found in its review of the "Grid Design, Operations, and Maintenance" category that initiatives GH-01, GH-04, AI-04, AI-05, AI-06, AI-07, and AI-11 did not meet their targets for 2024. According to the **2024 ARC**, five of these missed targets were due to retired facilities or mislabeled ones that should not have been targeted. PacifiCorp informed the IE that the target for AI-07 was also missed due to decommissioned facilities, although this target was misreported as complete in the **2024 Q4 QDR.** Progress was also misreported for GH-05 and AI-12 (although AI-12 only had one duplicate inspection). These findings together point to general data-quality issues that affect both the reporting and setting of targets in this category.

Data-quality issues aside, in spite of the genuine miss of the GH-01 target due to project delays, the IE believes that PacifiCorp still accomplished its overall goal for this category.

While the IE believes that PacifiCorp accomplished its overall goal for this initiative category, it could not evaluate the associated overall wildfire risk reduction because PacifiCorp did not provide risk reduction targets per initiative or initiative category as part of its **2024 WMP**.

The IE also reviewed past IE findings to determine whether there were trends of initiatives missing targets year-over-year. The IE determined that GH-01 and GH-04 also experienced missed targets in 2023. Based on the discussions with PacifiCorp SMEs highlighted above, there are always unforeseen constraints that arise associated with grid-hardening projects. The targets set out each year are based on project expectations for large quantities of work across multiple initiatives and cannot account for delays/constraints that may affect a small portion of the larger project.

The IE also notes the following general observations:

- Multiple initiatives required validation based on information not directly matching one-to-one with what PacifiCorp stated would be provided, either on the system reporting level or on the **2024 Q4 QDR** level.

- For Enhanced (Infrared) Inspection – Distribution Lines (AI-08), the database responsible for storing the associated inspections did not contain all the records of completion for 2024. It was not until the initiation of the IE process and IE requests that those records were added.

Finally, the IE discussed with PacifiCorp how it plans to improve overall and within this initiative category. PacifiCorp cited its continued efforts to transition field inspection work orders/reports/findings to a digital system that would house all steps in the process and create controls around completion dates, approvals, and records retention. This effort would address the data-quality issues encountered during the IE process and would

also allow for real-time QA/QC, which has been an increased focus both internally and externally with Energy Safety.

4.1.20.2 Funding Verification

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
GH-01	Line Rebuild – Covered Conductor Installation	Y	$62,313	$115,729	86%	Costs increased due to bringing on a construction project management company to manage the system-hardening projects. Incremental costs included field engineering support, post-construction inspections, extended warranty, etc.
GH-04	Installation of System Automation Equipment	Y	$5,000	$12,796	156%	Costs increased due to bringing on a construction project management company to manage the system-hardening projects. Additionally, project work in 2024 included higher costs to extend communications to field devices, increasing the cost per unit completed.
GH-05	Expulsion Fuse Replacement	Y	$1,000	$5,324	432%	Costs increased due to PacifiCorp establishing a High Fire Risk Area (HFRA), which resulted in an increase in expulsion fuses replaced. Consistent with PacifiCorp's approach to replacing expulsion fuses in HFTD Tiers 2 and 3, the company also replaced the expulsion fuses in the HFRA.
AI-01	Transmission Patrol Inspections	N	$93	$63	-32%	The actual cost to complete the planned work was lower than anticipated when the 2024 plan was projected prior to 2023.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
AI-02	Distribution Patrol Inspections	N	$308	$266	-14%	The actual cost to complete the planned work was lower than anticipated when the 2024 plan was projected prior to 2023.
AI-03	Transmission Detail Inspections	Y	$137	$57	-58%	The actual cost to complete the planned work was lower than anticipated when the 2024 plan was projected prior to 2023.
AI-04	Distribution Detail Inspections	Y	$203	$231	14%	The actual cost to complete the planned work was higher than anticipated when the 2024 plan was projected prior to 2023.
AI-05	Transmission Intrusive Pole Inspections	Y	$171	$95	-44%	The actual cost to complete the planned work was lower than anticipated when the 2024 plan was projected prior to 2023.
AI-06	Distribution Intrusive Pole Inspections	Y	$90	$103	14%	The actual cost to complete the planned work was higher than anticipated when the 2024 plan was projected prior to 2023.
AI-07	Enhanced (Infrared) Inspection – Transmission Lines	N	$90	$85	-6%	Not provided or requested – absolute variance less than 10%.
AI-08	Enhanced (Infrared) Inspection – Distribution Lines	N	$130	$129	-1%	Not provided or requested – absolute variance less than 10%.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
AI-11	Substation Inspections	N	$179	$181	1%	Not provided or requested – absolute variance less than 10%.
AI-12	Quality Assurance and Quality Control	N	$36	$0	-100%	Asset inspection QA/QC costs were not charged out to work orders for 2024 and the actuals for this initiative were not tracked separately.
GO-01	Equipment Settings to Reduce Wildfire Risk	N	$0	$482	N/A – no planned spend to compare with actuals	Equipment settings and spending for this initiative were not projected for 2024 at the time of the creation of the base **2023-2025 WMP**. PacifiCorp was still determining the scope of this initiative for 2024 based on 2023 results.
GO-02	Grid Response Procedures and Notifications	N	$600	$3,751	525%	Encroachment patrols were not originally included in the 2024 plan when this initiative was forecast in 2023.
MA-01	Equipment Maintenance and Repair	N	$285	$387	36%	The original forecast for this initiative did not include the costs associated with the weather station data plans.
Total			$70,635	$139,679	98%	

4.2 Vegetation Management and Inspections

4.2.1 Summary Table

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[6]
VM-01 8.2.2.1 Detailed Inspection – Distribution	874	875	Target met	875	100%	Desktop	Initiative validated	100%	294	492	67%	N/A
VM-02 8.2.2.2 Detailed Inspection - Transmission	602	599	Target met	602	100%	Desktop	Initiative validated	100%	157	201	28%	N/A
VM-03 8.2.2.3 Patrol Inspection - Distribution	865	1,037	Target met	1,037	100%	Desktop	Initiative validated	120%	316	333	5%	N/A
VM-04 8.2.2.4 Patrol Inspection - Transmission	99	119	Target met	119	100%	Desktop	Initiative validated	120%	20	25	25%	N/A
VM-05 8.2.3.1.2 Pole Clearing	3,126	3,192	Target met	71	76%	Field & Desktop	Initiative not validated	78%	374	413	10%	N/A
VM-06 8.2.2.2 Clearance - Distribution	No target	Not reported	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	15,087	18,295	21%	N/A
VM-07 8.2.2.2 Clearance - Transmission	No target	Not reported	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	1,904	2,498	31%	N/A

[6] PacifiCorp did not capture risk reduction goals in its **2023-2025 WMP**. Thus, the IE could not validate if a goal was met.

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[6]
VM-08 8.2.3.3 Fall-in Mitigation	2024: Tree condition will be reviewed to determine the impact of enhanced overhang reduction/crown removal. Trees will be assessed for dieback or other defects.	Pacific Power continues to evaluate the enhanced overhang reduction pilot by inspecting trees that were treated under the project in 2023 and 2024.	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	30	0	-100%	N/A
VM-11 8.2.5 Quality Assurance / Quality Control (Post-Audit Distribution)	865	1,037	Target met	1,037	100%	Desktop	Initiative validated	120%	135	171	27%	N/A
VM-11 8.2.5 Quality Assurance / Quality Control (Post-Audit Transmission)	99	119	Target met	119	100%	Desktop	Initiative validated	120%	135	171	27%	N/A

4.2.2 Detailed Inspection – Distribution (VM-01)

4.2.2.1 Initiative Review

According to Section 8.2.2.1 of PacifiCorp's **2024 WMP**, the overall objective of detailed inspections of distribution lines is to minimize vegetation-related reliability, safety, and wildfire ignition risks. The document adds that PacifiCorp's vegetation management program is compliant with GO 95, Rule 35, and applicable Public Resource Codes. These inspections are generally performed on a planned cycle where vegetation along a circuit scheduled for cycle maintenance is inspected and vegetation requiring work is identified for pruning or removal. Detailed inspections are generally ground inspections.

PacifiCorp's **2024 WMP** stated that PacifiCorp's detailed distribution inspections in 2024 would target 874 line-miles. PacifiCorp's **2024 Q4 QDR** reported that actual inspections covered 875 line-miles.

To validate the 875 line-miles reported, the IE requested supporting documentation, such as a list demonstrating tracking of inspections, in *DR 4*. In response, PacifiCorp provided evidence document **CA_Miles_Units_Tracker_2024.xlsx**, which contained a list of the 36 circuits inspected and the length and dates of inspection for each. These circuits totaled 875 line-miles.

Since detailed distribution inspections are tracked at the circuit level, the IE requested work releases documenting inspection of each circuit in *DR 10*. In response, PacifiCorp provided PDF copies of contractor work releases for 35 of the 36 circuits. In one case, a work release was not provided for a short circuit and at the IE's request, PacifiCorp instead provided a screenshot of a tracking spreadsheet showing that a PacifiCorp forester had personally inspected the line while in the area.

The IE examined each PDF to ensure that it contained the appropriate code for detailed distribution inspections (DNT), covered the circuit's full length consistent with the tracking document, and had a signature attesting to the inspection's completion in 2024. In some cases, inspections were completed in late 2023. In document **Vegetation Management Reporting Disclosure.pdf**, PacifiCorp explained that "inspections conducted in 2023 on circuits or lines planned for vegetation maintenance in 2024, are tracked as part of the 2024 work plan."

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp met its **2024 WMP** target of 874 line-miles of detailed distribution inspections by completing 875 line-miles of inspections in 2024, including December 2023 inspections for the 2024 work plan.

4.2.2.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $294 for a total expenditure projection of $294 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $492 for a total expenditure of $492. The projected expenditure of $294 and total expenditure of $492 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 67% was the establishment of the HFRA and the need for increased vegetation management activities in the HFRA consistent with PacifiCorp's approach for HFTD Tiers 2 and 3.

4.2.3 Detailed Inspection – Transmission (VM-02)

4.2.3.1 Initiative Review

According to Section 8.2.2.2 of PacifiCorp's **2024 WMP**, the overall objective of detailed inspections of transmission lines is to minimize and/or eliminate vegetation-related reliability (cascading outages), safety, and wildfire ignition risks, while maintaining compliance with applicable Public Resource Codes and NERC requirements. Like detailed inspections of distribution lines, vegetation management detailed inspections of transmission line corridors focus on maintaining clearances and identifying high-risk (hazard) trees. Inspections are generally ground-based. Where aerial inspections take place, they are generally followed up with ground inspections to confirm conditions identified during aerial inspection. The IE notes that page 211 of the WMP seems to mistakenly label this initiative as VM-06.

PacifiCorp's **2024 WMP** stated that PacifiCorp's detailed transmission inspections in 2024 would target 602 line-miles. PacifiCorp's **2024 Q4 QDR** reported that actual inspections covered 599 line-miles, a shortfall of three line-miles. PacifiCorp reported to the IE that it achieved 602 line-miles, which is consistent with the evidence submitted. In document **Vegetation Management Reporting Disclosure.pdf**, PacifiCorp explained that: "Due to the timing of pulling records from the GIS department, it is not uncommon for minor variations in the line length to be present. Targets or total line lengths identified at one point in time, may be different than total line lengths identified some period of time later as the GIS data is regularly updated."

To validate the 602 line-miles reported, the IE requested supporting documentation, such as a list demonstrating tracking of inspections, in *DR 4*. In response, PacifiCorp provided evidence document **CA_Miles_Units_Tracker_2024.xlsx**, which contained a list of the 17 lines inspected and the length and dates of inspection for each. These lines totaled 602 line-miles.

Since detailed transmission inspections are tracked at the line level, the IE requested work releases documenting inspection of each line in *DR 10*. In response, PacifiCorp provided contractor work releases for 16 of the 17 lines. In one case, a work release was not provided for a short line, and at the IE's request, PacifiCorp instead provided a screenshot of a tracking spreadsheet showing that a PacifiCorp forester had personally inspected the line while in the area.

The IE examined each file to ensure that it contained the appropriate code for detailed transmission inspections (TNT/MGI), covered the line's full length consistent with the tracking document, and had a signature attesting to the inspection's completion in 2024.

In one case, a work release was signed but had no completion date and a clearly incorrect signature date, and the IE had to rely on the tracking spreadsheet as evidence that the inspection took place in 2024. Additionally, the IE notes that in several cases, work releases had dates showing that the inspections had been completed a year later than requested. However, PacifiCorp's tracking spreadsheet show they were completed much earlier. PacifiCorp cited the possibility that the contractor failed to send the completed work release when the work was complete and dated it on the day it was ultimately sent. The IE notes that this leads to confusion in reviewing these work releases, which should ideally match tracking resources not just for auditing purposes but for PacifiCorp internal purposes as well.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp completed 602 line-miles of detailed transmission inspections in 2024, meeting the target identified in its **2024 WMP**.

