

Appendix B

The Public Safety Power Shutoff (PSPS) Plan.



Idaho Power Company's Wildfire Public Safety Power Shutoff Plan

December 2021

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1. INTRODUCTION

Wildfires in the Pacific west have increased in their intensity in recent years. In an effort to keep Idaho Power's customers and the communities it serves safe and continue improving the resiliency of Idaho Power's transmission and distribution facilities, Idaho Power implemented a Wildfire Mitigation Plan in 2021, focused on situational awareness, field personnel safety practices and operational wildfire mitigation strategies to prevent the accidental ignition of wildfires. As part of its operational mitigation practices, Idaho Power has developed this Public Safety Power Shutoff Plan (PSPS Plan or Plan) to proactively de-energize electrical facilities in identified areas of extreme wildfire risk to reduce the potential of those electrical facilities becoming a wildfire ignition source or contributing to the spread of wildfires. This Plan identifies the relevant considerations, process flow and implementation protocol before, during and after a PSPS event. The Plan will be active during wildfire season and reviewed annually and updated as necessary prior to the start of the next wildfire season.

This Plan identifies PSPS implementation considerations and responsibilities for different Idaho Power departments before, during and after PSPS events. Table 2 describes the different phases Idaho Power will use during PSPS events and Figure 7 depicts the communication audiences and timeline Idaho Power will ideally follow during an event. Finally, this Plan describes activities Idaho Power will undertake to prepare and improve the Plan over time, including interactions with local emergency agencies, and briefly describes the financial administration of the Plan.

2. LIST OF ACRONYMS

AAR—After Action Review

BLM—Bureau of Land Management

COO—Chief Operations Officer

ECMWF—European Centre for Medium-Range Forecasts

EMT—Emergency Management Team

ERC—Energy Release Component

F100—100-Hour Fuel Moisture

FPI—Wildfire Mitigation Plan Fire Potential Index

FWW—Fire Weather Watch

GBCC—Great Basin Coordination Center

GIS—Geographic Information System

IPUC—Idaho Public Utility Commission

IRWIN—Integrated Reporting of Wildland-Fire Information

LSO—Load Serving Operations

NIFC—National Interagency Fire Center

NOAA—National Oceanic and Atmospheric Administration

NWS—National Weather Service

OPUC—Oregon Public Utility Commission

PEC—Planning, Engineering and Construction

PSPS—Public Safety Power Shutoff

RFW—National Weather Service issued Red Flag Warning

SGM—Smart Grid Meter

SME—Subject Matter Expert

T&D—Transmission & Distribution

TDER—Transmission & Distribution Engineering and Reliability

UKMET—United Kingdom Meteorological Office

WMP—Wildfire Mitigation Plan

WRF—Weather Research and Forecasting

3. DEFINITIONS

(1) **Critical Facilities**—Refers to the facilities identified by Idaho Power that, because of their function or importance, have the potential to threaten life safety or disrupt essential socioeconomic activities if their services are interrupted.

(2) **ESF-12**—Refers to Emergency Support Function-12 and is the Idaho Power Company liaison from the State Office of Emergency Management for energy utilities issues during an emergency for both Idaho and Oregon.¹

(3) **Exercise**—Refers to planned activities and assessments that ensure continuity of operations, provide and direct resources and capabilities and gather lessons-learned to develop core capabilities needed to respond to incidents.

(4) **Community**—Refers to a group of people that share goals, values and institutions.²

(5) **Local Emergency Manager**—Refers to a jurisdiction’s role that oversees the day-to-day emergency management programs and activities.³

(6) **Public Safety Partners**—As defined by Idaho Power refers to ESF-12, Local Emergency Management and Idaho’s and Oregon’s Department of Human Services (or equivalent).

(7) **Public Safety Power Shutoff or PSPS**—A proactive de-energization of a portion of an Electric Utility’s electrical network, based on the forecasting of and measurement of extreme wildfire weather conditions.

¹ Federal Emergency Management Institute (FEMA) National Response Framework (NRF) Emergency Support Functions (ESF) [National Response Framework | FEMA.gov](#).

² FEMA definition under “Communities” (pg. 26) [National Response Framework \(fema.gov\)](#).

³ FEMA definition under “Local Government” (pg. 29) [National Response Framework \(fema.gov\)](#).

4. PUBLIC SAFETY POWER SHUTOFF OVERVIEW

In recent years, the western United States (U.S.) has experienced an increase in the intensity of wildland fires (wildfires). A variety of factors have contributed in varying degrees to this trend, including climate change, increased human encroachment in wildland areas, historical land management practices and changes in wildland and forest health. Recent events in western states have increased awareness of electric utilities' role in wildfire prevention and mitigation.

In an effort to keep Idaho Power's customers and the communities it serves safe and continue improving the resiliency of Idaho Power's transmission and distribution (T&D) facilities, Idaho Power implemented a Wildfire Mitigation Plan (WMP) in 2021 focused on situational awareness, field personnel safety practices and operational wildfire mitigation strategies. As part of its operational mitigation practices, Idaho Power developed this Wildfire Public Safety Power Shutoff Plan (PSPS Plan or Plan) to proactively de-energize electrical facilities in identified areas of extreme wildfire risk to reduce the potential of those electrical facilities becoming a wildfire ignition source or contributing to the spread of wildfires. Based on the inherently disruptive nature of power outages, Public Safety Power Shutoff (PSPS) events must be carefully evaluated under this Plan to balance wildfire risk with potential PSPS impacts on Idaho Power customers and the communities it serves.

The unpredictable nature of wildfire and weather patterns create significant challenges with forecasting PSPS events. Real-time evaluations and decision-making are therefore critical in making PSPS determinations and, depending on the associated wildfire risk, those determinations may result in proactive de-energization in areas not originally anticipated.

5. SCOPE

This PSPS Plan identifies the relevant considerations, process flow and implementation protocol before, during and after a PSPS event. The Plan will be active during wildfire season and reviewed and updated annually as necessary prior to the start of the next wildfire season. Wildfire season (also known as "closed season") is defined by Idaho Code § 38-115 as extending from May 10 through October 20 each year, or as otherwise extended by the Director of the Idaho Bureau of Land Management (BLM). Oregon's wildfire season generally aligns with Idaho's wildfire season and is designated by the State Forester each year pursuant to Oregon Revised Statute 477.505.

6. KEY TENETS

- Advancing the safety of Idaho Power employees, customers and the general public
- Collaborating with key external stakeholders (agencies, counties, local governments, public safety partners, first responders)

- Minimizing both potential wildfire risk and power outage impacts on communities and customers
- Maintaining reliable electric service

7. WILDFIRE ZONES

Idaho Power's WMP identifies areas of heightened wildfire risk within its service territory reflected by the following risk zones:

- Tier 2 Yellow Risk Zones are deemed increased risk areas.
- Tier 3 Red Risk Zones are deemed higher risk areas.

In its WMP, Idaho Power identifies operational practices specific to these zones of heightened wildfire risk for purposes of (1) reducing potential wildfire risk associated with Idaho Power's T&D facilities and field operations, and (2) improving the resiliency of the Idaho Power's T&D system impacted by wildfire. This PSPS Plan sets forth Idaho Power's PSPS evaluation criteria and processes, including operational and communication protocol, for implementing a PSPS.

8. PSPS IMPLEMENTATION CONSIDERATIONS

Idaho Power will initiate a PSPS if the company determines a combination of critical conditions indicate the T&D system at certain locations is at an extreme risk of being an ignition source and wildfire conditions are severe enough for the rapid growth and spread of wildfire. Idaho Power will evaluate as a whole (not relying on one single factor but a combination of all factors), without limitation, the criteria set forth in 9.1–9.17 below.

8.1. Fire Potential Index

In addition to the Risk Zone designations in its WMP, Idaho Power developed a Fire Potential Index (FPI) to forecast wildfire potential across Idaho Power's service area. The FPI converts data on weather; prevalence of fuel (shrubs, trees, grasses); and topography into a numerical FPI score to forecast the short-term wildfire threat in geographical areas throughout Idaho Power's service area. FPI scores range from 1 (very green, wet fuels with low to no wind and high humidity) to 16 (very brown and dry, both live and dead dry fuels with low humidity and high temperatures). FPI scores are grouped into the following 3 index levels:

- 1) Green—lower fire potential: FPI score of 1 through 11
- 2) Yellow—elevated fire potential: FPI score of 12 through 14
- 3) Red—highest fire potential: FPI score of 15 and 16

The FPI supports operational decision-making to reduce potential wildfire risk. During wildfire season, Idaho Power will determine a daily FPI as described in Section 5.2 of the WMP. The FPI

forecast is broken into four 6-hour time periods throughout each seven-day forecast. FPI information is provided via email, certain Geographic Information System (GIS) viewers and an FPI dashboard accessible to both Idaho Power employees and contractors from Idaho Power's website. The WMP details operational mitigation efforts in Red Risk Zones when the FPI score in that Red Risk Zone is also Red, including stopping planned work and changing distribution protection operations. A Red FPI score will be a consideration in Idaho Power's determination of whether to initiate a PSPS.

