Avista Utilities

Washington Electric Utility Wildfire Mitigation Plan Pursuant to HB1032

October 31, 2024 Version 1.0

Statement from Avista Executive Management

2024 represents Avista's 4th full year of implementing the Wildfire Resiliency Plan. Avista's wildfire strategies are firmly rooted in our 138-year operating history and represent the collective knowledge of Avista employees and fire agency professionals together with assistance from peer utilities, and most importantly, engagement with customers. This Plan was created in compliance with Washington HB 1032 requiring all electric utilities in the State of Washington to submit a Wildfire Resiliency Plan in an approved format and in accordance with the elements identified by the State. This plan as well as Avista's standard Wildfire Resiliency Plan, can be found on our website. Though the State plan format differs from our traditional plan, they are basically the same. Both plans reflect our commitment to partner with customers, communities, and those who manage forest landscapes and fight fires.

We all have a role to play in minimizing the risk of wildfire.

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Date: October 31, 2024

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Avista 2021-2023 DNR Wildfire Resiliency Plan

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1.0 Executive Summary

Provide a brief overview of the Wildfire Mitigation Plan (WMP) and the associated material provided to assist the consumers of the information. The below text can be kept and added to, edited, or removed for a utility-specific narrative.

Since 2020 Avista has responded to the increasing threat of wildfires within our service territory with a robust and well-rounded Wildfire Resiliency Plan focused on reducing the likelihood of a wildfire caused by Avista's Idaho and Washington electric operations, protecting the safety of our employees, customers, communities, and infrastructure, and preparing ourselves, our system, and external partners for a wildfire event. The Company produces an annual plan outlining our programs, strategies, performance metrics, and goals, as well as a state required plan that is produced every three years (beginning in 2024). Though these plans have two formats, they are, collectively, the same Plan, with the goals of:

- Supporting safe and reliable operations by protecting human lives, safeguarding property, and protecting physical assets against the threat of wildland fires through the implementation of Avista's Wildfire programs and Company operations.
- Reducing the risk of wildfire from the interaction of Avista's energy delivery system and the environment, as well as the impacts of wildfire to Avista's system.
- Preparing and training for episodic wildfire events, ensuring emergency preparedness for ourselves and our partners, and aligning operating practices with fire threat conditions.
- Protecting the energy delivery infrastructure that serves our customers and mitigating the probability and consequence of direct financial and liability costs associated with large scale fire events.

Avista's Wildfire Resiliency Plan recommendations also reflect cost prudency and were adopted based on their ability to leverage existing asset programs and operating practices, promote public safety, and mitigate financial risks. Avista's Plan is comprised of four major categories. The first category is grid hardening to reduce spark ignition events and make Avista's electrical system more resilient to the impacts of wildfire. Second is enhanced vegetation management practices to reduce vegetation-related risk, often a factor in creating heat events or sparks. The third involves situational awareness, primarily monitoring technology as well as a Wildland Urban Interface map of our service territory to help us identify and focus in on the areas of our system most likely to be at risk. Fourth is emergency operations and planning, which includes automation of equipment to allow us to quickly react to fire threat situations, partnerships and cross-training with external stakeholders, as well as operational tactics such as Enhanced Protection Settings (Fire Safety Mode) and Public Safety Power Shutoffs to help us react to wildfire risk.

2.0 Wildfire Resiliency Plan Overview

Avista is charged with safely, reliably, and affordably delivering energy services to its customers. At the same time, Avista recognizes that the threat of wildfire impacts all of us at our homes, communities, and businesses. Our Wildfire Resiliency Plan serves as a testament to our commitment and the responsibility

we take in working to mitigate the risk of our equipment being involved in sparking a fire event, protecting the safety of our customers and communities, and protecting the infrastructure that reliably serves our customers.

2.1 Purpose of the Wildfire Mitigation Plan

This Wildfire Mitigation Plan describes in detail the range of activities that a Utility or joint Utilities are taking to mitigate the threat of utility involved wildfires, including various programs, policies, and procedures. This plan complies with the requirements of HB1032 for investor and customer owned electric utilities (IOU/COU) to prepare a wildfire mitigation plan by October 31, 2024, and every three years thereafter.

The risk of wildfire is ever present in the western United States. Though we have always faced the threat of wildfires, that threat is increasing both as a function of population growth and location and as the result of a changing climate. Avista's Wildfire Resiliency Plan was developed as a risk-based approach to mitigating wildfires, which is critical for customers, communities, investors, and the regional economy. Avista has taken a proactive approach for many years to manage wildfire risks and impacts, and through its Wildfire Resiliency Plan, the Company has identified additional wildfire mitigation efforts for implementation, as described further in this report.

The goal of Avista's Wildfire Resiliency Plan is to reduce the likelihood of a wildfire caused by Avista's electric operations, reduce the risks associated with utility involved fires, protect the safety of customers, employees, and first responders, and to lessen the degree and impact of electric system damage and outages related to wildfire.

Avista is continually balancing wildfire risk and reliability risk. The recommendations contained in this Plan are based on the ability to reduce wildfire-related risk while considering this balance. It is important to note that though many elements of Wildfire Resiliency are aimed at reducing outage events and possible fire starts, we realize that it is impractical to expect perfect reliability, especially during fire season wind events. Using our strategy of altering protection schemes on select circuits based on data and the analysis provided by our Fire Weather Dashboard, Avista can achieve a better balance between reliability risk and wildfire risk safety objectives. This means that at times of extreme risk, customer reliability may be sacrificed in order to focus on customer safety. We believe that if this balance is carefully considered and decisions are made with the sophisticated analysis and guidance provided by the Fire Weather Dashboard, we can help make our system safer in times of fire threat while balancing customer service and reliability.

The Wildfire Resiliency Plan recommendations consider inherent risk (no defenses) and managed risk (with defenses) and investments needed to fund the programs necessary to achieve the Plan's objectives. Since the Plan was developed as a risk-based approach to mitigating wildfires, as a part of the Company's wildfire resiliency analysis, the Company focused on understanding the risk exposure of wildfires in general as well as the opportunity to reduce risk through specific actions taken associated with the Company's transmission and distribution areas. We believe it is critical to act in protecting our customers as well as the infrastructure that serves those customers.

The Washington State Mandated Wildfire Resiliency Plan, in compliance with HB 1032, will be filed with the State by October 31, 2024, and every three years thereafter.

2.2 Description of Where the Wildfire Plan Can Be Found Online

Provide a description of how the public and other reviewers can find WMP information online, if available. It is recommended that utilities host their WMP on the utility website in a location that is relatively easy to find and prioritizes the most current and up to date WMP.

Avista maintains a current copy of this Washington State Wildfire Resiliency Plan, as well as Avista's full service territory Wildfire Resiliency Plan on the Company's MyAvista.com website under "Safety" and "Wildfire Resiliency."

2.3 Best Practices Cross-Reference Table

Provide any industry standard or other best practices (Standards may include guidance from FEMA, US Forest Service, NERC regulations, NST, OSHA guidelines, etc.) referenced within the WMP including what section and page number in the form of hyperlinks. Standards that do not have a specific reference within the text but apply to the entirely of the plan can be listed without additional information. If no industry-wide standards or practices are utilized, this table may be left blank.

Statutory Requirement / Standards	Section & Page Number
HB 1032 – By October 31, 2024, and every three years thereafter, each Investor-owner and Consumer-owned Utility must review, if appropriate revise, and adopt its wildfire mitigation plan	<u>Sec. 4, p. 4</u>
ANSI A300 (Part 9)-2017 Tree Risk Assessment - Tree Failure	Section 7.3.1, pp. 25, 26
American National Standards Institute (ANSI)/American Society for Quality (ASQ) Z1.4-2008 Sampling Procedures and Tables for Inspection by Attributes	Section 10.3, p. 35
FERC Reliability Standard FAC-003	Section 7.3.1, pp. 26, 27
NERC Standard TOP-001-4	<u>Section 7.7.1, p. 29</u>

3.0 Utility Overview

In the following sections, provide an overview of the utility, its service area, and general description of the purpose of the Wildfire Mitigation Plan (WMP).

Avista Utilities serves electric and natural gas customers within a 30,000 square mile service territory containing approximately 1.7 million people in Washington (62%), Idaho (28%), and Oregon (gas only: 10%). We have approximately 414,000 retail electric customers and 378,000 natural gas customers.¹

¹ From Avista's 2024 Quick Facts. <u>365756ed-8fd4-48f4-9abe-e79ef78c730b (avistacorp.com)</u>

3.1 Utility Description and Context Setting Table

Provide a brief description of the utility and include the context-setting table. For utilities operating in multiple states, complete the table below only for the areas within Washington state. If any of the information is not tracked, not applicable, or not known, please leave that section blank and provide a summary of the exception. They note that for many utilities this will be a reference to a Public Safety Power Shutoff (PSPS) event. These events, whether through a formally defined PSPS program or not, are recognized as a safety measure of last resort initiated by utilities to pre-emptively de-energize specific powerlines during critical fire weather to reduce the risk of the electric system being involved in an ignition. The decision to either have or not have this type of practice is at the operational discretion of the individual utility.

Utility Name	Avista Utilities	Notes:			
Service Territory Size (sq miles)	30,000 Square Miles				
	[1.48]% Open Water				
	[0]% Perennial Ice/Snow				
	[1 19]% Developed. Open Space				
	[85]% Developed Low Intensity				
	[51]% Developed, Medium Intensity				
	[.09]% Developed, High Intensity				
	[22]% Barren Land	This information is for our			
	[.05]% Deciduous Forest	Washington and Idaho Service			
Service Territory Make-up	[42 51]% Everyteen Forest	Territories. We do not have this data broken out by state.			
	[42.51]/0 Evergreen Porest				
	[105]70 Mixed Forest				
	[16.37]% Scrub/Shrub				
	[10.1/]% Grassland/Herbaceous				
	[.88]% Pasture/Hay				
	[16.31]% Cultivated Crops				
	[.45]% Woody Wetlands				
	[.62]% Emergent Herbaceous Wetlands				
Service Territory Wildland Urban	[8]% Wildland Urban Interface [14]% Wildland Urban Intermix				
Interface (based on total area)	[] NA / Not tracked (please add any other detail below)	Washington Only			
Customers Served	408,000 retail electric customers				
Account Demographic	[]% Residential []% Agricultural []% Commercial/Industrial []				
Account Demographic	NA / Not tracked (please add any other detail below				
	01 Residential 714965 89.49%				
	21 Commercial - Firm 81997 10.26%	Avista does not track customers			
	22 Commercial - Interruptible 28 0.004%	with the suggested categories. Our			
	31 Industrial - Firm 824 0.10%	customer classes are defined by			
[Note: Please provide as a percent of	39 Pumping - Irrigation 548 0.07%	the Commission. Those classes are			
total customers served]	41 Industrial - Interruptible 25 0.003% 80 Interdepartmental 240 0.03%	indicated in this response.			
	91 Commercial Transportation 62 0.01%				
	92 Industrial Transportation 99 0.01%				
	93 Interdepartmental Transportation 6 0.001%				
	NA Not Applicable 133 0.02%				
Utility Equipment Make-up (circuit	Overhead Dist : 7 675				
miles)	Overhead Trans : 2 270	This data is in circuit miles and			
[Note: Please provide brief description	Underground Dist : 4 906	includes Avista's entire service			
of how line miles are measured or	Underground Trans : 0	territory.			
calculated]					
Has developed protocols to pre-	Yes No	Avista has developed a PSPS			
emptively shut off electricity in	A summary or description of protocols can be provided in	program which was implemented			
response to elevated wildfire risks? ³	section 7.	for the 2024 wildfire season.			
response to created what e rishest					
	Yes 🗆 No				
	If yes, then provide the following data for the three trailing	g No PSPS events from 2021 - 2023. r			
Has previously pre-emptively shut off	calendar vears:				
electricity in response to elevated	······································				
wildfire risk?	Number of shut-off events: [0]				
	Customer Accounts that lost service for >10 minutes: $\begin{bmatrix} 0 \\ 1 \end{bmatrix}$ For				
	prior response, average duration before service restored: [n/2]				
	prior response, average datation before service restored. [m/a]				

4.0 Objectives of the Wildfire Mitigation Plan

In this section, please state the objectives of the mitigation plan and how each objective supports a response and recovery system that is focused on public safety. For any section where a program overlaps two or more elements of the plan, it is acceptable to select the most applicable element to describe the program and reference that section where applicable for other areas. It is not necessary to repeat the program description multiple times.