4.2.3.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $157 for a total expenditure projection of $157 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $201 for a total expenditure of $201. The projected expenditure of $157 and total expenditure of $201 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 28% was the establishment of the HFRA and the need for increased vegetation management activities in the HFRA consistent with PacifiCorp's approach for HFTD Tiers 2 and 3.

4.2.4 Patrol Inspection – Distribution (VM-03)

4.2.4.1 Initiative Review

According to Section 8.2.2.3 of PacifiCorp's **2024 WMP**, the company conducts annual vegetation patrol inspections, generally of distribution lines that are off cycle and of those lines where the detailed inspection is not completed prior to the height of the fire season. The overall objective of patrol inspections of distribution lines is to minimize vegetation-related reliability, safety, and wildfire ignition risks by addressing vegetation conditions that require corrective action prior to the next scheduled work (e.g., trees that may have become hazard trees over the course of the past year and trees that have or likely to violate minimum clearance distances before the end of the current growing season). The document adds that PacifiCorp's vegetation management program is compliant with GO 95, Rule 35, and applicable Public Resource Codes. Patrol inspections are generally ground inspections.

PacifiCorp's **2024 WMP** stated that PacifiCorp's patrol inspections of distribution lines would target 865 line-miles in 2024. PacifiCorp's **2024 Q4 QDR** reported that actual inspections covered 1,037 line-miles, surpassing the target by 172 line-miles.

To validate the 1,037 line-miles reported, the IE requested supporting documentation, such as a list demonstrating tracking of inspections, in *DR 4*. In response, PacifiCorp provided evidence document **CA_Miles_Units_Tracker_2024.xlsx**, which contained a list of the 26 circuits inspected and the length and dates of inspection for each. These circuits totaled 1,035.5 line-miles, a small shortfall relative to the 1,037 line-miles reported.

To account for this difference, in document **Vegetation Management Reporting Disclosure.pdf**, PacifiCorp explained that: "Due to the timing of pulling records from the GIS department, it is not uncommon for minor variations in the line length to be present…Targets or total line lengths identified at one point in time, may be different than total line lengths identified some period of time later as the GIS data is regularly updated." The 1,035.5 line-miles tracked in the spreadsheet represent the same 1,037 line-miles reported.

Since distribution patrol inspections are tracked at the circuit level, the IE requested work releases documenting inspection of each circuit in *DR 10*. In response, PacifiCorp provided PDF copies of contractor work releases for all 26 circuits.

The IE examined each PDF to ensure that it contained the appropriate code for distribution patrol inspections (FIN), covered the full length of the circuit consistent with the tracking document, and had a signature attesting to the inspection's completion in 2024.

One work release listed the wrong circuit ID, although PacifiCorp explained that the circuit listed is the same as the one on the tracking spreadsheet and confusing the IDs is a known issue. Additionally, two work releases did not list work completion dates. This did not prevent the IE from verifying the work was completed in 2024, because the final contractor supervisor signatures were dated 2024, and PacifiCorp's tracking spreadsheet shows the completion date. However, for the purposes of auditing and internal recordkeeping, ideally all contractor work releases would have all fields complete before they are filed.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp completed 1,037 line-miles of patrol inspections of distribution lines in 2024, exceeding the target of 865 line-miles identified in the **2024 WMP**.

4.2.4.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $316 for a total expenditure projection of $316 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $333 for a total expenditure of $333. The projected expenditure of $316 and total expenditure of $333 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 5% was not provided in the **2024 ARC** or requested due to the absolute variance being less than 10%.

4.2.5 Patrol Inspection – Transmission (VM-04)

4.2.5.1 Initiative Review

According to Section 8.2.2.4 of PacifiCorp's **2024 WMP**, the company conducts annual vegetation patrol inspections, generally of transmission lines that are not scheduled for detail inspection. The objective of patrol inspections of transmission lines is to minimize vegetation-related reliability, safety, and wildfire ignition risks by addressing vegetation conditions that require corrective action prior to the next scheduled work (e.g., trees that may have become hazard trees over the course of the past year and trees that have or are likely to violate minimum clearance distances before the end of the current growing season). The document adds that PacifiCorp's vegetation management program is compliant with applicable rules and regulations. Patrol inspections are generally ground inspections but may be augmented with aerial inspections.

PacifiCorp's **2024 WMP** stated that PacifiCorp's patrol inspections of transmission lines would target 99 line-miles in 2024. PacifiCorp's **2024 Q4 QDR** reported that actual inspections covered 119 line-miles, surpassing the target by 20 line-miles.

To validate the 119 line-miles reported, the IE requested supporting documentation, such as a list demonstrating tracking of inspections, in *DR 4*. In response, PacifiCorp provided evidence document **CA_Miles_Units_Tracker_2024.xlsx**, which contained a list of the 10 lines inspected and the length and dates of inspection for each. These lines totaled 119 line-miles.

Since transmission patrol inspections are tracked at the line level, the IE requested work releases documenting inspection of each line in *DR 10*. In response, PacifiCorp provided PDF or Excel copies of contractor work releases for all 10 circuits.

The IE examined each file to ensure that it listed the appropriate code for transmission patrol inspections (FIT) and had a signature attesting to the inspection's completion in 2024.

Due to an older format, seven of the 10 files did not list the line distance at all or explicitly state that contractors were to inspect the whole line. In these cases, the IE had to rely on the attestation from document **Vegetation Management Reporting Disclosure.pdf** that: "Each work release, document or attestation, from the contractor

indicating completion of inspection associated with VM-1 though VM-4, covers the entire line length of the distribution circuit or transmission line."

In two cases PacifiCorp had to provide additional evidence documents to account for missing or incorrect values on the work releases and provide the IE reasonable confidence that the inspections were completed and these were clerical errors.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp completed 119 line-miles of patrol inspections of transmission lines in 2024, exceeding the target of 99 line-miles identified in the **2024 WMP**.

4.2.5.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $20 for a total expenditure projection of $20 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $25 for a total expenditure of $25. The projected expenditure of $20 and total expenditure of $25 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 25% was the establishment of the HFRA and the need for increased vegetation management activities in the HFRA consistent with PacifiCorp's approach for HFTD Tiers 2 and 3.

4.2.6 Pole Clearing (VM-05)

4.2.6.1 Initiative Review

According to Section 8.2.3.1.2 of PacifiCorp's **2024 WMP**, consistent with California Public Resource Code (PRC) § 4292, PacifiCorp conducts pole-clearing activities involving removal of all vegetation within the required 10-foot radius measured from the outer circumference of the specified pole. Flammable vegetation and materials located wholly or partially within the firebreak space shall be treated as follows:

a) At ground level: Remove flammable materials, including but not limited to, ground litter, duff, and dead or desiccated vegetation that will allow fire to spread.

b) From zero to eight feet above ground level: Remove flammable trash, debris or other materials, grass, and herbaceous and brush vegetation. All limbs and foliage of living trees shall be removed up to a height of eight feet.

c) From eight feet to horizontal plane of highest point of conductor attachment: Remove dead, diseased, or dying limbs and foliage from living sound trees and any dead, diseased, or dying tree in their entirety.

The minimum firebreak and clearance provisions of PRC 4292 are applicable during the declared CAL FIRE fire season for a respective county. The declared fire season for the audited pole locations began May 1, 2024. Clearing operations by PacifiCorp started in March of 2024 and continued through September of 2024.

PacifiCorp's **2024 WMP** stated that pole clearing would target 3,126 poles brushed in Local Responsibility Area (LRA) HFTD areas. PacifiCorp's **2024 Q4 QDR** reported that actual pole brushings numbered 3,192 in 2024, surpassing the target by 66 poles. PacifiCorp has expanded its pole clearing to include LRA subject equipment poles located in the HFTD in addition to its existing program in compliance with regulations of clearing State Responsibility Area (SRA) subject poles.

To validate the 3,192 poles brushed in 2024, the IE performed a desktop review and field verification. For both reviews the IE requested a list of all pole clearings for 2024 in *DR 4*. In response, PacifiCorp provided evidence documents **PpNotificationPoleClearing_2024_LRA.xlsx** and **PpPoleTreatmentDetail_2024_LRA.xlsx**. The IE sampled from the list provided and submitted *DR 5* and *DR 7*, which included a random sample for desktop and field verification.

For desktop verification, the IE reviewed evidence folder **Item 14 Attachments** from *DR 7*, which included signed work releases for the circuits captured as part of the random sample. For each work release, the IE verified the period and type of work performed and validated the completion date, comparing contractor signature date to the spreadsheets listed above. The IE determined that there was a signed work release for all circuits during the period of performance.

For field verifications, the IE visually inspected 89 randomly sampled poles (71 with a margin of error of 18) for vegetation clearance. The audited poles were selected from a population of "cleared poles" provided by PacifiCorp and were assessed according to the standards outlined in PRC 4292 as applicable in 2024. At the time of verification, several poles showed signs of vegetation regrowth. The IE looked for evidence of prior vegetation clearance, such as a visible clearing radius around each pole, to confirm that they had been previously cleared. It should be noted that the IE audit occurred after the start of the declared 2025 fire season, during which "subject poles" are required to meet clearance standards.

The results of the inspections are included in the attachments to this report. Compliant/Not Compliant was determined through both PRC 4292 standards and WMP descriptions of minimum standards. The results of the audit yielded a 76% pass rate, with 24% of the inspected poles found to be non-compliant.

Finding

Based on the field verification and desktop review of the evidence provided, the IE was unable to obtain reasonable assurance that PacifiCorp completed 3,192 pole brushings as reported in 2024. Due to the failure rate of 24% during field verification, the IE cannot say with confidence that the represented clearings were performed, even though the desktop evidence provided states that they were.

4.2.6.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $374 for a total expenditure projection of $374 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $413 for a total expenditure of $413. The projected expenditure of $374 and total expenditure of $413 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 10% was the establishment of the HFRA and the need for increased vegetation management activities in the HFRA consistent with PacifiCorp's approach for HFTD Tiers 2 and 3.

4.2.7 Clearance – Distribution (VM-06)

4.2.7.1 Initiative Review

Section 8.2.3.2 of PacifiCorp's **2024 WMP** describes how the company conducts cycle-based maintenance coupled with annual patrol and corrective maintenance (incremental to routine maintenance) to maintain required minimum clearance distances as identified in Table 1 of GO 95. This clearance accompanies the detailed distribution inspections tracked under VM-01. The IE notes that page 208 of the WMP seems to mistakenly state that this clearance is tracked under VM-02 rather than VM-06.

While this initiative did have a budgeted spend for 2024, which was recorded in the **2024 Q4 QDR** and was validated via the **2024 ARC**, it did not have a quantitative or qualitative target for the same period. As such, the IE did not perform a detailed review of VM-06 as part of the 2024 Independent Evaluator Annual Report on Compliance.

4.2.7.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $15,087 for a total expenditure projection of $15,087 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $18,295 for a total expenditure of $18,295. The projected expenditure of $15,087 and total expenditure of $18,295 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 21% was the establishment of the HFRA and the need for increased vegetation management activities in the HFRA consistent with PacifiCorp's approach for HFTD Tiers 2 and 3.

4.2.8 Clearance – Transmission (VM-07)

4.2.8.1 Initiative Review

Section 8.2.3.2 of PacifiCorp's **2024 WMP** describes how the company conducts cycle-based maintenance coupled with annual patrol and corrective maintenance (incremental to routine maintenance) to maintain required minimum clearance distances as identified in Table 1 of GO 95. This clearance accompanies the detailed transmission inspections tracked under VM-02.

While this initiative did have a budgeted spend for 2024, which was recorded in the **2024 Q4 QDR** and was validated via the **2024 ARC**, it did not have a quantitative or

qualitative target for the same period. As such, the IE did not perform a detailed review of VM-07 as part of the 2024 Independent Evaluator Annual Report on Compliance.

4.2.8.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $1,904 for a total expenditure projection of $1,904 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $2,498 for a total expenditure of $2,498. The projected expenditure of $1,904 and total expenditure of $2,498 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 31% was the establishment of the HFRA and the need for increased vegetation management activities in the HFRA consistent with PacifiCorp's approach for HFTD Tiers 2 and 3.

4.2.9 Fall-in Mitigation (VM-08)

4.2.9.1 Initiative Review

Section 8.2.3.3 of PacifiCorp's **2024 WMP** indicates that failure of limbs or branches overhanging electrical conductors pose a fall-in risk and that increased overhang clearances may decrease this mode of fall-in risk. The Enhanced Overhang Reduction Pilot aims to determine the effects of this activity on tree species and reduce the amount of vegetation overhanging high-voltage power lines, thereby decreasing ignition potential from vegetation and conductor contact. The following timeline is laid out:

- *2023*: Enhanced overhang reduction work is targeted for implementation and completion. Overhang reduction work will be post-audited to ensure that overhang reduction specifications were implemented and document if they were not.

- *2024*: Tree condition will be reviewed to determine the impact of enhanced overhang reduction/crown removal. Trees will be assessed for dieback or other defects.