8.2. National Weather Service Red Flag Warning

A Red Flag Warning (RFW) is a forecast warning issued by the National Weather Service (NWS) to inform the public, firefighters and land management agencies that conditions are ideal for wildland fire combustion and rapid spread. RFWs are often preceded by a Fire Weather Watch (FWW), which indicates weather conditions that could occur in the next 12–72 hours. The NWS has developed different zones across the nation for providing weather alerts (such as RFWs) to more discrete areas. These zones are shown on this NWS webpage: [Fire Weather](#). RFWs for Idaho Power's service territory include Idaho Zones (IDZ) 401, 402, 403, 413, 420 and 422; and Oregon Zones (OR) 636, 637, 642, 634, 644, 645 and 646; and are monitored and are factored into Idaho Power's determination of whether to initiate a PSPS. Boise and Pocatello NWS offices will not issue RFWs if fuels are moist and fire risk is low. The following thresholds are used by most NWS offices:

- Daytime:
 - Relative humidity of 25% or less
 - Sustained winds greater than or equal to 10 miles per hour (mph) with gusts greater than or equal to 20 mph over a four-hour time period
- Nighttime:
 - Relative humidity of 35% or less
 - Sustained winds greater than or equal to 15 mph with gusts greater than or equal to 25 mph over a three-hour time period
- Lightning:
 - The NWS rarely issues RFWs for lightning in the western United States. For this to occur, the Lightning Activity Level—a measure of lightning potential specifically as it relates to wildfire risk—needs to be at 3 or higher.

8.3. NWS Fire Weather Forecasts

The NWS provides detailed forecasts for the different weather zones with an emphasis on fire weather indicators (wind speed, relative humidity, lightning potential). A discussion

summarizing the weather patterns and highlighting fire threats is included in their [extended forecast](#).

8.4. Publicly Available Weather Models

Idaho Power's Atmospheric Science department uses the following weather models to predict weather timing, duration and intensity:

- [Pivotal Weather Link \(pivotalweather.com/model.php\)](http://pivotalweather.com/model.php): Provides numerical weather data, including a NWS blend of models, European Centre for Medium-Range Weather Forecasts (ECMWF), United Kingdom Meteorological Office weather service information and GOES-16 satellite information.
- [Graphical Weather Link \(graphical.weather.gov/sectors/conusFireWeek.php\)](http://graphical.weather.gov/sectors/conusFireWeek.php): A NWS website providing weather, water and climate data, forecasts and warnings for the United States for the protection of life and property. The Fire Weather page provides a daily and weekly view of multiple weather and environmental conditions influencing wildfire activity.

8.5. Idaho Power Weather Model

Idaho Power maintains its own Weather Research and Forecasting (WRF) model using high-resolution data from Idaho Power's weather stations across its service area. This model, along with publicly available weather models, helps develop weather forecasts that include timing, duration and intensity of weather systems. An Idaho regional WRF low-resolution map view is available to the public at atmo.boisestate.edu/view/.

8.6. Storm Prediction Center Fire Weather Outlooks

The Storm Prediction Center's [Fire Weather Outlook](#) provides a current, one-day-ahead and three- to eight-day forecast for wildfires over the contiguous United States. This forecast takes into account pre-existing fuel conditions combined with predicted weather conditions that result in a significant risk of wildfire ignition or spread.

8.7. Current Weather Observations

Identifying real-time wildfire weather and associated risks requires predicting conditions that could trigger a PSPS based on observing current weather conditions. Resources available for observing current weather conditions include direct, real-time data from Idaho Power's network of weather stations, available real-time wind speed information from Idaho Power's network of Smart Grid Meters (SGM), as well as [Windy: Wind Map and Weather Forecast](#) and the National Weather Service National Oceanic and Atmospheric Administration's (NOAA) [Weather and Hazards Viewer](#).

8.8. National Significant Wildland Fire Potential Forecast Outlook

[The National Significant Wildland Fire Potential Forecast Outlook](#) provides wildland fire expectations for the current month, the following month and a seasonal look at the two months beyond that. The main objective of this tool is to provide information to fire management decisionmakers for proactive wildland fire management, reducing firefighting costs and improving firefighting efficiency.

8.9. Great Basin Coordination Center Morning Briefing

The Great Basin Coordination Center ([GBCC](#)) is the focal point for coordinating the mobilization of resources for wildland fire and other incidents throughout the Great Basin Geographic Area, which encompasses Utah, Nevada, Idaho south of the Salmon River, the western Wyoming mountains and the Arizona Strip. The GBCC hosts a morning briefing (around 10 a.m. most mornings) that provides situational awareness for Idaho Power's service area.

8.10. GBCC Current and Predicted ERC and F100

The GBCC as described above also provides [day-ahead](#) Energy Release Component (ERC), 100-Hour Fuel Moisture (F100) and other fuels conditions information that helps Idaho Power understand wildfire potential in the service area.

8.11. Agency Input

Idaho Power works with Boise NWS Fire Forecasters through daily briefings and NIFC Predictive Service Forecasters on an as-needed basis, generally regarding data clarification, to streamline the transfer of data, information and communications about wildland fire critical to Idaho Power's service area.

Idaho Power works with other agencies, including the U.S. BLM and U.S. Forest Service, as wildland fires approach and impact Idaho Power T&D facilities.

8.12. De-Energization Windspeed Considerations

Idaho Power's service area covers 24,000 square miles across southern Idaho and eastern Oregon. The environmental factors across this area vary drastically from high desert landscape to mountainous terrain. Weather and environmental conditions also vary greatly within this area. Regional vegetation becomes "conditioned" to withstand different environmental conditions, which also influences de-energization thresholds. Idaho Power developed windspeed considerations, which it will continue to refine with additional data and weather technology based on historic wind conditions compared to system outage information.

8.13. Engineering Assessment

Idaho Power follows robust transmission and distribution maintenance and inspection practices. When a potential PSPS event is identified, Idaho Power's T&D Maintenance and Engineering department will evaluate potential impacts to current or planned maintenance activities.

8.14. Alternative Protective Measures

Considering the significant potential impact of a PSPS to customers, Idaho Power will thoroughly evaluate other potential alternatives for reducing wildfire risk prior to implementing a PSPS.

8.15. Real-time Field Observations

Idaho Power uses SGMs for various purposes on its the distribution systems, including communication (where available) to provide near real-time information and to detect wind speed with anemometers. This information is displayed on a GIS viewer and used to inform Idaho Power's evaluation and decision-making during storm events.

Idaho Power may also deploy field personnel to evaluate if a PSPS event should be initiated.

8.16. Other

Idaho Power plans to evaluate expanding existing capabilities to enhance weather forecasting and add new capabilities to detect fires.

9. RESPONSIBILITIES

Developing and implementing PSPS protocol involves various groups throughout the company. Below is a non-exhaustive list of responsibilities by department, representatives of which will work together to promote organized, consistent and safe implementation of PSPS events.

9.1. Load Serving Operations

- Develop and implement safe and reliable power shutoff protocols and procedures
- Ensure System and Regional Dispatch employees are appropriately trained to perform relevant responsibilities under this PSPS Plan, and that such employees receive timely information regarding wildfire risk and weather conditions for purposes of performing those responsibilities in the event of a PSPS
- Assist with PSPS evaluation and decision-making

- Safely restore service to PSPS areas when notified by Customer Operations it is safe to re-energize
- Provide required notifications to public safety partners to enhance public safety
- Participate in After-Action Reviews (AAR) (further discussed in Section 13 below) and ensure modifications to PSPS protocol are implemented as necessary

9.2. Atmospheric Science

- Monitor daily, weekly and long-term weather forecasts
- Monitor fuels conditions and trends
- Monitor Fire Weather Watches, Red Flag Warnings and High Wind Watches and Warnings
- Communicate with external agencies for increased situational and conditional awareness. Increase communications as conditions require
- Communicate internally to Idaho Power's Transmission & Distribution Engineering and Reliability (TDER) senior manager when extreme conditions indicate a PSPS event is likely
- Support PSPS activities such as planning, training and exercises
- Assist in PSPS information-gathering, evaluation and decision-making
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

