

Independent Evaluator Report on Wildfire  
Mitigation Plan Compliance  
Bureau Veritas North America, Inc.  
PacifiCorp dba Pacific Power



**BUREAU  
VERITAS**



**C2 GROUP**

**Bureau Veritas North America, Inc.**  
**C2 Group**  
**May 23, 2023**

## Contents

INTRODUCTION..... 2

INDEPENDENT EVALUATOR REVIEW OF COMPLIANCE..... 7

**Disclaimer**

This report has been compiled through the process of observation and the review of provided documents. The report is intended to serve only as a guide to assist with achieving compliance with regulatory requirements instituted by the Oregon Public Utility Commission (OPUC) for an independent evaluation of Investor-Owned Utility providers Wildfire Mitigation Practices. Bureau Veritas North America, Inc. (BVNA) is not the designer, implementer, or owner of the Wildfire Mitigation Plan (WMP) and is not responsible for its content, implementation, and/or any liabilities, obligations, or responsibilities arising therein.

The report reflects only those conditions and practices which could be ascertained through observation at the time of evaluation. This report is limited to those items specifically identified herein or as may be further required by OPUC at the time of the evaluation. The report does not represent those dangers, hazards, and/or exposures that do not in fact exist. BVNA shall only be responsible for the performance of the services identified or defined in our specific scope of services.

BVNA does not assume any responsibility for inaccurate, erroneous, or false information, expressed or implied, that is given to BVNA as the Independent Evaluator (IE). In addition, BVNA shall have no responsibility to any third party or for any other matters not directly caused by BVNA or that are beyond the reasonable control of BVNA. BVNA’s liability is limited to the cost of the services expressed herein or as otherwise agreed to by BVNA by a separate written contract.

## INTRODUCTION

### BACKGROUND

Mitigation Plans, which includes rules 860-024-0018, 860-300-0020, 860-300-0030, 860-300-0040 amended effective September 22, 2022, per PUC 6-2022. Per Orders, No. 22-131, No.22-132, and No. 22-133, effective April 28, 2022, the filed 2022 Wildfire Mitigation Plan (WMP) for the following public utilities in the State of Oregon was approved by Oregon Public Utility Commission (OPUC):

- PACIFICORP, dba PACIFIC POWER - Docket No: UM 2207
- PORTLAND GENERAL ELECTRIC COMPANY - Docket No: UM 2208
- IDAHO POWER COMPANY - Docket No: UM 2209

Additionally, the OPUC directed the three public utilities to engage with OPUC Staff and stakeholders through a workshop process prior to filing its 2023 Plan. The OPUC and Bureau Veritas North America, Inc. (BVNA), who has been selected as an Independent Evaluator (IE) by the OPUC, evaluated the 2023 WMPs and served as an Expert Witness to provide written testimony on the plan’s conformance to the State’s requirements.

### SCOPE

Pursuant to the OPUC’s Final IE Scope of Work (SOW) for the Utility Expert Witness, BVNA, in partnership with C2 Group, has reviewed Pacific Power’s 2023 Wildfire Mitigation Plan to verify compliance with the minimum requirements outlined in OAR 860-024-0018, 860-300-020, 860-300-0040, 860-300-0050, 860-300-0070 as summarized in Table 1 below.

**Table 1: Wildfire Mitigation Plans and Updates**  
**Minimum Requirements as set forth in Section 3(2)(a)-(h), chapter 592, Oregon Laws 2021**  
**Senate Bill 762 (2021) and OAR 860-300**

OAR 860-024-0018, 860-300-020, 860-300-0040, 860-300-0050, 860-300-0070	ID	Wildfire Mitigation Plan Requirements
(1)(a)(A) & (B)	1	Identified areas that are subject to a heightened risk of wildfire, including determinations for such conclusions, and are: (A) Within the service territory of the Public Utility, and (B) Outside the service territory of the Public Utility but within the Public Utility's right-of-way for generation and transmission assets.

(1)(b)	2	Identified means of mitigating wildfire risk that reflects a reasonable balancing of mitigation costs with the resulting reduction of wildfire risk.
(1)(c)	3	Identified preventative actions and programs that the Public Utility will carry out to minimize the risk of utility facilities causing wildfire.
(1)(d)	4	Demonstration of outreach efforts to regional, state, and local entities, including municipalities regarding a protocol for the de-energization of power lines and adjusting power system operations to mitigate wildfires, promote the safety of the public and first responders and preserve health and communication infrastructure.
(1)(e)	5	Identified protocol for the de-energization of power lines and adjusting of power system operations to mitigate wildfires, promote the safety of the public and first responders and preserve health and communication infrastructure, including a PSPS communication strategy consistent with OAR 860-300-0040 and OAR 860-300-0050.
(1)(f)	6	Identification of the community outreach and public awareness efforts that the Public Utility will use before, during and after a wildfire season, consistent with OAR 860-300-0040 and OAR 860-300-0050.
(1)(g)	7	Description of procedures, standards, and time frames that the Public Utility will use to inspect utility infrastructure in areas the Public Utility identified as heightened risk of wildfire, consistent with OAR 860-024-0018.
(1)(h)	8	Description of the procedures, standards, and time frames that the Public Utility will use to carry out vegetation management in in areas the Public Utility identified as heightened risk of wildfire, consistent with OAR 860-024-0018.
(1)(i)	9	Identification of the development, implementation, and administrative costs for the plan, which includes discussion of risk-based cost and benefit analysis, including consideration of technologies that offer co-benefits to the utility's system.
(1)(j)	10	Description of participation in national and international forums, including workshops identified in section 2, chapter 592, Oregon Laws 2021, as well as research and analysis the Public Utility has undertaken to maintain expertise in leading edge technologies and operational practices, as well as how such technologies and operational practices have been used develop implement cost effective wildfire mitigation solutions.

(1)(k)	11	Description of ignition inspection programs, as described in Division 24 of these rules, including how the utility will determine, and instruct its inspectors to determine conditions that could pose an ignition risk on its own equipment and pole attachments.
--------	----	--

Pacific Power provides electric service to more than 800,000 customers in 243 communities across Oregon, Washington, and northern California. The Oregon service territory is diverse and covers various areas of the state, including part of the Portland-metro area, west-central Oregon, southwest Oregon, and northeast Oregon. Pacific Power overhead electric assets in Oregon include:

- 3,056 line-miles of overhead transmission lines
- 12,890 line-miles of overhead distribution circuits.