- *2025*: Preliminary results of the pilot will be reviewed, and determinations made.

While the **2024 WMP** provides no specific target for 2024 and PacifiCorp's **2024 Q4 QDR** makes no mention of VM-08, page 28 of PacifiCorp's **2024 ARC** states that "this program was discontinued before 2024, and no activity or spending occurred." However, PacifiCorp acknowledged that this language was unclear and referred the IE instead to the language on page five of the **2024 ARC**: "Pacific Power continues to evaluate the enhanced overhang reduction pilot by inspecting trees that were treated under the project in 2023 and 2024. An evaluation of the pilot will be completed by the end of 2025 to determine the results and effectiveness." In other words, the initiative is in progress consistent with the timeline in the **2024 WMP**.

The IE requested documentation to confirm that work related to the Enhanced Overhang Reduction Pilot is ongoing. In response, PacifiCorp provided evidence

document **Post FOD [Fire Overhang Distribution] Assessment Tree Health_12-12-24.pdf**, which documents tree health assessments at pole numbers where trees had been treated as part of the pilot.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp is continuing its efforts as part of the Fall-In Mitigation initiative in accordance with the schedule laid out in the **2024 WMP**. The IE notes that the **2024 Q4 QDR** did not report on this initiative.

4.2.9.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $30 for a total expenditure projection of $30 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $0 for a total expenditure of $0. The projected expenditure of $30 and total expenditure of $0 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -100% was that follow-up reviews of completed work did not require a third-party contractor, which was the potential use of the initiative budget.

4.2.10 Quality Assurance / Quality Control – Post-Audit (VM-11)

4.2.10.1 Initiative Review

According to Section 8.2.5 of PacifiCorp's **2024 WMP**, the company conducts post-audits (quality control reviews) to compare completed vegetation management work against specifications. Post-audits are completed annually, primarily by PacifiCorp internal staff, and include review of routine maintenance (work identified during detailed inspections) and additional work completed annually within the HFTD (work identified during patrol inspections).

PacifiCorp's **2024 WMP** set post-audit targets for patrol inspections of both transmission and distribution lines in 2024. Progress toward these targets was reported in the **2024 Q4 QDR** and the IE verified this progress as described in the two following sections.

Post-Audit of Transmission Inspections

PacifiCorp's **2024 WMP** identified a post-audit target of 99 line-miles for patrol inspections of transmission lines. PacifiCorp's **2024 Q4 QDR** reported that actual post-audits of patrol inspections covered 119 line-miles in 2024, surpassing the target by 20 line-miles.

To validate the 119 line-miles reported, the IE requested supporting documentation, such as a list demonstrating tracking of inspections, in *DR 4*. In response, PacifiCorp provided evidence document **MASTER_2024_POST AUDIT Tracker_CA.xlsx**, which contained a list of the 13 lines with vegetation work to be inspected and the length of each. However, two lines were included twice, and removing the duplicates resulted in a

total of 135 line-miles. PacifiCorp confirmed that this discrepancy of 16 miles was due to the inclusion of a line on the tracking spreadsheet that was not tracked under VM-11.

Since post-audits of patrol inspections are tracked at the line level, the IE requested documentation of each line's inspection by a PacifiCorp forester in *DR 13*. In response, PacifiCorp provided forester audit forms for each of the 10 lines audited.

The IE reviewed each of these forms to verify that it audited the correct type of vegetation work (FMT), that it covered all the line-miles reported for the line in the tracking document, that it was completed in 2024, and that it was signed. In one case, a line was audited in segments by multiple foresters and the IE verified each of these forms and confirmed that the line-miles summed to the full line length tracked.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp completed post-audits of 119 line-miles of patrol inspections of transmission lines in 2024, exceeding the target of 99 line-miles in the **2024 WMP**.

Post-Audit of Distribution Inspections

PacifiCorp's **2024 WMP** identified a post-audit target of 865 line-miles for patrol inspections of distribution lines. PacifiCorp's **2024 Q4 QDR** reported that actual post-audits of patrol inspections covered 1,037 line-miles in 2024, surpassing the target by 172 line-miles.

To validate the 1,037 line-miles reported, the IE requested supporting documentation, such as a list demonstrating tracking of inspections, in *DR 4*. In response, PacifiCorp provided evidence document **MASTER_2024_POST AUDIT Tracker_CA.xlsx**, which contained a list of the 26 circuits with vegetation work to be inspected and the length of each. These circuits totaled 1,037 line-miles.

Since post-audits of patrol inspections are tracked at the circuit level, the IE requested documentation of each circuit's inspection by a PacifiCorp forester in *DR 13*. In response, PacifiCorp provided forester audit forms for each of the 26 circuits audited.

The IE reviewed each of these forms to verify that it audited the correct type of vegetation work (FMD), that it covered all the line-miles reported for the circuit in the tracking document, that it was completed in 2024, and that it was signed. In some cases, circuits were audited in segments by multiple foresters and the IE verified each of these forms and confirmed that the line-miles summed to the full circuit length tracked.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp completed post-audits of 1,037 line-miles of patrol

inspections of distribution lines in 2024, exceeding the target of 865 line-miles in the **2024 WMP**.

4.2.10.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $135 for a total expenditure projection of $135 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $171 for a total expenditure of $171. The projected expenditure of $135 and total expenditure of $171 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 27% was the establishment of the HFRA and the need for increased vegetation management activities in the HFRA consistent with PacifiCorp's approach for HFTD Tiers 2 and 3.

4.2.11 Synthesis of Findings

4.2.11.1 Initiative Review

The IE has reasonable assurance of PacifiCorp's completion of the inspection targets under "Vegetation Management and Inspections" (VM-01, VM-02, VM-03, VM-04, VM-11). However, reaching this point was complicated by data quality and recordkeeping issues described below.

For the field-verifiable target under VM-05 (Pole Clearing), despite the desktop review indicating complication, the IE cannot be reasonably certain of the pole clearing work based on visual inspections in the field, which found 24% of poles to be noncompliant.

The IE did not perform initiative reviews for VM-06 and VM-07 in the absence of specific targets. VM-08 is a pilot which the IE is reasonably assured is ongoing in accordance with the schedule in the **2024 WMP.**

As mentioned above, regarding the inspection initiatives (VM-01, VM-02, VM-03, VM-04, and VM-11), the IE includes below several notes about recordkeeping and data quality that would facilitate the audit process in the future.

One note is that although the numbers are the same across the **2024 WMP** and the **2024 Q4 QDR**, the unit in the **2024 WMP** for some vegetation management and inspection targets is circuit-miles whereas all targets in the **2024 Q4 QDR** are expressed in line-miles. For the purposes of the audit, the IE considered these units to be equivalent since the associated numbers were identical, but the IE notes that this difference in units is confusing and potentially inaccurate.

Across initiatives VM-01, VM-02, and VM-03, in some cases, values on the PDF work releases (such as "contractor," "forester," and "district") did not match the corresponding values in the tracking spreadsheet for reasons explained by PacifiCorp upon IE inquiry. In the future, additional up-front context about the nature of such tracking documents would reduce the IE effort in reviewing such fields and inquiring about discrepancies.

In the case of VM-11, the tracking spreadsheet erroneously included two lines twice as well as a line that was not part of the target.

Additionally, in VM-02, VM-03, VM-04, and VM-11, differences between the line/circuit lengths on work releases and the tracking spreadsheets, in some cases of over two miles, created confusion during the validation of completed activities. In the document **Vegetation Management Reporting Disclosure.pdf**, PacifiCorp explained:

"Due to the timing of pulling records from the GIS department, it is not uncommon for minor variations in the line length to be present. The line lengths may change slightly, similar to rounding error. Targets or total line lengths identified at one point in time, may be different than total line lengths identified some period of time later as the GIS data is regularly updated. These discrepancies regarding line lengths may also be expressed on work release documents where the total line length is referenced. Each work release, document or attestation, from the contractor indicating completion of inspection associated with VM-1 though VM-4, covers the entire line length of the distribution circuit or transmission line."

PacifiCorp reported to the IE that it is actively working on improving its processes to avoid these conflicting records related to line/circuit length.

Finally, the IE encountered additional challenges with the work releases related to missing signatures, missing or incorrect completion dates, incorrect circuit IDs, and absent or incorrect information about the distance inspected or total line distance. While PacifiCorp was able to readily provide clarifications or corrections in some cases, in others the IE had to rely on supplemental or less optimal evidence. Overall, these issues suggest a need for greater attention by PacifiCorp to ensuring that work releases are returned by contractors in a timely manner and checked for complete, accurate, and clear information before filing.

Concerning year-over-year performance, the IE notes that the only initiative reviews conducted under this category in the **2023 WMP IE ARC** were for VM-01, VM-02, VM-03, and VM-04, and that the IE had reasonable assurance that all targets were met. The IE did not comment on recordkeeping and data-quality issues like those encountered in the 2024 review, however this does not mean there were none, since the **2023 WMP IE ARC** did not include a synthesis of findings section.

4.2.11.2 Funding Verification

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
VM-01	Detailed Inspection – Distribution	N	$294	$492	67%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-02	Detailed Inspection – Transmission	N	$157	$201	28%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-03	Patrol Inspection – Distribution	N	$316	$333	5%	Not provided or requested – absolute variance less than 10%.
VM-04	Patrol Inspection – Transmission	N	$20	$25	25%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
VM-05	Pole Clearing	Y	$374	$413	10%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-06	Clearance – Distribution	N	$15,087	$18,295	21%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
VM-07	Clearance – Transmission	N	$1,904	$2,498	31%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
VM-08	Fall-in Mitigation	N	$30	$0	-100%	Budget was provided in the event a third-party contractor was needed to conduct or augment PacifiCorp's follow-up work, assessments, or inspections following implementation of the expanded overhang specification. Follow-up reviews of completed work did not require a third-party contractor and reviews were completed by PacifiCorp internal staff.
VM-11	Quality Assurance / Quality Control – Post-Audit	N	$135	$171	27%	PacifiCorp increased vegetation management activity for 2024 due to the establishment of the HFRA, for which the plan did not originally account. PacifiCorp's approach to vegetation management in the HFRA is consistent with vegetation management in HFTD Tiers 2 and 3.
Total			$18,317	$22,428	22.4%	

4.3 Situational Awareness and Forecasting

4.3.1 Summary Table

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[7]
SA-01 8.3.2.1 Environmental Monitoring Systems	8	10	Target met	10	100%	Desktop	Initiative validated	125%	160	209	31%	N/A
SA-02 8.3.3.1 Grid Monitoring Systems	No target	PacifiCorp completed pilot of this initiative in 2024 and does not plan on future utilization of distribution fault anticipators.	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	39	108	177%	N/A
SA-03 8.3.4.1 Smoke and Air Quality Sensors	No target	Initiative discontinued	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	15	14	-7%	N/A
SA-04 8.3.4.1 Ignition Detection Systems	6	6	Target met	6	100%	Desktop	Initiative validated	100%	1,065	1,031	-3%	N/A
SA-05 8.3.5.3 Weather Forecasting	No target	All QDR targets completed	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	115	267	132%	N/A
SA-06 8.3.6.1 Fire Potential Index	Scheduled for completion in 2023	Completed	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	97	-	-100%	N/A

[7] PacifiCorp did not capture risk reduction goals in its **2023-2025 WMP**. Thus, the IE could not validate if a goal was met.

4.3.2 Environmental Monitoring Systems (SA-01)

4.3.2.1 Initiative Review

Section 8.3.2.1 of PacifiCorp's **2024 WMP** describes the company's network of weather stations, which provide 10-minute observations of temperature, humidity, wind speed, wind direction, and wind gusts. Weather stations are calibrated annually before wildfire season to ensure accurate data.

The **2024 WMP** identified an annual target of eight weather stations installed and the **2024 Q4 QDR** reported that 10 were installed in 2024.

To confirm that 10 weather stations were installed, the IE requested a full population list of the stations listed by unique identifier in *DR 4*. In response, PacifiCorp provided a list of the 10 stations with unique identifiers in evidence document **Item 17 weather stations 2024.xlsx**.

The IE then requested evidence for all 10 weather stations in *DR 6* to further verify that they were installed. For each weather station, PacifiCorp provided a PDF field report that was filled in during each station's installation, including an installation checklist and images of the installed units. While the IE noted some discrepancies between the installation sheets and the Excel list submitted in *DR 4*, PacifiCorp explained in a working session these were due to changes made in the field (such as using a more accessible nearby pole) that had not been successfully transferred to the tracking system, or other data-quality issues. Regardless of these discrepancies, based on the PDF reports, the IE was able to verify that 10 weather stations were installed in 2024.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp exceeded its **2024 WMP** target of eight weather station installations in 2024 by performing 10 installations. The IE recommends that PacifiCorp take steps to ensure that before reporting data about installed weather stations, the data is checked against final field reports and any differences resolved.

4.3.2.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $160 for a total expenditure projection of $160 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $209 for a total expenditure of $209. The projected expenditure of $160 and total expenditure of $209 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 31% was the installation of two more stations than originally projected.