9.3. TDER Senior Manager

- Oversee wildfire mitigation program and support cross-departmental collaboration
- Monitor daily, weekly and long-term weather and wildfire forecasts
- Monitor Fire Weather Watches, Red Flag Warnings and High Wind Watches and Warnings
- Develop and lead training modules for PSPS implementation
- Activate the PSPS Assessment Team if a PSPS is likely
- Communicate with Oregon and Idaho ESF-12

- Ensure PSPS activities such as operations planning, training and exercises occur annually
- Ensure a coordinated and cohesive external and internal communication and notification plan is in place and reviewed annually
- Coordinate with Atmospheric Science to continue evaluating enhancements to situational awareness capabilities
- Participate in AARs and provide input on, and monitor as necessary, modifications to PSPS protocol

9.4. Customer Operations and T&D Construction

- Develop and implement safe and reliable power shutoff protocols and procedures
- Ensure field personnel are appropriately trained to perform all relevant responsibilities under this PSPS Plan
- Assist in PSPS information-gathering, evaluation and decision-making
- Ensure crews and equipment are available to support PSPS events
- Perform field observations, line patrols and other PSPS tasks as necessary
- Perform required repairs to safely re-energize the system after a PSPS event
- Request/obtain air patrol contractors for line inspections as required
- Participate, with assistance from Corporate Communications, in Idaho Power's general external education campaign
- Develop, with assistance from Corporate Communications, a cohesive notification framework with public safety partners while consistently evaluating ways to increase communication and outreach effectiveness
- Engage with public safety partners and critical facilities before, during and after a PSPS event
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

9.5. Supply Chain/Stores

- Ensure preparedness for wildfire season with materials readily available for restoration purposes

- Work with Customer Operations and T&D Construction in response to a PSPS event, which could include pre-event activities such as staging materials and supplies
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

9.6. Fleet/Equipment Resource Pool

- Ensure employees are appropriately trained to perform all relevant responsibilities under this PSPS Plan
- Ensure readiness of employees and resource pool equipment for a PSPS event
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

9.7. Supply Chain Contracting

- Ensure contract resources are appropriately trained to perform all relevant responsibilities under this PSPS Plan
- Work with Customer Operations to provide contracting resources as required
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

9.8. Substation Operations

- Monitor substations and perform actions to support PSPS operations
- Coordinate activities with Dispatch and Customer Operations
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

9.9. Corporate Communications

Corporate Communications will develop and execute PSPS communications to Idaho Power customers and employees and support other business units in their communication efforts with regulators, critical facility operators, public safety partners and other stakeholders.

Corporate Communications will:

- In coordination with Customer Operations and Regulatory Affairs, work with public safety partners, critical facilities, regulators and other stakeholders to develop a comprehensive, coordinated and cohesive customer notification framework.
- With input from public safety partners, develop and implement a wildfire education and awareness campaign focused on wildfire prevention and mitigation, PSPS awareness and outage preparedness for customers.
- In the event of a PSPS:
 - To the extent possible and in coordination with Customer Service and IT, notify customers before, during and after a PSPS event with the following information:
 - Expected timing and duration of the PSPS event
 - 24-hour contact information and website resources
 - Provide up-to-date information on a dedicated Idaho Power PSPS webpage prominently linked on the Idaho Power homepage.
 - Distribute information via media and social media channels.
- Participate in AARs and modify communication practices as necessary.

9.10. Distribution Engineering and Reliability

- Support Dispatch and Customer Operations in developing de-energization and re-energization plans for PSPS events
- Monitor and verify the protection system operated correctly after any device operations caused by events on the circuit as appropriate
- Evaluate and enact protective device setting changes as required.
- Support rapid repairs of damaged infrastructure as needed.
- Support Load Serving Operations in planning improvements to PSPS operational capabilities
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

9.11. Safety

- Ensure the safety professionals are appropriately trained to perform all relevant responsibilities under this PSPS Plan
- Provide PSPS training for field personnel
- Assist in AARs after a PSPS event (or potential event in which the PSPS Team is activated)

9.12. Vegetation Management

- Following de-energization, and when it is safe to do so, Customer Operations will report impacts to infrastructure and assets from vegetation, as appropriate. Vegetation Management will then work toward removing vegetation debris necessary for re-energization.
- Ensure contractors and field personnel are appropriately trained to perform all relevant responsibilities under this PSPS Plan.
- Use reasonable efforts to ensure contract resources are available and prepared for PSPS events.
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary.

9.13. Geographic Information Systems

- Work with Customer Operations and Corporate Communications to develop PSPS boundary information for PSPS GIS maps required for the PSPS website
- Before wildfire season and during preliminary notifications of a potential PSPS event, provide relevant GIS data within the confines of applicable law to public safety partners

9.14. Customer Service

- Respond to customer calls and respond to questions with information provided by Corporate Communications
- Ensure customer service representatives are trained to manage customer interactions during a PSPS event

9.15. Communication Systems (Stations)

- Provide monitoring and on-call presence for the following:
 - Radio communications and infrastructure
 - Network infrastructure and connectivity
 - SCADA communications
- Ensure readiness to deploy mobile 2-way radio trailer during a PSPS event
- Participate in AARs and ensure modifications to PSPS protocol are implemented as necessary

9.16. Customer Operations Support

- May lead AARs to ensure modifications to PSPS protocol are implemented as necessary

9.17. Legal

- Provide legal guidance in evaluating a potential PSPS event
- May direct AARs after a PSPS event (or potential event in which the PSPS Team is activated)
- May be involved in reviewing communications to customers, public safety partners and critical facilities

9.18. Regulatory

- May provide regulatory guidance in evaluating a potential PSPS event
- May be involved in reviewing communications to customers, public safety partners and critical facilities
- Assist in/direct regulatory reporting/filing activities

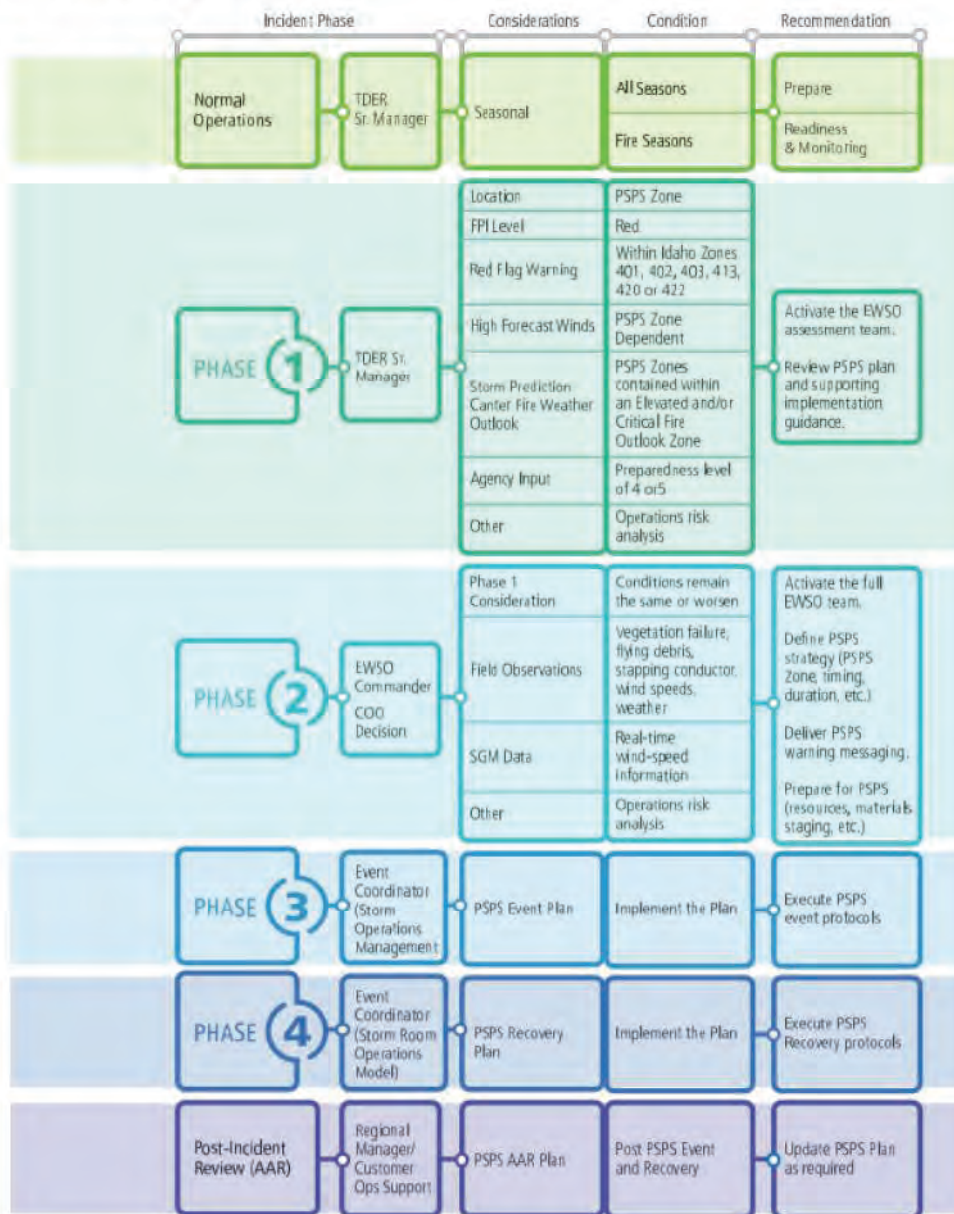
10. PSPS OPERATIONS

10.1. General

Section 11 details the phases, and protocol within each phase, of a PSPS event. Additional procedures are found in plans linked below and the attached Appendices as referenced herein.

