

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



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**Bureau Veritas North America, Inc.
C2 Group
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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.

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EXECUTIVE SUMMARY

BACKGROUND

Under Senate Bill 762 (2021) and Oregon Administrative Rules (OAR) 860-300-0002 effective November 30, 2021, per Order No. 21-440, public utilities in the State of Oregon must adopt and operate in compliance with a risk-based Wildfire Mitigation Plan (WMP) that is filed with the Oregon Public Utility Commission (OPUC). The WMP will be evaluated by the OPUC and Bureau Veritas North America, Inc. (BVNA), who has been selected as an Independent Evaluator (IE) by the OPUC to serve 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 Idaho Power’s 2022 Wildfire Mitigation Plan to verify compliance with the minimum requirements outlined in OAR 860-300-0002 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

AR 860-300-0002	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	Discussion 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.
(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.
(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.
(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.
(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.

Idaho Power provides electric service to approximately 600,000 customers throughout a 24,000 square mile area in southern Idaho and eastern Oregon. The Oregon service territory is continuous and smaller than the Idaho portion of the service territory. Idaho Power overhead electric assets in total include (Oregon line-miles not provided separately in the WMP):

- Approximately 4,800 line-miles of overhead transmission lines
- Approximately 19,300 line-miles of overhead distribution circuits

Idaho Power has designated portions of their Oregon service territory as Tier 2 Wildfire Risk Zones, or Yellow Risk Zones (YRZ), 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. Idaho Power has designated portions of their Idaho service territory as Tier 3 Wildfire Risk Zones, or Red Risk Zones (RRZ), locations of higher risk, as well as YRZs. Idaho Power did not provide line-miles of overhead electric assets in Oregon in YRZs in the WMP.

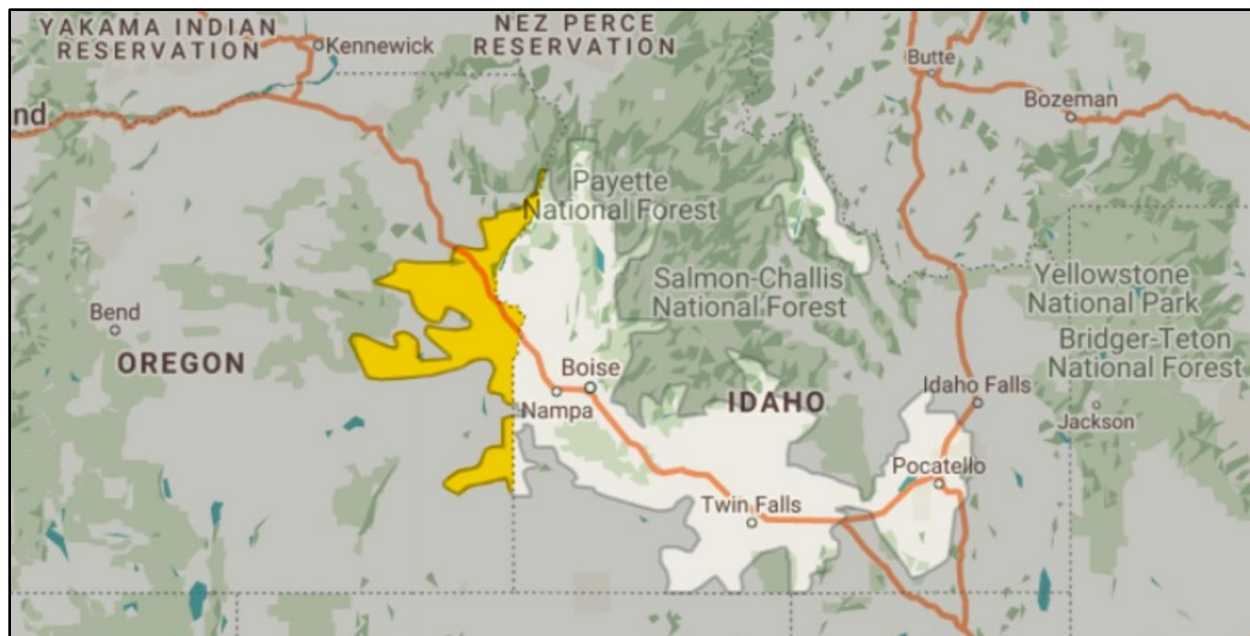


Figure 1: Map of Idaho Power's Service Territory

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 have affected Idaho Power'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 Idaho Power's WMP. The following includes a comprehensive review and assessment of Idaho Power's 2022 Oregon WMP by the OPUC's IE.

