Independent Evaluator Report on Wildfire Mitigation Plan Compliance Bureau Veritas North America, Inc. Portland General Electric



Bureau Veritas North America, Inc. C2 Group May 23, 2023 Revised June 6, 2023

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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 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.

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INTRODUCTION

BACKGROUND

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Under Senate Bill 762 (2021) and Oregon Administrative Rules (OAR) Chapter 860, Division 300 -Wildfire 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 Portland General Electric'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

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		(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 AOR 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 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.

Portland General Electric (PGE) provides electric service to over 900,000 customers throughout a 4,000 square mile area in northwestern Oregon. The service territory is continuous. PGE's underground and overhead electric assets in total include:

- 1,255 circuit-miles of overhead transmission lines
- 28,481 circuit-miles of underground and overhead distribution circuits

PGE has designated portions of their service territory as High Risk Fire Zones (HRFZ), locations with a heightened relative risk of catastrophic wildfires and started the implementation of wildfire mitigation measures for those areas as outlined in their WMP. PGE did not provide line-miles of overhead electric assets in HRFZs in the WMP.

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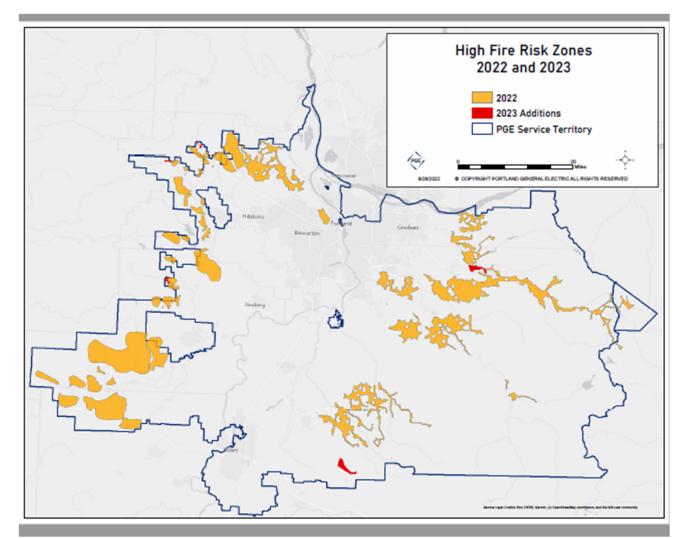


Figure 1: Map of Portland General Electric's Service Territory and 2022 and 2023 High Fire Risk Zones

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 have affected PGE's service area and they developed the 2022 Oregon WMP to outline and guide mitigation strategies to reduce the probability of utility-related wildfires. The plan's timeline, specific objectives, and key deliverables are covered within PGE's WMP. The following includes a comprehensive review and assessment of PGE's 2023 Oregon WMP by the OPUC's IE.

Key Recommendations

The IE conducted a compliance review of PGE'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 PGE'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 demonstration of community outreach efforts as it relates to Public Safety Power Shutoff (PSPS).

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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 comply with 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 are demonstrated below:

- Based on Deep Dive sessions, review of written responses to IE's questions and review of PGE's 2023 WMP, the IE recommends that for future WMPs PGE continue to include more information on the analysis completed to identify the relative risk of overhead asset components, such as specific wire types and equipment, and how that information is being used to guide programmatic decisions, including budgets.
- The IE recommends PGE to continue to evaluate and preplan their adjustment of risk based on climate change.
- Continue to receive input from emergency management partners regarding updating risk mapping, but also explore additional organizations with wildfire experience that may benefit in additional enhancements to the WMP.
- Based on Deep Dive sessions, review of written responses to IE's questions and review of PGE's 2023 WMP, the IE recommends that for future WMPs PGE include the details of the analysis of comparing measured risk reduction of plan activities to their costs Also provide a more detailed description for how mitigation activities are measured for evaluation of future implementation.
- The IE also recommends that for future WMPs PGE provide information on wildfires in the service territory for the prior year.
- The IE recommends that for future WMPs, PGE clearly lists all its preventative actions and their completed quantities in comparison to its planned goals, correlated to each of the preventative actions described in the various sections of the WMP, providing a summary of PGE's overall preventative actions and their compound effectiveness in reducing wildfire risk.
- The IE recommends that for future WMPs PGE provide an updated summary of Public Safety Partner feedback and key learnings collected from After Action Reports from exercises or events with a discussion of how the lessons learned contribute to WMP development.
- For 2023 and beyond, the IE recommends that PGE include details of the individual positions and departments included in the Corporate Incident Management Team (CIMT) during PSPS events and their roles and responsibilities. Providing detail in pre-assigned positions allows the IE to confirm a leadership structure is in place.
- For future WMPs, the IE recommends continuing the re-evaluation of existing PSPS as well potential future locations based on historical events and forecasted weather and climate change.
- For future WMPs, the IE recommends continuing to clarify the difference between an immediate safety shutoff required by OAR notifications and a PSPS shutoff required by OAR PSPS requirements.
- For future WMPs, the IE recommends continuing to perform enhancements for the logistics in establishing CRCs during a potential PSPS event.
- The IE also recommends that for future WMPs PGE continue to include more information about the analysis completed for programmatic decisions of modifying system operations,