Table 2 below summarizes the PSPS phases.

Table 1
Incident phase decision triggers



10.2. PSPS Preparedness

PSPS preparedness is a cyclical effort involving Idaho Power, public safety partners, state and local governments, communities and customers. Idaho Power's main objectives of preparedness are: 1) performing wildfire prevention and mitigation activities; and 2) engaging with external public safety partners, critical facilities and communities to develop relationships and provide education to safely and effectively implement this plan. The TDER senior manager coordinates and facilitates activities of multiple Idaho Power business units for wildfire prevention and mitigation activities while Customer Operations and Corporate Communications facilitates public outreach and coordination efforts with external stakeholders.



Figure 1
PSPS Preparedness Cycle

Idaho Power's goal is to take a community approach to wildfire preparedness by educating and encouraging individual preparedness and relying on existing protocols and procedures currently available through local governments and emergency response professionals.

10.2.1. Idaho Power Programs

Idaho Power's [WMP](#) facilitates PSPS preparedness through vegetation management protocol specific to wildfire season, distribution and transmission hardening efforts, situational awareness coinciding with wildfire operational protocol, training programs, communications strategies and coordinated planning with both internal and external stakeholders. This PSPS Plan and emergency response protocol correspond with Idaho Power's WMP preparedness measures in an effort to further reduce wildfire risk consistent with industry best practices and regulatory requirements.

10.2.2. Coordination with Government Entities

Coordination with local government and emergency response entities is critical to Idaho Power's reliance on existing protocols and procedures developed by these external stakeholders. Customer Operations engages in these coordination efforts through ongoing communications and additional activities as required by this Plan. Activities include, without limitation:

- Being a trusted energy advisor to mayors, city managers, county leaders, elected officials and other stakeholders
- Educating and encouraging individual preparedness
- Educating stakeholders about Idaho Power wildfire preparedness and mitigation efforts, PSPS planning and capabilities
- Enhancing relationships with external stakeholders for improving interoperability and wildfire coordination
- Enhancing relationships with community services partnerships

10.2.3. Community Preparedness

Engage with public sector agencies and communities where PSPS events are likely to leverage existing emergency response plans and resources to increase the effectiveness of PSPS communications.

10.2.4. Information Sharing

Coordinate with public safety partners in advance of a PSPS event to prepare information needed by these partners and establish communication protocols for critical decision-making before and during a PSPS event, including restoration activities.

10.2.5. Notifications and Emergency Alerts

Collaborate with agencies in advance of PSPS events to allow for use of existing notification methods to communicate effectively during PSPS events.

10.2.6. Training and Exercises

Coordinate and participate in tabletop exercises with public safety partners to enhance knowledge of each other's emergency operations for smooth interactions during PSPS events.

10.3. Proactive Communications

Although the size of Idaho Power’s service area, geographic and environmental diversity, and unpredictable nature of Idaho and Oregon weather make it challenging, Idaho Power is committed to providing as much advance notice as reasonably possible in preparation for a PSPS event. Table 3 provides Idaho Power’s optimal communication timeline for PSPS events, circumstances permitting.

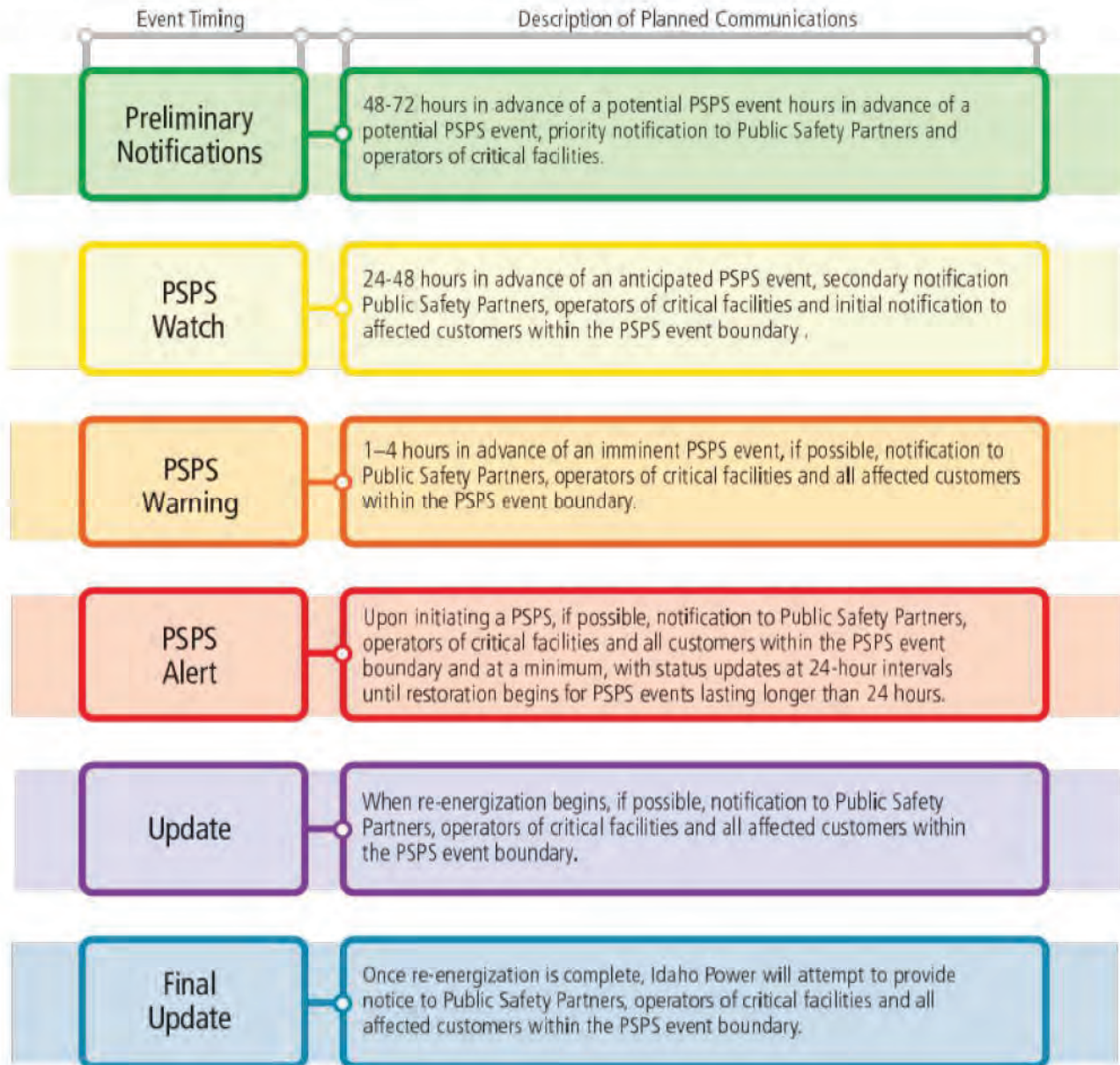


Figure 2
PSPS Event Communication Timeline

10.4. Wildfire Season Operations

As described here and in Idaho Power’s WMP, normal operations during wildfire season differs from normal operations during the rest of the year based on heightened requirements specifically targeted at predicting and reducing wildfire risk.

10.4.1. Situational Awareness Activities

During wildfire season, Idaho Power closely monitors fire conditions and weather patterns. Idaho Power’s Atmospheric Science team prepares a monthly “Seasonal Wildfire Outlook” report beginning in April and continuing through wildfire season containing information on regional drought conditions obtained from the National Drought Monitor, weather and climate outlook, seasonal precipitation and temperature outlooks from NOAA and the NWS, and a regional wildfire outlook.

During wildfire season, the Atmospheric Scientists will determine a daily FPI as described in Section 5.2 of the WMP describing shorter-term weather and fire conditions specific to WMP risk zones across Idaho Power’s service territory and in identified risk zones where transmission facilities extend beyond service territory boundaries.