Key Recommendations

The IE conducted a compliance review of Idaho Power's 2022 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 attempted to conduct interviews with Emergency Management officials to evaluate Idaho Power's outreach efforts regarding protocols for the de-energization of power lines and adjusting power system operations to mitigate wildfires, however due to severe staff shortages we were unable to conduct a virtual interview with the affected Public Safety Partners. Feedback was received via email that summarized interaction with the Emergency Manager(s) that is summarized below.

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.

Item number 9 listed in Table 1, the cost to implement the programming outlined in the WMP, is not included in Idaho Power's WMP. Additionally, several of the WMP sections have details that are not met, or only partially met upon reviewing for 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. The IE's key recommendations for what Idaho Power should provide in future WMPs are demonstrated below:

- Details of the analysis completed for establishing the risk tiers, and the threshold values utilized for classifying the YRZs and RRZs.
- More information on who from Idaho Power or other organizations validated and reviewed the tier boundaries/zones and will be involved in reviewing the information annually.
- 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.
- More detail be provided regarding the process and timing that will be followed to evaluate the established YRZs and RRZs on an annual basis.
- Include the analysis of comparing measured risk reduction of plan activities to their costs, a cost-benefit analysis.
- 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.
- Include details of how the objectives of key preventative actions have been met or not met, from the prior year of system operation, as well as adjustments made to programming included in the WMP to reduce wildfire risk.
- Provide a clear map of what areas of the Oregon service territory may be affected by a PSPS event.
- Include more detail regarding engagement with Public Safety Partners, such as the list of specific organizations met with, frequency of communication, methods of communication and the results of the outreach, as well as input received that impacted the WMP.
- Include more information about the analysis completed to make their programmatic decisions of modifying system operations, such as why only RRZs are included, and not YRZs, why only during fire season, and why the differences between transmission lines and distribution circuits.
- Include the anticipated timelines and estimated customer reach for the dynamic outreach activities including but not limited to media campaigns, distribution of collateral to Community-Based Organizations and Public Safety Partners, and webinars or live wildfire safety and preparedness forums.
- Define activities that have been on going and those that are planned to move forward for communication with PSPs. Provide detail of the level of communication and demonstration of understanding of public impact from PPS planned events, pre-planning, and coordination that occurs prior to a PPS warning and activation of PPS event.
- Clearly identify inspection and correction procedures and protocols for non-wildfire risk zones, inspection and correction procedures and protocols for RRZs, and inspection and correction procedures and protocols for YRZs, along with the impacted line-miles and structure counts for transmission and distribution assets in Oregon.
- Provide logic and details of analysis completed for their programming decisions in YRZs (and if any future RRZs) in Oregon regarding inspections and corrections.
- Clearly identify vegetation management practices and protocols for non-wildfire risk zones, vegetation management practices and protocols for RRZs, and vegetation management practices and protocols for YRZs, along with the impacted line-miles and structure counts for transmission and distribution assets in Oregon.
- Provide logic and details of analysis completed for their programming decisions in YRZs (and if any future RRZs) in Oregon regarding vegetation management practices and protocols.

- Provide more information regarding their quality control/quality assurance program and audits for vegetation management work completed in the RRZs, YRZs; measures employed, and resource types.
- Provide any analysis of historical events regarding Idaho Power power lines, vegetation and wildfires that informed the vegetation management program design.
- Provide cost information as outlined in Table 10 to implement activities in Oregon included in the WMP.
- Provide highlights of collaboration with industry channels, both information and knowledge shared from Idaho Power, and valuable information learned through the engagements.
- Provide details of the research and analysis for leading edge technologies and operational practices and the results of that research and analysis.