Research indicates that climate change has fueled the increase in wildfires across the Western U.S. and that the frequency of wildfires has quadrupled since the 1980s. Fire season is also longer. Most areas across the western United States report 80 additional days of fire season.² The U.S. Forest Service has extensive fire records for the Western states which indicate a tripling in fires larger than 1,000 acres, from an average of about 50 fires in 1970 to nearly 150 today.³ Conditions are becoming more and more condusive to large, destructive wildfires, and U.S. utility electric assets are located in areas that are becoming increasingly vulnerable to wildfires.

Avista published its first Wildfire Resiliency Plan in June of 2020 following 18 months of development which included working with peer utilities, internal subject matter experts, and regional wildfire and emergency response agencies. Based on the input provided by this array of participants, the Company identified actions to reduce wildfire risk grouped into four categories, all of which are designed to work together to protect customer, employee, and first responder safety, and protect critical assets to help ensure customer reliability and service. Our programs are grouped into four primary categories:

- **Grid Hardening** Strengthen and upgrade infrastructure to reduce equipment failures, decrease the potential for spark events, and protect poles and equipment from the impact of wildfires.
- Enhanced Vegetation Management Remove dead, dying, and diseased trees that could strike powerlines. Employ remote sensing such as LiDAR and satellite-derived information to aid in vegetation inspections and risk tree identification to help reduce the potential for vegetationrelated outages that can impact customer service and/or lead to a spark.
- Situational Awareness Develop and utilize tools to predict, identify, and respond to risk, both static risk in our service territory (via the WUI map) and dynamic real time risk (using Avista's Fire Weather Dashboard).
- Emergency Response & Operations Align utility system protection with fire-weather conditions in order to enhance the safety of customers, especially during high fire threat weather. Recognize wildfire as separate and distinct from other weather events and partner closely with emergency first responders and firefighters before, during, and after an event to increase safety.

² John T. Abatzoglou and A. Park Williams, "Impact of Anthropogenic Climate Change on Wildfire Across Western US Forests," Proceedings of the National Academy of Sciences, October 10, 2016, <u>Impact of anthropogenic climate change on wildfire across</u> western US forests | PNAS

³ Climate Central, "Graph: Hotter Years, More Fires in Western States," <u>https://www.climatesignals.org/resources/graph-hotter-years-more-fires-western-states</u>

The elements within each of these program areas are specifically designed to address safety for people, communities, and infrastructure. Programs to reduce the risk of spark or heat events include distribution grid hardening measures such as replacing outdated equipment and installing wildlife guards, as well as identifying and mitigating risk-trees (trees with the potential of imminent fall-in hazard to energized facilities). Programs to protect infrastructure include replacing wood poles with steel and wrapping wood poles with fire resistant mesh in high fire threat locations. The Wildfire Resiliency Plan also has a strong focus on preparation as a means of reducing risk, including the development of our Fire Weather Dashboard, which models fire risk on a feeder-by-feeder and section-by-section basis. It also includes use of the Fire Safety Mode operating practice, installation of additional monitoring and control equipment in high fire threat areas, and "people" preparation including formalizing procedures inside and outside of the Company to address wildfire situations, as well as working with external partners on training, coordination, and response.

Avista's Wildfire Resiliency Plan is intended to accelerate existing infrastructure programs as well as conduct new programs to reduce fire ignition risk from electric lines and to make systems more resilient against the impact of fires. Avista's Wildland Urban Interface (WUI) map indicates that 2,746 miles (36%) of its electric distribution lines are located in high fire consequence areas, of which 1,708 miles reside in Washington (22%). These zones reveal the intersection between forest land and human development and are the focal point of Avista's risk mitigation strategies.

4.1 Minimizing Sources of Ignition

Describe steps taken to reduce likelihood of ignitions from energized equipment.

Most of Avista's Wildfire Program elements are related to minimizing the chance for a spark or heat event occurring. Some of our programs are more specifically focused on this mitigation, including our distribution grid hardening efforts, enhanced vegetation management practices, situational awareness strategies, and operational tactics.

Distribution Grid Hardening

Distribution grid hardening efforts are intended to reduce the number of spark-ignition events on the distribution system and to protect critical infrastructure from the impacts of fire, focused primarily on portions of electric circuits located in high fire threat areas. Though Avista has asset maintenance programs to replace poles and equipment, existing programs are condition-based and support reliability objectives. Wildfire Distribution Grid Hardening focuses on upgrades most likely to reduce spark ignition events and poles fires. The scope of this work includes:

- Replace wooden crossarms with fiberglass to mitigate pole fires.
- Replace small or outdated wire with modern steel-reinforced wire to reduce conductor failures.
- Install wedge-bail clamps at hot tap connector locations to help prevent thermal failures.
- Underground distribution lines where financially feasible.
- Add or replace wildlife guards to mitigate electrical contacts with animals and birds.
- Replace wood with metal poles at critical span locations such as highway and river crossings.

On average, Avista experiences about 80-90 pole fires per year mostly related to wood crossarms. In the U.S., about 25% of pole fires lead to collateral damage including wildfire.⁴ By replacing wood crossarms with fiberglass units, leakage current is substantially reduced, and pole fire risk is much lower.

Animals cause about 8% of Avista's outages (animal related outages are the number five cause of power outages in the U.S.)⁵ Wildfires caused by animals are increasingly common due to issues such as ignition of nesting materials and other animal-related debris or electrocuted birds and animals falling to the ground, igniting dry vegetation below.⁶ Installation of animal guards at transformers and other connection points is an effective means of reducing these electrical contacts.

Though hot taps fail at a low rate, a majority of peer utilities use a bail type connector in conjunction with hot taps to prevent conductor drops, which can lead to live wires coming in contact with dry vegetation on the ground, thus Avista crews are adding these connectors. At critical spans such as highways or river crossings, line personnel are replacing wood poles with metal units to strengthen those spans and reduce the risk of pole failure. They also replace end-of-life wood poles and equipment and install lightning arresters to help prevent lightning storms from sparking fires. These efforts are focused on the areas of our system identified by our Wildland Urban Interface (WUI) maps as being at highest risk.

Enhanced Vegetation Management

Effective vegetation management is an integral part of maintaining overhead electric distribution and transmission lines. Historically, utilities have trimmed and removed trees with a focus on improving reliability and reducing the frequency of outages. Avista has a long history of using proactive approaches to identify and address potential vegetation-related issues before they result in outages. However, with the increasing threat of wildfires as a result of poor forest health, past fire suppression activities, and periods of prolonged drought, through the Wildfire Resiliency Plan, Avista enhanced our existing vegetation management practices especially in elevated fire threat areas. This was accomplished by splitting the existing vegetation practices) and risk tree inspections which will encompass 100% of our non-urban distribution system each year. This new program that we call "Enhanced Vegetation Management" focuses specifically on risk trees, those most likely to be a hazard to electrical facilities. This new program includes new elements such as digital data collection, Fuel Reduction Partnerships, and the Safe Tree Program. All of these programs are designed to identify and mitigate vegetation issues to help prevent outages and spark events.

Situational Awareness

Avista has developed a computer algorithm to monitor, forecast, and adapt to fire-weather events. Avista's Fire Weather Dashboard combines the National Weather Service's 7-day forecast with Avista

⁴ "National Survey Takes a Look at Pole Fire Causation and Mitigation," T&D World, November 11, 2019, <u>National Survey</u> <u>Takes a Look at Pole Fire Causation and Mitigation | T&D World (tdworld.com)</u>

⁵ Krysti Shallenberger, "7 ways animals threaten the power grid," UtilityDive, October 21, 2016, <u>7 ways animals threaten the power grid | Utility Dive</u>

⁶ Brian McGowan, Michael Anderson, Luis Puigcerver, "Increase Reliability in the Power Grid and Reduce Wildlife-Related Fire Risk," T&D World, Sept. 20, 2020, <u>Increase Reliability in the Power Grid and Reduce Wildlife-Related Fire Risk | T&D World (tdworld.com)</u>

infrastructure data to quantify the daily fire risk on all of our distribution circuits. This allows system operators to align circuit protection settings with fire-weather conditions and to minimize the potential for spark-ignition on a circuit-by-circuit basis. This monitoring system is similar to those used in California. In fact, Avista worked closely with San Diego Gas & Electric to calibrate the system to achieve a balance between electric service reliability and fire ignition potential. This monitoring system supports Avista's fire season circuit protection program known internally as Fire Safety Mode.

Avista developed the Fire Safety Mode (FSM) operating program in the early 2000s in response to a number of active fire years in the late 1990s. Historically, circuit reclosers are programmed to automatically reclose several times after detecting a line fault in order to maximize service reliability. Electric faults occur when equipment fails or when weather and wind cause branches or trees to fall into powerlines, for example. All electrical faults involve a release of energy before the fault is interrupted by the utility's protective equipment. The vast majority of electrical faults do not result in fire ignition, and most distribution faults are temporary, such as animal contacts, lightning, and small tree branches. Temporary faults can be cleared by de-energizing a circuit and then re-energizing a couple of seconds later to maintain customer service. On the other hand, if the fault is permanent such as a broken conductor or when trees fall into powerlines, a combination of circuit breaker operation and line fuses is used to isolate the fault and limit the number of impacted customers. However, in some situations this series of reclose attempts can add to fire ignition potential. Avista engineers developed the FSM program to limit automatic reclosing on circuits with elevated fire ignition risk.

Avista also developed a Wildland Urban Interface (WUI) map of our service territory which identifies areas of our system that are most likely to be impacted by wildfire, helping prioritize the work required to clear vegetation hazards and to harden electric lines. Avista's WUI risk mapping is oriented towards potential utility-caused fires combined with significant impact to communities. Understanding where our greatest risk areas are located is an important component in implementing the Wildfire Resiliency Plan, helping us prioritize the application of solutions.

Operations and Emergency Response

A large part of Operations and Response includes the ability to monitor and control electric transmission and distribution equipment, which is critical when responding to wildfires and addressing wildfire risk. Centralized aggregation of data (such as SCADA) received from the power system provides visibility and allows operators to quickly adjust protection and controls to match fire risk (or other) conditions. Automation and communications equipment let us rapidly disable reclosing or, in extreme cases, shut off power in response to increased fire hazard in accordance with established procedures. As part of Avista's Wildfire Resiliency Plan, we are working to make sure key protection devices out on the powerlines and in substations can be operated remotely to quickly respond to fire weather and the associated risk. Thus, the Plan includes installing or upgrading midline and substation breakers to enable dynamic protection settings, allowing these devices to be monitored and operated remotely and automatically during fire season, as well as SCADA installations at substations in high fire risk locations to enable substation monitoring and operation during high fire threat conditions.

One important defensive strategy against wildfire ignition is Avista's Fire Safety Mode (FSM) operations, which can significantly reduce spark ignition potential by adjusting the sensitivity of the protection system when there are forecasted significant weather events during wildfire season. Since

the early 2000s, during fire season Avista has transitioned into the mode of limiting the number of circuit recloses on selected feeders on circuits deemed potentially at risk. This operational methodology is an important defensive strategy against wildfire ignition by both identifying electric circuits that operate in elevated fire threat areas and the reconfiguration of their associated protection systems to allow these protection devices to be remotely and automatically adjusted for wildfire threat. This practice allows us to reduce the number of times a line will try to reclose if it trips off, reducing the chance for a spark.