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such as limiting reclosing to one attempt during fire season, and no reclosing on Red Flag Warning days. 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 PGE list the metrics developed to evaluate the effectiveness of community outreach efforts and provide a discussion of findings related to customer wildfire awareness from annual surveys.
- The IE recommends that for future WMPs, PGE expand the discussion of QA/QC programs used to validate inspection activities in wildfire risk areas including procedures and quantity of inspections reviewed.
- As with the 2022, IE project, the IE recommends that for future WMPs PGE provide any analysis of historical events pertaining to PGE's power lines, specific equipment type, vegetation and wildfires be provided that informed the program's design and its success factors, as well as logic and details of analysis completed for their programming decisions in HRFZs regarding vegetation management practices and protocols.
- The IE recommends that for future WMPs PGE continue to provide 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 the cost-benefit assessments that were made to make budgeting decisions, and if any initial budgets were modified based on cost-benefit analysis completed.
- The IE also recommends that for future WMPs PGE provide program level forecasted costs, for the WMP year, as well as a forecast of costs at minimum three years out.
- The IE recommends that for future WMPs PGE continue to provide highlights of collaboration with industry channels, both information and knowledge shared from PGE, and valuable information learned through the engagements.

The following paragraphs provide a comparative analysis of PGE'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 PGE's WMP, industry practices and 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, PGE'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 provided information within the plan that partially met or partially demonstrated the plans compliance with the rule. More information, clarity or detail is required to demonstrate the plans 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 both within and outside the service territory but within the utility right-of-way.

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 Portland General Electric'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

PGE in 2019 began a multi-phase wildfire risk assessment and modeling program to evaluate industry best practices; identify the highest risk zones within the PGE service territory; quantify the likelihood that PGE assets could contribute to the ignition of large wildfires; map the locations, and apply a consequence model to determine where a potential wildfire ignition would be most significant.

Continued assessment in 2022 of variables in the model informed PGE's decision to add new High Fire Risk Zones (HRFZs) in the 2023 WMP and assess existing boundaries of previously identified HFRZs. In the 2023 WMP there are ten distinct HFRZs. HFRZs are areas that could be subject to Public Safety Power Shutoff (PSPS) events.

PGE calculates baseline equipment risk in terms of ignition probability, given its type, age, condition, and location. Probability values vary with age and condition, increasing as equipment ages. The 2023 WMP provided side by side graphics showing updates to High Fire Risk Zones that indicates a continued evolution of risk identification and modeling.

Table 1 in the WMP lists data sources, inputs, and the planned cadence of updates for maintaining key modeling inputs. Table 2 in the WMP lists data sources, inputs, and the planned cadence of updates for georisk modeling data sources and inputs, such as meteorological data and burn probability.



Demonstrated Compliance

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

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

Table 2: Subject Area 1 Summary of Demonstrated Compliance

Recommendations for Future WMPs

Based on Deep Dive sessions, review of written responses to IE's questions and review of PGE's 2023 WMP, the IE recommends that for future WMPs PGE continue to include more information on the analysis completed to identify the relative risk of overhead asset components, such as specific wire types and equipment, and how that information is being used to guide programmatic decisions, including budgets.

The IE recommends PGE to continue to evaluate and preplan their adjustment of risk based on climate change.

Continue to receive input from emergency management partners regarding updating risk mapping, but also explore additional organizations with wildfire experience that may benefit in additional enhancements to the WMP.

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.



Throughout the WMP PGE identifies multiple activities utilized to reduce fire risk. In 2021 PGE created an ignition management tracking database and process. The information collected allows PGE to base the system hardening investments on the risk drivers that deliver optimized risk/spend efficiencies. Over time the ignition probability values database can be refined to create more accurate risk projections.