As a result, the IE found that Idaho Power's WMP does not meet the requirements and should not be accepted until at minimum cost information is provided, as well as a detailed inventory on the number of structures and line-miles that are included in YRZs and RRZs in Oregon, organized by transmission and distribution assets.

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 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, Idaho 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 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 Idaho 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

Idaho Power with the help of a wildland fire computer modeling consultant identified areas of elevated wildfire risk in their Oregon service territory and rights-of-way and refer to the areas as “Risk Zones,” specifically Yellow Risk Zone (YRZ) and Red Risk Zone (RRZ) with red being the higher risk area. The risk analysis assesses and quantifies the threat of fire based upon risk-based methodology. This methodology is consistent with basic conventional risk by assessing wildfire risk based on fire probability and consequences. At a minimum, the assessment focuses on the potential impact in terms of harm to people and damage to property and uses various data sets, data sources and processes to complete the modeling.

The YRZ (Tier 2) and RRZ (Tier 3) were established after draft risk tiers were generated algorithmically by establishing threshold values. The risk tiers are reflective of relative risk to Idaho Power’s service territory only and not absolute risk. Idaho Power notes that the risk profile in their service territory is significantly lower than utilities serving California. The YRZ and RRZ boundaries were validated, and necessary adjustments were made to account for several factors such as means of ingress and egress and cell phone coverage.

Demonstrated Compliance

Table 2 summarizes the findings of demonstrated compliance for Subject Area 1. One item is substantially met, and two items are partially met.

Idaho Power describes the approach, data inputs, analysis completed, and industry standards used to identify high wildfire risk zones, however they do not provide specific information on how the zone threshold values were established, and why it was decided to create YRZs and RRZs (two tiers) to manage wildfire risk in their service territory.

Idaho Power did not provide any information regarding an analysis of the risk from specific utility asset types, and therefore this item is partially met.

Idaho Power did not provide details of the process and timing that will be followed to evaluate the established zones, and what data inputs and portions of the analysis will be reviewed annually, and therefore this item is partially met.

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.	Substantially Met
2	Describe analysis to both evaluate risk from the environment and specific utility asset types.	Partially Met
3	Describe process that will be followed to evaluate areas on an annual basis.	Partially Met

Recommendations for Future WMPs

The IE recommends that for future WMPs Idaho Power include details of the analysis completed for establishing the risk tiers, and the threshold values utilized for classifying the YRZs and RRZs. It is suggested that Idaho Power also provide more information on who from Idaho Power or other organizations validated and reviewed the tier boundaries/zones and will be involved in reviewing the information annually.

The IE also recommends that for future WMPs Idaho Power include 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.

Lastly, the IE recommends that for future WMPs, more detail be provided regarding the process and timing that will be followed to evaluate the established YRZs and RRZs on an annual basis and the information clearly depict the established risk zone in Oregon and its bordered lands

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 Idaho Power identifies multiple activities utilized to reduce fire risk. 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. There are no costs identified in the WMP for implementing the activities in Oregon, or overall, for Idaho Power.

The WMP does not provide a history of wildfires in Idaho Power’s service territory, and the subset of those wildfires that were identified as being caused by Idaho Power 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.

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.	Not Met
2	Describe how the effectiveness of the activities will be measured or have been measured.	Not Met

Recommendations for Future WMPs

The IE recommends that for future WMPs Idaho 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 Idaho 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: *Identify preventative actions and programs that the utility will carry out to minimize the risk of utility facilities causing a wildfire.*

The IE utilized the following “Expectation of Demonstrated Compliance” description to evaluate Subject Area 3 of the plan, which covers preventative actions and programs utilized to reduce the risk of utility infrastructure causing a wildfire.

- What falls out of the risk assessment as high-level risk, priorities and quantitative results from the preventative actions or programs.