Public Safety Power Shutoffs (PSPS) happen when electric companies preemptively turn off the power to specific areas in order to reduce the risk of wildfires and to help keep customers and communities safe from the threat of wildfire. It is an effort to prevent electrical equipment from starting a severe, fast spreading wildfire by turning off powerlines during extreme weather based upon a calculation of risk, typically when high winds, low humidity, and other adverse weather conditions combine to increase the risk of wildfire. It is considered a top tier mitigation tool to help prevent utility involved wildfires in extreme fire threat situations. As part of its operational mitigation strategies related to Fire Safety Mode operations, Avista developed a Public Safety Power Shutoff Plan to proactively de-energize facilities located in high risk areas during extreme weather conditions that have the potential to propagate wildfire. Our PSPS Plan is essentially the last step in our Fire Safety Mode operations plan, though the major difference between Fire Safety Mode Operations and PSPS is that Fire Safety circuits are only removed from service when an actual fault is experienced on the line, while PSPS circuits are proactively disconnected based on an assessment of risk.

The primary objective of Wildfire Resiliency is to reduce the number of utility-involved ignition events and to minimize the damage to infrastructure resulting from wildfires. The bulk of that effort is rooted in long-term planning and implementation of methods such as clearing vegetation away from powerlines, automation, operational strategies, and increasing the resiliency of infrastructure. However, wildfires will continue to occur, so Wildfire Resiliency also includes support elements such as first responder training, developing relationships with key internal and external partners, and emergency operations procedures. The Operations and Emergency Response part of the Plan encompasses both internal and external resources with a goal of reacting to wildfire threat in a proactive and coordinated manner, along with the ability to rapidly respond as needed. These strategies are described below:

• Wildfire Emergency Operating Procedure (EOP)

Avista uses a formal Incident Command Structure (ICS) to respond to electric and natural gas emergencies called Emergency Operating Procedures (EOP). This system may be activated several times each year in response to severe weather conditions and other high impact events. Avista expanded its existing EOP to incorporate a specific wildfire function in order to coordinate with fire officials during an event.

To customize Avista's EOP work to Wildfire, we brought fire professionals into our internal discussions and EOP processes, which has also allowed us to successfully integrate into their Fire Incident Command (ICS) structure during actual fire events. In Washington State, the Department of Natural Resources is responsible for most non-federal fire suppression, and in Idaho, the Department of Lands takes the lead. In either state, responses to fires larger than 100

acres triggers an ICS. The ICS is a standardized approach to the command, control, and coordination of the fire response from beginning to end, allowing the various agencies responding to the fire to work together efficiently. It provides components such as common terminology, integrated communications, and a unified command structure over all of the jurisdictions and personnel involved. Avista's strong relationships with these fire professionals, strengthened by our work with them to develop and implement the Plan and their participation in our EOP processes, ensures that Avista is successfully engaged with them in a fire situation. This integration enables our personnel to understand what is expected of them and how they can assist and support fire command.

• Cross Training on Fire Safety

Avista employs approximately 290 electric line operating personnel across 12 operating districts. These employees respond to a variety of electric trouble calls including those that involve structure as well as wildland fires. Each year in-person training is provided to all electric line personnel with a focus on safety during wildfire response. A prominent theme in that training is direct contact and coordination with fire authorities prior to conducting any line inspections or attempting to re-energize portions of electric circuits during fire season. We recognize that in a wildfire event safety comes first, and that police and fire authorities command the scene. Though Avista crews respond to pole fire events and have basic firefighting training and equipment, they are not professional firefighters. We defer fully to fire professionals.

Avista conducts annual fire safety and electrical hazard training with fire agency partners across the service territory, including joint training sessions with fire protection personnel. Fire professionals provide fire safety training to Avista first responders and, in turn, Avista conducts electrical hazard training for fire personnel. It is important that Avista personnel understand the safety precautions taken during an active fire situation and that Avista first responders understand fire incident command structures and their role during an active event. Likewise, it is essential that fire personnel understand the hazards associated with electric operations and firefighting operations in the vicinity of utility facilities. This program is designed to promote the safety of everyone involved in a wildfire situation.

Expedited Response Agreements

This entails agreements with local fire departments, the Washington Department of Natural Resources, and the Idaho Department of Lands to dispatch fire patrol personnel to transmissionlevel outage locations during fire season. The goal of these agreements is to get a quick response to the site of the fault. If the fault causes a spark event and a fire results, trained fire fighters and apparatus respond and are able to engage the fire quickly. A quick response is key to keeping fires smaller. Expedited Response is initiated when Avista System Operations makes a request and provides an exact location of the incident to the appropriate entity, enabling fire department response to go directly to the scene with any required available information. Avista has signed agreements in place that fire professionals will respond to transmission level outages in both Idaho and Washington. Nearly 100% of our transmission system is covered by Expedited Response agreements have no cost and no end date.

Weekly Fire Threat Assessment Meetings

During fire season, Avista hosts meetings to discuss fire threat, the potential to elevate protection settings (Fire Safety Mode) as appropriate, share current information, and coordinate efforts. These meetings provide a forum for Avista district managers to report on fires in our operating districts including impacts or potential impacts to our infrastructure as well as discuss elevating system protection settings (Fire Safety Mode) in response to fire threat situations.

4.2 Resiliency of the Electric Grid

Describe the utility's ability to withstand fire weather conditions and quickly recover services.

As mentioned above, most of Avista's Wildfire Program elements are related to minimizing the chance for a heat or spark event to occur. Some of our programs are more specifically focused on resiliency, including our steel replacement program and transmission wood pole fire resistant mesh wraps.

Transmission Steel Pole Conversion

Transmission lines are particularly vulnerable to wildland fires. Avista began installing tubular steel transmission poles in the late 1980s and has systematically replaced wood transmission poles and structures with steel since 2006, typically for poles which were damaged or failed, or in the course of routine transmission line build projects. Since then, reconstruction projects have converted a number of circuits from wood to steel, and that trend will continue. Though Avista is committed to steel conversion, one of the objectives of the Wildfire Resiliency Plan is to accelerate that process in fire prone areas. The Company has created a prioritized list of wood structures to be replaced with steel based upon WUI zone location, historical fire patterns, and in high canopy areas where steel poles would be the best choice (versus low-vegetation areas where fire protection may be provided with fire mesh wrap at the base of the wooden pole). Steel poles have the added benefit of increasing reliability, as they are less likely to fail. Steel poles are stronger and less prone to wind, fire, lightning, bird, and insect damage. They also resist catastrophic "domino effect" failure when a tension release from a pole being knocked down can cause a long line of consecutive poles to snap, and are resistant to structural failure, which can lead to an ignition if it results in a wire down. Steel poles that are incorporated within a steel structure that includes a steel cross arm, commonly referred to as an H-Frame, provide more resistance to failure from severe weather events. Steel poles have a longer life expectancy and typically require less maintenance and repair than wooden poles.

Fire Resistant Wraps on Wood Transmission Poles

Avista began using fire-resistant paint to protect transmission poles as early as 2005. Though the paint has proven effective in protecting poles from low-level fires, it has a limited expected life and requires maintenance every 3 to 5 years. Avista worked with Southern California Edison to adopt a more resilient product for protecting wood transmission poles at risk from grassland or other low-level fires. Fire resistant mesh wrap incorporates a heat activated chemical on a steel mesh substrate that is wrapped around the base of wood poles. When activated by extreme heat, the chemical expands to seal the pole and protect it from fire. This product works well in protecting wood poles that reside in areas where fires move quickly and tend to stay low to the ground.

Restoration of Service

For all utilities, restoration of service following any outage to as many customers as quickly as possible is a top priority. Restoration efforts may also, if possible, include consideration of customers most heavily impacted by outages or located in Named Communities. If Avista de-energizes a line for Public Safety Power Shutoff or if a line placed in elevated protection settings trips out of service, the process of restoration may take longer, as facilities cannot be re-energized until conditions are safe and all lines are thoroughly inspected to ensure that any safety related issues are mitigated before the line is returned to service. Restoration time for any event is impacted by crew availability and location, the accessibility of the impacted circuit, how many circuits were impacted across the service territory, how much damage was done, when firefighters allow access to the area, employee safety, and other factors.

5.0 Roles and Responsibilities

Provide within these sections an organizational overview of the utility and wildfire management or response personnel, coordination efforts with other local utilities and infrastructure providers, and any currently obligated or voluntary emergency management communication efforts. It is up to the discretion of each utility to determine the specific needs of the communities they serve and how best to prepare for any emergency situation, including wildfire.

The Wildfire Implementation Team is comprised of a manager who oversees wildfire-related programs, plans, and strategies as well as his associated staff. Plan implementation is governed by an Avista steering committee whose membership reflects a broad cross-section of departments including Regulatory, Financial, Risk, Insurance, Electric Operations, Community Relations, Corporate Communications, Real Estate, Environmental, Legal, and Asset Maintenance. In addition to governance by the steering committee, an executive management team routinely meets to monitor progress and discuss forward-looking strategies. Wildfire is an enterprise level risk and executive level oversight is essential for producing prudent and cost effective outcomes for customers. Thus, Avista's officers and the Board of Directors are provided consistent progress reports. We also gather customer and first responder feedback via our communications outreach efforts and engage continuously with partners outside the Company such as the Washington Dept. of Natural Resources, Idaho Dept. of Lands, the National Weather Service, our Commissions, and others to gather input, insights, and expertise. All of this engagement helps ensure that the Plan is meeting all stakeholder objectives and goals for the program and that we continue to improve over time.

Working With External Parties

An important part of the Wildfire Resiliency Plan relates to emergency readiness with our community partners. We have learned that partnerships are absolutely critical, and we continue to add and enhance these relationships whenever we can. Since the beginning of the Wildfire Resiliency Plan, we have focused on outreach. The Company has developed close and integral partnerships with outside agencies including first responders and state and federal agencies. The Company is also cross-training with first responders regarding fire situation command and response and in working safely near electric facilities. The Wildfire Team participates in Washington Dept. of Natural Resources and Idaho Dept. of Lands fire briefings during fire season. We also work with fire agencies across our service territory in response to outage events. This includes de-energizing facilities upon their request in order to keep firefighters safe. It also includes our Expedited Response strategy where these professionals respond to transmission level outages during fire season. We engage with the Tribes on fuel reduction efforts and communications needs unique to them. We actively engage with customers through a variety of means, from emails and

bill inserts to direct face-to-face engagement, telephone town hall events, events, phone calls and/or emails. All of these partnerships are integral to the success of our plan, as Wildfire is too critical a situation for us to deal with strictly on our own.

In the case of implementing a PSPS or wildfire-related Emergency Operating Procedure (EOP), external agencies that may be impacted (such as the Washington Dept. of Natural Resources, the Idaho Dept. of Lands, the U.S. Forest Service) are brought into the process to provide input and ideas as well as to receive a heads-up regarding Avista's information on fire risk that may be related to their jurisdictions. Customers and communities that are directly impacted by these actions are informed and provided updates prior to, during, and after an event.

We also coordinate with external agencies to reduce the chance of wildfires by reducing fuel loading near our facilities. Through our Fuel Reduction Partnerships, Avista financially assists these external agencies with fuel mitigation near our facilities. Partnerships include the U.S. Forest Service, the Washington Dept. of Natural Resources, the Idaho Dept. of Lands, area tribes, counties, and local and regional fire agencies. This work includes removal of dead trees and underbrush and thinning small diameter trees on or adjacent to Avista-owned facilities and corridors. Some of these funds are also used to help these agencies provide assistance, expertise, and educational opportunities to property owners. For example, Avista's partnership with Bonner County's Dept. of Emergency Management provides funding for their BonFire Program,⁷ a county-wide resource whose goal is to provide technical expertise to landowners who wish to reduce fuels in and around their homes. In addition to expertise, BonFire also provides labor resources to complete the fuel reduction work prescribed.