4.3.3 Grid Monitoring Systems (SA-02)

4.3.3.1 Initiative Review

Section 8.3.3.1 of PacifiCorp's **2024 WMP** describes the company's piloting of distribution fault anticipator (DFA) technology in partnership with Texas A&M University. DFA devices monitor continuously for high- or low-current fault conditions and provide preemptive alerts over cellular networks to identify equipment along distribution circuits that could cause an outage.

PacifiCorp's **2024 Q4 QDR** indicated that two DFAs were installed in 2023 but did not report a target for 2024. The **2024 WMP** did not mention a 2024 target either, while the **2024 ARC** stated that PacifiCorp had completed the pilot of the program and determined not to proceed with future installations of DFAs.

To validate the statements contained within the **2024 ARC**, the IE requested that PacifiCorp provide evidence corroborating those statements. In response, PacifiCorp provided evidence document **DFA Update Aug 2024.pptx**, which outlined the state of the pilot and the recommendation to management not to proceed with the installation of additional DFAs.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that initiative SA-02 was completed at the close of 2023 and that the evaluation of the pilot led to the determination not to proceed with future installations of DFAs in PacifiCorp's service territory. As a result, there was not an initiative target for the IE to review for 2024.

4.3.3.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $39 for a total expenditure projection of $39 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $108 for a total expenditure of $108. The projected expenditure of $39 and total expenditure of $108 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 177% was that PacifiCorp did not account for the cost of data connections for the DFAs when creating the projected expenditure values.

4.3.4 Smoke and Air Quality Sensors (SA-03)

4.3.4.1 Initiative Review

Section 8.3.4.1 of PacifiCorp's **2024 WMP** describes PacifiCorp's smoke and air quality sensors program, highlighting that PacifiCorp installed 20 intelligent smoke and particulate sensors in the highest fire risk areas of its northern California service territory. This effort was part of the continued evaluation of the durability and accuracy

of the sensors in support of the Department of Homeland Security's Smart Cities Internet of Things (SCITI) Lab's wildland fire sensor program.

According to PacifiCorp's **2024 ARC**, the company has determined that smoke sensors are ineffective when compared to cameras and that PacifiCorp has no plans to continue utilizing them in the future and will remove the installed sensors. The **2024 WMP** states that the initiative was discontinued on December 3, 2023.

The IE requested evidence of SA-03's discontinuation. In response, PacifiCorp provided field reports with photos attesting to removal of all 20 smoke and air quality sensors in 2024. PacifiCorp added that in lieu of the sensors, the company moved to using AI-enabled wildfire-detection cameras for ignition detection given the substantially larger viewsheds, live camera feeds, AI detection, and smoke alerts.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that initiative SA-03 has been discontinued as reported in the **2024 WMP** and there is no target to evaluate for 2024.

4.3.4.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $13 and OPEX ($ Thousands) of $2 for a total expenditure projection of $15 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $14 and OPEX of $0 for a total expenditure of $14. The projected expenditure of $15 and total expenditure of $14 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -7% was not provided in the **2024 ARC** or requested due to the absolute variance being less than 10%.

4.3.5 Ignition Detection Systems (SA-04)

4.3.5.1 Initiative Review

Section 8.3.4.1 of PacifiCorp's **2024 WMP** describes PacifiCorp's high-definition camera program, specifically the technology within those camera systems and how the installation of additional systems will fill gaps in the existing camera network.

The **2024 WMP** identified an annual target of six high-definition camera systems and the **2024 Q4 QDR** reported that six systems were installed in 2024.

To confirm the installation of six camera systems, the IE requested a full population list of the systems with unique identifiers in *DR 4*. In response, PacifiCorp provided a list of the six systems with unique identifiers in **DR 4_250429_Cameras.xlsx**.

This evidence document contained asset IDs and locations for six cameras, as well as installation dates, which all fell within 2024. The document also contained a count of detections in March 2025 for each camera.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp completed the installation of six camera systems in 2024, in accordance with the target identified in the **2024 WMP**.

4.3.5.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $985 and OPEX ($ Thousands) of $80 for a total expenditure projection of $1,065 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $960 and OPEX of $71 for a total expenditure of $1,031. The projected expenditure of $1,065 and total expenditure of $1,031 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -3% was not provided in the **2024 ARC** or requested due to the absolute variance being less than 10%.

4.3.6 Weather Forecasting (SA-05)

4.3.6.1 Initiative Review

Section 8.3.5 of PacifiCorp's **2024 WMP** describes PacifiCorp's systems and procedures used to forecast weather within its service territory. These forecasts play a critical role in mitigating the risk of utility-caused wildfires. By accurately predicting weather conditions and its impact on the grid, electric utilities can proactively take steps to reduce the risk of fire ignition and spread, ensuring public safety. The ability to gather, interpret, and translate data into an assessment of utility-specific risk and inform decision making is a key component of PacifiCorp's situational awareness.

While the **2024 WMP** did not include specific targets related to SA-05, the **2024 Q4 QDR** reported the following qualitative targets:

1. *Extend historic 30-year weather data reanalysis through 2023.*
2. *Build Machine Learning (ML) gridded grassland Normalized Difference Vegetation Index (NDVI) product.*
3. *Develop detailed technical requirements for multi-member Weather Research and Forecast (WRF) ensemble implementation.*

While the **2024 Q4 QDR** listed the status of these targets as "in progress," PacifiCorp informed the IE that this was an oversight and that the targets are all complete. To verify that these targets were met in 2024, the IE requested documentation in *DR 7*.

With respect to Item #1, PacifiCorp provided document **Historical Reanalysis WRF.csv**, which shows district-level maximum spread component values for each historical date from 1992 through 2024 for a sample district. According to PacifiCorp, this is an example of the data that is produced by the WRF historical reanalysis.

For Item #2, PacifiCorp provided document **NDVI_Modeling_Final_Report.pdf**, dated November 13, 2024, which describes the final NDVI modeling product created for PacifiCorp by wildfire risk software provider Technosylva.

For Item #3, PacifiCorp provided document **TSVA_ENSEMBLE STATEMENT OF WORK.docx**, dated July 26, 2024, which describes the technical requirements of a WRF ensemble to be developed by Technosylva to reduce reliance on a single forecast.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp completed the three 2024 targets associated with SA-05 in its **2024 Q4 QDR** and that this initiative should have been marked "completed" rather than "in progress." The IE notes that it did not identify 2024 targets for this initiative in PacifiCorp's **2024 WMP** itself.

4.3.6.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $12 and OPEX ($ Thousands) of $103 for a total expenditure projection of $115 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $0 and OPEX of $267 for a total expenditure of $267. The projected expenditure of $115 and total expenditure of $267 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 132% was that domain expansion costs were not considered in the initial limited project scope.

4.3.7 Fire Potential Index (SA-06)

4.3.7.1 Initiative Review

Section 8.3.6 of PacifiCorp's **2024 WMP** describes how, prior to the onset of the 2023 fire season, PacifiCorp planned to update its district-level wildfire risk categories using a Fire Potential Index (FPI) in development by Technosylva. The FPI model would quantify the potential for large or consequential wildfires several days out based on weather, fuels, and terrain inputs.

According to the **2024 WMP**, the FPI was scheduled for completion in May 2023. To confirm that the FPI was completed, the IE requested evidence of its completion. In response, PacifiCorp provided a screenshot of the FPI completed and in operation, showing daily district-level fire risk for the dates of May 21-26, 2025, across PacifiCorp's service territory in Washington, Oregon, and California.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp has completed its Fire Potential Index as described in the **2024 WMP**. The IE notes the **2024 Q4 QDR** did not report on this initiative.

4.3.7.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $1 and OPEX ($ Thousands) of $96 for a total expenditure projection of $97 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $0 and OPEX of $0 for a total expenditure of $0. The projected expenditure of $96 and total expenditure of $0 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -100% was that the cost of work associated with the Fire Potential Index was captured in the expenditure for SA-05.

4.3.8 Synthesis of Findings

4.3.8.1 Initiative Review

The IE has reasonable assurance that PacifiCorp completed its 2024 targets for three initiatives in the "Situational Awareness and Forecasting" category (SA-01, SA-04, and SA-05), with the other three (SA-02, SA-03, SA-06) lacking 2024 targets because they were previously completed or discontinued.

As in 2023, PacifiCorp continued to build out its network of weather stations and ignition detection cameras in 2024, once again completing its targets under SA-01 and SA-04, respectively. In the case of SA-01, the IE recommends that PacifiCorp take steps to ensure that before reporting data about installed weather stations, the data is checked against final field reports and any differences resolved.

PacifiCorp also continued to expand its weather forecasting capabilities under SA-05, partly through building on 2023 efforts in 30-year WRF reanalysis and WRF ensemble configuration. (The IE also had reasonable assurance of SA-05 completion in 2023.)

SA-02 and SA-03 were pilots of distribution fault anticipators and smoke and air quality sensors, respectively, that were implemented in 2023. The IE confirmed that these initiatives had no 2024 targets because they were discontinued based on their results. Conversely, the IE has reasonable assurance that PacifiCorp's Fire Potential Index (SA-06), scheduled for completion in May 2023, is operational, although there were no 2024 targets for that initiative either.

4.3.8.2 Funding Verification

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
SA-01	Environmental Monitoring Systems	N	$160	$209	31%	PacifiCorp installed two more stations than the base **2023-2025 WMP** originally planned for 2024.
SA-02	Grid Monitoring Systems	Y	$39	$108	177%	The original forecast for this initiative did not include the costs associated with the data connections for the DFAs.
SA-03	Smoke and Air Quality Sensors	N	$15	$14	-7%	Not provided or requested – absolute variance less than 10%.
SA-04	Ignition Detection Systems	Y	$1,065	$1,031	-3%	Not provided or requested – absolute variance less than 10%.
SA-05	Weather Forecasting	N	$115	$267	132%	The original forecast was for a limited scope and did not include domain expansion costs.
SA-06	Fire Potential Index	N	$97	$0	-100%	The actual costs for this initiative were included in the actuals for SA-05.
Total			$1,491	$1,629	9.3%	

4.4 Emergency Preparedness

4.4.1 Summary Table

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[8]
EP-01 8.4.2 Emergency Preparedness Plan	Continued progress on three-year training program	Continued progress on three-year training program	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	50	253	406%	N/A
EP-02 8.4.2.3 External Collaboration and Coordination	- 1 Functional Exercise (FE) - 1 Table Top Exercise (TTX) - 1 Workshop	- 1 Functional Exercise (FE) - 1 Table Top Exercise (TTX) - 1 Workshop - 1 Preparedness Fair/ CRC Demo	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	30	7	-77%	N/A
EP-03 8.4.4.2 Public emergency communication strategy	Implement improvements to the Public Safety Partner Portal and deliver a dashboard for situational awareness during PSPS responses	Completed	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	0	3	N/A – no planned spend to compare with actuals	N/A
EP-05 8.4.6 Customer support in wildfire and PSPS emergencies	No target	Not reported	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	0	140	N/A – no planned spend to compare with actuals	N/A

[8] PacifiCorp did not capture risk reduction goals in its **2023-2025 WMP**. Thus, the IE could not validate if a goal was met.

4.4.2 Emergency Preparedness Plan (EP-01)

4.4.2.1 Initiative Review

Section 8.4.2 of PacifiCorp's **2024 WMP** describes the company's Emergency Response Plan (ERP), which is intended to be the primary reference material for any emergency or contingency response affecting PacifiCorp's employees, assets, or business continuity. The plan contains functional annexes including governance transfer, emergency response organizational structure, on-scene incident response, resourcing and mutual assistance, training and exercise, and emergency communication.

The **2024 WMP** included a target of completion of an internal staff Emergency Coordination Center (ECC) and Department Operations Center (DOC) three-year training program by 2025. While the **2024 Q4 QDR** did not report on this initiative, the **2024 ARC** highlighted continued efforts toward completion of the three-year training program and stated that training was being conducted in accordance with Energy Safety curriculum standards for a Type III Utility Representative credential.

The IE requested documentation to support continued progress as part of *DR 7*. In response, PacifiCorp provided **Item 2 Attachment.xlsx** and the following statement:

"PacifiCorp implemented a progressive training program for incident management teams, which includes the Emergency Coordination Center, in 2024. Coursework and timing varies depending upon the position. Required coursework recognizes and utilized National Incident Management System (NIMS) framework. An outline of the coursework is provided in the attachment. The California Office of Emergency Services Type III training standards are available to, and may be used, by private organizations but is in place for local government EOCs [Emergency Operations Centers]."

By reviewing **Item 2 Attachment.xlsx**, the IE was able to determine the curriculum associated with Year 2 and the method of delivery for this curriculum.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp continues to make progress toward its 2025 target as outlined in the **2024 WMP**, conducting Type III training in line with its three-year plan.

4.4.2.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $50 for a total expenditure projection of $50 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $253 for a total expenditure of $253. The projected expenditure of $50 and total expenditure of $253 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 406% was that PacifiCorp did not

include all related emergency management and meteorology personnel in the projected expenditures associated with this initiative.