Pacific Power has designated a portion of their Oregon service territory to be in Fire High Consequence Areas (FHCA), locations with a heightened risk of catastrophic wildfires, and started the implementation of wildfire mitigation measures for those areas as outlined in their WMP. Pacific Power overhead electric assets in Oregon in the FHCAs include:

- 413 line-miles of overhead transmission lines (14% of total)
- 2,264 line-miles of overhead distribution circuits ( 18% of total)

Pacific Power further designated a subset of the FHCA to areas with a heightened risk of catastrophic wildfires; these areas are referred to as Public Safety Power Shutoff Zones, or (PSPS) zones. These FHCA subset areas, deemed pockets of the most extreme fire risk, are subject to PSPS events. Pacific Power overhead electric assets in Oregon in the PSPS zones include:

- 1,336 line-miles of overhead distribution circuits (9% of total)
- 0 line-miles of overhead transmission circuits (0% of total)



**Figure 1:** Map of Pacific Power's Oregon Service Territory

In part, driven by climate change, the Western United States continues to experience an unprecedented number of catastrophic wildfires, many reaching higher and typically wetter elevations, and climate forecasts suggest this to be a continuing trend. These effects and trends affected much of Pacific Power's service area and developed the 2023 Oregon WMP to outline and guide mitigation strategies to reduce the probability of utility-related wildfires. The plan's timeline, specific objectives, key deliverables, and estimated costs are covered within Pacific Power's WMP. The following includes a comprehensive review and assessment of Pacific Power's 2023 Oregon WMP by the OPUC's IE.

## Key Recommendations

The IE conducted a compliance review of Pacific Power's 2023 WMP by examining the information provided in the plan and comparing it to the plan requirements set forth in Senate Bill 762 and OAR 860-300. Additionally, the IE conducted interviews with Emergency Management officials to evaluate Pacific Power's outreach efforts regarding communication and operational protocols for the de-energization of power lines and adjusting power system operations to mitigate wildfires, along with the demonstration of community outreach efforts as it relates to Public Safety Power Shutoff (PSPS).

Assessments of the WMP sections were made following the Utility Expert Witness final SOW and further guided by BVNA's "Expectation of Demonstrated Compliance" matrix, which identifies detailed criteria for each plan required topic to guide the WMP evaluation.

The majority of the WMP sections appeared to be in compliance and adhere to requirements listed above in Table 1: Wildfire Mitigation Plans and Updates, Minimum Requirements as set forth in Section 3(2)(a)-(h), chapter 592, Oregon Laws 2021. A summarization of the IE's key recommendations is demonstrated below:

- The IE recommends that for future WMPs Pacific Power continues to include details of the analysis completed to identify areas subject to heightened risk of wildfires and provide updates on available technologies and methodologies for identifying high risk zones both within service territories and outside service territories but within Pacific Power right-of-ways.
- The IE also recommends that for future WMPs Pacific Power include details of the analysis completed to identify the riskiest specific asset features, such as conductor type. With distribution hardening projects in the high risk zones projected to take eight years, it is important to understand how projects are being prioritized based on varying asset risk levels.
- The IE recommends that for future WMPs Pacific Power include the analysis of comparing measured risk reduction of plan activities to their costs, a cost-benefit analysis.
- The IE also recommends that for future WMPs Pacific Power include a description of how the overall effectiveness of the plan activities will be measured, as well as information on wildfires in the service territory for the prior year.
- The IE recommends that for future WMPs, Pacific Power shows the two-tier map for Tier 2 and Tier 3 wildfire risk zones across its entire territory in Oregon and clearly delineates the transmission lines across the different zones and tiers.
- Additionally, IE recommends that for future WMPs, Pacific Power correlates the preventative actions taken across the various sections of the WMP and quantify Pacific Power's overall preventative actions and their compound effectiveness in reducing wildfire risk
- The IE recommends that for future WMPs Pacific Power include discussion of specific feedback provided by Public Safety Partners from the various engagement channels and how the input contributed to the development of the WMP.
- Although identified in Section 8 of the WMP, the IE recommends that Pacific Power continue to include more information regarding procedures to re-energize lines after a PSPS event. It is also recommended that specific lessons learned or findings from after action reports be included in future WMPs regarding the execution of PSPSs.
- The IE recommends that Pacific Power continue to include more information about their program of modifying system operations; where in the service territory modifications are made, what conditions trigger the modifications, who makes the decision to modify

operations, and the analysis used to determine such protocol. Without specific information included in the WMP, it is difficult to measure successes and procedure adjustments in future WMPs.

- The IE recommends that for future WMPs, Pacific Power continue to provide updated discussion regarding the wildfire mitigation engagement strategy including results and key learnings from the previous year's outreach and plans for future engagement.
- The IE recommends that for future WMPs, Pacific Power identify QA/QC programs used to validate inspection activities in wildfire risk areas including procedures and quantity of inspections reviewed.
- The IE recommends that for future WMPs, Pacific Power provide more information regarding their quality control/quality assurance program and audits for vegetation management work completed in the FHCAs; measures employed, frequency, and resource types. Although 2022 achievements are found in Section 13, the IE recommends detailing vegetation management accomplishments that not only include line miles cleared, but number of also number of structures that are impacted. Additionally, the IE recommend that any analysis of historical events pertaining to Pacific Power's power lines, specific equipment type, vegetation, and wildfires be provided that informed the program's design and its success factors.
- The IE recommends that for future WMPs, Pacific Power continue to provide defined details of the cost-benefit analysis completed to support decisions of program strategy and scale. The programs are consistent with emerging industry best practices; however, there is little information provided of any cost-benefit. The IE also recommends the utility highlight their successes with detailed tables and illustrations describing each program identified not only in Section 13, but throughout the WMP in each respective section.
- The IE recommends that for future WMPs Pacific Power expand the discussion and provide highlights and additional specifics of collaboration with industry channels, both information and knowledge shared from Pacific Power, and valuable information learned through the engagements.
- The IE recommends that for future WMPs Pacific Power provide a description of procedures and standards used to train inspectors in the determination of ignition risks.

The following paragraphs provide a comparative analysis of Pacific Power's WMP and the minimum requirements set forth in Section 3(2)(a)-(h), chapter 592, Oregon Laws 2021. This report considers all information demonstrated in Pacific Power's WMP, industry practices, depicted regulation and further contains IE recommendations for future WMPs.

## INDEPENDENT EVALUATOR REVIEW OF COMPLIANCE

Each report section hereafter contains an evaluation of the WMP requirements, organized by subject, as listed in the order in Table 1. Note, Pacific Power's WMP does not follow the order of items as demonstrated in Table 1.