5.1 Utility Roles and Responsibilities

Please provide a utility wildfire program organizational chart highlighting the wildfire specific staff/positions within the utility. The utility should also provide a detailed description of the wildfire specific roles within the utility and the responsibilities of said roles.

The Wildfire organization at Avista is based out of the Electrical Engineering group, led by the Director of Electrical Engineering. The Wildfire Team is comprised of a manager who oversees the wildfire programs, plans, and strategies. They are supported by a Wildfire Program Specialist who oversees external relationships including Expedited Response, provides training/cross-training, monitors the Fire Weather Dashboard, and manages situational awareness tools. The Wildfire Analyst is responsible for Commission work, writing the wildfire resiliency plans, providing presentations, and collecting and reporting plan-related metrics. This team does the day to day work related to Avista's Wildfire Resiliency Plan, including managing relationships with other groups within the Company who do the physical work related to our programs such as vegetation management, transmission and distribution grid hardening, and installing the equipment on the distribution grid to control and monitor operations. The Sr. Wildfire Resiliency Program Manager and the Wildfire Community Safety Manager report to the Wildfire

⁷ BonFire Program Information: https://www.bonnercountyid.gov/departments/EmergencyManagement/bonfire

Resiliency Manager and lead the Company's Public Safety Power Shutoff plan development and implementation as well as associated customer engagement and communications and managing Customer Resource Centers during a PSPS event.

The Wildfire Steering Committee is responsible for on-going oversight of wildfire season preparedness and providing support to the Wildfire Resiliency Manager, focused primarily on tactical changes. The committee consists of internal Avista stakeholders with responsibility for the outcome of wildfire preparedness and response activities. This includes representation from Risk, Legal,



Regulatory, Asset Maintenance, Customer Service, and Communications.

Activities related to operational response to weather conditions are overseen and directed by Avista's Executive Wildfire Leadership Team, consisting of officers and senior officers of the Company. This team provides strategic direction related to wildfire activities and final operational approval when placing feeders elevated protection setting operating mode. In the case of a wildfire or PSPS event, decision making is escalated through the appropriate channels. This typically begins with an Emergency Operations Process (EOP), a team comprised of cross-functional Company specialists. These people represent the impacted areas of the utility and provide a high level of experience and expertise. They guide the work and the decisions regarding escalating a situation, prepare crews and employees, notify customers, and manage the situation from initiation to full restoration. They also make the call whether to involve executive leadership. The EOP defines key roles and responsibilities for personnel, identifies communications channels, and outlines strategies for engaging with fire protection professional and emergency operating agency staff during expected or actual wildfire events, creating a consistent and efficient approach.

5.2 Coordination with Local Utilities and Infrastructure Providers

Describe any coordination and communication involving other local utilities and infrastructure providers which are essential to wildfire response and recovery (e.g., water utilities, gas utilities, phone/cable/internet providers, local emergency management and first responders).

Avista Regional Business Managers have been coordinating and communicating about our Wildfire Resiliency Plan with a number of partners over the past several years including local emergency managers, local emergency planning committees, fire districts and departments, tribes, state and national wildfire responders (DNR, IDL, BLM) and elected officials in high fire threat municipalities. Avista has also been working closely with our municipalities, large customers and other local utilities (especially water purveyors) to identify critical infrastructure (such as water supply, wastewater treatment facilities, hospitals, emergency operations centers and the radio towers that support them) on our system, down

to the meter number. We have conversations with our public safety partners, including the Red Cross, about the services essential to wildfire response and recovery. We have also been establishing and enhancing partnerships with community and health organizations that support vulnerable populations in the event of a power outage.

5.3 Coordination with Local Tribal Entities

Describe any coordination with adjacent Tribes that may be impacted or have emergency response needs in the event of a wildfire scenario.

Avista holds Town Hall Meetings in all of our elevated WUI zones each year prior to fire season. These meetings are designed to educate elected, community, and tribal leaders about wildfire resiliency and Avista's Plan, as well as to gather insights about how to better engage with these communities going forward. The goal of these meetings is to inform first responders on Avista's Wildfire Resiliency Plan, share information on how to best coordinate activities before, during, and after an event, to educate customers on the Company's efforts to reduce wildfire risk, and to notify them about our strategy to elevate system protection settings (Fire Safety Mode and Public Safety Power Shutoffs) during critical fire weather events, including the potential impacts of these efforts. An important factor in this engagement is ensuring that potentially impacted community leaders understand the possibility for more frequent and longer power outages during Fire Safety Mode activation so they can help answer questions and support their citizens.

Specific community outreach efforts with the Tribes have included a number of discussion topics especially concerning tribal elders and medically vulnerable tribal members. The Tribes are partnering with Avista to further identify these vulnerable populations (some already have partial lists) and to strategize on what can be done to help support all tribal members, especially these vulnerable customers, in the case of an extended power outage. We also work closely with the Tribes while performing grid hardening and transmission resiliency work that impacts their land and members.

5.4 Emergency Management / Incident Response Organization

Describe utility's efforts (if any) to coordinate with relevant safety agencies as well as other relevant local and state agencies to establish roles, responsibilities, and structure of communication for emergency management system alerts. Coordination efforts may include but are not limited to:

• Emergency management system structure during red flag conditions and wildfires

• Relevant training exercises the utility may participate in relating to red flag conditions and wildfires

(It is recommended as a best practice that utilities adopt or adapt an industry recognized Incident Management System as a guide).

The Emergency Operating Plan or EOP is an incident command structure that defines workflow processes and unified command structures deployed during emergency events. It includes defining key roles and responsibilities, identifying communications channels, and emergency operating procedures to be used during emergency events. The vast majority of the major events that lead to an Avista Emergency Operating Procedure (EOP) are weather related, coming about due to extreme wind, dangerous temperatures, or snow/ice events. Avista has developed an EOP specific to wildfire events, as it is imperative that wildfire events or potential wildfire conditions be managed in a specific, detailed, and

thoughtful way that has a strong emphasis on the safety of people, places, and infrastructure and also that includes critical external partners. Prescribed procedures must be adopted and followed at all levels of the Company in order to manage a wildfire or potential wildfire situation adequately and successfully. At the same time, the Company must integrate into firefighting efforts in a way that supports their work and increases their safety.

In 2023 we finalized our Emergency Operating Procedures specific to wildfire response and set up an extensive tabletop exercise to test the design against a simulated fire situation. We invited emergency management agencies across our service territory including the Red Cross, the Idaho Department of Lands, and the Washington Department of Natural Resources to be observers in this tabletop exercise wildfire scenario. The exercise included a realistic situation related to a wildfire event and allowed participants to "experience" and react to this event and develop a unified approach, specifically related to working together in fire Incident Command Structures (ICS) in place during wildfire events. The ICS provides a standardized approach to the command, control, and coordination of the fire response from beginning to end, allowing the various agencies responding to the fire to work together efficiently. It provides components such as common terminology, integrated communications, and a unified command structure over all of the jurisdictions and personnel involved. Avista's strong relationships with fire professionals, strengthened by our work with them on the Wildfire Resiliency Plan, have brought them into our internal discussions and EOP processes. Working together in this way, practicing response together, ensures that Avista is successfully engaged with them in an ICS situation, and that our personnel understand what is expected of them and how they can assist and support fire command.

It should be noted that in most large wildfire situations, local response (city, county) is superseded by state and federal authorities. In Washington State, the Department of Natural Resources is responsible for most non-federal fire suppression. Fires larger than 100 acres trigger a Fire Incident Command Structure (ICS). Avista defers to the leadership of these organizations in a wildfire event.

Avista has always had good relationships with the firefighting agencies that have jurisdiction on the lands that our facilities occupy. During fire season the Wildfire Team holds fire risk meetings to provide updates and information sharing as well as gather feedback from operations managers and non-Company associated parties. Divisional managers are responsible for conducting basic fire training at one of their monthly safety meetings, but as part of the Wildfire Resiliency Plan, Avista partners directly with fire protection agencies to cross-train personnel so that Avista first responders understand fire incident command structures, their role during an active event, and fire safety. In turn, fire professionals understand the hazards associated with electric operations to help keep them safe when working near our facilities. Avista is recognized as a partner with the major fire agencies and is invited to participate with them in pre-fire season planning meetings and post-fire season reviews as well as coordination during fire events.

Avista is also an active participant in the Inland Empire Fire Chiefs Association. We were asked to join in their meetings to add input on critical infrastructure capabilities and needs during wildfire and other emergency responses. This group includes the Fire Chief of the City of Spokane and the Chiefs of Spokane County as well as the Spokane County Department of Emergency Management and the Spokane County Sheriff's Department. Along with information sharing, this relationship has brought a

heightened awareness of how fire and emergency response is coordinated and how the utility can integrate into emergency response efforts.

Emergency Management organizations around the service territory take part in our spring telephone town hall meetings. Avista uses this platform to communicate broadly with customers, community leaders, and first responders from highly impacted communities located in elevated fire risk zones, including vulnerable populations and medically vulnerable customers. These meetings review Avista's preparations for fire season and potential operations such as Fire Safety Mode and Public Safety Power Shutoffs. In addition to answering customer questions, this platform also yields helpful information about how our customers are preparing and what is most concerning to them. In these meetings we share updates on our current and future wildfire plan progress as well. Emergency management professionals, public safety partners, and key community leaders from each region are invited to participate in their associated town hall meeting.

It is important to note that Red Flag conditions are only one factor Avista considers in evaluating fire risk. Due to the size of our service territory at over 30,000 square miles, weather risks vary significantly across our system. To manage this variability, our Fire Weather Dashboard was developed to model and predict fire risk on each individual feeder in Avista's system in real time. A spectrum of information goes into this analysis including a variety of National Weather Service information such as wind speed and direction, sustained wind levels, humidity and dryness levels, temperature, and drought conditions, as well as Avista-specific information including type of vegetation on each feeder, condition of equipment, type of equipment, mode of operation, historic outage data, population and human impact, and other factors to develop a prediction of wildfire risk. This information is far more detailed than the more general Red Flag Warning.

6.0 Wildfire Risks & Drivers Associated with Design, Construction, Operation & Maintenance

Within these sections, provide any specific information regarding the risks and risk drivers specific to the utility service territory and surrounding areas as well as enterprise-wide safety risks.

6.1 Risks and Risk Drivers Associated with Topographic and Climatological Risk Factors

List primary risk drivers for wildfires specific to the utility service area and briefly describe the utility's prioritization of stated risks (what is most important in a service area), and what climate conditions or geographic characteristics the utility's wildfire mitigation strategy incorporates. Example risk drivers may include Extended drought; Vegetation type; High winds; Steep terrain; Lack of early fall rain.

A variety of factors go into Avista's assessments around wildfire risk and how this risk can be effectively mitigated. Our risks are captured both in our static Wildland Urban Interface (WUI) map specific to our service territory and which informs where we will focus our mitigation efforts, and in our dynamic Fire Weather Dashboard, which models real-time fire risk on a feeder-by-feeder basis. In general, for Avista, wind is the number one most impactful factor contributing to wildfire risk. We cannot have high risk without high winds. Relative humidity is typically the second most important determining factor, as it influences fuel moisture levels and therefore burnability. Avista's risk drivers include:

Vegetation Type

Vegetation type is a key driver in the risk assessment for utilities as it shows areas that have higher flame lengths and higher probabilities of fire occurrence and spread rates. This can also help describe areas of lower risk like urban core areas that are less burnable. The spread of wildfires varies based on the flammable material present and in vertical arrangement or slope. Ground fires typically burn by first smoldering in organic material on the ground and are fed by leaf and timber litter, grass, and low-lying shrubs and plants. Ladder fires are fed by the fuels between the ground and the tree tops such as small trees and downed logs. Crown fires, those in the tree tops, are dependent upon the density of trees. If trees are close together, the fire can spread more easily. It is important to know the geographic characteristics of an area in order to predict fire risk and behavior. Avista has identified the areas of our system with the most tree cover near our powerlines using the USDA Forest Service Wildfire Hazard Potential map.⁸ We also use our LiDAR and satellite inspection data to help us identify vegetation type and location.