Review of Initiatives

Idaho Power outlines in the WMP key preventative actions: asset inspections and vegetation management, system hardening, situational and conditional awareness, system operations, field operations, and PSPS implementation. Each action is described in how it will be executed, and how it will minimize the risk of utility facilities causing a wildfire.

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	What falls out of the risk assessment as high-level risk, priorities and quantitative results from the preventative actions or programs.	Substantially Met

Recommendations for Future WMPs

The IE recommends that for future WMPs Idaho Power include details of how the objectives of key preventative actions have been met or not met, from the prior year of system operation, and further demonstrate to what degree the preventable measures have reduced the risk of the utility’s infrastructure from the cause of fire, as well as adjustments made to programming included in the WMP to reduce 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

Idaho Power engages with Public Safety Partners, and focuses on wildfire awareness, prevention and outage preparedness outreach and opportunities for collaboration. The WMP notes that Idaho Power may include tabletop exercises with Public Safety Partners prior to wildfire season.

Demonstrated Compliance

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

The geographical boundary of the impacted areas of the service territory in Oregon that may be affected by a PSPS event is not explicitly outlined in the WMP.

Little detail is provided regarding engagement with Public Safety Partners. As indicated in the Executive Summary, the IE in participation with an OPUC representative attempted to interview EMs to gain an understanding of communication protocols, collaboration levels and engagement. Unfortunately, due to staff shortages a virtual interview was not conducted. In lieu of the virtual interview, written information

was provided. It is clear that Idaho Power has a good working relationship with their EM partner(s) and Idaho Power does participate in monthly Local Emergency Planning Committee (LEPC) meetings.

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.	Not Met
2	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.	Partially Met

Recommendations for Future WMPs

The IE recommends that for future WMPs, Idaho Power provide a clear map of what areas of the Oregon service territory may be affected by a PSPS event.

The IE also recommends that for future WMPs Idaho Power include more detail regarding engagement with Public Safety Partners, such as the list of specific organizations met with, frequency of communication, methods of communication and the results of the outreach. It is also recommended to include input received that impacted 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.

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

Idaho 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.

Idaho Power is modifying some of its existing system operations for transmission lines and distribution circuits in RRZs to mitigate wildfire risk during wildfire season. Modifications for transmission lines include no testing of a line that has been “locked out” during the time of a red Fire Potential Index (FPI). Modifications for distribution circuits include operating the lines in a non-reclosing state during the time of a red FPI.

Demonstrated Compliance

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

Idaho Power 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	Met

	occurs due to an emergent situation and how they are defined.	
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Recommendations for Future WMPs

The IE recommends that for future WMPs Idaho Power include more information about the analysis completed to make their programmatic decisions of modifying system operations, such as why only RRZs are include, and not YRZs, why only during fire season, and why the differences between transmission lines and distribution circuits. 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.

- 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.
- Detailed description of each activity: content and messaging of outreach and communication, why it was chosen, its expected audience, its expected impact, measures to ensure communication techniques are successful in reaching the target audience, who from the utility supports the effort, outside organizations who support the effort, and when it is planned (before, during and after wildfire season).

Review of Initiatives

Idaho Power has included avenues to distribute information regarding its WMP to various Public Safety Partners and engage for collaborative efforts that may include tabletop exercises with Public Safety Partners to assist with wildfire preparedness. Idaho Power plans to distribute information regarding its WMP to customers via tools including, but not limited to, fact sheets, mass media, community presentations, newsletters, social media, and the Idaho Power website. Prior to wildfire season, communications include newsletters, video stories, email, and social media. The WMP indicates that each fire season Idaho Power conducts outreach that includes wildfire prevention tips, outage preparedness tips, and checklists as well as recommendations to sign up for alerts. During wildfire season, communication methods will include emails, social media, news media, website resources, and phone calls and text messages to customers. Post wildfire season communications will be newsletters, eNews, social media, news media and the Idaho Power website.