Furthermore, the following terms are used in each table of compliance to illustrate the plans completeness. These definitions are provided for the reader to understand the level of demonstrated compliance found within the plan:



**Met:** The term acknowledges that the utility has adequately demonstrated information in the plan that meets the requirements of the identified rule.

**Substantially Met:** The term indicates that the utility has largely but not wholly met the requirements of the rule.

**Partially Met:** The term indicates that the utility has to some extent, or some degree has provided information within the plan that partially met or partially demonstrated the plan's compliance with the rule. More information, clarity, or detail is required to demonstrate the plan's compliance with the rule.

**Not Met:** The term indicates that the utility has not provided any information or detail that addresses the requirements of the rule or is grossly understated.

### Wildfire Mitigation Plan Adherence to Requirements

**Subject Area 1: *Identified areas that are subject to a heightened risk of wildfire, including determinations for such conclusions and are:***

- (A) Within the service territory of the Public Utility, and
- (B) Outside the service territory of the Public Utility but within the Public Utility's right-of-way for generations and transmission assets

The IE utilized the following "Expectation of Demonstrated Compliance" descriptions to evaluate Subject Area 1 of the plan, which covers wildfire area risk mapping in Pacific Power's service territory and rights-of-way.

- Describe the approach, data inputs, analysis completed, quantitative risk asset tools and techniques, and industry standards utilized to identify areas subject to heightened risk of wildfire.
- Describe analysis to both evaluate risk from the environment and specific utility asset types (if considered).
- Describe process that will be followed to evaluate areas on an annual basis.

### Review of Initiatives

Pacific Power with the help of a wildland fire computer modeling consultant identified areas of elevated wildfire risk in their Oregon service territory and outside the service territory within the right-of-way for generation and transmission assets and refer to the areas as Fire High Consequence Areas (FHCA). The risk analysis focuses on the potential impact in terms of harm to people and damage to property and used various data sets, data sources and processes, which generally included wind/weather inputs from WRF (Weather Research and Forecasting); the fire spread analysis also applied topography, fuel data, and structure density to complete the modeling. Individual blocks of geographic area, each a two-kilometer square cell, received a grid score corresponding to its relative wildfire risk. The outputs of the prior Pacific Power California mapping project were used for calibration and assigned grid cell scores in Oregon correlating with California statewide grid cell scores. Upon completion of computer modeling, a validation activity was completed by evaluating historic fire perimeters, existing Pacific Power facility equipment and local conditions.

Pacific Power analyzed records of unplanned outages over seven years to measure the risk of utility assets. Outage types identified with possible correlation to ignition potential include equipment failure, operational and tree preventable. No information is provided regarding specific utility asset features (i.e., small copper conductor, wood cross arms) that were analyzed to have the highest risk. Pacific Power does state the recognition and understanding that advanced fire risk modeling methodologies exist and that they plan to evolve and assess their wildfire risk model. The implementation of the Wildfire Risk Reduction Model indicates Pacific Power continues to evaluate available means of identifying and mitigating risks from the environment and utility assets.

Pacific Power has addressed the updating frequency of their baseline risk mapping by assessing the timing and maturity of their maintenance and inspection programs that include asset inspections, vegetation management and long term investments. Pacific Power plans to refresh the baseline risk mapping on a five-year cycle as a result of their assessment.

### Demonstrated Compliance

Table 2 summarizes the findings of demonstrated compliance for Subject Area 1.

**Table 2: Subject Area 1 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Describe the approach, data inputs, analysis completed, quantitative risk asset tools and techniques, and industry standards utilized to identify areas subject to heightened risk of wildfire.	Met
2	Describe analysis to both evaluate risk from the environment and specific utility asset types.	Met
3	Describe process that will be followed to evaluate areas on an annual basis.	Met

### Recommendations for Future WMPs

The IE recommends that for future WMPs Pacific Power continues to include details of the analysis completed to identify areas subject to heightened risk of wildfires and provide updates on available technologies and methodologies for identifying high risk zones both within service territories and outside service territories but within Pacific Power right-of-ways.

The IE also recommends that for future WMPs Pacific Power include details of the analysis completed to identify the riskiest specific asset features, such as conductor type. With distribution hardening projects in the high risk zones projected to take eight years, it is important to understand how projects are being prioritized based on varying asset risk levels.

**Subject Area 2: *Identify means of mitigating wildfire risk that reflects a reasonable balancing of mitigation cost with the resulting reduction of wildfire risk.***

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 2 of the plan, which covers wildfire risk mitigation and the balance of cost with wildfire risk reduction.

- Describe the main activities being utilized to reduce wildfire risk, how they reduce risk, and how the utility's planned chosen activities balance costs with effectiveness of reducing wildfire risk.
- Describe how the effectiveness of the activities will be measured or have been measured.

**Review of Initiatives**

Throughout the WMP Pacific Power identifies multiple activities utilized to reduce fire risk, as well as how they reduce wildfire risk. Pacific Power also outlines core principles that guide their WMP investments. There is not a specific section of the report that describes an analysis completed that measures the risk reduction of specific activities and compares it to its cost to complete the activities.

Chapter 13 of the WMP provides detailed descriptions of current and future mitigation activities along with results of previous year activities. A detailed description of methods used to measure activity successes or failures was not specifically provided.

**Demonstrated Compliance**

Table 3 summarizes the findings of demonstrated compliance for Subject Area 2.

**Table 3: Subject Area 2 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Describe the main activities being utilized to reduce wildfire risk, how they reduce risk, and how the utility's planned chosen activities balance costs with effectiveness of reducing wildfire risk.	Substantially Met
2	Describe how the effectiveness of the activities will be measured, or have been measured.	Substantially Met

**Recommendations for Future WMPs**

The IE recommends that for future WMPs Pacific Power include the analysis of comparing measured risk reduction of plan activities to their costs, a cost-benefit analysis.

The IE also recommends that for future WMPs Pacific Power include a description of how the overall effectiveness of the plan activities will be measured, as well as information on wildfires in the service territory for the prior year.

**Subject Area 3: Identified preventative actions and programs that the Public Utility will carry out to minimize the risk of utility facilities causing wildfire.**

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 3 of the plan, which covers the preventative actions and programs that the Public Utility carries out to reduce the wildfire risk.

- Describe preventative actions that are specific to reducing the risk and exposures to wildfire, and the measurable improvements, risk reductions, or quantitative results from the preventative actions or programs.