PGE's wildfire investment strategy ranks system hardening, and situational awareness projects identified as the highest value risk mitigation projects per dollar of investment.

The WMP does not provide a history of wildfires in PGE's service territory, and the subset of those wildfires that were identified as being caused by PGE utility assets. A complete baseline description of recent wildfire history is not included to provide context to assist in measuring the value of the risk reduction investments.

Demonstrated Compliance

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

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.	Met
2	Describe how the effectiveness of the activities will be measured or have been measured.	Met

Table 3: Subject Area 2 Summary of Demonstrated Compliance

Recommendations for Future WMPs

Based on Deep Dive sessions, review of written responses to IE's questions and review of PGE's 2023 WMP, the IE recommends that for future WMPs PGE include the details of the analysis of comparing measured risk reduction of plan activities to their costs Also provide a more detailed description for how mitigation activities are measured for evaluation of future implementation.

The IE also recommends that for future WMPs PGE provide 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

PGE provides an overview of preventative actions and programs planned to reduce wildfire risk in its WMP. PGE has shown the two-tier map for Tier 2 and Tier 3 wildfire risk zones across its entire territory in Oregon and listed the breakdown of transmission and distribution lines per tier. Specific measurable/quantitative preventative actions are identified in the WMP for planned investments for Undergrounding/Reconductoring. Other preventative actions to reduce the wildfire risk are covered under PGE'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.

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

Table 4: Subject Area 10 Summary of Demonstrated Compliance

Recommendations for Future WMPs

The IE recommends that for future WMPs, PGE clearly lists all its preventative actions and their completed quantities in comparison to its planned goals, correlated to each of the preventative actions described in the various sections of the WMP, providing a summary of PGE'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

PGE collaborates with Public Safety Partners for various purposes. One key objective is to gather input from Public Safety Partners to ensure that PGE's community engagement efforts are consistent and impactful throughout its service area, and that they address the specific needs of each community. This input is collected through an interactive workshop conducted before the onset of the fire season. Another objective is to work together with Public Safety Partners to achieve equitable outcomes in PGE's wildfire outreach initiatives.

The third objective is to establish a coordination strategy before, during, and after the fire season. Before the fire season, PGE will actively participate in preparedness coordination forums, quarterly summits, and organize at least one tabletop exercise. During the fire season, PGE will keep Public Safety Partners informed about any operational adjustments made to the PGE system and maintain communication with the appropriate contacts during a fire or fire threatening PGE infrastructure. After a wildfire incident, PGE will seek feedback from Public Safety Partners through an After-Action Review (AAR) process. Once the fire season concludes, Public Safety Partners will have the opportunity to engage in PGE's post-season review process.

PGE summarizes of key learnings and feedback from Public Safety Partners from the 2022 fire season in Appendix 8 of the 2023 WMP including an improvement plan with recommended actions for improvement of the WMP.

PGE outlines strategy for Community Resource Centers to be activated for PSPS events in collaboration with local Public Safety Partners. Input from Public Safety Partners includes discussion of strengths and opportunities related to CRC activation.

Demonstrated Compliance

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

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	Provide a 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.	Met

Table 5: Subject Area 4 Summary of Demonstrated Compliance

Recommendations for Future WMPs

The IE recommends that for future WMPs PGE provide an updated summary of Public Safety Partner feedback and key learnings collected from After Action Reports from exercises or events with a discussion of how the lessons learned contribute to WMP development.

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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.

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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), 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, and 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 2023 WMP, PGE has a series of defined steps and decision points documented to follow for deciding when to initiate a Public Safety Power Shutoff (PSPS), including teams who are involved with the steps and decisions. Standard notification timelines have also been established for de-energization warnings and re-energization estimated completion.

PGE is modifying some of its existing system operations for distribution lines in HRFZs to mitigate wildfire risk during wildfire season. Modifications to distribution lines include limiting electronic reclosers to one attempt of reclosing during fire season, and on Red Flag Warning days during fire season blocking reclosing.

As a last resort, PGE may proactively de-energize power to one or more PSPS zones, however, it is difficult to determine in the WMP if the same protocol exists for non-wildfire threat areas.

Demonstrated Compliance

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

PGE does not provide information of the analysis completed to make the programmatic decisions included in the WMP for adjusted power system operations.