4.4.3 External Collaboration and Coordination (EP-02)

4.4.3.1 Initiative Review

Section 8.4.3.1 of PacifiCorp's **2024 WMP** describes several preparedness actions conducted for areas of wildfire concern within the company's service territory. Workshops and exercises have and will continue to be conducted annually. PacifiCorp has also hosted workshops to coordinate response and ensure response efforts are complementary to tribal, state, county, and local response actions. PacifiCorp conducts its response activities within the National Incident Management System (NIMS) organizational structure, which allows seamless integration with public sector agencies. Through these coordination sessions, PacifiCorp and other potentially affected agencies have developed partnerships that have proven very effective through both exercises and actual response to incidents.

The **2024 WMP** included a 2024 target of one Functional Exercise (FE), one Tabletop Exercise (TTX), and one Workshop. The **2024 Q4 QDR** reported these targets as completed in Q2 of 2024, with a Tabletop Exercise and Workshop completed in May 2024 and a Functional Exercise completed in June 2024. The **2024 Q4 QDR** also reported the completion of a Preparedness Fair in May 2024.

The IE requested documentation of completion of the four activities as part of *DR 6* and *DR 14*. In response, PacifiCorp provided the following files:

DR 6:

1. **Exhibit B1 PacifiCorp 2024 Modoc County PSPS Tabletop and FE After Action Report.docx**
2. **Exhibit B2 PacifiCorp 2024 Modoc County PSPS TTX Presentation 05.22.24.pptx**
3. **Exhibit B3 PacifiCorp 2024 Modoc County PSPS Functional Exercise Presentation 06.25.24.pptx**
4. **Exhibit B4 PacifiCorp 2024 Modoc County TTX Situation Manual 05.22.24.docx**
5. **Exhibit B5 PacifiCorp 2024 Modoc County PSPS FE Exercise Plan 06.25.24.docx**

DR 14:

6. **May 1 2024 Preparedness Fair.pdf**
7. **May 1 2024 Press Release.pdf**
8. **May 1 2024 Social Media.pdf**

The IE reviewed these files and determined that:

- **Files 1, 3, and 5** demonstrate completion of a Functional Exercise conducted on June 25, 2024.
- **Files 1, 2, and 4** demonstrate completion of a Tabletop Exercise conducted on May 22, 2024.
- **File 2** demonstrates completion of a Workshop conducted on May 22, 2024.
- **Files 6, 7, and 8** demonstrate completion of a Preparedness Fair conducted on May 1, 2024.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp met its **2024 WMP** target of completing one Functional Exercise, one Tabletop Exercise, and one Workshop in 2024, and that it completed a Preparedness Fair as additionally reported in the **2024 Q4 QDR**.

4.4.3.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $30 for a total expenditure projection of $30 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $7 for a total expenditure of $7. The projected expenditure of $30 and total expenditure of $7 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -77% was that PacifiCorp did not require as much funding for the initiative as initially projected.

4.4.4 Public Emergency Communication Strategy (EP-03)

4.4.4.1 Initiative Review

Section 8.4.4.1 of PacifiCorp's **2024 WMP** describes the company's protocols for emergency communications and lists processes and procedures for notification of stakeholders. These stakeholders include but are not limited to the general public, priority essential services and public safety partners, access and functional needs (AFN) populations, populations with limited English proficiency, tribes, and people in remote areas.

PacifiCorp's **2024 WMP** stated that in 2024 it would implement improvements to its Public Safety Partner Portal (PSP Portal) and deliver a dashboard for situational awareness during Public Safety Power Shutoff (PSPS) response. The **2024 Q4 QDR** marked this initiative as complete.

The IE requested documentation of improvements to the PSP Portal, including the dashboard for situational awareness during PSPS response, as part of *DR 7*. In response, PacifiCorp provided evidence document **DR7.03.pdf**, which included a series of screenshots of the updated portal, including the dashboard.

PacifiCorp's response to *DR 7* also included the following statement:

"PacifiCorp implemented improvements to the Public Safety Portal to include emergency event workflows, event area mapping efficiencies, and additional partner communications. The Public Safety portal provides interactive mapping capabilities in the web application to provide additional insight into PSPS events. To increase awareness of activity associated with an event, the Portal allows for partners to identify their preferences for outreach communications and provides in-app alerts for visibility into even area changes."

To effectively verify the evidence, the IE followed up with PacifiCorp to request a specific list of improvements to supplement the shared screenshots.

PacifiCorp provided the following list of improvements:

1. *"Login Page*
    a. *This is the login page for the public safety portal. Users have the ability to register a critical facility, an Organization, as a partner of an organization, or as an internal user.*
2. *Interactive Map*
    a. *The interactive map is in compliance with California Decision 21-06-034.*
3. *Email Alert (Event notification)*
    a. *Email alerts are sent when an event is created or modified.*
4. *User Preferences*
    a. *The user preferences functionality allows for users to identify how they would like to be notified for event updates, and which counties they want to be notified for. They can also update their contact information and supervisor information in this section.*
5. *CF Registration*
    a. *Critical Facility registration panel allows for parties to register a critical facility within the portal.*
6. *In-app alerts*
    a. *In app alerts allow additional awareness of events taking place within the state a user's account is associated with."*

Upon review, the IE determined that the portal screenshots and the supplemental list of improvements demonstrate that PacifiCorp implemented improvements to the Public Safety Partner Portal and delivered a dashboard for situational awareness during PSPS response.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp met its 2024 initiative targets of implementing improvements to its Public Safety Partner Portal and delivering a dashboard for situational awareness during PSPS response as described in the **2024 WMP**.

4.4.4.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $0 for a total expenditure projection of $0 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $2.5 for a total expenditure of $2.5. The projected expenditure of $0 and total expenditure of $2.5 could not be validated in the **2024 ARC** and the IE requested in *DR 7* validation of the spend and the reason for the variance. PacifiCorp validated the spend and stated that the reason for the variance was that annual portal upkeep was not calculated in planning as an ongoing expenditure.

4.4.5 Customer Support in Wildfire and PSPS Emergencies (EP-05)

4.4.5.1 Initiative Review

Section 8.4.6 of PacifiCorp's **2024 WMP** describes the company's customer support efforts in wildfire and PSPS emergencies, including AFN notification protocols and provision of medical baseline support services through its portable battery program. The portable battery program offers free portable batteries to eligible medical baseline customers as well as device education and technical support based on a technical evaluation of the customer's unique needs.

While this initiative did have a budgeted spend for 2024, which was recorded in the **2024 Q4 QDR**, it did not have a quantitative or qualitative target for the same period. As such, the IE did not perform a detailed review of EP-05 as part of the 2024 Independent Evaluator Annual Report on Compliance.

4.4.5.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $0 for a total expenditure projection of $0 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $140 for a total expenditure of $140. The projected expenditure of $0 and total expenditure of $140 could not be validated in the **2024 ARC** and the IE requested in *DR 7* validation of the spend and the reason for the variance. PacifiCorp validated the spend and stated that the reason for the variance was that spend was not forecast for 2024 because the portable battery and rebate program was in a pilot phase and results from 2023 were still being evaluated.

4.4.6 Synthesis of Findings

4.4.6.1 Initiative Review

The IE has reasonable assurance that PacifiCorp completed its 2024 targets for all three of the initiatives reviewed under the "Emergency Preparedness" category (EP-01, EP-02, and EP-03). This was also the case in the **2023 WMP IE ARC**. While that document also provided an initiative review of EP-05, the IE did not identify an EP-05 target for 2024 and only completed a funding verification for that initiative.

The IE does not have any recordkeeping or data quality recommendations to make.

As in 2023, in 2024 PacifiCorp continued to advance its emergency preparedness efforts through internal training, external exercises and workshops with potentially affected agencies, and communication tools for public safety partners.

4.4.6.2 Funding Verification

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
EP-01	Emergency Preparedness Plan	N	$50	$253	406%	Original projections did not include all related emergency management and meteorology personnel for 2024 when the plan was created prior to 2023.
EP-02	External Collaboration and Coordination	N	$30	$7	-77%	PacifiCorp did not require as much funding for this initiative in 2024 as originally forecast prior to 2023.
EP-03	Public Emergency Communication Strategy	N	$0	$2.5	N/A – no planned spend to compare with actuals	The original forecast did not account for annual upkeep of the portal.
EP-05	Customer Support in Wildfire and PSPS Emergencies	N	$0	$140	N/A – no planned spend to compare with actuals	Spend was not forecast for 2024 because the portable battery and rebate program was in a pilot phase and results from 2023 were still being evaluated.
Total			$80	$402.5	403%	

4.5 Community Outreach and Engagement

4.5.1 Summary Table

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[9]
CO-01 8.5.2 Public Outreach and Education Awareness Program	- Perform Pre- and Post-fire season customer survey: In Q2 and Q4, respectively - Pre-fire season survey: 55% or more of the sample survey are aware of wildfire safety communications - Pre-fire season survey: PacifiCorp remains the most mentioned source of communication about wildfire preparedness - Access and Functional Needs (AFN) resources on the website: One additional language for the medical certificate	- Completed: Perform Pre- and Post-fire season customer survey: In Q2 and Q4, respectively - Completed: Pre-fire season survey: 55% or more of the sample survey are aware of wildfire safety communications - Completed: Access and Functional Needs (AFN) resources on the website: One additional language for the medical certificate	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative not validated	Sampling not utilized	90	100	11%	N/A

[9] PacifiCorp did not capture risk reduction goals in its **2023-2025 WMP**. Thus, the IE could not validate if a goal was met.

4.5.2 Public Outreach and Education Awareness Program (CO-01)

4.5.2.1 Initiative Review

Section 8.5.2 of PacifiCorp's **2024 WMP** explains how the company maintains a flexible and dynamic education and awareness strategy that is informed by customer survey data, community stakeholder input, and community needs. Some communication efforts target the company's entire customer base, while other communications target communities in the HFTD and HFRA (with some overlap with non-HFTD/non-HFRA locations depending on the media market and distribution channel). Overall, PacifiCorp's outreach includes information that can be heard, watched, discussed, and read in a variety of ways with the goal of accessibility and understandability.

The **2024 WMP** included several 2024 targets related to CO-01:

- *Perform Pre- and Post-fire season customer survey: In Q2 and Q4, respectively*
- *Pre-fire season survey: 55% or more of the sample survey are aware of wildfire safety communications*
- *Pre-fire season survey: PacifiCorp remains the most mentioned source of communication about wildfire preparedness*
- *Access and Functional Needs (AFN) resources on the website: One additional language for the medical certificate*

The **2024 Q4 QDR** reported the second target complete but did not mention the others. The **2024 ARC** reported that the surveys were completed and that the medical certificate was added in an additional language, but the language cited was Spanish, which was already added in 2023 according to the **2023 WMP IE ARC**.

With respect to the conducting of the surveys and the pre-fire season survey targets, the IE requested evidence of PacifiCorp's survey target completion in *DR 7*. In response, PacifiCorp provided slide decks summarizing 2024 pre- and post-season survey results for California. The pre-season survey deck was dated March 2024 (**Spring 2024 California Wildfire Survey Results.pptx**), and the post-season survey deck was dated November 2024 (**Fall 2024 California Wildfire Survey Results.pptx**). The IE notes that although the WMP states that pre-season surveys are conducted in Q2, the evidence documents show that in 2022, 2023, and 2024, the survey was conducted in March.

The pre- and post-wildfire season survey evidence documents summarized the results, key findings, and recommendations for each survey. The pre-wildfire season document stated that the objective of the survey was to "measure the public's awareness of messaging related to wildfire preparedness and safety." The post-wildfire season survey evidence document conveyed a similar message.

The pre-fire season survey results indicated that 55% of respondents were aware of wildfire safety communications and that Pacific Power was the most mentioned source

of communication about wildfire preparedness (relative to CAL FIRE, news, etc.) at 47%.

With respect to the AFN resources target, PacifiCorp provided a copy of a flyer in Hmong for its AFN Customer Programs (which includes the medical certificate program) launched in 2024. However, PacifiCorp stated that the medical certificate application itself is not available in Hmong and that it did not have plans to make it available.

Finding

Based on the evidence reviewed, the IE has reasonable assurance that PacifiCorp met its **2024 WMP** targets of performing pre- and post-wildfire season surveys, 55% of respondents to the pre-season survey reporting awareness of wildfire safety communications, and PacifiCorp being the most mentioned source of wildfire safety communications in the pre-season survey. However, the IE found that the medical certificate application did not exist in Hmong, meaning that based on the IE's interpretation of the target "AFN resources on the website – 1 additional language for the medical certificate," this target was not met. The IE recommends that if PacifiCorp does not intend to specifically make the medical certificate application available in additional languages, that it revise the wording of this target in future WMPs. Additionally, the **2024 ARC** indicated that the medical certification application was available in Spanish and marked CO-01 complete on this basis. However, Spanish was the language added in 2023, meaning that the 2024 progress was misreported.