Demonstrated Compliance

Table 7 summarizes the findings of demonstrated compliance for Subject Area 6. Expectations of demonstrated compliance for task 1 are met, however task 2 was not met.

Idaho Power outlines the high-level methods of outreach; however, they do not provide details of messaging content, expected target audience for various methods of outreach, expected impact of outreach, details, numbers or reach of Community-Based Organization or Public Safety Partners to capture distribution range or footprint, or timeframes of outreach activities for cohesive understanding of (before, during and after wildfire season) efforts for maximum impact.

Table 7: Subject Area 6 Summary of Demonstrated Compliance

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	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
2	Detailed descriptions of each activity: content and messaging of outreach and communication, why it was chosen, its expected audience, it's expected impact, measures to ensure communication techniques are successful in reaching the target audience, who from the utility supports the effort, outside organizations who support the effort, and when it is planned (before, during and after wildfire season).	Partially Met

Recommendations for Future WMPs

The IE recommends that for future WMPs Idaho Power include the anticipated timelines and estimated customer reach for the dynamic outreach activities including but not limited to media campaigns, distribution of collateral to Community-Based Organizations and Public Safety Partners, and webinar or live wildfire safety and preparedness forums. With a diverse customer base, it is critical to assess the effectiveness and traction of the various methods of outreach especially for high-risk areas to help identify if outreach efforts require a tailored approach based on demographic, region, or wildfire risk level.

Idaho Power proposes social media as the quickest way to spread word of safety concerns and plans to incorporate social media into its outreach during wildfire season communications, however, does not indicate strategy or activities to increase its social media following from its currently limited subscriber base, and effectively increase the overall footprint of social media specific outreach. The IE recommends the initiation of a campaign to increase its social media following prior to wildfire season if it plans to leverage social media platforms as a method of distributing safety concerns, potential loss of power, or evacuations during the wildfire season.

The IE also recommends that Idaho Power leverages the 24/7 accessibility of its website to provide a centralized and continuous resource for customers throughout the year and includes checklists, fact sheets, and video content readily available. Currently the Wildfire Safety section has bullet points on what customers can do to help prevent wildfires, with the WMP available but does not host any downloadable or printable fact sheets or checklists that provide customers with actionable tools and steps to increase safety and awareness.

Further information should be included that identifies what the conditions are that drive the activation of Community Resource Centers (CRC) and how are the placement of the Community Resource Centers is determined.

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.

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 Idaho Power identified as high wildfire risk.

- Description of inspection activities in non-high wildfire risk areas, separated by distribution and transmission (inspection types, frequencies, correction protocols).
- 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

Idaho Power employs several methods to inspect overhead assets. For transmission structures, the following methods are used:

- *Annual aerial visual inspections*, by helicopter, for transmission lines identified as Western Electricity Coordinating Council (WECC) Path Lines and lines in RRZs. It is unclear from the WMP if this type of inspection applies to any transmission structures in Oregon.
- *Annual ground visual inspections*, by using four-wheel-drive vehicles, all-terrain vehicles, utility terrain vehicles, and/or by foot. It is unclear from the WMP if these are considered “patrols” or detailed inspections, and if the protocol and frequency for this type of inspection varies from non-YRZs and YRZs.
- *Detailed visual (high-resolution photography) inspections*, by helicopter or unmanned aerial vehicles, performed every 10 years. It is unclear from the WMP if the protocol and frequency for this type of inspection varies from non-YRZs and YRZs.
- *Wood pole inspection and treatment program*, by foot, every 10 years. It is unclear from the WMP if the protocol and frequency for this type of inspection varies from non-YRZs and YRZs.
- *Cathodic protection and inspection program*, by foot, every 10 years, on select transmission towers with either an impressed current corrosion protection system (ICCP) or direct-buried sacrificial magnesium anodes. It is unclear from the WMP if the protocol and frequency for this type of inspection varies from non-YRZs and YRZs.
- *Thermal imaging (infrared) inspections*, of lines and equipment, that is being specifically expanded to include the RRZs. It is unclear from the WMP if this type of inspection applies to any transmission structures in Oregon and if the protocol and frequency for this type of inspection varies from non-YRZs and YRZs.

