

**ANNUAL REPORT ON COMPLIANCE  
SUBMITTED BY PACIFICORP (U 901 E)  
REGARDING COMPLIANCE WITH ITS 2022 WILDFIRE MITIGATION PLAN**

Pursuant to the California Public Utilities Code Section 8386.3(c)(1), PacifiCorp d/b/a Pacific Power (PacifiCorp or the Company) provides this Annual Report on Compliance (ARC) addressing implementation of PacifiCorp's 2020-2022 Wildfire Mitigation Plan (WMP). PacifiCorp's 2022 WMP Update was recommended for approval by Office of Energy Infrastructure Safety(OEIS) on December 9, 2022 then approved by the California Public Utilities Commission on February 24, 2023.

**BACKGROUND**

During the calendar year of 2022, the company worked diligently to implement the measures set forth in the 2022 WMP Update and to address the conditions set forth in Resolutions WSD-011 (general conditions for all IOUs) and WSD-017 (conditions specific to PacifiCorp). The Company previously reported detailed 2022 WMP progress in quarterly submissions to the Office of Energy Safety (Energy Safety) throughout 2022 and early 2023. These include Pacific Power's four 2022 Quarterly reports submitted May 2022, August 2022, November 2022, and February 2023.

Requirements for the ARC were set forth in the letter dated February 16, 2021, from the Wildfire Safety Division (WSD) regarding Compliance Operational Protocols and the October 2022 Compliance Process established by the Office of Energy Safety.<sup>1</sup> These protocols require that the electric corporations (EC) include a written narrative in ARC submissions addressing the following five key components:

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<sup>1</sup> <https://energysafety.ca.gov/wp-content/uploads/2022-wmp-compliance-process.pdf>

- a. *An assessment of whether the EC met the risk reduction intent by implementing all of their approved WMP initiatives. i.e., the degrees to which initiative activities have reduced ignition probabilities;*
- b. *A full and complete listing of all change orders and any other operational changes, such as initiative location changes, made to WMP initiatives, with an explanation of why the changes were necessary, and an assessment of whether the changes achieved the same risk reduction intent;*
- c. *Descriptions of all planned WMP initiative spend vs actual WMP initiative spend an explanation of any differentials between planned and actual spends;*
- d. *A description of whether the implementation of WMP initiatives changes the threshold(s) for triggering a PSPS event and/or reduced the frequency, scale, and scope and duration of PSPS events; and*
- e. *A summary of all defects identified by the WSD within the annual compliance period, the correction actions taken, and the completion and/or estimated completion date.*

This report addresses each of the five components in a distinct subsection, for the reporting period of January 1, 2022, through December 31, 2022.

**A. An assessment of whether the EC met the risk reduction intent by implementing all of their approved WMP initiatives. i.e., the degrees to which initiative activities have reduced ignition probabilities.**

Pacific Power's risk assessment models are evolving to include a quantified and more granular approach to determine the utility's overall risk and potential consequence of both wildfire and PSPS. During the 2020-2022 cycle, Pacific Power leveraged a combination of California's HFTD map and the company's internal Localized Risk Assessment Model (LRAM) to qualitatively evaluate relative risk and develop programs and inform strategies.

This relative risk evaluation was used to assign a composite wildfire risk score based on outage data, vegetation data and historical climatological data for sections of the electric grid which can be isolated by protective devices guided the implementation of the following grid hardening projects in 2022:

- Completion of 62 miles of grid hardening under the covered conductor program.

- Replacement of 2,113 expulsion fuses with non-expulsion fuses to reduce the potential for ignition associated with fuse operations;
- Replacement of 1,101 distribution poles;
- Upgrade of 44 line reclosers and substation relays to enable advanced protection and control schemes, incorporate greater customization and more complex logic, and provide additional event data.

The relative risk assessment based on the HFDT map and LRAM does not provide metrics for post-mitigation evaluation. Pacific Power believes that wildfire risk reduction is achieved through cumulative implementation of all WMP initiatives. Along those lines, it is extremely difficult to assign quantitative risk reduction values to one individual initiative or initiatives implemented at a certain location.

At the urging of the Commission, Pacific Power has spent a significant amount of time and resources in the past two years learning from what other utilities are developing, as to better align risk modeling for initiative evaluation. This learning has taken place both informally, through workshops and consortiums, and more formally, as part of both the OEIS-guided joint utility risk modeling working group and the Joint Utility Covered Conductor Effectiveness Workstream. Based on experience learned from collaboration and sharing of best practices with other utilities and leading companies in the industry, in 2022 Pacific Power began implementing new tools and is currently on the path toward operation of a fully quantified risk model by the end of 2024.