**Review of Initiatives**

Pacific Power provides an overview of preventative actions and programs planned to reduce wildfire risk in its WMP. Pacific Power has shown its Fire High Consequence Areas across its entire territory in Oregon, listed the breakdown of transmission lines per voltage. Specific measurable/quantitative preventative actions are identified in the WMP for the Line Rebuild program, advanced system protection and control, and expulsion fuse replacement. Other preventative actions to reduce the wildfire risk are covered under Pacific Power’s various initiatives for situational awareness and associated wildfire risk modeling, inspection and correction programs, vegetation management, and early fault detection technology, as detailed in Subject Areas 2, 7, 8, and 10.

**Demonstrated Compliance**

Table 4 summarizes the findings of demonstrated compliance for Subject Area 3.

**Table 4: Subject Area 3 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Describe preventative actions that are specific to reducing the risk and exposures to wildfire, and the measurable improvements, risk reductions, or quantitative results from the preventative actions or programs.	Substantially Met

**Recommendations for Future WMPs**

The IE recommends that for future WMPs, Pacific Power shows the two-tier map for Tier 2 and Tier 3 wildfire risk zones across its entire territory in Oregon and clearly delineates the transmission lines across the different zones and tiers.

Additionally, IE recommends that for future WMPs, Pacific Power correlates the preventative actions taken across the various sections of the WMP and quantify Pacific Power's overall preventative actions and their compound effectiveness in reducing wildfire risk.

**Subject Area 4: *Demonstration of outreach efforts to regional, state, and local entities, including municipalities regarding a protocol for the de-energization of power lines and adjusting power system operations to mitigate wildfire, promote the safety of the public and first responders and preserve health and communication infrastructure.***

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 4 of the plan, which covers outreach to regional, state, and local entities regarding protocols for de-energizing power lines and adjusting power system operations.

- Provide geographical boundary of impacted areas of the service territory that may be affected by a PSPS event or modified power system operations.
- Provide list of specific regional, state, and local entities, including municipalities, who have been reached out to, when are they reached out to, who will be reached out to, and the results of the outreach. Provide detail of topics covered, and input from agencies that have impacted utility wildfire risk reduction planned activities.

### Review of Initiatives

Pacific Power identifies multiple approaches for engagement with Public Safety Partners including general outreach, workshops, tabletop exercises, CRC demonstrations, and functional exercises. A summary of Public Safety Partner engagement activities completed in 2022 is provided along with a summary of activities planned for 2023. Discussion of feedback received from Public Safety Partners from the completed activities is not provided.

Pacific Power indicates that a project has been implemented to develop a secure communication portal for information sharing with Public Safety Partners in the event of a PSPS. The project timeline identifies that development of the portal will continue throughout 2023 with launch expected at the beginning of 2024.

Pacific Power outlines strategy for Community Resource Centers to be activated for PSPS events in collaboration with local Public Safety Partners including a list and maps of pre-identified brick and mortar locations. Discussion of CRC activation in 2022 identified opportunities to strategize on CRC locations. Public Safety Partner Coordination Strategy has been updated to include CRC demonstrations.

### Demonstrated Compliance

Table 5 summarizes the findings of demonstrated compliance for Subject Area 4.

**Table 5: Subject Area 4 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Provide geographical boundary of impacted areas of the service territory that may be affected by a PSPS event or modified power system operations.	Met

2	<p>Provide list of specific regional, state, and local entities, including municipalities, who have been reached out to, when are they reached out to, who will be reached out to, and the results of the outreach. Provide detail of topics covered, and input from agencies that have impacted utility wildfire risk reduction planned activities.</p>	Met
---	--	-----

### Recommendations for Future WMPs

The IE recommends that for future WMPs Pacific Power include discussion of specific feedback provided by Public Safety Partners from the various engagement channels and how the input contributed to the development of the WMP.

**Subject Area 5: *Identified protocol for the de-energization of power lines and adjusting of power system operations to mitigate wildfires, promote the safety of the public and first responders and preserve health and communication infrastructure, including a PSPS communication strategy consistent with OAR 860-300-0040 and OAR 860-300-0050.***

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 5 of the plan, which covers protocols for de-energizing power lines and adjusting power system operations.

- Overview of steps completed by the utility leading up to a PSPS and closing a PSPS event.
- Detailed descriptions of each step of the process, including: information used, and analysis completed to make decisions for the steps, utility staff involved in the steps and the utility decision-maker(s), interaction with entities outside of the utility that impact decisions, communication protocols (internal and external), the typical duration of each step.
- Description of adjusted power system operations to mitigate wildfire, and description of operations in non-wildfire threat conditions. Include details of information used, analysis completed before adjusting operations, utility staff involved with adjusting operations, reasoning/logic to specific operational choices.
- Describe vulnerabilities to stakeholders such as emergency responders and public safety officials when de-energizing of the system occurs and what is necessary to communicate when a re-energization occurs due to an emergent situation and how they are defined.

### Review of Initiatives

Based on multiple deep dive sessions, reviewing written responses from the utility and reviewing the 2022 WMP, Pacific Power has a series of defined steps and decision points documented to follow for deciding when to initiate a Public Safety Power Shutoff (PSPS), including individuals and departments who are involved with the steps and decisions. Standard notification timelines have also been established for de-energization warnings and re-energization estimated completion. Additional detail is provided in Section 8 of the 2022 WMP regarding the steps de-energize and re-energize before and after an event.

Pacific Power continues to enhance its existing system operations for transmission lines and distribution circuits to mitigate wildfire risk. Examples of enhancements modifications include more frequently disabling distribution reclosers, the use of modified and more sensitive protection and control schemes, or Elevated Fire Risk (EFRs), and patrolling prior to line testing. Additionally Pacific Power installed

Communicating Fault Current Indicators (CFCIs) to better remotely pinpoint fault locations in the FHCA. It is unclear where in the FHCA and when the modifications are being deployed.

### Demonstrated Compliance

Table 6 summarizes the findings of demonstrated compliance for Subject Area 5.

**Table 6: Subject Area 5 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Overview of steps completed by the utility leading up to a PSPS and closing a PSPS event.	Met
2	Detailed descriptions of each step of the process, including: information used and analysis completed to make decisions for the steps, utility staff involved in the steps and the utility decision-maker(s), interaction with entities outside of the utility that impact decisions, communication protocols (internal and external), typical duration of each step.	Met
3	Description of adjusted power system operations to mitigate wildfire, and description of operations in non-wildfire threat conditions. Include details of: information used, and analysis completed before adjusting operations, utility staff involved with adjusting operations, reasoning/logic to specific operational choices.	Met
4	Describe vulnerabilities to stakeholders such as emergency responders and public safety officials when de-energizing of the system occurs and what is necessary to communicate when a re-energization occurs due to an emergent situation and how they are defined.	Met

### Recommendations for Future WMPs

Although identified in Section 8 of the WMP, the IE recommends that Pacific Power continue to include more information regarding procedures to re-energize lines after a PSPS event. It is also recommended that specific lessons learned or findings from after action reports be included in future WMPs regarding the execution of PSPSs.