Slope and Exposure

Slope and exposure indicate areas where fires will grow faster under certain conditions and provide less time and access to attack the fire from first responders. For example, fuels uphill from a fire are more readily dried and warmed by the fire than those downhill, yet burning logs can roll downhill from the fire to ignite other fuels. Thus, slope is an important factor. Exposure provides both rainfall and sunlight, allowing surface plants to proliferate, providing fuel for fire spread. Exposure is also a factor in how quickly vegetation dries out if it is located in a sunny versus a shaded area.

Winds

Winds are critical in risk assessment as this can indicate how quickly fires will travel and grow. Wind is the major lateral driver for most wildfires that become extremely large in a single burn window. Winds are also the most variable and hardest factors to predict in analyzing wildfire risk. Wind affects wildfire in a variety of ways. It can dry out vegetation, it can carry burning embers that spread the fire, and it can cause vegetation to fall or come in contact with power equipment. In fact, strong winds can be the primary cause of a spark transforming into a wildfire. In Avista's service territory, the least impactful winds for tree damage are from the Southwest, as this is our "normal" wind direction and the trees have self-strengthened to be more durable to winds in this direction. Winds from the North tend to do the most damage to our system, especially related to tree fall-ins. Thus, the predicted directionality of the wind is a factor included in our calculations of fire risk.

Humidity

Humidity is another key driver in determining wildfire risk. Relative humidity affects wildfires by either dampening or drying out potential fuel, thus hour-by-hour changes in fuel moisture are tracked as a forecasted value. Low humidity levels dry out vegetation fuels on a short-term basis, and they can also cause a short-term spike in fire danger. When there are cooler temperatures and/or high atmospheric moisture levels, fire danger is reduced. At a microscopic scale, the increase or decrease in humidity is

⁸ Source: <u>Wildfire Hazard Potential | Missoula Fire Sciences Laboratory (firelab.org)</u> Data is available as raster GIS data or as spreadsheets from the USDA Forest Service Fire Modeling Institute.

pushing and pulling moisture out of vegetation depending on humidity and temperature, which can increase or decrease the intensity of a wildfire directly.

Drought

Drought leads to lack of moisture in the soil, which prevents plants from absorbing water, increasing the amount of dead and dry vegetation, which then becomes fuel for wildfires. Dry vegetation causes fires to spread more quickly and become more intense.

Burn Index/Energy Release Component

The Burn Index and Energy Release Component are values derived from the United States Forest Service (USFS) Severe Fire Danger Index.⁹ This index is a value that has been shown to best provide an accurate location of 90% of the burned acres on all historic back casting done by the USFS. It does not necessary correlate to ignition but rather those spaces that are primed for large growth fires and where those fires could happen at a forecasted level.

Probability of Loss of Homes

The probability of loss of homes is a key driver in the risk assessment for utilities as it shows the areas and communities near utility services that are at the highest risk levels for total loss during a wildfire. This data is compilation of a multitude of datasets and consolidated down to the structures near the utility's service territory. Avista acquires this information from the USDA Forest Service Wildfire Hazard Potential Map (WHP)¹⁰ which indicates the burnability of an area, and from the USDA Housing Unit Impact (HUI) dataset¹¹ which incorporates the general consequences of fire on people and the potential economic impact of wildfire on communities and infrastructure. Conservative wildfire spread is then assessed and summed to attempt to account for a potential loss of homes if a wildfire were to occur in a particular place.

We note that climatology may change utility risk over time. Things like prolonged droughts and low rainfall will increase risk. Further, this will potentially turn lower risk areas today into higher risk areas of tomorrow. Lastly, increases in urban development into the wildland urban interface will increase the likelihood of community-altering wildfires in the future. Much of this is difficult to estimate or predict.

6.1 Enterprise-Wide Safety Risks

Describe the utility's methodology for identifying and assessing enterprise-wide safety risks related to wildfires. Risk areas may include Operational, Procedural, System Sensitivities. Example risk drivers may include: Contact from Object (i.e., animal, balloon, vegetation, vehicle); Equipment/Facility Failure (i.e., Capacitor Bank, Conductor, Crossarm, Fuse, Insulator, Transformer, etc.); Wire to Wire Contact

⁹ <u>Severe Fire Danger Index: A forecastable metric to inform firefighter and community wildfire risk management | US Forest Service Research and Development (usda.gov)</u>

¹⁰ Source: <u>Wildfire Hazard Potential | Missoula Fire Sciences Laboratory (firelab.org)</u> Data is available as raster GIS data or as spreadsheets from the USDA Forest Service Fire Modeling Institute.

¹¹ Wildfire Risk to Communities: Spacial Datasets of Wildfire Risk for Populated Areas in the United States. fs.usda.gov/rds/archive/products/RDS-2020-0060/_metadata_RDS-2020-0060.html

Avista tracks the metrics most closely related to wildfire risk in our service territory. One of these operational risk areas is related specifically to vegetation contacts with our facilities. We track the number of these events that cause these outages as well as the number of risk trees we mitigate on both the transmission and distribution systems and the number of miles inspected (including ground, aerial, LiDAR and satellite). This helps us determine if our vegetation management practices are having positive effect in reducing fall-in and grow-in risk.

Other operational wildfire risk areas are related to our equipment and elements that could lead to spark events; thus, we track overhead equipment failures (arresters, conductor, crossarms, cutouts and fuses, insulators, reclosers and regulators, switches, and overhead transformers). We also track the number of outages related to pole fires. In relation to these outages, we monitor the miles of distribution grid hardening accomplished as we work toward hardening all of the elevated fire risk areas of our system. These outages are shown in Appendix A.

Additional operational risk areas involve our work in automating our system to react to increases in fire threat conditions. This includes installation of automation and control devices at both the midline and substation level on the distribution system. We track the number of these devices we install each month as we work toward automating all of these devices located in high fire threat areas.

Procedural risk is addressed through training of our personnel (and cross-training with fire personnel), development and practicing Emergency Operations Procedures specific to wildfire situations, as well as weekly assessment meetings during wildfire season that include both internal and external participants to ensure readiness and to work together to determine operations.

7.0 Wildfire Preventative Strategies

Within these sections, provide any specific information regarding current prevention strategies, lessons learned from the prevention activities, and considerations for the future state.

7.1 Weather Monitoring

7.1.1 Current Strategy Overview

Provide details on weather monitoring (if any) conducted by the utility. The following is a list of possible weather monitoring sources: United States National Weather Service, United States Forest Service Wildland Fire Assessment System, National Fire Danger Rating System.

Avista forecasts short-term fire risk via our Fire Weather Dashboard by combining elements of the National Weather Service 7-day hourly weather forecasts with Avista's circuit health, performance metrics and historical data based on our service territory. Our Dashboard was designed to indicate the moments where utility-sourced fire potential is at its highest and when fire spread rates pose significant risk to neighboring communities. It provides daily quantitative fire risk potential metrics. During fire season Avista continuously tracks localized weather patterns to identify consistently dry conditions that promote lower fuel moisture, as well as extreme wind conditions, as an acute risk-based warning system for wildfire potential. Because weather cannot be controlled, Avista desires to prioritize where there is

increased potential for wildfire given current conditions, fuel, terrain, and prior ignition events so we can react accordingly.

7.1.2 Planned Updates

Describe changes (if any) to weather monitoring that are anticipated in the upcoming three years. If applicable, describe what led to the change and the anticipated benefit or improvement once implemented. If it is a pilot program, describe the pilot period.

The Dashboard has been calibrated over time to best fit data to observed outcomes in real time and through back casting. These calibrations simplify action points and ensure proper weighting of factors. It may also be updated based upon revisions to Avista's WUI map, which is an input to the model. The WUI map is updated each time the underlying data is updated. Inputs are provided by the U.S. Forest Service Fire Modeling Institute's Wildfire Hazard Potential Map¹² which defines the relative potential for wildfire, and the USDA Housing Unit Impact dataset¹³ which indicates the consequences of wildfire on communities and infrastructure. Updates of the WUI map into the Dashboard analytics allows us to have an increased view of potential impact to communities in our service area as new data becomes available.

In addition, Avista is participating with the Washington Department of Natural Resources (DNR) and the Idaho Department of Lands (IDL) in the installation and monitoring of ten wildfire cameras in key locations across Washington and Northern Idaho in the fall of 2024.

7.2 Design and Construction Standards

7.2.1 Current Strategy Overview

Detail any instances where the utility is engaged in system re-design and hardening practices or other efforts for purposes of wildfire mitigation. If any industry best practices are being utilized, note the standard or code, as applicable, and how the utility achieves that standard in its processes.

Many sources of powerline outages are difficult to control, including winter storms, strong wind events, lightning, and public caused outages including vehicular accidents and trees that are felled through powerlines. However, by upgrading powerline conductor and equipment, these failures are more manageable and should reduce the overall number of outages and potential for spark-ignition events. Though Avista has well-established programs to replace poles, conductor, and equipment, existing programs are condition-based and aligned with reliability objectives. Wildfire grid hardening objectives are focused on reducing the number of (and potential for) spark ignition or heat events, thus we have enhanced these existing programs by focusing hardening efforts in high fire threat areas based upon our WUI map and historic fire patterns. Hardening powerlines, poles and other equipment through updated designs and material selections also helps the power system withstand higher wind speeds and other environmental factors such a wildfire near or beneath our facilities. Wildfire system hardening focuses on

¹² Source: <u>Wildfire Hazard Potential | Missoula Fire Sciences Laboratory (firelab.org)</u> Data is available as raster GIS data or as spreadsheets from the USDA Forest Service Fire Modeling Institute.

¹³ This data is acquired from the USDA/US Forest Service Housing Unit Impact (HUI) dataset which contains a nationwide raster of housing unit density measured in persons per square kilometer and incorporates the general consequences of fire on people and the potential economic impact of wildfire on communities and infrastructure. <u>fs.usda.gov/rds/archive/products/RDS-2020-0060/ metadata_RDS-2020-0060.html</u>

the prevention of equipment spark events as well as promoting equipment resilience during fire (and other reliability risk) exposure. Grid hardening programs are key to protecting both our customers and our electric transmission and distribution systems from wildfire risk, with a focus on high fire threat areas.

Avista's Grid Hardening measures include distribution grid hardening measures such as replacing outdated equipment, adding strength such as wedge/bail clamps, and installing wildlife guards, as well as identifying and mitigating risk-trees (trees with the potential of imminent fall-in hazard to energized facilities). On the transmission system, programs to protect infrastructure include replacing wood poles with steel and wrapping wood poles with fire resistant mesh in high fire threat locations are utilized. These elements were described earlier in this report.

7.2.2 Planned Updates

Describe any changes to design and construction standards that are anticipated in the upcoming three years. If applicable, describe what led to the change and the anticipated benefit or improvement once implemented.

Avista is developing a new program we call Enhanced Grid Hardening. Converting overhead distribution line sections to underground cables has not historically been listed as a specific component of our distribution grid hardening. In the past, Avista has conducted underground conversion of overhead lines on a case-by-case basis, but in most existing situations the physical challenges create an undue economic burden, making conversion expensive and unfeasible unless it was for new applications such as a new subdivision or business development. However, going forward, Avista has made a commitment that new distribution facilities located in specific areas within high fire risk zones will be installed underground to mitigate future risk. We are currently risk-ranking communities in our service territory which are excessively vulnerable to total loss in the event of a wildfire. We believe that by focusing on zones where the wildfire growth modeling suggests large scale loss to communities and high impacts to homes, people, and communities, thus concentrating on very specific areas and the conductor segments most at risk and carefully prioritizing this work, we may be able to provide a direct risk reduction. This concept is currently being developed and will be evaluated in 2026 to determine cost and feasibility.