4.5.2.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $90 for a total expenditure projection of $90 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $100 for a total expenditure of $100. The projected expenditure of $90 and total expenditure of $100 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 11% was that PacifiCorp did more public outreach in 2024 than originally forecast. PacifiCorp noted that expenditures in 2024 were more aligned with actual costs from 2023.

4.5.3 Synthesis of Findings

4.5.3.1 Initiative Review

CO-01 is the only initiative evaluated under the "Community Outreach and Engagement" category, and as described above, the IE has reasonable assurance that PacifiCorp met all its **2024 WMP** targets except for the addition of the medical certificate in an additional language. The **2023 WMP IE ARC** did not identify any missed targets. With respect to recordkeeping and data quality, the IE recommends that future iterations of the WMP reflect that the pre-fire season survey is conducted in Q1, as it was in 2022, 2023, 2024, rather than in Q2.

The IE notes that the **2024 WMP** sets increasingly stringent targets for wildfire safety communications awareness in the pre-season survey (50% in 2023, rising to the 55% evaluated in 2024, and 60% in 2025). The **2024 WMP** also identifies longer-term efforts associated with CO-01, including implementing customer feedback from post-season surveys into future outreach by October 2025, improving surveys based on 2023-2025 experience by 2028, and increasing availability of website wildfire and PSPS resources in additional languages by October 2032.

4.5.3.2 Funding Verification

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
CO-01	Public Outreach and Education Awareness Program	N	$90	$100	11%	PacifiCorp did more outreach in 2024 than was originally forecast prior to 2023. The actual costs for 2024 are more aligned with actual costs from 2023.
Total			$90	$100	11%	

4.6 Risk Methodology and Assessment

4.6.1 Summary Table

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[10]
RA-01 6.2.2 Risk and Risk Components Calculation	No target	No WMP target. Met first QDR target in Q1. Second QDR target in progress	Target not met	Sampling not utilized	Sampling not utilized	Desktop	Initiative not validated	Sampling not utilized	130	368	183%	N/A
RA-02 6.4.1 Top Risk Areas within the HFRA	No target	No WMP target. Met QDR target in Q2	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	0	7	N/A – no planned spend to compare with actuals	N/A
RA-03 6.4.3 Other Key Metrics	No target	No WMP target. Per QDR target, initiated discovery and benchmarking for effectiveness of undergrounding and covered conductor. Began developing internal effectiveness modeling for undergrounding	Target not met	Sampling not utilized	Sampling not utilized	Desktop	Initiative not validated	Sampling not utilized	40	0	-100%	N/A
RA-04 6.5 Enterprise System for Risk Assessment	No target	Not reported	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	157	157	0%	N/A

[10] PacifiCorp did not capture risk reduction goals in its **2023-2025 WMP**. Thus, the IE could not validate if a goal was met.

4.6.2 Risk and Risk Components Calculation (RA-01)

4.6.2.1 Initiative Review

Section 6.2.2 of PacifiCorp's **2024 WMP** describes how the company uses its FireSight model (formerly known as WRRM) to calculate likelihood of ignition, consequences of ignition, and ignition (wildfire) risk – combining likelihood and consequences – as part of its risk analysis framework. This ignition risk currently stands in for the overall utility risk used to prioritize mitigation actions. However, PacifiCorp is also developing a public safety power shutoff (PSPS) risk assessment solution to quantify PSPS risk as an additional input to the overall utility risk model.

While the **2024 WMP** did not include specific targets related to RA-01, the **2024 Q4 QDR** reported two qualitative targets for the year:

1. *Updated wildfire risk at the circuit level as part of annual FireSight planning model updates.* The **2024 Q4 QDR** reported that this target was met in Q1 of 2024.

2. *Updated PSPS risk at the circuit level.* According to the **2024 Q4 QDR**, this target was still in progress at the end of 2024 as PacifiCorp continued development of internal PSPS probability and consequences calculations.

The IE requested evidence of the completion of the first target, and evidence of progress toward the second, in *DR 7*. In response, PacifiCorp provided evidence document **PacifiCorp_DR 7_Issuance_250513_Q8.docx**.

For the first target, PacifiCorp was unable to provide time-stamped evidence of circuit-level wildfire risk updates in 2024. PacifiCorp stated that: "we have since deployed version controlling and logging for our risk model outputs in an Azure development environment" and "don't expect this to continue to be an issue going forward."

With respect to the second target, the evidence document states that PSPS risk is currently being developed with an anticipated rollout date by year-end 2025. The document includes a screenshot of a circuit diagram with sectionalizing devices and their downstream customer counts. This displays work being conducted to segment each circuit by their PSPS devices, which will allow for PSPS risk aggregation at multiple levels of granularity, including the circuit level. PacifiCorp explained this is basically a virtual grid that can be used to model customer impacts under various weather conditions. PacifiCorp further explained that the updated PSPS risk target was not met because of shifts in prioritization to other risk analysis work and because of limited staffing, which is currently being resolved through hiring additional capacity.

Finding

Based on the desktop review of the evidence provided, the IE does not have reasonable assurance that PacifiCorp completed its 2024 target of updating circuit-level wildfire risk

as described in the **2024 Q4 QDR** due to a lack of timestamped evidence. With respect to the 2024 target of calculating circuit-level PSPS risk, the IE has reasonable assurance that PacifiCorp is making progress but notes that, as reported in the **2024 Q4 QDR**, PacifiCorp did not meet the target in 2024 due to shifts in priorities and limited staffing. The IE did not identify 2024 targets for RA-01 in the **2024 WMP** itself.

4.6.2.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $130 for a total expenditure projection of $130 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $368 for a total expenditure of $368. The projected expenditure of $130 and total expenditure of $368 were validated in the **2024 ARC**. PacifiCorp's reasons for the expenditure variance of 183% were a) that PacifiCorp included the spend for RA-03 in the expenditure total for RA-01 due to a change in the work breakdown structure alignment and b) that PacifiCorp did not include calculation of risk reduction in the original projected expenditure for RA-01.

4.6.3 Top Risk Areas within the HFRA (RA-02)

4.6.3.1 Initiative Review

Section 6.4.1 of PacifiCorp's **2024 WMP** describes how PacifiCorp uses the risk scores calculated under RA-01 to identify High Fire Risk Areas (HFRAs) where mitigation efforts are prioritized.

While the **2024 WMP** did not include specific targets related to RA-02, PacifiCorp's **2024 Q4 QDR** reported an annual qualitative target of "updated and approved FHCA [Fire High Consequence Area]" and stated that this target was met in Q1 of 2024.

As evidence of the approved and updated FHCA being deployed in Q1 of 2024, PacifiCorp provided a screenshot of a spreadsheet listing approval dates for updates to the PacifiCorp map. This spreadsheet shows that the update with description "includes FHCA for transmission outside of service territory" was approved on 2/2/24.

Finding

Based on the desktop review of the evidence provided, the IE has reasonable assurance that PacifiCorp completed its 2024 target of "updated and approved FHCA" as reported in the **2024 Q4 QDR**. The IE did not identify 2024 targets for RA-02 in the **2024 WMP** itself.

4.6.3.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $0 for a total expenditure projection of $0 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $6.5 for a total expenditure of $6.5. The projected expenditure of $0 and total expenditure of $6.5 could not be validated in the **2024 ARC**

and the IE requested in *DR 7* validation of the spend and the reason for the variance. PacifiCorp validated the spend and stated that the reason for the variance was that the maintenance associated with the updates to the FHCA were not originally included in the forecast expenditure.

4.6.4 Other Key Metrics (RA-03)

4.6.4.1 Initiative Review

Section 6.4.3 of PacifiCorp's **2024 WMP** describes its plans to track risk-spend efficiency (RSE) as a key metric. Section 7.1.4.1 explains that RSE scores are calculated to capture changes in risk per dollar spent. The main objective of RSE scores is to allow PacifiCorp to target certain high fire risk areas for mitigation efforts (i.e., covered conductors, undergrounding, etc.) while allowing for efficient and smart spending. To calculate RSE scores, PacifiCorp must analyze the key drivers of ignition risk asset-wise, the mitigation efforts available, and their effectiveness and cost.

While the **2024 WMP** did not include specific targets related to RA-03, PacifiCorp's **2024 Q4 QDR** reported an annual qualitative target of "effectiveness measures for select mitigations," with this target marked as "in progress." The **2024 Q4 QDR** reported that in Q2, PacifiCorp initiated discovery and benchmarking for effectiveness of undergrounding and covered conductor and that in Q3 and Q4 it began developing internal effectiveness modeling for undergrounding.

When asked for clarification on the meaning of the target, PacifiCorp stated that: "This initiative covers two separate work streams: 1) benchmarking with peer utilities and engineering/research studies on assumed or estimated mitigation effectiveness for risk modeling and 2) establishing the framework for measuring mitigation effectiveness based on work completed by PacifiCorp."

In *DR 7*, the IE requested evidence of the progress reported in Q4, namely development of effectiveness modeling and its application to undergrounding. PacifiCorp responded with three third-party PDF materials representative of the discussions and documents reviewed as part of PacifiCorp's 2024 work on RSE benchmarking (the progress described for Q2 in the **2024 Q4 QDR**). This evidence does not show proof of the level of progress reported by Q4 in the **2024 Q4 QDR** and PacifiCorp reported that it could not provide additional evidence beyond these documents, although it provided a slide deck presented in 2025 as evidence that work is ongoing. PacifiCorp also did not provide a clear response to why the target was not completed but said it would include additional information in the QDR going forward to provide additional clarity on RA-03.

Finding

Based on the desktop review of the evidence provided, the IE does not have reasonable assurance that PacifiCorp made the progress on RA-03 reported in the **2024 Q4 QDR**. The IE notes that PacifiCorp did not meet its 2024 target or report having done so. The IE did not identify 2024 targets for RA-03 in the **2024 WMP** itself.

4.6.4.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $40 for a total expenditure projection of $40 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $0 for a total expenditure of $0. The projected expenditure of $40 and total expenditure of $0 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -100% was that PacifiCorp included the spend for RA-03 in the expenditure total for RA-01 due to a change in the work breakdown structure alignment.

4.6.5 Enterprise System for Risk Assessment (RA-04)

4.6.5.1 Initiative Review

Section 6.5 of PacifiCorp's **2024 WMP** states that PacifiCorp does not have a centralized enterprise risk assessment database to store wildfire and PSPS data. While the company's PROSPER repository tracks outages and causes, it is not designed to calculate wildfire risk, PSPS risk, or provide analytics to show outage trends or locations where there is higher risk. For fire incident tracking, PacifiCorp has implemented Fire Incident Tracking in an advanced data analytics platform to enable long-term trend analysis. Over time, the data analytics tool will combine fire incident information with utility asset and outage data (if applicable) to create a comprehensive view of each tracked fire event. The analytics platform will also be used to enable viewing of FireSight risk outputs, PSPS risk, and utility risk in a single location to support quantification of utility risk and to identify locations where mitigation efforts are needed to reduce the risk of a wildfire or PSPS event.

While this initiative did have a budgeted spend for 2024, which was recorded in the **2024 Q4 QDR** and was validated via the **2024 ARC**, it did not have a quantitative or qualitative target for the same period. As such, the IE did not perform a detailed review of the initiative as part of the 2024 Independent Evaluator Annual Report on Compliance.

4.6.5.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected CAPEX ($ Thousands) of $149 and OPEX ($ Thousands) of $8 for a total expenditure projection of $157 for 2024. As documented in Table 11, the actual expenditure for 2024 was CAPEX of $136 and OPEX of $21 for a total expenditure of $157. The projected expenditure of $157 and total expenditure of $157 were validated in the **2024 ARC**. There was no variance for which to request a reason.

4.6.6 Synthesis of Findings

4.6.6.1 Initiative Review

The IE reviewed initiatives RA-01, RA-02, and RA-03 in the "Risk Methodology and Assessment" category. The IE did not identify any 2024 targets associated with RA-04.

While the IE had reasonable assurance of completion of RA-02, neither RA-01 nor RA-03 was reported as "completed" in the **2024 Q4 QDR**. In the case of RA-01, PacifiCorp cited shifting priorities and staffing limitations for the incomplete target, and in the case of RA-03, PacifiCorp did not provide a clear explanation.

With respect to year-over-year performance, while the IE had reasonable assurance of completion for RA-01 and RA-02 in 2023, the IE was not able to verify any progress on RA-03 in 2023 as work was pushed to 2024. Given that PacifiCorp did not meet its 2024 target for RA-03 either, or provide clear evidence of the progress reported, this initiative seems to be falling well behind its original schedule.

The IE notes that a general problem for the initiatives in this category seems to be a lack of verification methods for the targets. For instance, while PacifiCorp reported one of its RA-01 targets as complete, this could not be verified due to a lack of timestamped evidence. PacifiCorp explained that it is resolving this issue for RA-01 going forward. For RA-02, PacifiCorp noted that the FHCA is not updated every year (for example, it will not be updated in 2025) depending on the outcome of the company's review, and documenting this lack of an update and the reasoning behind it could prove more difficult than showing an update occurred. Finally, for RA-03, the IE was not able to fully understand what the target of "effectiveness measures for select mitigations" concretely meant (i.e., what would be considered "complete"), and although the target was missed, PacifiCorp also failed to show clear evidence of the progress reported.