For distribution structures, the following methods are used:

- *Annual ground detailed visual inspections*, by using four-wheel-drive vehicles, all-terrain vehicles, utility terrain vehicles, and/or by foot for distribution lines located in the RRZs. It is unclear from the WMP if this type of inspection applies to any distribution structures in Oregon, and if it only applies to RRZs, what the detailed inspection protocol is for YRZs.

- *Wood pole inspection and treatment program*, by foot, every 10 years. It is unclear from the WMP if the protocol and frequency for this type of inspection varies from non-YRZs and YRZs.
- *Annual line equipment inspections*, of distribution system protection line equipment by line operations technicians. It is unclear from the WMP if the protocol and frequency for this type of inspection varies from non-YRZs and YRZs.

Defects found during inspections are classified as Priority 1, 2 or 3. Priority 1 defects may require reporting and repair as soon as reasonably practicable. Priority 2 defects require correction action within 24 months of identification. Priority 3 defects do not pose a threat and are monitored.

Demonstrated Compliance

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

Idaho Power does describe inspection activities and correction protocols for overhead transmission and distribution assets; however, they do not clearly outline and distinguish the difference between the inspection activities and protocols for structures in non-wildfire risk zones vs. YRZs, and RRZs, and what specifically applies to transmission and distribution structures in YRZs in Oregon. Additionally, there is no inventory of the line-miles and structures included in any enhanced inspection practices for YRZs in Oregon.

Idaho Power does not provide any logic or details of analysis completed for their programming decisions in Oregon YRZs. If there are no enhanced inspections or corrections, it is not explicitly stated as such, and no information is provided to support the decision.

Table 8: Subject Area 7 Summary of Demonstrated Compliance

Description No.	Expectation of Demonstrated Compliance	Demonstrated Compliance
1	Description of inspection activities in non-high wildfire risk areas, separated by distribution and transmission (inspection types, frequencies, correction protocols).	Substantially Met
2	Description of procedures and standards utilized to guide inspection activities in wildfire risk areas.	Partially Met
3	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.	Not Met
4	Explanation of logic/reasoning in selected inspection practices in wildfire risk areas.	Not Met

Recommendations for Future WMPs

The IE recommends that for future WMPs Idaho Power clearly identify inspection and correction procedures and protocols for non-wildfire risk zones, inspection and correction procedures and protocols

for RRZs, and inspection and correction procedures and protocols for YRZs, along with the impacted line-miles and structure counts for transmission and distribution assets in Oregon.

The IE also recommends that for future WMPs Idaho Power provide logic and details of analysis completed for their programming decisions in YRZs (and if any future RRZs) in Oregon regarding inspections and corrections.

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.*

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 Idaho 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

Idaho Power employs several vegetation management activities for overhead assets. For transmission structures, the following methods are used:

- *Annual transmission vegetation inspections* are conducted aurally or by ground patrols, on “applicable transmission lines” that are defined by Idaho Power as RRZs. It is unclear from the WMP if the frequency and protocol for this type of inspection varies for non-wildfire risk zones and YRZs.
- *Transmission line clearing cycles* are three years for urban and rural valley areas and six years for mountain areas. It is unclear from the WMP if the clearing cycles vary between non-wildfire risk zones, RRZs and YRZs or clarify how the timelines support growth and condition of the vegetation species are maintained.
- *Transmission line clearing quality control and assurance* is completed by a utility arborist or a contracted notifier when line clearing work is required, and a line clearing audit form is completed and retained. It is unclear from the WMP if the quality control and assurance protocols vary between non-wildfire risk zones, RRZs and YRZs.