10.4.2. GIS Wildfire Information

Idaho Power’s GIS team pulls regional wildfire information from a feature layer sourced by the GIS mapping software company ESRI, which pulls the data from the Integrated Reporting of Wildland-Fire Information (IRWIN) and the National Interagency Fire Center (NIFC). This information is added to multiple GIS viewers utilized by Idaho Power employees. These viewers also overlay current wildfire information to geospatially show physical relationships to transmission and distribution lines which provides valuable situational awareness in understanding wildfire activity near Idaho Power’s T&D systems. This information is updated near real-time.

10.4.3. Key Grid Interdependent Utilities and Agencies

Idaho Power exchanges dispatch information with key grid interdependent utilities and energy providers to expedite communication and coordination during wildfire events. These contacts include Avista, Bonneville Power Administration, Northwestern Energy, NVEnergy, Oregon Trail Electric Cooperative, PacifiCorp, Raft River Electric, Seattle City Light and U.S. Bureau of Reclamation. Idaho Power also exchanges dispatch information with NIFC, BLM Fire Dispatch and various National Forest Service District Offices—including Idaho Power dispatch receiving BLM and US Forest Service incident command information during wildfire events—to improve communication and coordinate fire-related activities.

10.5. Phase 1

The decision to implement a PSPS event will be based on the best available data for weather and other fire-related conditions as detailed above in Section 8—PSPS Implementation Considerations. Multiple events may require simultaneous management such as other storm-related outages or other PSPS events.

10.5.1. PSPS Assessment Team Activation

Idaho Power will transition from normal wildfire season operations to Phase 1 of a PSPS event at the direction of the TDER senior manager. During Phase 1, Idaho Power will activate the PSPS Assessment Team, which includes the TDER senior manager, a regional senior manager of the area potentially impacted, Load Serving Operations (LSO) senior manager, a documentation subject matter expert (SME), and representatives from the Atmospheric Science team and Corporate Communications. The PSPS Assessment Team will hold conference calls as needed to discuss current and forecasted weather conditions and other critical information regarding a potential PSPS event. The TDER senior manager will facilitate PSPS Assessment Team meetings and conference calls and the PSPS Assessment Team will be responsible for determining whether to recommend maintain Phase 1, escalate to Phase 2, or de-escalate to normal operations. The PSPS Assessment Team will decide if Idaho Power will issue a preliminary notification of a potential PSPS event to public safety partners, critical facilities operators and ESF-12 as described in Table 3 above. During Phase 1, the PSPS Assessment Team will review the PSPS Plan and supporting documents. An operational risk assessment will be performed as well to determine current operational factors (existing outages, facilities under construction, personnel availability, etc.), risks and vulnerabilities. Ultimate determination will be made whether to escalate to Phase 2 by the TDER senior manager. Within one hour of Phase 2 notification, the full PSPS team will be placed on stand-by and team member availability will be determined. The full PSPS team is the PSPS Assessment Team plus the VP of Planning, Engineering and Construction, the Customer Operations VP and VP of Power Supply or their assigns.

10.5.2. Community Notifications

Depending on the situation and timing, public safety partners and critical facility operators may be notified during this phase. These notifications may include emails, text messages and/or phone calls as described in Idaho Power internal processes and procedures.

10.6. Phase 2

Phase 2 actions are determined by additional situational awareness activities, timing of forecasted weather events and risk tolerance. Upon transitioning to Phase 2, Idaho Power will provide external notifications as called out in Table 3 above with specific roles and responsibilities as described in internal process and procedure documents.

10.6.1. Activate Event Coordinator

Idaho Power will assign an Event Coordinator as outlined in Wildfire Mitigation and PSPS Plan. The event coordinator's main role is to coordinate activities across the region associated with PSPS implementation and restoration.

10.6.2. Conduct Operational Risk Analysis

The PSPS Assessment Team will present its operational risk analysis recommendation to the VP of PEC, VP of Customer Operations and the COO who will then evaluate the PSPS Assessment Team's recommendation, and the COO will make the final determination of whether to proceed to Phase 3 implementation of a PSPS event.

10.6.3. Request to Delay a PSPS Event

There may be requests to delay proactive de-energization from the public safety partners. This may occur for several reasons, with the most anticipated being loss of power for pumping water to fight wildfires. Delay requests should be routed through dispatch and sent to the PSPS Team for evaluation. The PSPS Team will provide the COO a recommendation on whether to approve the proactive de-energization delay and the COO will make the final decision. As soon as practicable after receiving the request, Idaho Power will notify the ESF-12 liaison of the delay request and basis of such request, as well as the final determination and the underlying justification.

10.6.4. PSPS Event Strategy

Regional operations personnel developed action plans and switching orders as part of their preparedness activities. These plans and switching orders will be reviewed and refined as necessary based on the current and forecasted conditions and will include situation-specific tactics and detailed instructions.

10.6.5. Field Observations and Response Teams

Regional Operations will coordinate field personnel to be mobilized and dispatched to strategic locations, including areas with limited weather and system condition visibility, to perform field observations for on-the-ground, real-time information critical to inform decisions on proactive de-energization. Field observations include—without limitation—conditional assessments of system impacts from wind and vegetation, flying debris and slapping conductors.

10.6.6. Customer and Community Notifications

Depending upon the timing and situation, Idaho Power may use various forms of communication (including media outreach) to provide information and updates to public safety partners, critical facility operators, and customers, particularly those impacted by the PSPS event. Information and updates will include the reason for the potential de-energization, where to find

real-time updates on outage status and other relevant safety and resources. Internal processes and procedures will be followed to ensure accurate, up-to-date communication is provided.

10.7. Phase 3

Upon the COO making a determination to proactively de-energize, the LSO representative of the PSPS Team will inform System and Regional Dispatch Operations and request coordination of the estimated time to begin the PSPS. The regional manager, or their assigned representative of the region in which the PSPS will take place, will coordinate with the event coordinator to pre-position field personnel where manual de-energization is required and to stand by for orders to de-energize. System and Regional Dispatch Operations will implement the PSPS according to their established processes. Stations and communications system operations personnel will be prepared to support PSPS activities as needed. Idaho Power will take the following community-centered actions as soon as safely possible. Regional teams will follow internal processes and procedures to safely and effectively implement a PSPS event.

10.7.1. Customer and Community Notification

Relying on internal processes and procedures, Idaho Power will use various forms of communication (including media outreach) to provide information and updates to customers and other stakeholders, particularly those impacted by the PSPS event. Information and updates will include the reason for the de-energization, where to find real-time updates on outage status and other relevant safety and resource information regarding the PSPS. Specific protocols may be included in individual work group plans.

10.8. Phase 4

10.8.1. System Inspections

When it is safe to do so, Idaho Power will begin line patrolling activities to inspect T&D circuits and other potentially impacted Idaho Power facilities. Patrol personnel will report system conditions back to System and Regional Dispatch Operations for coordination with field crews. Patrols will be performed as required to ensure conditions and equipment are safe to re-energize.

10.8.2. Repair and Recovery

Line crews will repair T&D facilities as coordinated with System and Regional Dispatch Operations, replacing damaged equipment and performing other actions to support safe re-energization of the T&D system.

10.8.3. Incident Management Support

Support throughout the PSPS event will continue as described in Idaho Power's Wildfire Mitigation and PSPS Operational Plan. The PSPS Team will continue to monitor fire and weather conditions. Logistics and mutual assistance requirements will be determined and acted upon per existing plans and processes. If timely re-energization is not possible based on the magnitude of the event, the EMT will be notified for additional support.

10.8.4. Communicate PSPS Event Conclusion

Idaho Power will use various forms of communication (including media outreach) to inform customers and other stakeholders, particularly those impacted by the PSPS event, when repairs are complete and it is safe to re-energize the system. This may occur in stages as different feeders or feeder sections are repaired and safe to re-energize. This will be viewable on the outage map on Idaho Power's website during the event. Idaho Power will also leverage existing public agency outreach and notification systems as done at other points in the PSPS process.

10.8.5. Re-energization

Once re-energization activities are completed and service is restored, crews and support staff will demobilize and return to normal fire season operations as described in internal process and procedure documents.

10.9. Post-incident Review

During the PSPS phases the documentation SME will collect and maintain in the Regional Dispatch Operations logs incident information required for reporting purposes.

Following conclusion of a PSPS event, the Regional Manager or their assigned representative will conduct informal, high-level debriefs to identify potential modifications to PSPS protocol based on lessons learned during the event. The regional manager or assigned representative will consolidate the feedback and provide to the documentation SME.

Also following the PSPS event, the TDER senior manager will conduct an AAR with the PSPS Team to identify potential modifications to PSPS protocol based on lessons learned during the event. The TDER senior manager will consolidate the feedback and provide to the documentation SME.