The IE recommends that Pacific Power continue to include more information about their program of modifying system operations; where in the service territory modifications are made, what conditions trigger the modifications, who makes the decision to modify operations, and the analysis used to determine such protocol. Without specific information included in the WMP, it is difficult to measure successes and procedure adjustments in future WMPs.

**Subject Area 6: Identification of the community outreach and public awareness efforts that the Public Utility will use before, during, and after a wildfire season.**

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 6 of the plan, which covers community outreach and public awareness efforts before, during, and after wildfire season.

- Detailed description of the Wildfire Mitigation Plan Engagement Strategy identifying planned forums and opportunities for follow up along with a description of the design considerations for inclusivity and accessibility.
- Detailed description of community outreach and public awareness efforts: content and messaging of outreach and communication, media platforms used to disseminate information, frequency of outreach, equity considerations.
- Description of metrics used to track and report the effect of community outreach and public awareness efforts.

**Review of Initiatives**

Pacific Power’s wildfire safety and preparedness engagement strategy employs multiple platforms for increasing awareness and community engagement including community forums, webinars, messaging via the Pacific Power website, and campaigns delivered via radio spots, video ads, digital audio ads, social media ads delivered both in English and Spanish. A timeline for planned outreach and engagement for 2023 is included.

Pacific Power includes an evaluation of the 2022 outreach campaign including a review of metrics to demonstrate overall effectiveness with a list of considerations for development of future WMPs.

**Demonstrated Compliance**

Table 7 summarizes the findings of demonstrated compliance for Subject Area 6.

**Table 7: Subject Area 6 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Detailed description of the Wildfire Mitigation Plan Engagement Strategy identifying planned forums and opportunities for follow up along with a description of the design considerations for inclusivity and accessibility.	Met
2	Detailed description of community outreach and public awareness efforts: content and messaging of outreach and communication, media platforms used to disseminate information, frequency of outreach, equity considerations.	Met



3	Comprehensive list of completed community outreach and public awareness effort types and planned (new or repeat type of engagement and outreach) effort types in 2022.	Met
---	--	-----

### Recommendations for Future WMPs

The IE recommends that for future WMPs, Pacific Power continue to provide updated discussion regarding the wildfire mitigation engagement strategy including results and key learnings from the previous year’s outreach and plans for future engagement.

### ***Subject Area 7: Description of procedures, standards, and time frames that the Public Utility will use to inspect utility infrastructure in areas the Public Utility identified as heightened risk of wildfire, consistent with OAR 860-024-0018.***

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 7 of the plan, which covers utility infrastructure inspections and corrections in the areas Pacific Power identified as high wildfire risk.

- Description of procedures and standards utilized to guide inspection activities in wildfire risk areas.
- Description of inspection activities in wildfire risk areas, detailed by miles and structures of impacted distribution and transmission assets, inspection types and methods, frequency, infraction categorization, infraction protocol.
- Explanation of logic/reasoning in selected inspection practices in wildfire risk areas.

### Review of Initiatives

Pacific Power is supplementing its existing overhead electric asset inspections and corrections program in the FHCAs. Additional primary elements are 1. Designating certain conditions as energy release risk conditions, 2. Increasing inspection frequencies in the FHCAs, 3. Reducing correction timeframes for fire threat conditions in the FHCA in alignment with requirements in OAR 860-024-0018(5)(b).

Pacific Power is also performing enhanced inspections annually utilizing infrared technology that is gathered using a helicopter flying over lines. Transmission lines operating at 69 kV and higher are included in the enhanced inspection program, and corrections of condition codes follow the same timeline as conditions found in FHCAs via other inspection methods.

Additionally, Pacific Power is identifying fire threat conditions for correction for assets within the FHCA that are not owned by Pacific Power. Pacific Power notifies the assets’ owners of identified conditions in need of correction.

The table below is included in Pacific Power’s WMP and summarizes the frequency of both non-FHCA and FHCA inspections.

Table 6: Planned Inspection Frequency in the FHCA

Inspection Type	Non-FHCA Frequency	FHCA Inspection Frequency
	(years)	(years)
<b>OH Distribution and Local Transmission (Less than 200 kV)</b>		
Visual	2	1
Detailed	10	5
Pole Test & Treat	10	10
<b>OH Main Grid (More than 200kV) - No Change</b>		
Visual	1	1
Detailed	2	2
Pole Test & Treat	10	10

For asset conditions identified by Pacific Power as having characteristics associated with a higher risk of wildfire potential, the timeline for correction has been updated to align with requirements in OAR 860-024-0018(5)(b) and is summarized in the table below included in Pacific Power’s WMP.

Table 7: Planned Correction Timeframes for Fire Threat Conditions in the FHCA

Condition Priority	Correction Timeframes
Imminent fire threat conditions	Immediate
All other fire threat conditions (Energy Release Risk within the FHCA)	Up to 180 days

### Demonstrated Compliance

Table 8 summarizes the findings of demonstrated compliance for Subject Area 7.

Table 8: Subject Area 7 Summary of Demonstrated Compliance

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Description of procedures and standards utilized to guide inspection activities in wildfire risk areas.	Met
2	Description of inspection activities in wildfire risk areas, detailed by miles and structures of impacted distribution and transmission assets, inspection types and methods, frequency, infraction categorization, infraction protocol.	Met
3	Explanation of logic/reasoning in selected inspection practices in wildfire risk areas.	Met

### Recommendations for Future WMPs

The IE recommends that for future WMPs, Pacific Power identify QA/QC programs used to validate inspection activities in wildfire risk areas including procedures and quantity of inspections reviewed

**Subject Area 8: *Description of the procedures, standards, and time frames that the Public Utility will use to carry out vegetation management in areas the Public Utility identified as heightened risk of wildfire, consistent with OAR 860-024-0018.***

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 8 of the plan, which covers vegetation management procedures, standards and timeframes in the areas Pacific Power identified as high wildfire risk.