**B. A full and complete listing of all change orders and any other operational changes, such as initiative location changes, made to WMP initiatives, with an explanation of why the changes were necessary, and an assessment of whether the changes achieved the same risk reduction intent.**

Pacific Power did not submit change orders in 2022. Information regarding the change order submitted on November 1, 2021 can be found in the 2021 ARC.

**C. Descriptions of all planned WMP initiative spend vs actual WMP initiative spend and an explanation of any differentials between planned and actual spends.**

PacifiCorp’s planned 2022 and actual spend will be included in the upcoming 2023 WMP due on May 8, 2023, as Table 4.2 in Section 4.3. This table is reproduced below with additional information regarding the cost variation. Overall, in 2022, Pacific Power spent \$84,657 thousand as compared to a plan of \$91,900 thousands , which reflects a variance of \$7,243 thousands , or 7.9% under plan.

<b>Initiative</b>	<b>Planned (\$ thousands)</b>	<b>Actual (\$ thousands)</b>	<b>Variance (\$ thousands)</b>	<b>Variance Description</b>
A summarized risk map that shows the overall ignition probability and estimated wildfire consequence along the electric lines and equipment	\$186	\$58	(\$128)	Planned program cost included data scientist personnel time to develop risk models. Resource recruiting challenges impacted actuals.
Advanced weather monitoring and weather stations	\$1,349	\$1,021	(\$328)	2022 planned spend assumed weather station installations also required pole replacements. 2022 actuals reflect that weather station installations did not always require pole replacements and the program scope was successfully delivered for less than the plan.
Continuous monitoring sensors	\$166	\$193	\$27	Actual costs incurred were higher than planned. Costs have increased since initial project development.
Fault indicators for detecting faults on electric lines and equipment	\$1,000	\$1,067	\$67	Within 10% of plan 184 more units installed than original plan.
Forecast of a fire risk index, fire potential index, or similar	\$164	\$118	(\$46)	Since implementing the California WMP, Pacific Power has expanded the software component of the situational awareness program system-wide to include the company’s service territory outside of California. As a result, Pacific Power has revised its California allocation to align with other software projects in use across the company. While the work and scope has not changed, California’s allocation of spend has reduced.
Weather forecasting and estimating impacts on electric lines and equipment	\$375	\$99	(\$276)	Since implementing the California WMP, Pacific Power has expanded the software component of the situational awareness program system-wide to include the company’s service territory outside of California. As a result, Pacific Power has revised its California allocation to align with other software projects in use across the company. While the work and scope has not changed, California’s allocation of spend has reduced.
Circuit breaker maintenance and installation to de-energize lines upon detecting a fault	\$402	\$110	(\$292)	Actual spend on circuit breaker replacement in 2022 depends on inspection results and equipment performance. Fewer than expected circuit breakers related work required in 2022 than planned.

Covered conductor installation	\$67,200	\$52,500	(\$14,700)	2022 scope of 112 planned miles not fully constructed. Material, construction labor, and permit delays were the primary reasons for delays.
Crossarm maintenance, repair, and replacement	\$272	\$697	\$425	Crossarm repair and replacement spending is dependent on inspection results. In 2022, incremental spend over plan was required to implement the program.
Expulsion fuse replacement	\$1,644	\$2,516	\$872	Pacific Power experienced an increase in unit cost for fuse replacement over plan. These revised costs will be used for future planning purposes.
Installation of system automation equipment	\$4,610	\$7,184	\$2,574	Actual costs experienced exceeded planned values.
Mitigation of impact on customers and other residents affected during PSPS event	\$325	\$356	\$31	Within 10% of plan
Pole loading infrastructure hardening and replacement program based on pole loading assessment program	\$150	\$0	(\$150)	Pole replacement shifted under the covered conductor installation program and, therefore, costs with engineering reported under line rebuild (covered conductor installation) program.
Detailed inspections of distribution electric lines and equipment	\$188	\$204	\$16	Within 10% of plan
Detailed inspections of transmission electric lines and equipment	\$9	\$53	\$44	Transmission inspections (including detailed inspections) experienced a higher than planned unit cost
Infrared inspections of transmission electric lines and equipment	\$80	\$73	(\$7)	Within 10% of plan
Intrusive pole inspections	\$174	\$125	(\$49)	Intrusive pole inspections were completed for a lower unit cost than planned.
Patrol inspections of distribution electric lines and equipment	\$264	\$289	\$25	Within 10% of plan
Patrol inspections of transmission electric lines and equipment	\$37	\$144	\$107	Transmission inspections (including patrol inspections) experienced a higher than planned unit cost due to an increase in labor rates.
Personnel monitoring areas of electric lines and equipment in elevated fire risk conditions	\$0	\$580	\$580	Pacific Power does not traditionally budget for this item specifically but maintains the capability to perform this task and incur this expense as needed and during emergencies. In 2022, planned spend for this initiative was not formally included in the WMP but will be included in future plans for transparency and tracking purposes.
Quality assurance / quality control of inspections	\$36	\$37	\$1	Within 10% of plan No significant variance from plan
Substation inspections	\$186	\$188	\$2	Within 10% of plan No significant variance from plan
Detailed inspections and management practices for vegetation clearances around distribution electrical lines and equipment	\$6,848	\$6,881	\$33	Within 10% of plan No significant variance from plan