After wildfire season, the Customer Operations support leader may conduct an AAR focusing on operational processes, communications, customer support as well as emergency response and restoration. Idaho Power may also request feedback from external stakeholders on coordination efforts, communications and outreach effectiveness for integration into the AAR report.

11. FINANCIAL ADMINISTRATION

Idaho Power will track expenses related to PSPS events for OPUC and IPUC reporting and potential recovery. Expense should be tracked for the entire PSPS event (Phase 1 through conclusion of the Post-Incident Review and filing the PSPS event report with the OPUC) to include, without limitation, time reporting, equipment and supplies used to set up customer resource centers and provided to customers (e.g., water, ice, etc.)

12. REPORTING

Employees are required to manage information regarding PSPS events pursuant to Idaho Power's Information Retention Policy and underlying standards. Idaho Power will submit reports to the IPUC and OPUC as required.

13. AFTER-ACTION REPORT

An AAR is a structured review or de-brief process used to evaluate the effectiveness of the Plan and potential areas for improvement. This process may be performed after a PSPS event and may be confidential at the direction of Legal to improve the PSPS processes and procedures.

14. TRAINING

Idaho Power will strive to provide annual training, prior to or shortly after the beginning of wildfire season, to relevant employees on their respective roles in performing this PSPS Plan.

15. EXERCISES

Idaho Power will exercise this PSPS Plan at least annually using various scenarios and testing all or any portion(s) of the Plan which may include:

- Testing text and/or phone alerts with a test group of public safety partners
- Testing tactical operational plans such as reporting field observations or positioning employees at manually operated disconnects to test timing for de-energization and field inspections of T&D assets
- Discussing and/or practicing roles and responsibilities of both strategic and tactical operations, including decision-making handoffs and hypothetical scenarios
- Discussing and/or developing re-energization plans
- Testing capacity limits on incoming and outgoing communications systems

Appendix C

Oregon Wildfire Requirements and Recommendations.

Oregon Requirements and Recommendations

This appendix provides additional information specific to wildfire-related requirements, as well as wildfire-related recommendations, in Oregon.

Oregon Administrative Rule (OAR) Requirements

Below is a mapping of wildfire mitigation plan rules to sections within Idaho Power's WMP.

Wildfire Protection Plan Filing Requirements—OAR 860-300-0020

Oregon Requirement—OAR 860-300-0020	Corresponding Location in WMP
<p><i>(1) Wildfire Protection Plans and Updates must, at a minimum, contain the following requirements as set forth in Section 3(2)(a)-(h), chapter 592, Oregon Laws 2021 and as supplemented below:</i></p> <p><i>(a) Identified areas that are subject to a heightened risk of wildfire, including determinations for such conclusions, and are:</i></p>	<p>See Section 3: Quantifying Wildland Fire Risk</p> <p>See Idaho Power website for details of wildfire risk zones outside of service territory</p>
<p><i>(A) Within the service territory of the Public Utility, and</i></p> <p><i>(B) Outside the service territory of the Public Utility but within the Public Utility's right-of-way for generation and transmission assets.</i></p>	<p>See Section 3.2.2: Wildfire Risk Areas</p> <p>See Figure 3: Boardman to Hemingway (B2H) Proposed Route Risk Zones</p>
<p><i>(b) Identified means of mitigating wildfire risk that reflects a reasonable balancing of mitigation costs with the resulting reduction of wildfire risk.</i></p>	<p>See Section 4: Costs and Benefits of Wildfire Mitigation</p>
<p><i>(c) Identified preventative actions and programs that the Public Utility will carry out to minimize the risk of utility facilities causing wildfire.</i></p>	<p>See Section 5: Situational Awareness; Section 6: Mitigation—Field Personnel Practices; Section 7: Mitigation—Operations; Section 8: Mitigation—T&D Programs; and Section 8.3: T&D Vegetation Management</p>
<p><i>(d) 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.</i></p>	<p>See Section 10.2 Community Outreach and Section 10.2.1: Community Engagement</p> <p>See Appendix B: Idaho Power's Public Safety Power Shutoff Plan, Section 10.2.1: Coordination with Government Entities and Section 10.2.2: Community Preparedness</p>
<p><i>(e) 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.</i></p>	<p>See Section 7.4: Public Safety Power Shutoff and Appendix B: Idaho Power's Public Safety Power Shutoff Plan</p>
<p><i>(f) Identification of the community outreach and public awareness efforts that the Public Utility will use before, during and after a wildfire season.</i></p>	<p>See Section 10: Communicating About Wildfire</p>

Oregon Requirement—OAR 860-300-0020	Corresponding Location in WMP
<i>(g) 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.</i>	For Transmission, see Section 8.2.1: Transmission Asset Management Programs (with information on aerial, ground, detailed visual, pole, and other protection programs) For Distribution, see Section 8.2.2: Distribution Asset Management Programs (with information on visual, pole, and line equipment inspection programs)
<i>(h) 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.</i>	See Section 8.3.2: Transmission Vegetation Management and Section 8.3.3: Distribution Vegetation Management
<i>(i) 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.</i>	See Section 4: Costs and Benefits of Wildfire Mitigation, specifically Section 4.3: Wildfire Mitigation Cost Summary and Section 4.4: Mitigation Activities
<i>(j) 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.</i>	See Section 2: Government, Industry, and Peer Utility Engagement

Risk Analysis—OAR 860-300-0030

Oregon Requirement—OAR 860-300-0030	Corresponding Location in WMP
<i>(1) The Public Utility must include in its Wildfire Mitigation Plan risk analysis that describes wildfire risk within the Public Utility's service territory and outside the service territory of the Public Utility but within the Public Utility's right of way for generation and transmission assets. The risk analysis must include, at a minimum:</i>	See Section 3: Quantifying Wildland Fire Risk
<i>(a) Defined categories of overall wildfire risk and an adequate discussion of how the Public Utility categorizes wildfire risk. Categories of risk must include, at a minimum:</i>	See Section 3.2.2: Wildfire Risk Areas and risk zone map on Idaho Power's website for detailed map of wildfire risk zones
<i>(A) Baseline wildfire risk, which include elements of wildfire risk that are expected to remain fixed for multiple years. Examples include topography, vegetation, utility equipment in place, and climate;</i>	See Section 3.2 for discussion of fixed risk elements
<i>(B) Seasonal wildfire risk, which include elements of wildfire risk that are expected to remain fixed for multiple months but may be dynamic throughout the year or from year to year; Examples include cumulative precipitation, seasonal weather conditions, current drought status, and fuel moisture content;</i>	See Section 3.2.1 for discussion of variable risk elements that change throughout the year
<i>(C) Risks to residential areas served by the Public Utility; and</i>	See Section 3.2.1 paragraph 4 addresses the consideration of residential areas in risk analysis

Oregon Requirement—OAR 860-300-0030	Corresponding Location in WMP
<i>(D) Risks to substation or powerline owned by the Public Utility.</i>	See Section 3.2.1 paragraph 4 addresses overhead power lines. Note: Idaho Power does not model wildfire progression or spread within substations due to zero vegetation within the fenced area. Also see Section 3.2.2.1 for discussion of risk modeling of proposed Boardman to Hemingway transmission line
<i>(b) a narrative description of how the Public Utility determines areas of heightened risk of wildfire using the most updated data it has available from reputable sources.</i>	See Section 3.2.2: Wildfire Risk Modeling Process and the 2023 Risk Modeling Update
<i>(c) a narrative description of all data sources the Public Utility uses to model topographical and meteorological components of its wildfire risk as well as any wildfire risk related to the Public Utility's equipment.</i>	See Section 11.4: Wildfire Risk Map
<i>(A) The Public Utility must make clear the frequency with which each source of data is updated; and</i> <i>(B) The Public Utility must make clear how it plans to keep its data sources as up to date as is practicable.</i>	See Section 11.4: Wildfire Risk Map
<i>(d) The Public Utility's risk analysis must include a narrative description of how the Public Utility's wildfire risk models are used to make decisions concerning the following items:</i> <i>(A) Public Safety Power Shutoffs</i> <i>(B) Vegetation Management;</i> <i>(C) System Hardening;</i> <i>(D) Investment decisions; and</i> <i>(E) Operational decisions.</i>	A) See Section 7.5.2: PSPS Plan B) See Section 8.3: T&D Vegetation Management C) See Executive Summary on Infrastructure Hardening; Section 8.2.2: Distribution Asset Management Programs; Section 11.9: Long-Term Metrics D) Risk analysis informs Red and Yellow Risk Zones mitigation activities. See Section 4: Costs and Benefits of Wildfire Mitigation and Section 4.4 Mitigation Activities E) See Section 7.2: Operational Protection Strategy and Appendix A: Wildland Fire Preparedness and Prevention Plan
<i>(e) For updated Wildfire Mitigation Plans, the Public Utility must include a narrative description of any changes to its baseline wildfire risk that were made relative to the previous plan submitted by the utility, including the Public Utility's response to changes in baseline wildfire risk, seasonal wildfire risk, and Near-term Wildfire Risk.</i>	For the 2023 WMP, Idaho Power did not make changes to baseline wildfire risk, but will evaluate and discuss changes in the 2024 WMP.