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.	Substantially 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

For 2023 and beyond, the IE recommends that PGE include details of the individual positions and departments included in the Corporate Incident Management Team (CIMT) during PSPS events and their roles and responsibilities. Providing detail in pre-assigned positions allows the IE to confirm a leadership structure is in place.

For future WMPs, the IE recommends continuing the re-evaluation of existing PSPS as well potential future locations based on historical events and forecasted weather and climate change.

For future WMPs, the IE recommends continuing to clarify the difference between an immediate safety shutoff required by OAR notifications and a PSPS shutoff required by OAR PSPS requirements.

For future WMPs, the IE recommends continuing to perform enhancements for the logistics in establishing CRCs during a potential PSPS event.

The IE also recommends that for future WMPs PGE continue to include more information about the analysis completed for programmatic decisions of modifying system operations, such as limiting reclosing to one attempt during fire season, and no reclosing on Red Flag Warning days. 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, 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 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

PGE's 2023 WMP details its WMP Engagement strategy for outreach and public awareness efforts directed towards customers, local communities, and Public Safety Partners. Planned efforts for 2023 include hosting WMP engagement sessions within each county (or group of adjacent counties), hosting a pre-planning session with Public Safety Partners to identify functional needs to be accommodated in the engaging sessions, capturing feedback from WMP engagement sessions, and gathering additional feedback through follow-up surveys. Comments received during PGE's 2022 WMP engagement sessions are included in the 2023 WMP in appendix 3.

PGE provides examples of content used for outreach and public awareness efforts with an inventory of materials and channels used for distribution in appendix 4.

PGE identifies 2023 as the baseline year for development of metrics to evaluate the effectiveness of wildfire outreach efforts in collaboration with Public Safety Partners which will be measured using annual surveys. Outcomes of 2022 outreach and awareness efforts are included in the 2023 WMP in appendix 6.

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	Description of metrics used to track and report the effect of community outreach and public awareness efforts.	Met

Recommendations for Future WMPs

The IE recommends that for future WMPs PGE list the metrics developed to evaluate the effectiveness of community outreach efforts and provide a discussion of findings related to customer wildfire awareness from annual surveys.

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 860-0024-0018.

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 Portland General Electric 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

PGE is supplementing its existing overhead electric asset inspection and corrections program in the HRFZs. Additional primary elements are: 1. Annually inspecting all overhead assets in the HRFZs, 2. Performing ignition prevention inspections with an Inspect-Correct approach using two-person crews to inspect and repair most corrections and mitigate risk in a single visit to the pole, and 3. Reducing correction timeframes for infractions that pose a hazard in alignment with requirements in OAR 860-024-0018(5)(b).

PGE oversees the Ignition Prevention Program utilizing a project management team and GIS dashboard for tracking inspection progress which were identified as initiatives in PGE's 2022 WMP.

Demonstrated Compliance

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

PGE's 2023 WMP includes a breakdown of both structure count and line miles of structures surveyed in 2022 for structures in PGE HFRZ and PGE generation and transmission assets outside of their service territory in Table 10: PGE Structures Surveyed in 2022. PGE also identifies that approximately 28,000 structures, or approximately 10 percent of PGE's system, are inspected annually in non-HFRZ areas as a part of the FITNES Program.

In the 2023 WMP, PGE's introduction to the Ignition Inspection Program explains that scope inspections include each supporting structure within the HFRZs each year.

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

Table 8: Subject Area 7 Summary of Demonstrated Compliance

Recommendations for Future WMPs

The IE recommends that for future WMPs, PGE expand the discussion of 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.

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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 Portland General Electric 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 2023 WMP, PGE's vegetation management program consists of two focused areas; Routine Vegetation Management and Advanced Wildfire Risk Reduction (AWRR). Under the Routine Vegetation Management Program, vegetation and trees are trimmed with increased clearances along with the removal of vegetation that is dead and/or dying. Additionally, cyclic patrols are performed that comply with OAR 860-024-0016. The AWRR program focuses on the HFRZs. Under the AWRR program, annual vegetation management inspections are performed for all overhead lines, annual "Cycle Buster" tree trimming and completing annual prescribed vegetation control techniques for locations that exceed standard line-clearance specifications. PGE performs QA/QC of completed work in the AWRR.

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

As with the 2022, IE project, the IE recommends that for future WMPs PGE provide any analysis of historical events pertaining to PGE's power lines, specific equipment type, vegetation and wildfires be provided that informed the program's design and its success factors, as well as logic and details of analysis completed for their programming decisions in HRFZs regarding vegetation management practices and protocols.