- Description of vegetation management activities in non-high wildfire risk areas (trimming and clearing protocol and frequency, inspection frequency, QA/QC program, separated by transmission and distribution).
- Description of vegetation management activities in wildfire risk areas, detailed by miles and structures of impacted distribution and transmission assets, trimming, and clearing protocol and frequency, inspections, QA/QC program (separated clearly between distribution and transmission activities).
- Explanation of logic/reasoning in selected vegetation management practices in wildfire risk areas.
- Description of the process for reviewing practices and methods to ensure effectiveness with plan procedures.

### Review of Initiatives

Based on multiple deep dive sessions, reviewing written responses from the utility and reviewing the 2022 WMP, Pacific Power utilizes two forms of vegetation management in their service area; Regular Vegetation Management and FHCA Vegetation Management. Regular Vegetation Management activities include pruning of tall growing vegetation and removal of dead, dying or diseased trees to provide safe clearing distances between vegetation and power lines. This work is typically performed in the non-FHCA service area and on a planned 3 cycle. FHCA Vegetation Management activities include the above mentioned as well as completing annual vegetation inspections on all lines in the FHCA, with correction work also completed based on inspection results, increased minimum clearance distances for distribution cycle work, and annual pole clearing on subject equipment poles.

### Demonstrated Compliance

Table 9 summarizes the findings of demonstrated compliance for Subject Area 8.

**Table 9: Subject Area 8 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Description of vegetation management activities in non-high wildfire risk areas (trimming and clearing protocol and frequency, inspection frequency, QA/QC program, separated by transmission and distribution).	Met
2	Description of vegetation management activities in wildfire risk areas, detailed by miles and structures of impacted distribution and transmission assets, trimming, and clearing protocol and frequency, inspections, QA/QC program (separated clearly between distribution and transmission activities).	Substantially Met
3	Explanation of logic/reasoning in selected vegetation management practices in wildfire risk areas.	Met
4	Description of the process for reviewing practices and methods to ensure effectiveness with plan procedures.	Met

### Recommendations for Future WMPs

The IE recommends that for future WMPs, Pacific Power provide more information regarding their quality control/quality assurance program and audits for vegetation management work completed in the FHCAs; measures employed, frequency, and resource types. Although 2022 achievements are found in Section 13, The IE recommends detailing vegetation management accomplishments that not only include line miles cleared, but number of also number of structures that are impacted. Additionally, the IE recommend that any analysis of historical events pertaining to Pacific Power’s power lines, specific equipment type, vegetation, and wildfires be provided that informed the program’s design and its success factors.

**Subject Area 9: Identification of the development, implementation, and administrative costs for the plan, which includes a discussion of risk-based cost and benefit analysis, including consideration of technologies that offer co-benefits to the utility's system.**

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 9 of the plan, which covers the cost to develop, implement and administer the WMP, risk-based cost and benefit analysis, and consideration of technologies that offer co-benefits.

- Summary of plan activities that are incremental costs to "baseline" utility operations.
- Two detailed tables, one for capital costs and one for expense (O&M) costs, with annual costs for each plan activity, and a forecast of costs for the activities described in the plan that are anticipated to go beyond 2023.

- Summary discussion of decision-making process on planned expenditures, based on risk-based cost and benefit analysis, and co-benefits to the utility's system.

### Review of Initiatives

Based on multiple deep dive sessions, reviewing written responses from the utility and reviewing the 2022 WMP, Pacific Power identifies sixteen program categories in their WMP that require an increase in investment over multiple years. The program categories are listed in one of two tables, one for planned incremental capital expenditures, and one for planned incremental expense expenditures, each with costs forecasted from 2023 to 2027 (five-year forecast).

The guiding principle for Pacific Power's investment strategy is that the frequency of ignition events related to electric facilities can be reduced by engineering more resilient systems that experience fewer fault events.

Co-benefits of the WMP are listed, such improving public safety, work safety and reliability.

### Demonstrated Compliance

Table 10 summarizes the findings of demonstrated compliance for Subject Area 9.

**Table 10: Subject Area 9 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Summary of plan activities that are incremental costs to "baseline" utility operations.	Met
2	Two detailed tables, one for capital costs and one for expense (O&M) costs, with annual costs for each plan activity, and a forecast of costs for the activities described in the plan that are anticipated to go beyond 2022.	Met
3	Summary discussion of decision making process on planned expenditures, based on risk-based cost and benefit analysis, and co-benefits to the utility's system.	Met

### Recommendations for Future WMPs

The IE recommends that for future WMPs, Pacific Power continue to provide defined details of the cost-benefit analysis completed to support decisions of program strategy and scale. The programs are consistent with emerging industry best practices; however, there is little information provided of any cost-benefit. The IE also recommends the utility highlight their successes with detailed tables and illustrations describing each program identified not only in Section 13, but throughout the WMP in each respective section.

**Subject Area 10: *Description of participation in national and international forums, including workshops identified in section 2, chapter 592, Oregon Laws 2021, as well as research and analysis the Public Utility has undertaken to maintain expertise in leading edge technologies and operational practices, as well as how such technologies and operational practices have been used develop implement cost effective wildfire mitigation solutions.***

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 10 of the plan, which covers participation in workshops and forums, research, and analysis to maintain expertise in leading edge technologies and operational practices, and the application of the technologies and practices.

- Comprehensive list of national and international forums and state workshops attended by utility staff, and nature of participation in the forums and workshops (who attended from the utility, who presented from the utility).
- Research and analysis the utility is doing or has completed regarding leading edge technology and operational practices.
- Results of research and analysis of technology and operational practices that have been implemented into cost-effective wildfire mitigation solutions.

### Review of Initiatives

Pacific Power is an active member and participates in regional, national, and international industry collaboration channels around wildfire risk mitigation for utilities. Collaboration channels are listed in the WMP, however little detail is provided on specific outcomes of the engagements, and information shared by Pacific Power in the forums in the Industry Collaboration Narrative which remains consistent with what was previously provided in Pacific Power’s 2022 WMP. The plan summary, costs, and benefits table provides an outline of 2022 achievements and 2023 program objectives.

Details of research and development are provided for partnerships with the Oregon Department of Forestry and Texas A&M University.

### Demonstrated Compliance

Table 11 summarizes the findings of demonstrated compliance for Subject Area 10.

**Table 11: Subject Area 10 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Comprehensive list of national and international forums and state workshops attended by utility staff, and nature of participation in the forums and workshops (who attended from the utility, who presented from the utility).	Substantially Met
2	Research and analysis the utility is doing or has completed regarding leading edge technology and operational practices.	Met

3	Results of research and analysis of technology and operational practices that have been implemented into cost-effective wildfire mitigation solutions.	Met
---	--	-----

### Recommendations for Future WMPs

The IE recommends that for future WMPs Pacific Power expand the discussion and provide highlights and additional specifics of collaboration with industry channels, both information and knowledge shared from Pacific Power, and valuable information learned through the engagements.