Oregon Requirement—OAR 860-300-0030	Corresponding Location in WMP
<i>(2) To the extent practicable, the Public Utility must confer with other state agencies when evaluating the risk analysis included in the Public Utility's Wildfire Mitigation Plan.</i>	See Executive Summary section on Lessons Learned: Community Feedback

Wildfire Mitigation Plan Engagement Strategies—OAR 860-300-0040

Oregon Requirement—OAR 860-300-0040	Corresponding Location in WMP
<i>(1) The Public Utility must include in its Wildfire Mitigation Plan a Wildfire Mitigation Plan Engagement Strategy. The Wildfire Mitigation Plan Engagement Strategy will describe the utility's efforts to engage and collaborate with Public Safety partners and Local Communities impacted by the Wildfire Mitigation Plan in the preparation of the Wildfire Mitigation Plan and identification of related investments and activities. The Engagement Strategy must include, at a minimum:</i>	See Section 10: Communicating About Wildfire
<i>(a) Accessible forums for engagement and collaboration with Public Safety Partners, Local Communities, and customers in advance of filing the Wildfire Mitigation Plan. The Public Utility should provide, at minimum:</i>	See Section 10.2: Community Outreach and Section 10.2.1: Community Engagement
<i>(A) One public information and input session hosted in each county or group of adjacent counties within reasonable geographic proximity and streamed virtually with access and functional needs considerations; and</i>	See Section 10.2.1: Community Engagement and Section 10.3.1: Key Communication Methods
<i>(B) One opportunity for engagement strategy participants to submit follow-up comments to the public information and input session.</i>	
<i>(b) A description of how the Public Utility designed the Wildfire Mitigation Plan Engagement Strategy to be inclusive and accessible, including consideration of multiple languages and outreach to access and functional needs populations as identified with local Public Safety Partners.</i>	See Section 10.2.1: Community Engagement and Section 10.3.1: Key Communication Methods
<i>(2) The Public Utility must include a plan for conducting community outreach and public awareness efforts in its Wildfire Mitigation Plan. It must be developed in coordination with Public Safety Partners and informed by local needs and best practices to educate and inform communities inclusively about wildfire risk and preparation activities.</i>	See Section 10.2.1: Community Engagement and Section 10.3.1: Key Communication Methods
<i>(a) The community outreach and public awareness efforts will include plans to disseminate informational materials and/or conduct trainings that cover:</i>	For (A) – (D), see Section 10.2.1: Community Engagement; Section 10.3: Customer Communications; and Section 10.3.1: Key Communication Methods
<i>(A) Description of PSPS including why one would need to be executed, considerations determining why one is required, and what to expect before, during, and after a PSPS;</i>	
<i>(B) A description of the Public Utility's wildfire mitigation strategy;</i>	
<i>(C) Information on emergency kits/plans/checklists;</i>	
<i>(D) Public Utility contact and website information.</i>	

Oregon Requirement—OAR 860-300-0040	Corresponding Location in WMP
<p><i>(d) 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.</i></p> <p><i>(b) In formulating community outreach and public awareness efforts, the Wildfire Mitigation Plan will also include descriptions of:</i></p> <p><i>(A) Media platforms and other communication tools that will be used to disseminate information to the public;</i></p> <p><i>(B) Frequency of outreach to inform the public;</i></p> <p><i>(C) Equity considerations in publication and accessibility, including, but not limited to:</i></p> <p><i>(i) Multiple languages prevalent to the area;</i></p> <p><i>(ii) Multiple media platforms to ensure access to all members of a Local Community.</i></p>	<p>See Section 10.2.1: Community Engagement</p> <p>For (A)-(C): See Section 10.2.1: Community Engagement; Section 10.3: Customer Communications, and Section 10.3.1: Key Communication Methods</p>
<p><i>(3) The Public Utility must include in its Wildfire Mitigation Plan a description of metrics used to track and report on whether its community outreach and public awareness efforts are effectively and equitably reaching Local Communities across the Public Utility's service area.</i></p>	<p>See Section 10.3.3: Communication Metrics</p>
<p><i>(4) The Public Utility must include a Public Safety Partner Coordination Strategy in its Wildfire Mitigation Plan. The Coordination Strategy will describe how the Public Utility will coordinate with Public Safety Partners before, during, and after the fire season and should be additive to minimum requirements specified in relevant Public Safety Power Shut Off requirements described in OAR 860-300-0050. The Coordination Strategy should include, at a minimum:</i></p> <p><i>(a) Meeting frequency and location determined in collaboration with Public Safety Partners;</i></p> <p><i>(b) Tabletop Exercise plan that includes topics and opportunities to participate;</i></p> <p><i>(c) After action reporting plan for lessons learned in alignment with Public Safety Partner after action reporting timeline and processes.</i></p>	<p>See Section 10.2.1: Community Engagement</p>

OPUC Order Nos. 22-133 and 22-312

This appendix also addresses recommendations received from Oregon Public Utility Commission (OPUC) Staff in Docket No. UM 2209 and approved by the OPUC Order Nos. 22-133 and 22-312. The italicized text below reflects OPUC Staff's specific recommendations for the company.

Recommendations Pertaining to OPUC Order No. 22-312Category: Cost Allocation

- 1) *Provide detailed cost allocation assumptions of the transmission and distribution patrol, maintenance, and repair program, separated by transmission and distribution, as well as any associated maintenance and repair program including justification and reasoning for the cost allocation between Idaho and Oregon.*
- 2) *Provide details explaining the proposed cost allocation between Idaho and Oregon associated with wildfire mitigation program capital investments.*

Idaho Power removed the cost allocation information contained in an earlier version of the WMP, as the WMP is intended as an evolving document and not one related to prudence of specific investments.

To address Staff's interest in this subject, the company will file a wildfire mitigation-related cost deferral application with the OPUC in December 2022 so it may be reviewed in concert with the 2023 WMP.

Category: Risk Framework

- 3) *Provide detailed explanation of the strategy pertaining to its risk analysis framework.*

See Executive Summary of WMP. Idaho Power carried out a review of risk management processes and will consider the ISO 31000-2018 framework and process in the 2023 WMP.

Recommendations Pertaining to OPUC Order No. 22-133

The following summarizes OPUC Staff's recommendations for the company to include in its 2023 WMP.

Risk Modeling—OAR 860-300-0020 (1)(a)(A) & (B):

- 1) *Provide details regarding the mileage of overhead facilities that lie within its designated YRZs and RRZs.*

See Section 3.2.2. for details of overhead line mileage in designated wildfire risk zones.

- 2) *Idaho Power provide details of the analysis completed for establishing the risk tiers and the threshold values utilized for classifying the YRZs and RRZs.*

See Section 3.2.2. Tier levels were established based on quantitative results of modeling and numerous workshops held with our consultant and individuals having local knowledge of topography, fuels, fire history, and overhead facilities in their area. Tier levels were generated algorithmically as a starting point in the analysis and refined through workshops. Idaho Power did not base tier levels solely on risk scores.

- 3) *Idaho Power provide information regarding an analysis of the risk from specific utility asset types.*

See Section 3.2.1. The company used equal probability of ignition occurring on overhead transmission and distribution facilities in quantifying wildfire risk. As we mature our risk modeling methodology, the company plans to include reliability data to improve risk models.

- 4) *Idaho Power provide details of the process and timing that will be followed to evaluate the established heightened wildfire risk zones, and what data inputs and portions of the analysis will be reviewed annually.*

See sections 3.2.1. and 11.4. Idaho Power is planning to update its risk modeling in 2023.