Detailed inspections and management practices for vegetation clearances around transmission electrical lines and equipment	\$67	\$840	\$773	Pacific Power experienced an increase in vegetation management costs.
Remote sensing inspections of vegetation around distribution electric lines and equipment	\$34	\$34	\$0	No variance
Remote sensing inspections of vegetation around transmission electric lines and equipment	\$10	\$10	\$0	No variance
Patrol inspections of vegetation around distribution electric lines and equipment	\$244	\$374	\$130	Pacific Power experienced an increase in vegetation management costs.
Patrol inspections of vegetation around transmission electric lines and equipment	\$39	\$23	(\$16)	Pacific Power was able to deliver the full scope of patrol inspections for less than planned cost.
Vegetation management to achieve clearances around electric lines and equipment	\$5,171	\$8,696	\$3,525	Vegetation Management spend to achieve clearance around electric lines and equipment is heavily depending in inspection results conducted in 2022 and labor costs. In 2022, costs were significantly higher than plan due to an increase in labor rates.
Centralized repository for data	\$400	\$52	(\$348)	Spending in this program includes expenditures associated with a centralized team to manage program delivery. Work orders and tracking were set up in 2022 and only a portion of the costs were captured under these new work orders. While the work was completed as planned, only a fraction of the costs were captured for reporting in this way. Moving forward, Pacific Power intends to fully capture these costs throughout the year to better reflect actuals.
Customer support in emergencies	\$200	\$1	(\$199)	Advancements to Pacific Power's existing Public Safety Partner portal were delayed due to contractor resource constraints. Project scope is still expected to occur and will be shifted into the new 2023-2025 WMP.
Disaster and emergency preparedness plan	\$10	\$31	\$21	Pacific Power experienced higher than anticipated costs to complete planned tabletop and emergency management exercises in 2022.
Community engagement	\$60	\$103	\$43	Pacific Power experienced higher than anticipated costs to complete planned external outreach and customer engagement in 2022.
<b>Total</b>	<b>\$91,900</b>	<b>\$84,657</b>	<b>(\$7,243)</b>	Within 10% of plan

**D. A description of whether the implementation of WMP initiatives changes the threshold(s) for triggering a PSPS event and/or reduced the frequency, scale, and scope and duration of PSPS events.**

The implementation of initiatives did not have change the Company's thresholds for triggering a PSPS event in 2022 and/or reducing the frequency, scale, scope and duration of PSPS events in 2022. It is important to note that Pacific Power did not perform a PSPS event in its

California service territory in 2022. Pacific Power remains committed to the continued deployment of grid hardening in targeted PSPS zones to significantly reduce the need for PSPS.

Pacific Power plans to continue reviewing how the implementation of grid hardening and other mitigation initiatives will impact the PSPS decision making processes and risk assessment framework following the 2023-2025 WMP Guidelines from Energy Safety.

**E. A summary of all defects identified by the WSD within the annual compliance period, the correction actions taken, and the completion and/or estimated completion date.**

As of January 1, 2023, Pacific Power had not received any open Notices of Violation (NOV) or Notices of Defect (NOD).

**CONCLUSION**

PacifiCorp's WMP efforts continue to evolve, both through internal learning and through additional guidance received from the Commission, Energy Safety (formerly Wildfire Safety Division), stakeholders, and our customers. While the Company has made great progress in implementing the objectives of its 2022 WMP, it continues to evaluate and refine programs and measures to ensure that it is taking actions that will reduce risk without imposing unnecessary costs and burdens on customers.