7.3 Fuel and Vegetation Management

7.3.1 Current Strategy Overview

Detail any instances where the utility has or is developing or implementing programs and practices to manage fuels and vegetation for purposes of wildfire mitigation. If any industry standards are used as a baseline for Vegetation Management, please cite and briefly describe the standard(s).

Effective vegetation management is an integral part of maintaining overhead electric distribution and transmission lines. Avista's Vegetation Team uses a proactive approach to identify and address potential vegetation-related issues before they result in outages. Avista's vegetation management program, with implementation of the Wildfire Plan, was broken into two distinct programs: routine cycle maintenance and risk tree mitigation (known as the Enhanced Vegetation Management Program.

Avista's routine cycle distribution vegetation management program consists of cycle trimming and risk tree inspections. Note that Avista's definition of "risk tree" is a visibly dead, diseased, or dying tree, or one which possesses obvious structural defects that could fall into conductor. This is in part regulated

by ANSI A300 (Part 9)-2017 Tree Risk Assessment - a. Tree Failure.¹⁴ Avista's assessments conform to level 1 standards as performed from the center of the corridor using ground-based patrols (or from a vehicle) and/or by analyzing high-resolution images captured via satellite. In alignment with its Wildfire Resiliency Plan, Avista added the goal of inspecting the entire distribution system annually for risk trees using a combination of satellite data and visual inspection. Transmission annual inspections are conducted with a combination of ground and aerial inspections in accordance with NERC/FERC regulations.¹⁵ The Wildfire Resiliency Plan added LiDAR inspections to the existing transmission inspection methods, which is able to specifically identify and mitigate vegetation-related risk not always visible using traditional inspection methods.

The Wildfire Resiliency Plan also added the new program of Fuel Reduction Partnerships with external parties such as the Idaho Dept. of Lands and Washington Dept. of Natural Resources, partnering with these state agencies as well as regional counties and area Tribes to reduce fuels/vegetation on their properties near our facilities. And, in addition, the Wildfire Resiliency Plan added the Safe Tree Program to remove and/or replace trees located on customer property in danger of contacting powerlines.

7.3.2 Planned Updates

Describe changes to the utility's vegetation management practices (if any) that are anticipated in the upcoming three years. If applicable, describe what led to the change and the anticipated benefit or improvement once implemented.

Avista's Enhanced Vegetation Management Program has been in place since 2020 and is in full operation. We inspect 100% of our system each year for risk trees and will continue to do so into the future. A recent goal, added in 2023, is mitigation and removal of risk trees within six months of identification.

7.4 Asset Inspections and Response

7.4.1 Current Strategy Overview

Detail any instances where the utility is engaged in inspection practices or pilot projects (e.g., use of LiDAR, infrared, drones, etc.) for purposes of wildfire mitigation. For any inspection program descriptions, include detail on remediation practices. If industry standards are used as a basis for inspections, please cite and briefly describe the standard(s).

As part of Avista's Wildfire Resiliency Plan we perform risk tree inspections across 100% of the nonurban, high fire risk areas of the distribution system every year with the stretch goal of remediating risk trees within six months of identifying them. Inspection methodologies include boots-on-the-ground, ground and aerial surveys, and LiDAR and satellite imaging. As mentioned above, Avista's definition of a risk tree is and our inspection standards are defined by ANSI A300 (Part 9)-2017 Tree Risk Assessment - a. Tree Failure.¹⁶ Assessments conform to level 1 standards.

¹⁴ ANSI A300 Standards, https://treecareindustryassociation.org/business-support/ansi-a300-standards/

¹⁵ FERC Reliability Standard FAC-003, https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-4.pdf requires inspection of 100% of the interconnected transmission grid annually.

¹⁶ ANSI A300 Standards, https://treecareindustryassociation.org/business-support/ansi-a300-standards/

LiDAR and satellite data collection was added by Avista's Wildfire Resiliency Plan in order to complement and supplement routine manual inspections. These new technologies provide a high level of detail regarding the health and location of vegetation across the system with a goal of reducing tree contacts with powerlines, one of the most common causes of outages and sparks.

In 2020 as the Wildfire Resiliency Plan was getting started, we began the addition of both satellite and LiDAR data collection for our distribution and transmission systems. Digital inspections are quickly becoming the industry standard practice, as it allows for a complete vegetation record, including the efficacy of field work along with the information necessary to create future work plans. Digital data collection techniques provide detailed data on vegetation, growth patterns, and risk to power infrastructure, and can easily differentiate between grassland, agricultural or urban areas, and can detect the species and health of vegetation, thus can identify vegetation that is likely to grow into or fall into powerlines. Because these images are taken on a regular basis, they show us where vegetation risk exceeds both reliability and fire mitigation thresholds and provide valuable information regarding the location of problem (or potential problem) vegetation issues over time. The analysis provided is invaluable in directing planners and line clearing crews to specific locations on the system to perform maintenance and mitigate risk trees rather than the traditional method of working on an entire circuit or polygon. Both the satellite and LiDAR tools and associated analytics will essentially learn Avista's system and the vegetation around our lines, allowing us to plan vegetation work in a more precise and predictable way, streamlining our vegetation management programs and helping to maximize their value.

The transmission system is inspected annually via ground, aerial, and LiDAR. LiDAR works well for transmission because most transmission lines have open linear rights-of-way like roads and railways, allowing LiDAR data to be primarily collected via a fixed wing aircraft or helicopter. The resulting surveygrade data yields sub-centimeter accuracy, and when combined with high resolution photography, it provides vegetation planners with a robust assessment of both encroachment and risk tree hazards. It can identify dead, dying, diseased or structurally defective trees both inside and outside corridor rights-of-way and is very accurate in calculating fall-in risk. LiDAR works well for transmission inspections because it provides a high level of detail and accuracy, including the placement of the conductor in the corridor, so areas where vegetation might impact the lines are identifiable. LiDAR inspections not only pinpoint potential vegetation issues, but also identify issues that could create risk such as corroded attachment hardware, ground profile changes, excessive sag, unauthorized encroachments or attachments and thermal issues. We note that transmission inspections are regulated by FERC Reliability Standard FAC-003 which requires inspection of 100% of the interconnected transmission grid annually.¹⁷ Failure to meet this requirement can result in substantial fines.

Avista uses satellite data collection on the distribution system, which allows for a system-wide approach rather than conventional corridor collection (LiDAR). Satellite-based data is not as sophisticated as LiDAR, requiring several passes over the system to collect the data needed, and satellite images are not detailed enough to include conductor placement. However, satellite imaging aligns well with distribution topologies, as it works very efficiently for the trunk-and-lateral, non-linear configuration of the distribution system, which often lacks well-defined flyable corridors. Satellite acquisition allows collection over a

¹⁷ FERC Reliability Standard FAC-003, https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-003-4.pdf

broad area both in urban and rural areas using successive overpasses, pairing this information with computer-based machine learning algorithms to assess the risk of both tree encroachment ("grow-in") and hazard tree risks ("fall-in"). Satellite imagery provides a huge volume of geospatial information, enabling deeper and more regular vegetation management intelligence, including change detection. Satellite based vegetation inspection works well for the distribution system, as it can cover large areas quickly and accurately and provide detailed data on vegetation, growth patterns, and risk to power infrastructure. It can easily differentiate between grassland, agricultural or urban areas and detect the species and health of vegetation, thus can calculate vegetation that is likely to grow into or fall into powerlines.

7.4.2 Planned Updates

Describe any changes to the utility's inspection program that are anticipated in the next three years. If applicable, describe what led to the change and the anticipated benefit or improvement once implemented.

No major changes or updates anticipated. We believe that the combination of inspection methods Avista utilizes is invaluable in directing planners and line clearing crews to the areas of greatest need with accuracy. A small "change" may be in finding additional uses for the data analysis gained from LiDAR and satellite imaging.

7.5 Workforce Training

7.5.1 Current Strategy Overview

Describe any wildfire mitigation related workforce training or work rules/practices.

The Company provides annual fire safety training as part of the field crew safety meetings. Our crews also cross-train with first responders and fire professionals regarding working safely around the electric system.

In 2023, as we finalized our Wildfire Emergency Operating Procedures (EOP), we set up an extensive tabletop exercise to test our EOP design against a simulated fire situation. We invited emergency management agencies across our service territory including the Red Cross, the Idaho Department of Lands, and the Washington Department of Natural Resources to be observers in this tabletop exercise wildfire scenario. The exercise included a realistic situation related to a wildfire event and allowed participants to "experience," train, and react to this event together. This event highlighted the value of having Avista embedded with Fire Incident Command. Working together in this way helps ensure that direct communication and coordination between Avista and the fire agency responders will be effective and efficient and that fire and utility crews can work safely in the field. This exercise provided an excellent opportunity to train Avista employees in successfully managing an actual wildfire situation as well as in effective engagement with external parties and will be conducted annually.

7.5.2 Planned Updates

Describe any changes to workforce training efforts that are anticipated in the next three years. If applicable, describe what led to the change and the anticipated benefit or improvement once implemented.

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We will continue to work with our external partners and participate in Incident Command Responses as needed, learning from both joint exercises and actual situations, and folding what we learn into our wildfire planning and into future training. We will continue to train and practice with our crews and fire professionals to ensure a strong and effective response to wildfire situations. This includes annual exercises related to Wildfire EOPs and Public Safety Power Shutoff events. These joint exercises and real life experiences will help us continue to refine our skills and capabilities related to actual fire events, and further strengthen our relationships with our external partners.

7.6 Relay and Recloser Policy

7.6.1 Current Strategy Overview

Describe the utility's associated protective devices and relay practices, including the use of pulse reclosers and other programmable controlled reclosers. Additionally, describe if the utility changes relay settings to more quickly or easily deenergize a circuit during certain conditions.

Electric utilities use automatic reclosing to improve system reliability by preventing momentary faults on overhead conductors that may result in extended outages and impacts to customers. However, for circuits that pass through high fire risk areas, automatic reclosing is not always desirable during certain conditions due to the increased risk of ignition. Since the early 2000s, during fire season Avista has transitioned into the mode of limiting the number of circuit recloses on selected feeders during fire season on circuits deemed at risk. This operational methodology is an important defensive strategy against wildfire ignition. This operating mode, which we call Fire Safety Mode (FSM), involves both identifying electric circuits that operate in elevated fire threat areas and the reconfiguration of their associated protection systems to allow protection devices to be remotely and automatically adjusted for wildfire threat based on the operating location and threat level. Fire Safety Mode reduces the potential for spark events and the risk of fire.

Avista's Fire Weather Dashboard allows system operators to better understand timing and extent of the risk, providing the opportunity for the Company prepare and to act in order to mitigate potential sparkignition events. When combined with the dynamic operating capability provided by automation equipment such as distribution and substation reclosers, the Dashboard guides the decision to enable various levels of operations (including Fire Safety Mode and Public Safety Power Shutoffs) to mitigate risk. Based on the Fire Risk Potential Score from the Dashboard, we can move from Non-FSM (non-fire season where multiple reclose attempts are permitted) to Base FSM (where protection settings are set to limit non-reclosing but fuses will operate), to Extreme FSM (where a single instantaneous overcurrent condition will trip and fuses will not operate), to PSPS level where the line will be de-energized.

However, by disabling reclosing, utilities are prioritizing wildfire risk over reliability risk, so this decision is carefully considered. The Company attempts to carefully balance the safety of the public with the need to maintain reliability and customer service.

7.6.2 Planned Updates

Describe any changes to relay or recloser operations that are anticipated in the next three years. If applicable, describe what led to the change and the anticipated benefit or improvement once implemented.