- 5) *Idaho Power address the concerns raised by STOP B2H Coalition as thoroughly as possible.*

Idaho Power met with Stop B2H Coalition representative Jim Kreider on November 11, 2022, to provide an overview of the risk analysis performed for the Boardman to Hemingway (B2H) route. A presentation was delivered that highlighted Idaho Power's approach to quantifying wildfire risk and provided details of analysis performed along the B2H route that exceeded analysis performed in other locations within the service area. Risk analysis conducted along the B2H route includes quantifying wildfire risk similarly to other overhead facilities as described in Section 3. In addition, the following was also performed:

- Analysis of surface fuels within 1 mile of the B2H route to determine the potential of crown fire
- Determination of the influence of topographical slope on resistance to control and spread rate within 1 mile of the B2H route
- A review of temperature, precipitation, and relative humidity of the project site
- A review of the wildland urban interface and estimation of land use area within 1 and 10 miles of the project site
- A review of historic ignitions and the perimeter of historic fires within 50 miles of the project site going back 50 years

Transmission design engineers at Idaho Power also reviewed the design of lattice and H-frame structures proposed for B2H construction. A review was performed to identify the design characteristics that lead to decreased potential of ignition. This information was shared with Mr. Kreider and the overall fire potential for the area surrounding Morgan Lake. Mr. Kreider provided good feedback and recommended that Idaho Power meet with the new fire chief for the La Grande Rural Fire District and Baker County to compare risk maps and methodology. Idaho Power agreed and will have more engagement with Mr. Kreider and agencies in 2023. Additionally, the company plans to include the B2H route when reconducting risk modeling in 2023.

WMP Effectiveness—OAR 860-300-0020 (1)(b):

- 6) *Include a description of how it will measure the overall effectiveness of its wildfire mitigation activities, as well as information on wildfires in the service territory for the prior year.*

See the Executive Summary and Section 11.9. Metrics include tracking and monitoring mitigation programs to identify gaps and areas requiring corrective action. Long-term metrics were incorporated in 2022 to track potential drivers of ignition with respect to outage counts.

Plan Objectives—OAR 860-300-0020 (1)

- 7) *Idaho Power include details on whether the objectives of key preventative actions outlined in previous year's WMP have been met.*

See the Executive Summary.

- 8) *Idaho Power describe, to what degree, the preventable measures outlined in previous year's WMP have reduced the risk of the utility's infrastructure from causing ignitions.*

See Section 11.9. Idaho Power believes that mitigation activities have reduced wildfire risk but we need more time in concluding the magnitude of risk reduction. Idaho Power expects that reliability data and outage analytics will provide greater confidence of risk reduction with time.

- 9) *Idaho Power describe any adjustments made to its wildfire prevention programs that were included in previous year's WMP.*

See the Executive Summary. Adjustments were made to pre-season wildfire patrols due to snow levels. Also, Idaho Power did not meet all vegetation management production goals set for the year and had to adjust quality assurance and control audits from 100% in wildfire risk zones to a random sample approach.

Outreach Efforts—OAR 860-300-0020 (1)(d)

- 10) *Idaho Power include more detailed information about how it used learnings from the previous year to improve its 2023 Plan. The company should consider Public Safety Partner input through After Action Reports (from exercises and events), surveys or other feedback mechanisms, and company lessons learned.*

See the Executive Summary and Section 10.2.1.

- 11) *Idaho Power include clarification about CRCs in its 2023 WMP Update, to include:*

See sections 10.2.1. and 10.2.2.

- 12) *Idaho Power incorporate the following in its 2023 WMP:*

- *Map showing areas of its service territory at higher risk for PSPS events.*

See PSPS program in Appendix B.

- *List of Public Safety Partners the company engages with related to WMP.*

Idaho Power maintains routine contact with county emergency managers and state-level Public Safety Partners for both Oregon and Idaho. Specific contacts can be provided upon request.

- *Frequency of communication with Public Safety Partners.*

See sections 10.2.1. and 10.2.2.4.

- *Methods of communication with Public Safety Partners.*

See Section 10.2.1.

- *Feedback received from Public Safety Partners, and description of how the information influences the WMP.*

See Section 10.2.1.

Lessons Learned—OAR 860-300-0020 (1)(e)

- 13) *Idaho Power include previous year's lessons learned regarding de-energization of power lines to include findings from after action reports, including survey results from exercises and actual events (when available), in its 2023 WMP.*

See the Executive Summary. While Idaho Power did not call a PSPS event in 2022, there were several lessons learned from functional exercises and one near PSPS event that was subsequently canceled due to precipitation.

- 14) *Idaho Power include more information about the analysis completed to make their programmatic decisions of modifying system operations. The information should clarify why the company describes plans for RRZs not YRZs, and differences in system operations between transmission lines and distribution circuits.*

See Section 7.2.

Communication and Outreach—OAR 860-300-0020 (1)(f)

- 15) *Idaho Power incorporate the following its 2023 WMP:*

- *Examples of messaging;*
- *Selection process for methods of outreach;*
- *Determination of target audience;*

- *Metric and criteria used to evaluate effectiveness of outreach;*
- *Outcome of previous year's outreach evaluation;*
- *Description of company personnel and external resources responsible for outreach efforts;*
- *Description of timing of the outreach, including before, during, and after wildfire season;*
- *Description of Wildfire Mitigation Information/Resources maintained by the company on its website; and*
- *Description of Social Media Campaign developed and implemented by the company to inform customers about potential wildfire impacts (i.e., potential loss of power, preparedness, safety and awareness, etc.).*

See Section 10.2.

16) Idaho Power conduct wildfire training and exercises and include a discussion about community outreach and public awareness efforts prior to the upcoming fire season to clarify these activities, and to solicit input from participating Stakeholders.

See the Executive Summary and Section 10.2.

Asset Inspections—OAR 860-300-0020 (1)(g)

17) 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.

See Section 3.2.2. for line miles in wildfire risk zones and Section 8.2. for details of programs taking place in those zones.

18) Idaho Power include logic and details of analysis completed for their inspection and correction programming decisions in YRZs (and if any future RRZs) in Oregon.

See Section 8.2.

Vegetation Management—OAR 860-300-0020 (1)(h)

19) 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.

See Section 8.3.

20) 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.

See sections 4.4.6. and 8.3.

21) Idaho Power provide more information regarding their quality control/quality assurance program and audits for vegetation management work completed in the RRZs, YRZs, including measures employed and resource types.

See sections 8.3.2. and 8.3.3.4.

22) Idaho Power provide analysis of any historical events pertaining to its power lines, specific equipment type, vegetation, and wildfires that informed the program's design and monitoring approach.

See Section 3.2.2.

Expert Forums—OAR 860-300-0020 (1)(i)

23) Idaho Power discuss the impact of participation in expert forums (see OAR 860-300-0020(1)U)) on identification of solutions most likely to provide the benefits anticipated. This should include:

- Cited research, reports, and studies used in any analysis, unless the source is confidential.*
- How the factors unique to the company's facilities and service territory were used when considering the applicability of specific options to its systems.*

See Section 2.3. In addition to participation in wildfire mitigation forums, Idaho Power spent significant time in 2022 developing a six-year roadmap to integrate new technology into the WMP. This consisted of researching products and meeting with 30 different companies throughout the year. We worked with the Electric Power Research Institute on gaining feedback of the performance and mitigation benefit of different technologies. Covered conductor was a key area of focus and helped develop a pilot plan. Additionally, the company has invested in the Westly Group, a fund that invests in startups focused on the digitalization and sustainability of energy, mobility, buildings, and industrial technology. One of our focus areas with the Westly Group in 2022 was reviewing new wildfire technologies.

The following were references used during the year to form changes in the 2023 WMP.

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- Serrano, R., Carvalho, M., Araneda, J., Alamos, O., Barroso, L., Bayma, D., Ferreira, R., and Moreno, R. 2022, January/February. *Fighting Against Wildfires in Power Systems*, IEEE Power & Energy, 20(1), 38-51.
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Advanced Relay Protection

- Davoudi, M., Efaw, B., Avendano-Mora, M., Lauletta, J., and Huffman, G. “Reclosing of Distribution Systems for Wildfire Prevention”. *IEEE Transactions on Power systems*, Vol 36, No. 4.
- Eaton Power Systems (2021). *Overcurrent Fault Data in The Form6*

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- Hou, D. 2007. *Detection of High Impedance Faults in Power Distribution Systems*. Presented at the 6th Annual Clemson University Power Systems Conference, Clemson, South Carolina.
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- Bravo, R., Pham, E., Luy, A., Rorabaugh, J., and Hutchinson, E. *12 kV Covered Conductor Testing*. IEEE PES Transmission and Distribution Conference and Exposition, October 2020.
- Kabot, O., Fulnecek, J., Misak, S., and Prokop, L. *Partial Discharges Pattern Analysis of Various Covered Conductors*. Published in 21st International Scientific Conference on Electric Power Engineering, October 2020.
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Risk Management

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Group Participation and Learnings—OAR 860-300-0020 (1)0

24) Idaho Power include more specifics on what it has learned by participating in these groups. Staff would like assurance the company is leveraging the learnings from other utilities and experts to facilitate implementation of solutions with the highest benefit cost ratio.

See Section 2.3.

25) Idaho Power include its contribution to these forums including any research projects it is supporting or participating in.

See Section 2.3.