For distribution structures, the following methods are used:

- *Distribution line clearing cycles* are three years (Idaho Power is actively working towards achieving this cycle, which is shortened from the previous cycle). In RRZs and YRZs Idaho Power's goal is to perform mid-cycle pruning in the second year.
- *Distribution vegetation inspections* are conducted annually by utility arborists for each distribution line in RRZs and YRZs. It is unclear from the WMP if there are distribution lines in the YRZs in Oregon, and how the frequency of the inspections varies from non-wildfire risk zones and RRZ and YRZs.
- *Distribution line clearing procedures* include maintaining a target clearance between vegetation and conductors of five feet for lines energized at 600 volts through 50 kV, or three feet if the vegetation is not considered to be readily climbable. It is unclear from the WMP if the clearing procedures vary between non-wildfire risk zones, RRZs and YRZs or clarify that the frequency supports the specific vegetation species growth and/or condition is considered for contact vulnerability.
- *Distribution line clearing quality control and assurance* is completed by a utility arborist or a contracted notifier when line clearing work is required, and a line clearing audit form is completed and retained. It is unclear from the WMP if the quality control and assurance protocols vary between non-wildfire risk zones, RRZs and YRZs.

Additionally, Idaho Power clears vegetation around the base of certain subject transmission wood poles and a limited number of distribution subject wood poles in Idaho. Idaho Power applied with the Oregon BLM Vale District Office to prepare an Environmental Assessment to use the same ground sterilant on transmission and distribution facilities in Oregon. It is unclear from the WMP how structures are selected for treatment, and how this procedure would apply to YRZs in Oregon if approved.

Demonstrated Compliance

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

Idaho Power does describe vegetation management activities and protocols for overhead transmission and distribution assets; however, they do not clearly outline and distinguish the difference between all the vegetation management activities and protocols for structures in non-wildfire risk zones vs. YRZs, and RRZs, and what specifically applies to transmission and distribution structures in YRZs in Oregon. Additionally, there is no inventory of the line-miles and structures included in any enhanced vegetation management practices for YRZs in Oregon.

Idaho Power does not provide any logic or details of analysis completed for their programming decisions in Oregon YRZs, particularly for transmission lines. If there is no enhanced vegetation management for Oregon YRZ transmission lines, it is not explicitly stated as such, and no information is provided to support the decision.

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).	Partially Met
3	Explanation of logic/reasoning in selected vegetation management practices in wildfire risk areas.	Not Met
4	Description of the process for reviewing practices and methods to ensure effectiveness with plan procedures.	Partially Met

Recommendations for Future WMPs

The IE recommends that for future WMPs Idaho Power clearly identify vegetation management practices and protocols for non-wildfire risk zones, vegetation management practices and protocols for RRZs, and vegetation management practices and protocols for YRZs, along with the impacted line-miles and structure counts for transmission and distribution assets in Oregon.

The IE also recommends that for future WMPs Idaho Power provide logic and details of analysis completed for their programming decisions in YRZs (and if any future RRZs) in Oregon regarding vegetation management practices and protocols.

Additionally, the IE recommends that for future WMPs Idaho Power provide more information regarding their quality control/quality assurance program and audits for vegetation management work completed in the RRZs, YRZs; measures employed, and resource types. It is also recommended that any analysis of historical events pertaining to Idaho Power 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 2022.
- 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

Idaho Power did not provide information pertaining to Subject Area 9, except to write in the WMP that the potential human and capital costs and damage from wildfire events vastly exceed any incremental costs of wildfire mitigation efforts in the WMP.

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.	Not 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.	Not 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.	Not Met

Recommendations for Future WMPs

The IE recommends that for future WMPs Idaho Power provide cost information as outlined in Table 10 to implement activities in Oregon included in the WMP.

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

Idaho Power participates in workshops with other utilities and regional and national 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 Idaho Power in the forums.

Idaho Power provided examples of new technology practices they are employing to mitigate wildfire risk, such as unmanned aircraft systems for line patrols, energy limiting fuses and mesh wraps for wood poles, however no information is provided on research and development they are taking on as Idaho Power.

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

Recommendations for Future WMPs

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

The IE also recommends that for future WMPs Idaho Power provide details of the research and analysis they are completing for leading edge technologies and operational practices and the results of that research and analysis.

APPENDIX