**Subject Area 11: *Description of ignition inspection program, as described in Division 24 of these rules, including how the utility will determine, and instruct its inspectors to determine, conditions that could pose an ignition risk on its own equipment and on pole attachments.***

The IE utilized the following “Expectation of Demonstrated Compliance” descriptions to evaluate Subject Area 11 of the plan, which covers utility infrastructure ignition inspection programs in the areas Pacific Power identified as high wildfire risk. This evaluation was completed in conjunction with Subject Area 7.

- Detailed Information associated with the factors/values considered to support the inspector instruction for identification of ignition risks.
- Description of procedures and standards used to train inspectors in the determination of ignition risks.

### Review of Initiatives

Pacific Power employs various initiatives for inspection and correction of identified conditions for transmission and distributions assets as detailed in Subject Area 7.

Pacific Power has developed a list of conditions that have been identified as energy release conditions that when identified on assets located inf FHCA correspond with an increased risk of fire ignition and are presented in a table including the description of the associated conditions.

Description of the procedures and standards used to train inspectors in the determination of ignition risks was provided in WMP presentations and in response to data requests.

### Demonstrated Compliance

Table 12 summarizes the findings of demonstrated compliance for Subject Area 11.

**Table 12: Subject Area 11 Summary of Demonstrated Compliance**

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Description of the conditions determined that could pose an ignition risk on utility equipment or pole attachments.	Met
2	Description of procedures and standards used to train inspectors in the determination of ignition risks.	Met

### Recommendations for Future WMPs

The IE recommends that for future WMPs Pacific Power provide a description of procedures and standards used to train inspectors in the determination of ignition risks.

## CONCLUSION

Pacific Power, in its second year of producing a Wildfire Mitigation Plan has provided a detailed description of their overhead electrical assets and their methodology for the risk assessments of their Fire High Consequence Areas within their service areas. Pacific Power has shown their commitment to providing a detailed WMP by engaging with wildfire professionals and fire and life safety consultants to provide an improved 2023 WMP and clear vision of their commitment to comply with OPUC Wildfire Mitigation Rules.

As the OPUC is developing rules for wildfire mitigation planning, new rules were implemented this year that were a result of the 2022 WMP assessment. Table 1 under the scope of this report depicts the application of the old and new rules to the current 2023 WMP and this report has provided terms (Met, Substantially Met, Partially Met, Not Met) to understand the level of demonstrated compliance found within the plan. Of these 30 new rules for the 2023 WMP, Pacific Power has showed some level of demonstrated compliance:

- Met 25
- Substantially Met 5
- Partially Met 0
- Not Met 0

As the independent evaluator, the level of improvement from the 2022 WMP assessment to the 2023 WMP assessment is clear and provides confidence that future WMP's will continue to show professionalism and improvements. Pacific Power has provided good momentum moving forward in redefining their actions associated with Oregon rules regarding WMP structures.

Bureau Veritas's overall conclusion is that Pacific Power has made changes to their WMP that demonstrates their efforts to reduce fire risks as required by OPUC's rules as narrated above in the recommendations. Pacific Power has proven to have taken a good step forward in their WMP processes and philosophies while understanding there is always room for improvement.



## APPENDIX

### IOU Demonstration of Compliance Status Spreadsheet

### Wildfire Mitigation Plan Evaluation Criteria

OAR 860-300-0020	ID	Wildfire Protection Plans and Updates must, at a minimum, contain the following requirements as set forth in Senate Bill 762 (2021) and OAR 860-300	Expectation of demonstrated compliance	Pacific Power
(1)(a)(A) & (B)	1	Identified areas that are subject to a heightened risk of wildfire, including determinations for such conclusions, and are: (A) Within the service territory of the Public Utility, and (B) Outside the service territory of the Public Utility but within the Public Utility's right-of-way for generations and transmission assets	<ul style="list-style-type: none"> <li>Describe the approach, data inputs, analysis completed, quantitative risk asset tools and techniques, and industry standards utilized to identify areas subject to heightened risk of wildfire.</li> <li>Describe analysis to both evaluate risk from the environment and specific utility asset types (if considered).</li> <li>Describe process that will be followed to evaluate areas on an annual basis.</li> </ul>	<b>Met Met Met</b>
(1)(b)	2	Identify means of mitigating wildfire risk that reflects a reasonable balancing of mitigation cost with the resulting reduction of wildfire risk.	<ul style="list-style-type: none"> <li>Describe the main activities being utilized to reduce wildfire risk, how they reduce risk, and how the utility's planned chosen activities balance costs with effectiveness of reducing wildfire risk.</li> <li>Describe how the effectiveness of the activities will be measured or have been measured.</li> </ul>	<b>Substantially Met Substantially Met</b>
(1)(c)	3	Identify preventative actions and programs that the Public Utility will carry out to minimize the risk of utility facilities causing wildfire.	<ul style="list-style-type: none"> <li>Describe preventative actions that are specific to reducing the risk and exposures to wildfire, and the measurable improvements, risk reductions, or quantitative results from the preventative actions or programs.</li> </ul>	<b>Substantially Met</b>
(1)(d)	4	Demonstration of outreach efforts to regional, state, and local entities, including municipalities regarding a protocol for the de-energization of power lines and adjusting power system operations to mitigate wildfires, promote the safety of the public and first responders and preserve health and communication infrastructure.	<ul style="list-style-type: none"> <li>Provide geographical boundary of impacted areas of the service territory that may be affected by a PSPS event or modified power system operations.</li> <li>Provide list of specific regional, state, and local entities, including municipalities, who have been reached out to, when are they reached out to, who will be reached out to, and the results of the outreach. Provide detail of topics covered, and input from agencies that have impacted utility wildfire risk reduction planned activities.</li> </ul>	<b>Met Met</b>
(1)(e)	5	Identified protocol for the de-energization of power lines and adjusting of power system operations to mitigate wildfires, promote the safety of the public and first responders and preserve health and communication infrastructure, including a PSPS communication strategy consistent with OAR 860-300-0040 and OAR 860-300-0050	<ul style="list-style-type: none"> <li>Overview of steps completed by the utility leading up to a PSPS and closing a PSPS event.</li> <li>Detailed descriptions of each step of the process, including: information used, and analysis completed to make decisions for the steps, utility staff involved in the steps and the utility decision-maker(s), interaction with entities outside of the utility that impact decisions, communication protocols (internal and external), typical duration of each step.</li> <li>Description of adjusted power system operations to mitigate wildfire, and description of operations in non-wildfire threat conditions. Include details of: information used, and analysis completed before adjusting operations, utility staff involved with adjusting operations, reasoning/logic to specific operational choices.</li> <li>Describe vulnerabilities to stakeholders such as emergency responders and public safety officials when de-energizing of the system occurs and what is necessary to communicate when a re-energization occurs due to an emergent situation and how they are defined.</li> </ul>	<b>Met Met Met Met</b>