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 riskbased 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 2023 WMP, PGE identifies two main cost categories, operations and maintenance and capital costs in their WMP that require an increase in investment in 2023. As with the 2022 IE report, programs continue to be listed under one of the two cost categories with reference to the individual programs in various sections, but not itemized as forecasted costs.

PGE will continue to refine its Wildfire Risk Mitigation Assessment program for 2023 which includes forecasting capital and O&M needs.

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 2023	Substantially 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.	Substantially Met

Recommendations for Future WMPs

The IE recommends that for future WMPs PGE continue to provide 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 the cost-benefit assessments that were made to make budgeting decisions, and if any initial budgets were modified based on cost-benefit analysis completed.

The IE also recommends that for future WMPs PGE provide program level forecasted costs, for the WMP year, as well as a forecast of costs at minimum three years out.

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 and 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

PGE 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, as well as details of the focus of the forums, and PGE's role in the forums. PGE discussed involvement in forums identified in the 2022 WMP including the International Wildfire Risk Mitigation Consortium (IWRMC), Electric Power Research Institute (EPRI), Oregon Joint Use Association (OJUA), and Regional Disaster Preparedness Organization (RDPO). Discussion of participation in Oregon Wildfire Detection Camera Interoperability Committee is new for the 2023 WMP.

Details of research and development (R&D) are provided for partnerships with the Electric Power Research Institute (EPRI) on an early fault detection pilot project, as well as special R&D projects in the areas of remote sensing data acquisition, 360-degree artificial intelligence-driven image analysis, development of a Storm Predictive tool, operation of the 5G PGE Energy lab, and a development of a proposed portable battery pilot program based on information gained from benchmarking and discussions with representatives from California IOUs.

Demonstrated Compliance

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

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).	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

Table 11: Subject Area 10 Summary of Demonstrated Compliance

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Recommendations for Future WMPs

The IE recommends that for future WMPs PGE continue to provide highlights of collaboration with industry channels, both information and knowledge shared from PGE, 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 Portland General Electric 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

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

PGE has developed standards for ignition prevention inspections based on experience conducting asset inspections in the FITNES program and provides a list of conditions in Appendix 2 of the WMP. PGE conducts inspector training for ignition prevention inspections prior to the start of inspections covering a variety of topics including scope and location of inspections, inspection and correction standards, inspection and correction procedures, inspection software, crew configuration, tools, equipment and materials, communication protocols, quality assurance requirements, and wildfire awareness and suppression safety training.

Demonstrated Compliance

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

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

Table 12: Subject Area 11 Summary of Demonstrated Compliance



Recommendations for Future WMPs

The IE recommends that for future WMPs PGE identify updates to Ignition Prevention standards including discussion of rationale supporting the changes.

CONCLUSION

Portland General Electric, 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 High Fire Risk Zones (HFRZ) within their service areas. Portland General Electric 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, Portland General Electric 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. Portland General Electric has provided good momentum moving forward in redefining their actions associated with Oregon rules regarding WMP structures.

Bureau Veritas's overall conclusion is that Portland General Electric 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. Portland General Electric 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	PGE
(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 gernerations and transmission assets		 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. 	Met Met Met
(1)(b)	2	Identify means of mitigating widlfire risk that reflects a reasonable balancing of mitigitation cost with the resulting reduction of wildfire risk.		 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. 	Met Met
(1)(c)	3	Identify preventiative actions and programs that the <u>Public</u> Utility will carry out to minimize the risk of utility facilities causing wildfire.		 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
(1)(d)	4	Demonstration of outreach efforts to regional, state, and local entities, including municipalities regarding a protocol for the de-engerization 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 infrastructre.		 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. 	Met Met
(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		 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), 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, and 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. 	Met Met Substantially Met Met

(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.	 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. 	Met Met Met
(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.	 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. 	Met Met Met
(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, consistent with OAR 860- 024-0018.	 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 activitie's 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. 	Met Substantially Met Met Met
(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.	 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. 	Met Substantially Met Substantially Met
(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	 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. 	Met Met Met

(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.	 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. 	Met Met
2	12	Wildfire Mitigation Plans must be updated annually and filed with the Commision 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	+
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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	21
11100	
Sustantially Met	7
	7 0
Sustantially Met	7 0 0