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Avista's Public Safety Power Shutoff Plan was ready for the 2024 fire season. We will continue to refine the trigger points for system protection based on the Dashboard Fire Risk Potential score as we gain experience with the use of both FSM and PSPS.

7.7 De-Energization / Public Safety Power Shutoff

7.7.1 Current Strategy Overview

Provide information about plans (if any) to proactively de-energize as it pertains to wildfire mitigation, this can include, but is not limited to Public Safety Power Shutoff guidelines. Summarize the conditions (if any) under which the utility may de-energize to prevent ignitions. Describe the protocols the utility would utilize when determining the appropriateness of proactive de-energization. If a utility does not plan on enacting proactive de-energization, please list other mitigation strategies to limit asset related ignitions under critical fire weather conditions. Additionally, utilities describe notification protocols and procedures ahead of, during, and following a proactive de-energization. Detail on restoration of service following a de-energization can be provided in Section 9.

Avista has developed a scale of actions to be taken prior to implementing de-energization by using enhanced protection settings through our Fire Safety Mode strategy, thus the threshold for implementing PSPS would be relatively high. The decision to do this is highly impactful to customers, including real financial consequences as well as the potential for loss of water, food spoilage, dangers associated with loss of traffic signals and communications, and other impacts that often hit the most vulnerable customers hardest. Determining when to implement a PSPS event will include factors such as the fire risk index, the impact on critical customers, operational criticality, effects on medically vulnerable customers, customer proximity to aid/support, the potential duration of the event, the utility resources available, the potential for fire spread, and actual weather conditions.

Generally, de-energization is more commonly used on the distribution systems than on transmission systems. Transmission level PSPS events are very complex due to regulatory requirements and overall bulk electric system impacts. This is due in great part to mandatory NERC and FERC requirements around maintaining system reliability for Avista and the Western Interconnection. Remaining in compliance with these requirements is designed to keep the Western Interconnection stable and is regulated under federal mandates. Therefore, Avista's PSPS program will focus primarily on distribution, and potentially include the transmission lines only after a thorough analysis of Avista's transmission system and of the impacts a PSPS event would have on Avista's reliability and compliance obligations.¹⁸

The Company is taking a very measured, thoughtful, and cautious approach to proactive de-energization for PSPS, because in this case, unlike de-energizing for planned work for example, facilities cannot be re-energized until conditions are safe and all lines are thoroughly inspected, which can take a significant amount of time. The process of de-energizing the system is less challenging than re-energizing it. De-energizing lines for a PSPS event, given the scope of the restoration efforts and the anticipated duration of the outages, presents a substantial cost to the utility – and to customers, in great part because a PSPS

¹⁸ Since PSPS would not initially involve Avista's transmission system, interconnected transmission providers (BPA, PAC, Idaho Power, etc.) should be minimally affected. Avista should also be able to continue to serve BPA's transfer customers. Interconnected transmission operations are regulated under NERC Standard TOP-001-4. <u>TOP-001-4.pdf (nerc.com)</u>

would only be considered during an extreme weather event in which many circuits beyond those that have been proactively de-energized and potentially be impacted as well.

Once lines are de-energized for a PSPS event, facilities cannot be re-energized until conditions are safe and all circuits and lines are thoroughly inspected or patrolled to ensure that it is safe to re-energize. After inspection, lines are re-energized segment by segment. Patrol of all impacted overhead electric facilities, both transmission and distribution, can only commence once the weather event has subsided. While the overall duration of PSPS events is uncertain, many utilities report durations between 3-6 days. Several PSPS events in California have taken up to 14 days for full restoration. Restoration efforts following a PSPS will always require additional time to fully inspect the full length of each circuit and line that was de-energized. Power restoration following a PSPS is akin to a major storm. In traditional utility restoration efforts, the priority is to restore service to as many customers as possible through line switching and by isolating faulted circuits. Restoration efforts may also include a consideration of customers most heavily impacted by outages or located in Named Communities.

Notification protocols and procedures are critical in implementation of Fire Safety Mode and a PSPS. Prior to fire season the Company communicates with customers about Avista's Wildfire Resiliency Plan, what FSM and PSPS are, and how these operations may impact them. Our education and outreach efforts are designed to help customers prepare for wildfire season and the associated actions we may take in order to protect them, including resources available to impacted customers, identification of and communicating with critical infrastructure customers, working with regulators and local community leaders, and engaging with first responders and emergency management personnel. An important factor in this engagement is ensuring that community leaders understand the potential for more frequent and longer power outages during Fire Safety Mode activation so they can help answer questions and support their citizens. The company works with customers, first responders, emergency managers, and community leaders across the service territory, specifically those in elevated fire threat areas, including public safety and tribal partners, prior to wildfire season.

In the case of a PSPS event, Avista has a multi-step communications plan. From 2 to 7 days out from a potential event, we begin a PSPS Watch in which we monitor the weather forecasts, begin internal discussions and preparations (pre-EOP) and begin notifying key public safety and tribal partners as well as critical customers likely to be impacted. From 48 hours to within 1 hour of the estimated event, we begin the PSPS Warning process in which we reach out to additional external public safety partners and begin notifying customers directly if they are within the expected PSPS area. When a PSPS is executed, public safety partners, critical infrastructure customers, and all impacted customers are notified, if possible, up to 24 hours in advance. During this time, we utilize an Outage Map tool located on our website which will provide PSPS specific information regarding the location of the event, and any other pertinent event information. The map will be updated throughout the event to keep customers informed. Avista also has a specialized customer service team in place to engage with medically vulnerable customers to ensure that they have a plan in place or to assist if they need help and support. These same parties are also notified when service has been restored. It should be noted that weather is dynamic and Avista may modify the PSPS plan and process to accommodate changing levels of risk. Any changes will be communicated to customers as early as possible.

7.7.2 Planned Updates

As the Company experiences its first season with a PSPS Plan, it is anticipated that goals, set points, and expectations will be refined. Communications may also be refined and improved over time based on customer and external partner feedback and suggestions.

8.0 Community Outreach and Public Awareness

8.1 Current Community Outreach and Public Awareness Program

Provide a description of customer communication efforts or programs related to wildfire mitigation performed over the past three years. If any evaluations or assessments of customer communications were performed, briefly describe the findings as appropriate. This may include efforts to increase awareness that a WMP exists, notification of activities under the WMP, etc. If the Utility utilizes proactive de-energization (or PSPS) protocols, this section may be used to describe any efforts made to educate or interact with the public regarding customer awareness of the utility's protocols.

Examples may include, but are not limited to, interaction with the Fire Adapted Communities Learning Network, initiatives to reach customers with limited English proficiency, or interagency meetings to promote best management practices. Examples of evaluations may include number of impressions, customers reached, or resources provided/requested.

Avista is committed to partnering with emergency first responders, community leaders, and customers in our Wildfire communications. The original 2020 Wildfire Resiliency Plan noted customer outreach as a goal and described some of the initial meetings with fire departments, elected leaders, regulators, and peer utilities that were foundational in development of our initial Plan. Avista's communication outreach extends well beyond wildfire issues and has adopted an 'all-means and all-channels' approach to communicating with customers and other interested persons.

Starting in 2022, Avista established a cross-functional team including regional business managers, corporate communication specialists, tribal relations employees, customer engagement, electric operations, and the Wildfire Resiliency team to improve and expand Avista's customer outreach related to wildfire. Each year the Company sponsors a series of meetings with first responder groups and county-level emergency management offices along with police, fire, and emergency dispatch centers, ambulance services, volunteer support, and elected officials throughout Washington and Idaho in order to provide information about Avista's Wildfire Resiliency Plan and fire season operating strategies. Avista also meets with members of the Colville Confederated, Spokane, and Nez Perce Tribes. Meetings have been convened with the Washington Department of Natural Resources, the U.S. Forest Service, the Bureau of Land Management, Idaho Department of Lands, and the Spokane City Council. An additional communications framework was developed to assist employees who routinely meet with local emergency first responders.

Each year prior to fire season, Avista conducts a series of residential customer telephone townhall meetings. In these meetings, Avista employees provide an overview of the Wildfire Resiliency Plan as well as information about changes to the protection system during fire season and how that might impact them. At each meeting a fire agency or emergency management expert is available to answer questions about fire safety, home preparedness, evacuations, and other emergency response issues. The focus of

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these meetings is to connect with customers who live in high fire threat areas. The convenience of attending by telephone allows customers to connect with utility employees and fire professionals more easily. Questions ranged from "who do I contact about a tree near a powerline" to "how should I prepare for a fire" to "how are evacuations handled in my area." We are expanding these communications to provide messages in multiple languages.

In 2022, our first year of town hall meetings, we reached out to nearly 36,000 customers in 8 counties (Washington and Idaho) including 225 county emergency managers, fire officials, tribal leaders from three tribes, and elected officials. In 2023 we expanded this outreach to over 90,000 customers in 16 counties across our service territory, including over 640 community leaders and emergency response organizations.

Conducting telephone townhall meetings require significant planning, coordination, and internal support, but the benefits both to customers and the Company are tremendous. It is important that we partner closely with emergency professionals, community leaders, as well as customers to understand fire risk and to work together before, during, and after a wildfire event. Providing clear and concise communication together with receiving feedback are important components of implementing a successful wildfire mitigation plan.

Related specifically to PSPS, we rolled out PSPS as an added part of our wildfire strategies in 2024. In May of 2024 we held a press briefing with local fire agencies and others to talk about the 2024 season and overall preparedness, with an emphasis on PSPS and elevated protection settings. In addition to earned media, we use all our Avista channels, such as email, customer newsletters, bill inserts, and social media to spread awareness of our wildfire work and PSPS.

For our most vulnerable customers, Avista has a Customer Service CARES team which is specifically trained to engage with medically vulnerable customers and acts as a liaison between the customer and community partner support networks. A PSPS event may especially impact medically vulnerable customers, necessitating additional outreach to ensure these customers have a plan to be prepared for the de-energization. The CARES Team will provide additional notifications to customers who are considered "Life Support" to help ensure that they have what they need during these events. Avista is also offering a battery backup program to qualified life support customers who have been verified through a medical provider at no cost to the customer.

In addition, we launched an employee team of volunteer Community Response Ambassadors who trained with the Red Cross to provide help and support. We have also made a significant effort to identify critical commercial/industrial customers for notification during elevated Fire Safety Mode protection settings. Recognizing who these customers are, the critical services they provide, and where they are located makes it possible to do as much as possible to protect their energy supply and/or restore their service as quickly as possible. Specialized community outreach efforts with the tribes included a number of discussion topics including concern for tribal elders and medically vulnerable tribal members. The tribes are partnering with Avista to further identify these vulnerable populations (some tribes already have partial lists) and see what can be done to help support them in the case of an extended power outage.

8.2 Planned Updates

Describe any changes to customer communication and public awareness strategies or programs that are anticipated in the next three years. If applicable, describe what led to the change and the anticipated benefit or improvement once implemented.

We added PSPS as part of our wildfire work for the 2024 fire season. Continuing changes include expanding our language options beyond English-only. For example, in 2023 we offered materials and translation options for our Town Hall Meetings in Spanish. We are also working with our Equity Advisory Group to fully develop and identify Highly Impacted Communities and Vulnerable Populations ("Named Communities") unique to our service territory to help identify barriers to participation and education and specialized accessibility needs.

9.0 Restoration of Service

Within this section, provide the detailed process for restoring service after an outage as outlined by the utility during high wildfire risk conditions or following a de-energization or wildfire event. When applicable, reference specific sections within the utility's restoration plan (if available) that detail the utility's protocols before during and after restoration. (Here they note that the State Energy Office – Energy Emergency Management is available to support development and assessment of restoration activities or assist with any questions or concerns.)