(1)(f)	6	Identification of the community outreach and public awareness efforts that the Public Utility will use before, during and after a wildfire season, <b>consistent with OAR 860-300-0040 and OAR 860-300-0050.</b>	<ul style="list-style-type: none"> <li>• Detailed description of the Wildfire Mitigation Plan Engagement Strategy identifying planned forums and opportunities for follow up along with a description of the design considerations for inclusivity and accessibility.</li> <li>• Detailed description of community outreach and public awareness efforts: content and messaging of outreach and communication, media platforms used to disseminate information, frequency of outreach, equity considerations.</li> <li>• Description of metrics used to track and report the effect of community outreach and public awareness efforts.</li> </ul>	<b>Met</b> <b>Met</b> <b>Met</b>
(1)(g)	7	Description of procedures, standards, and time frames that the Public Utility will use to inspect utility infrastructure in areas the Public Utility identified as heightened risk of wildfire, <b>consistent with OAR 860-024-0018.</b>	<ul style="list-style-type: none"> <li>• Description of procedures and standards utilized to guide inspection activities in wildfire risk areas.</li> <li>• Description of inspection activities in wildfire risk areas, detailed by miles and structures of impacted distribution and transmission assets, inspection types and methods, frequency, infraction categorization, infraction protocol.</li> <li>• Explanation of logic/reasoning in selected inspection practices in wildfire risk areas.</li> </ul>	<b>Met</b> <b>Met</b> <b>Met</b>
(1)(h)	8	Description of the procedures, standards, and time frames that the Public Utility will use to carry out vegetation management in areas the Public Utility identified as heightened risk of wildfire, <b>consistent with OAR 860-024-0018.</b>	<ul style="list-style-type: none"> <li>• Description of vegetation management activities in non-high wildfire risk areas (trimming and clearing protocol and frequency, inspection frequency, QA/QC program, separated by transmission and distribution).</li> <li>• Description of vegetation management activities in wildfire risk areas, detailed by miles and structures of impacted distribution and transmission assets, trimming, and clearing protocol and frequency, inspections, QA/QC program (separated clearly between distribution and transmission activities).</li> <li>• Explanation of logic/reasoning in selected vegetation management practices in wildfire risk areas.</li> <li>• Description of the process for reviewing practices and methods to ensure effectiveness with plan procedures.</li> </ul>	<b>Met</b> <b>Substantially Met</b> <b>Met</b> <b>Met</b>
(1)(i)	9	Identification of the development, implementation, and administrative costs for the plan, which includes discussion of risk-based cost and benefit analysis, including consideration of technologies that offer co-benefits to the utility's system.	<ul style="list-style-type: none"> <li>• Summary of plan activities that are incremental costs to "baseline" utility operations.</li> <li>• Two detailed tables, one for capital costs and one for expense (O&amp;M) costs, with annual costs for each plan activity, and a forecast of costs for the activities described in the plan that are anticipated to go beyond 2023.</li> <li>• Summary discussion of decision-making process on planned expenditures, based on risk-based cost and benefit analysis, and co-benefits to the utility's system.</li> </ul>	<b>Met</b> <b>Met</b> <b>Met</b>
(1)(j)	10	Description of participation in national and international forums, including workshops identified in section 2, chapter 592, Oregon Laws 2021, as well as research and analysis the Public Utility has undertaken to maintain expertise in leading edge technologies and operational practices, as well as how such technologies and operational practices have been used develop implement cost effective wildfire mitigation solutions	<ul style="list-style-type: none"> <li>• Comprehensive list of national and international forums and state workshops attended by utility staff, and nature of participation in the forums and workshops (who attended from the utility, who presented from the utility).</li> <li>• Research and analysis the utility is doing or has completed regarding leading edge technology and operational practices.</li> <li>• Results of research and analysis of technology and operational practices that have been implemented into cost-effective wildfire mitigation solutions.</li> </ul>	<b>Substantially Met</b> <b>Met</b> <b>Met</b>

(1)(k)	11	Description of ignition inspection programs, as described in Division 24 of these rules, including how the utility will determine, and instruct its inspectors to determine conditions that could pose an ignition risk on its own equipment and pole attachments.	<ul style="list-style-type: none"> <li>Detailed Information associated with the factors/values considered to support the inspector instruction for identification of ignition risks.</li> <li>Description of procedures and standards used to train inspectors in the determination of ignition risks.</li> </ul>	Met Met
2	12	Wildfire Mitigation Plans must be updated annually and filed with the Commission no later than December 31 of each year. Public Utilities are required to provide a plan supplement explaining any material deviations from the applicable Wildfire Mitigation Plan acknowledged by the Commission. A Public Utility's initial Wildfire Protection Plan must be filed no later than December 31, 2021, per section 5, chapter 592, Oregon Laws 2021.	No expectation. From BV	
3	13	Within 180 days of submission, Wildfire Mitigation Plans and Wildfire Updates may be approved or approved with conditions through a process identified by the Commission in utility-specific proceedings, which may include retention of an Independent Evaluator (IE). For purposes of this section, "approved" means the Commission finds that the Wildfire Mitigation Plan or Update is based on reasonable and prudent practices including those the Public Utility identified through Commission workshops identified in SB 762, Section 2, and designed to meet all applicable rules and standards adopted by the Commission.	No expectation. From BV	
4	14	Approval of the Wildfire Mitigation Plan or Update does not establish a defense to any enforcement action for violation of a Commission decision, order or rule or relieve a Public Utility from proactively managing wildfire risk, including monitoring emerging practices and technologies.	No expectation. From BV	

Pacific Power

Total Subject Areas	30
---------------------	----

2023 WMP Level of Demonstrated Compliance	
Met	25
Sustantially Met	5
Partially Met	0
Not Met	0
	30

2022 WMP Level of Demonstrated Compliance (Comparison)	
Met	16
Sustantially Met	11
Partially Met	1
Not Met	0
	28