As a result, although these initiatives may not lend themselves to quantitative targets, the IE recommends that in the future PacifiCorp strive to set targets that are clear in terms of what they aim to achieve and for which PacifiCorp will be able to provide verifiable forms of evidence.

4.6.6.2 Funding Verification

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
RA-01	Risk and Risk Components Calculation	N	$130	$368	183%	PacifiCorp included the spend for RA-03 in the expenditure total for RA-01 due to a change in the work breakdown structure alignment. PacifiCorp also did not include calculation of risk reduction in the original projected expenditure for RA-01.
RA-02	Top Risk Areas within the HFRA	N	$0	$6.5	N/A – no planned spend to compare with actuals	Spend for this initiative was not projected for 2024 at the time of the creation of the base **2023-2025 WMP**.
RA-03	Other Key Metrics	N	$40	$0	-100%	PacifiCorp included the spend for RA-03 in the expenditure total for RA-01 due to a change in the work breakdown structure alignment.
RA-04	Enterprise System for Risk Assessment	N	$157	$157	0%	Not provided or requested – absolute variance less than 10%.
Total			$327	$531.5	62.5%	

4.7 Public Safety Power Shutoff

4.7.1 Summary Table

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[11]
PS-01 9.1.6 Protocols on PSPS	No target	Pacific Power did not have any PSPS events in 2024.	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	800	0	-100%	N/A

[11] PacifiCorp did not capture risk reduction goals in its **2023-2025 WMP**. Thus, the IE could not validate if a goal was met.

4.7.2 Protocols on PSPS (PS-01)

4.7.2.1 Initiative Review

Section 9.1.6 of PacifiCorp's **2024 WMP** describes the company's protocols for implementing a Public Safety Power Shutoff (PSPS). It states that the primary factors considered in deciding to de-energize are the 72-hour weather circuit forecast, pre-event inspections and strategic field observations, information from emergency services, meteorology and outage impact data including 95th and 99th percentile winds, location of existing fires, and other, non-weather-related factors.

While this initiative did have a budgeted spend for 2024, which was recorded in the **2024 Q4 QDR** and was validated via the **2024 ARC**, it did not have a quantitative or qualitative target for the same period. As such, the IE did not perform a detailed review of PS-01 as part of the 2024 Independent Evaluator Annual Report on Compliance.

4.7.2.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $800 for a total expenditure projection of $800 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $0 for a total expenditure of $0. The projected expenditure of $800 and total expenditure of $0 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of -100% was that PacifiCorp did not experience a PSPS event in 2024.

4.7.3 Synthesis of Findings

4.7.3.1 Initiative Review

The sole initiative in the "Public Safety Power Shutoff" category (PS-01) had no quantitative or qualitative target for 2024. As such, the IE did not perform a detailed review of this initiative, nor was it reviewed in the **2023 WMP IE ARC**. PacifiCorp did not have any PSPS events in 2023 or 2024.

4.7.3.2 Funding Verification

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
PS-01	Protocols on PSPS	N	$800	$0	-100%	PacifiCorp did not have any PSPS events in 2024.
Total			$800	$0	-100%	

4.8 Wildfire Mitigation Plan Strategy Development

4.8.1 Summary Table

Initiative Number, WMP Section, and Name	WMP - Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate	Verification Method	IE Finding on Initiative	Initiative Validation Rate	WMP - Planned Spend (Thousands $)	EC-Claimed Actual Spend (Thousands $)	Variance	Satisfied Risk Reduction Goal - Finding[12]
WP-01 7.1.2 Wildfire Mitigation Strategy Development	No target	Not reported	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	520	949	83%	N/A
WP-02 7.1.4.1 Identifying and Evaluating Mitigation Initiatives	No target	Not reported	Target met	Sampling not utilized	Sampling not utilized	Desktop	Initiative validated	Sampling not utilized	100	666	566%	N/A

[12] PacifiCorp did not capture risk reduction goals in its **2023-2025 WMP**. Thus, the IE could not validate if a goal was met.

4.8.2 Wildfire Mitigation Strategy Development (WP-01)

4.8.2.1 Initiative Review

Section 7 of PacifiCorp's **2024 WMP** describes its wildfire mitigation strategy development efforts. In 2022, PacifiCorp developed a new department, commonly referred to as Wildfire Safety. This new department consists of 13 full-time employees, is led by a Managing Director, and includes both a project management office focused on delivery of line rebuilds and other system-hardening initiatives and a project delivery team responsible for overall plan development, monitoring, and implementation.

While the broader Wildfire Safety team is tasked with supporting all types of wildfire mitigation initiatives and strategies across the company's entire service territory, a key function of the Wildfire Safety Program Delivery team is to develop, implement, monitor, and improve the company's WMP. It is the responsibility of Wildfire Safety Program Delivery to coordinate with other internal departments such as Asset Management, Vegetation Management, Field Operations, and Emergency Management to ensure that all aspects of the plan are delivered. Additionally, Wildfire Safety regularly evaluates its plan and provides updates as needed and consistent with statutory and regulatory requirements, including managing quarterly data reporting (QDR), the annual compliance report (ARC), and change order requests.

While this initiative did have a budgeted spend for 2024, which was recorded in the **2024 Q4 QDR** and was validated via the **2024 ARC**, it did not have a quantitative or qualitative target for the same period. As such, the IE did not perform a detailed review of WP-01 as part of the 2024 Independent Evaluator Annual Report on Compliance.

4.8.2.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $520 for a total expenditure projection of $520 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $949 for a total expenditure of $949. The projected expenditure of $520 and total expenditure of $949 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 83% was that PacifiCorp did not include the costs of independent evaluation when originally forecasting expenditure in 2023.

4.8.3 Identifying and Evaluating Mitigation Initiatives (WP-02)

4.8.3.1 Initiative Review

Section 7.1.4.1 of PacifiCorp's **2024 WMP** describes how the company identifies and evaluates potential mitigations. Identifying mitigation pilots and possible programs sometimes requires an evaluation of current industry practices and technology utilized. PacifiCorp has relationships with other utilities across multiple states and discusses industry practices with them to learn from their experiences. The company uses these learnings as well as learnings from completed projects and programs to evaluate proven

solutions. Where feasible, PacifiCorp evaluates multiple mitigation options to ensure that the solution ultimately selected is the most cost-effective relative to the risk reduced. Where there is limited information on a possible mitigation, PacifiCorp may undertake a pilot to evaluate the cost-effectiveness of a possible solution before determining whether it should be applied more widely.

While this initiative did have a budgeted spend for 2024, which was recorded in the **2024 Q4 QDR** and was validated via the **2024 ARC**, it did not have a quantitative or qualitative target for the same period. As such, the IE did not perform a detailed review of WP-02 as part of the 2024 Independent Evaluator Annual Report on Compliance.

4.8.3.2 Funding Verification

PacifiCorp's **2024 Q4 QDR** Table 11 projected OPEX ($ Thousands) of $100 for a total expenditure projection of $100 for 2024. As documented in Table 11, the actual expenditure for 2024 was OPEX of $666 for a total expenditure of $666. The projected expenditure of $100 and total expenditure of $666 were validated in the **2024 ARC**. PacifiCorp's reason for the expenditure variance of 566% was that the grant study included in this initiative was not included when originally forecasting the expenditure in 2023.

4.8.4 Synthesis of Findings

4.8.4.1 Initiative Review

Neither initiative in the "Wildfire Mitigation Plan Strategy Development" category had a quantitative or qualitative target for 2024. As such, the IE did not perform a detailed review of these initiatives, nor were they reviewed in the **2023 WMP IE ARC**.

4.8.4.2 Funding Verification

Initiative ID	Initiative	Focus (Y/N)	Planned Spend ($ Thousands)	Actual Spend ($ Thousands)	Variance	Variance Description
WP-01	Wildfire Mitigation Strategy Development	N	$520	$949	83%	The costs for independent evaluation were not included in PacifiCorp's plan for 2024 when it was originally forecast in 2023.
WP-02	Identifying and Evaluating Mitigation Initiatives	N	$100	$666	566%	The grant study included in this initiative was not included for the 2024 plan when it was originally forecast in 2023.
Total			$620	$1,615	160%	

5. Evaluation of QA/QC Programs

The following assessment is based on the IE's review of PacifiCorp's QA/QC programs through a review of PacifiCorp's **2024 WMP**, data previously submitted to Energy Safety, and information obtained through data requests.

5.1 Description of QA/QC Programs

PacifiCorp indicated that it does not have an overarching QA/QC program, but rather separate QA/QC programs for its Asset Inspection and Vegetation Management programs. These programs are each administered independently by the respective program teams.

Asset Inspections

For QA/QC of asset inspections, PacifiCorp identified the following key program components as described in response to *DR 1* Question 11 and documented in PacifiCorp's **Overhead Detailed Inspection Program Audit Process** (May 2021), **Policy No. 123-PP**, **2025 GO95 Training Manual_12162024.pdf**, and **2025 GO95 Training Guide.pdf**.

PacifiCorp runs a two-tier QA/QC process as described in its **Overhead Detailed Inspection Program Audit Process** (May 2021):

- *Tier 1* requires contractors to QA/QC audit a minimum of 5% of the total poles scheduled by PacifiCorp for the calendar year. The audits are performed on a computer-generated random 5% sample chosen within a completed section and performed on a weekly basis. These QA/QCs must meet 90% conformance for urban areas and 80% for rural areas.
- *Tier 2* of the process is run by PacifiCorp staff, which reviews an additional 2-3% of inspections on top of the 5% performed in Tier 1. Approximately half of the audit sample is derived from those reviewed in Tier 1 and half are randomly chosen.

The 2024 results of this process, which show 93.49% overall audit accuracy, are captured in the **CA Audit Summary (2024).xlsx** file received via email correspondence on June 5, 2025. All audit results are entered into PacifiCorp's QA/QC activities master spreadsheet.

PacifiCorp has recently begun using cellphones and tablets to document inspection records and findings to ensure that inspections and findings are recorded consistently with internal procedures. PacifiCorp has also developed a new internal tool to evaluate inspection results, automatically isolate open fire risk conditions in plots, facilitate quick data export, provide insight about trends, and drive a deeper understanding of fire risk conditions. Finally, PacifiCorp recently developed pre/post energization checklists used to ensure that projects are being constructed to meet the requirements of the

company's latest wildfire mitigation standards and ensure that projects are constructed as designed.

PacifiCorp's plans for further development of the Asset Inspection QA/QC program include exploring with its contractors the potential to amend current contractual requirements relative to the QA/QC process. Further potential developments include increasing the required pass rate as found in Table 8-7: Grid Design and Maintenance QA/QC Program in the **2024 WMP**. Finally, PacifiCorp will also consider whether a different QA/QC process and resulting pass rate, separate from the current process used for contract management, is appropriate for WMP reporting purposes.

Vegetation Management

The following review is based on PacifiCorp's response to *DR 1* Question 10, *DR 2* Question 2, and *DR 3* Questions 2 and 3 regarding its Vegetation Management (VM) QA/QC program, as well as email correspondence and an SME call on May 29, 2025.

There are two distinct processes that are generally employed in a QA/QC program. One is *quality control*, which typically verifies a product by testing a sample of the product against specifications, standards, or other criteria. Quality control measures are aimed at checking, measuring, or inspecting a sample in terms of one or more product characteristics and evaluating the results against requirements to confirm compliance. In this case, the samples are completed tree work, completed inspection work, and completed pole-clearing work.

By contrast, *quality assurance* typically assesses a "process" for adherence and/or compliance with specific requirements through analysis of objective evidence related to the program or process. In this case, the entire vegetation management process, from identification of required tree work to completion of this work, is reviewed for effectiveness.

As noted in previous independent evaluations, PacifiCorp does not appear to have a robust vegetation management QA/QC program in place. A review of the data request responses indicates that comprehensive QA/QC procedures have not been fully developed and corresponding training has yet to be implemented. While PacifiCorp states that it conducts annual audits, no documentation was provided to substantiate this. The IE has not received evidence indicating that PacifiCorp has made meaningful improvements since last year's evaluation.

PacifiCorp's **2024 WMP** includes only a high-level discussion regarding VM QA/QC, while there is also a brief discussion in PacifiCorp's Transmission and Distribution Program Vegetation Management Standard Operating Procedures (**SOP_08292024.pdf)**, which was provided in response to *DR 1* Question 10. These two documents conflict with each other and do not clearly state any procedures.

PacifiCorp submitted several documents as evidence of QA/QC practices. The IE found that these documents lacked sufficient detail regarding process and guidance. For example, the Standard Operating Procedures (SOPs) describe a QA/QC process as being conducted "occasionally, at the Forester's discretion," which appears inconsistent with the **2024 WMP**'s description of post-audits as occurring annually. When further clarification was requested, PacifiCorp provided a high-level QA/QC program overview that again referred to the SOPs, reiterating that QA/QC is "occasional" and left to the foresters. Additionally, the language in the SOPs appears to prioritize general crew safety and site conditions rather than activities specifically related to wildfire risk reduction. It lacks clear criteria or direction for evaluating post-work vegetation clearance, verification of risk tree identification or removal, or any vegetation management actions directly tied to wildfire mitigation.

The overall maturity of the QA/QC program appears unchanged relative to 2023. Documentation provided to the IE does not demonstrate significant progress or improvements that would reflect a more mature QA/QC program at this time. Site-level examples of QA/QC implementation and oversight were not provided in response to data requests or interview questions. Responses to the IE lacked sufficient detail. As a result, the IE has concluded that PacifiCorp's QA/QC program could be improved to increase the program's effectiveness.

The IE notes that PacifiCorp uses its Mobile Data Management Software (MDMS) to record inconsistencies with PacifiCorp's specifications or missed work (exceptions). The audit exceptions are visible to the vegetation management contractors within the MDMS.

Vegetation Management QA/QC pass rate information for 2024 was provided by PacifiCorp in response to *DR 13* Question 3. The pass rate was calculated by identifying the number of locations identified where vegetation maintenance was needed and the number of locations where a non-billable audit exception was found.

Vegetation Management QA/QC Program Pass Rate 2024

Activity	Target Pass Rate	2024 Pass Rate
Routine Cycle Maintenance (Detailed) – Distribution	95%	99%
Annual Corrective Work (Patrol) – Distribution Pole	95%	99%
Clearing Beyond PRC 4292	95%	94%
Routine Maintenance (Detailed) – Transmission	95%	99%
Annual Corrective Work (Patrol) - Transmission	95%	100%

Recent changes to the Vegetation Management QA/QC program include the hiring of additional staff throughout PacifiCorp's service territory to increase internal post-audit capacity. PacifiCorp has also continued to refine its work management process. This includes filing specific, work-related, milestone-type documentation such as contractor-

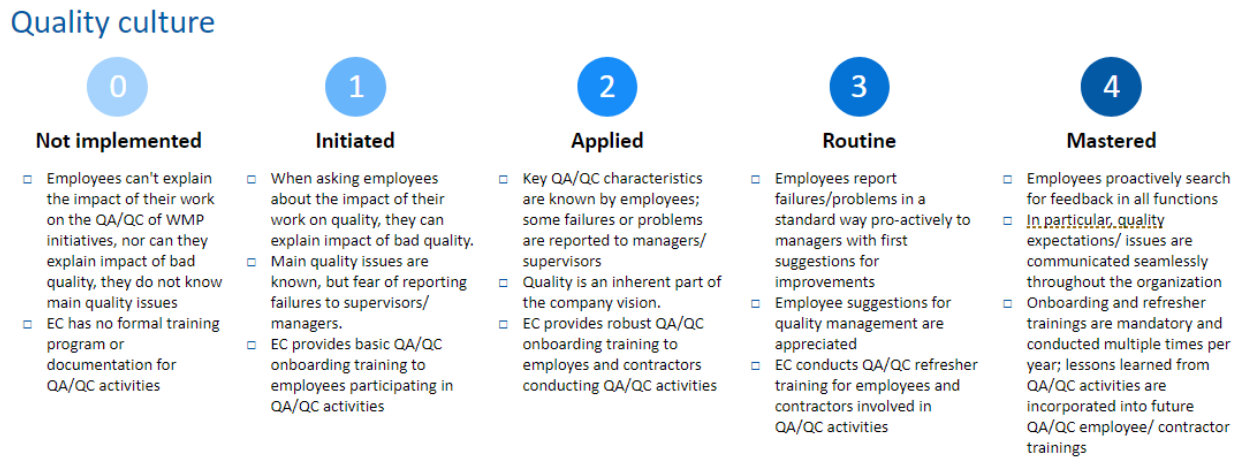
accepted work releases, work completed documentation, contractor-completed work releases, post-audit completion documentation, and audit findings or exceptions addressed and corrected.

PacifiCorp's plans for further development of the Vegetation Management QA/QC program include the incorporation of pre-inspection audits. The IE notes that PacifiCorp's **2023-2025 WMP** stated that this would be an improvement in 2023.

5.2 Five Dimensions of QA/QC Framework Ratings and Assessment

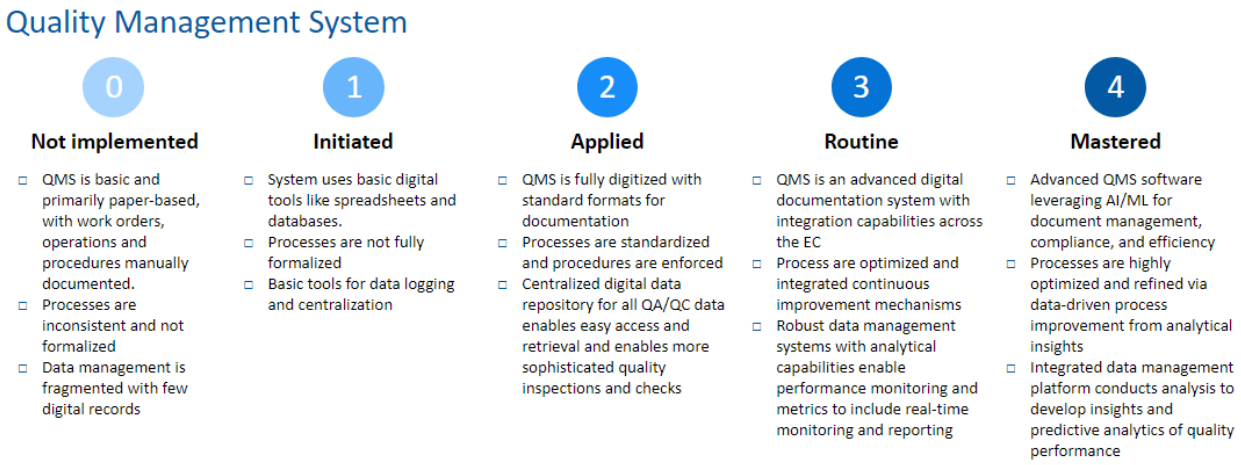
Roles & Responsibilities Rating = 1 Initiated

PacifiCorp staff have some awareness of QA/QC tasks, basic definitions of roles exist, and semi-formal communication channels exist.



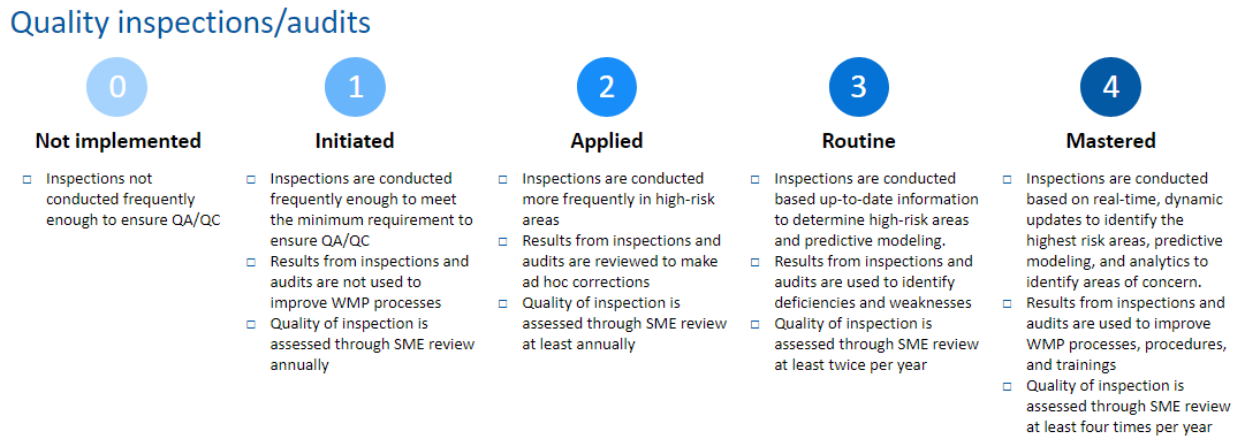
Quality Culture Rating = 1 Initiated

PacifiCorp understands the impact of their work on quality, main quality issues are known, and PacifiCorp provides basic QA/QC training, specifically with the GO 95 Training Guide.



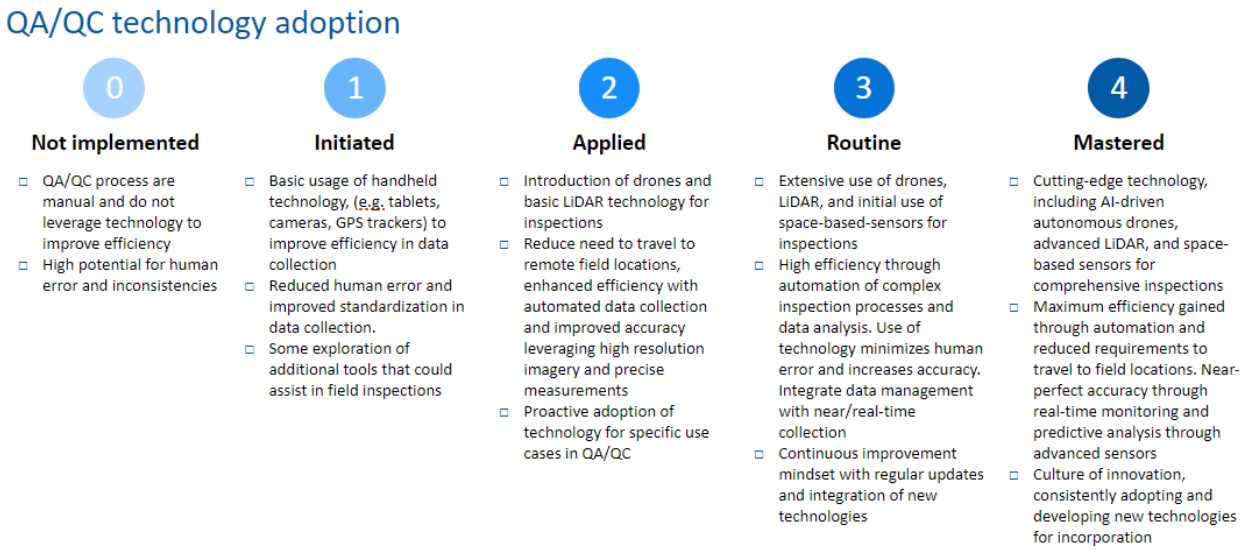
Quality Management System Rating = 1 Initiated

PacifiCorp uses basic digital tools for data logging and centralization. QA/QC processes are not fully formalized.



Quality Inspections/Audits Rating = 2 Applied

PacifiCorp conducts inspections more frequently in high-risk areas, the results from inspections and audits are reviewed to make ad hoc corrections, and quality of inspection is assessed at least annually.



QA/QC Technology Adoption Rating = 1 Initiated

PacifiCorp's QA/QC includes basic usage of handheld technology to improve efficiency in data collection, reduce human error, and standardize data collection. PacifiCorp is exploring additional tools to assist in field inspections.

5.3 QA/QC Maturity Overview Sunburst Chart

5.4 QA/QC Recommendations

The IE provides the following recommendations for PacifiCorp's QA/QC programs for each of the five dimensions.

Roles & Responsibilities

- Formally document and define QA/QC program roles and responsibilities. This could be accomplished through enhancements of the current Asset Inspection and Vegetation Management QA/QC program documents. Alternatively, PacifiCorp could consider drafting a comprehensive QA/QC program document covering PacifiCorp's collective WMP QA/QC program.
- Perform regular reviews and updates of PacifiCorp's documented QA/QC roles and responsibilities.
- Establish WMP QA/QC meetings or information sessions with PacifiCorp's WMP SMEs and contractors. During the meetings, review QA/QC roles and responsibilities and explain communication options available if staff identify QA/QC issues.

Quality Culture

- Develop QA/QC onboarding and refresher trainings for PacifiCorp staff and contractors and require completion of trainings prior to performing WMP work or inspections.
- Create overarching WMP QA/QC program documentation to help inform PacifiCorp staff and contractors on the importance of QA/QC and their roles in ensuring quality.

Quality Management System

- Continue developing digitized and automated standard formats for QA/QC, auditing, and inspection documentation.
- Create a centralized data repository (replacing existing spreadsheets), for all QA/QC data. This would include data for the Asset Inspection and Vegetation Management QA/QC programs.

Quality Inspections/Audits

- Use results from inspections and audits to improve WMP processes, procedures, trainings, and identification of areas of concern.
- Encourage more frequent SME reviews of inspections.

QA/QC Technology Adoption

- Adopt additional technologies for inspection and documentation production/management. These could include drones, LiDAR, and space-based sensors.
- Adopt automation and tools to improve efficiencies in data collection and management of findings from audits and inspections.