Power restoration following a PSPS is akin to that of a major storm. In traditional utility restoration efforts, the priority is to restore service to as many customers as possible through line switching and by isolating faulted circuits. However, if a utility de-energizes lines for a PSPS event, facilities cannot be re-energized until conditions are safe and all lines are thoroughly inspected and re-energized segment by segment as it is deemed safe to do so. Patrolling all impacted overhead electric facilities, both transmission and distribution, will only commence once the weather event has subsided and when fire response leadership (if involved) gives the all-clear. Restoration following a typical PSPS event are variable, but may require up to three to six days perhaps longer, as restoration efforts following a PSPS require the time it takes to fully inspect each de-energized circuit, even if the circuits weren't damaged during the weather event, to ensure that it is safe to re-energize the line. Factors impacting the length of these outages include crew availability, terrain and accessibility of the impacted lines, length of the feeder, etc.

Typically, a restoration process will begin with the "all clear" being issued by decision-makers including fire professionals if applicable. Field crews will then be mobilized and broad communications to impacted customers will begin, including providing help with resources as appropriate. Restoration typically starts with critical infrastructure and commercial zones. To complete repairs, main trunk lines are the focus followed by branch lateral circuits, then individual customers. Communications are updated to provide estimated restoration times. Once the event is over and all power has been restored, the Company conducts an after-action review with emergency first responders to identify areas for improvement.

For Avista, like many utilities, it seems likely that PSPS would be limited to the highest fire risk zones while areas of lower risk may be subject to elevated protection levels. Avista operates 350 electric distribution lines over 7,650 miles. It is conceivable that following a major fire-weather event, 50 to 100 or even more of these circuits could be de-energized either through pre-emptive action (PSPS), circuit breaker operation settings (Fire Safety Mode), or due to weather impacts such as a tree falling across a line. Circuits that have not been moved to elevated settings or de-energized may also be impacted by

the storm and require repair. Most, if not all, of Avista in-house resources would be focused on the patrol/inspection effort system wide.

Outage scenarios that would lead to consideration of a PSPS could also be of a large enough magnitude for Avista to initiate a mutual aid request from other utilities as well as the need for outside contractors, which could have an impact on restoration time depending upon where these crews are based, in addition to the significant cost involved. Avista's field operations will coordinate with the PSPS Assessment Team to develop estimated restoration times and a plan specific to the situation. Outage times will be impacted by conditions and dependent upon when it is safe to re-energize.

As Avista further develops and refines its restoration efforts specific to an actual PSPS, the Company will need to prioritize balancing and allocating additional resources to circuits that may have been impacted by storm damage in Named Communities, in areas with critical customers, and in areas with large numbers of customers. This will help ensure that restoration efforts are equitable for the most vulnerable and highly impacted customers that may not have equal means or access to resources during prolonged outages. This additional effort will take more time and resources during the restoration process but ensures that equity is being applied to the PSPS restoration process.

10.0 Evaluating the Plan

Within these sections, provide information on how the utility tracks and evaluates the performance of its wildfire mitigation plan and the associated mitigation efforts. If this is an initial WMP submission, some sections may not apply or have any historical context. In such cases, the section can be used to describe future states if such information is known. If leaving blank, please indicate that the information is not yet available.

10.1 Metrics and Assumptions for Measuring Plan Performance

Provide metrics that are relevant to the utility's wildfire mitigation efforts described in the WMP and that measure or benchmark the utility's performance on such mitigation efforts. If desired, full metrics or tracking can be attached in the Appendix.

Our Wildfire programs are tracking a variety of data, statistics, and achievements. For example, a decreasing number of tree-related outages should indicate the benefits of our Enhanced Vegetation Management program, and our distribution grid hardening efforts should reduce the number of overhead equipment outages over time. We are also tracking the number of pole fires, as these should be positively impacted by grid hardening investments, specifically replacing wood crossarms with fiberglass crossarms. However, most of the benefits of the Wildfire programs will not show up immediately. Wildfire metrics are intended to reflect long-term trends on our system. Only long-term trends are truly meaningful here; it is not practical or reasonable to look merely to end-of-year results due to the variability of a variety of factors, most specifically weather conditions. In addition, a marked change in these statistics will take the time it requires to replace thousands of crossarms across the system, change out aged equipment, and mitigate vegetation issues system wide, for example. None of these programs will be completed within a year but will be ongoing and offering continual improvement.

Metrics track the progress of our primary programs and support the Wildfire goal of continual improvement based on data and experience. Our four primary programs: Grid Hardening, Enhanced

Vegetation Management, Emergency Operations & Response, and Situational Awareness, are grouped into three broad metrics categories: Performance, Infrastructure, and Vegetation Management.

In the Performance category we collect metrics about pole fires, tree fall-ins and grow-ins, overhead equipment failures, etc.

In the Infrastructure category we collect metrics about Grid Hardening efforts including the number of miles of distribution grid hardening achieved, the number of transmission steel pole conversions completed, and the number of transmission fire-resistant mesh wraps installed. This category also includes the progress being made to add the automation and communication equipment necessary to enable Fire Safety Mode operation, including equipment at both the distribution midline and substation levels.

The Vegetation category is focused on hazard tree identification and remediation. We track several metrics related to this program including number of hazard trees identified and mitigated, number of miles inspected, and number of satellite (Distribution) or LiDAR (Transmission) miles completed. All of these metrics help us track the improvements brought about by our programs (such as a reduction in the number of tree-related outages) and highlight areas where more focus is needed (such as areas of the system or equipment experiencing more outages than typical.) Tracking metrics also ensures that we are meeting performance goals such as 100% inspection of the system each year for risk trees. Some of our key metrics can be found in Appendix A.

10.2 Identifying and Addressing Areas of Continued Improvement in the Plan

When applicable, describe adjustments, improvements, or additions to the plan derived from established metrics including, lessons learned, or any other processes contributing to continuous improvement efforts.

Avista's Wildfire effort focuses on the "Plan-Do-Check-Adjust" methodology, thus we are constantly monitoring the impacts of our programs and the work happening in the industry, as well as seeking the guidance of our partners and peers. We are continuously searching for areas of improvement and refinement, which is evidenced by the fact that our Fire Weather Dashboard risk model has been upgraded to new levels of sophistication, we have developed strong and invaluable partnerships with first responders and fire professionals, and we are establishing data-driven means of determining the most cost-effective grid hardening and vegetation management strategies. We consider our Wildfire Resiliency Plan a dynamic program that will be improved over time with experience and associated increases in expertise.

Some lessons learned as we have implemented the Plan include things that are within our control, such as the cultural changes required to implement elevated protection settings and PSPS. Others, such as tree mortality and the significantly escalated amount of vegetation work required, are outside of our control and require additional (and sometimes unexpected) amounts of money and manpower.

10.3 Monitoring the Effectiveness of Inspections

Describe processes for monitoring the performance of inspections, including inspections performed by contractors. This section may include any assurance or control protocols for reviewing inspection quality.

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Vegetation work is inspected after completion using several techniques depending on work type. All hazard trees are photographed by the work prescriber on Fieldnote. Fieldnote associates the photo with the plan and GPS point of the tree to be mitigated. When work is complete, the contractor takes a photo of the work when it is completed, resulting in a geo-referenced before and after photo series. In addition to before and after photo logs, field audits are completed. The target sample size of the audits is determined based on the American National Standards Institute (ANSI)/American Society for Quality (ASQ) Z1.4-2008 Sampling Procedures and Tables for Inspection by Attributes.¹⁹ Using this method, the sample size is selected based on the population size. In this case it is the number of polygons in the

annual workplan for each program. A two-stage sampling procedure is used, with the first stage sampling determining the polygons to be audited and the second stage sample determining which jobs are audited within each polygon. An audit plan is generated for the Wildfire Risk Tree Program and another for the Routine Vegetation Maintenance Program.



Multistage random sampling involves random sampling of a population based on natural clusters within that population and then sampling an attribute within the selected clusters. In this case, the natural cluster would be the vegetation work polygon, and the attribute sampled within the selected polygons would be the specific jobs. Two stage random sampling requires that cluster elements are heterogeneous, each cluster is a small portion of the entire population, and each cluster is mutually exclusive. Avista's distribution vegetation sampling plan meets these requirements. In addition to the audit process, Avista staff periodically conduct field visits to check on work progress and work practices.

As mentioned previously, vegetation inspections of the transmission system are regulated at the federal level. NERC's Electric Reliability Standard for Vegetation Management²⁰ is designed to prevent vegetation-related outages which could lead to cascading, that is, outages that impact large areas of the interconnected grid. This Standard directly addresses inspection requirements. The Standard mandates documented maintenance specifications, strategies, procedures, and processes to prevent flash-over, including considering engineered sag and sway of the conductor, as well as the interdependence of vegetation owners to have an imminent threat procedure whereby the applicable control center is notified of vegetation conditions that could cause an outage at any moment. Further, each owner must complete annual work plans to prevent violation of the standard. Each utility's vegetation management plan must conform to requirements. Utilities can be fined as much as one million dollars per violation per day for FAC-003 violations.²¹

¹⁹ ANSI/ASQ Z1.4 & Z1.9 Sampling Plan Standards for Quality Control | ASQ

²⁰ NERC Transmission Vegetation Management Standard FAC-003-2, <u>FAC-003-2</u> TR <u>December 17 2010.pdf (nerc.com)</u>

²¹ Randall H. Miller, "FAC-003-4 Revisited," CNUC, April 29, 2020, FAC-003-4 Revisited - CN Utility Consulting (wearecnuc.com)

Appendix A

A.1 Metrics Tables

External Risk Metrics									
Metric Type External Risk Event 2021 2022 2023 Units Commer									
Red Flag Warnings	Red Flags Warning Days* for Weather Zone that includes Utility Service Territory				# of Days	Avista does not maintain historic weather data			
High Wind Conditions	High Wind Warning Days* in Weather Zone that Includes Utility Service Territory				# of Days	Avista does not maintain historic weather data			
	Circuit Miles (in High Risk Areas as Defined by the Utility)	3,240	2,746	2,746	# Miles	Based on Avista's WUI Map			
Increase of Customers/Infrastructure	As Percentage of Total Distribution Circuit Miles	42%	36%	36%	%	Based on Avista's WUI Map			
in High Risk Areas	Customer Accounts in [High Risk Area as Defined by Utility]	126,200	126,200	126,200	# Cust. Accounts	Based on Avista's WUI Map			
-	As Percentage of Total Customer Accounts	31%	31%	31%	%	Based on Avista's WUI Map			
Notes:	* Red Flag Warnings and High Wind Warnings are declared by the National Weather Service.								

Performance Metrics									
Metric Type	External Risk Event	2021	2022	2023	Units	Comments			
1 Distribution Inspections	Circuit Miles Inspected	5,245	6,466	6,546	# of Circuit Miles	Vegetation Management - Wildfire Only: Risk Tree			
1. Distribution inspections	Count of Inspection Findings				# of Circuit Miles	The Wildfire Program does not track this.			
2. Transmission Inspections	Patrol Inspections Performed	2,270	2,270	2,270	# of Circuit Miles	Vegetation Management - Wildfire Only: Risk Tree			
	Count of Inspection Findings # of Circuit Miles		The Wildfire Program does not track this.						
3a. Vegetation Inspections	Circuit Miles Inspected	5,245	6,466	6,546	# of Miles	Vegetation Management - Wildfire Only: Risk Tree			
Distribution	Count of Inspection Findings	12,796	15,678	19,511	# Risk Trees Removed	Vegetation Management - Wildfire Only: Risk Tree			
3b. Vegetation Inspections Transmission	Circuit Miles Inspected	2,270	2,270	2,270	# of Miles	Vegetation Management - Wildfire Only: Risk Tree			
	Count of Inspection Findings	1,910	3,281	3,062	# Risk Trees Removed	Vegetation Management - Wildfire Only: Risk Tree			

Outage Metrics									
Metric Type	2021	2022	2023						
	Animal	585	538	590					
	Planned	3106	2846	2861					
	Equipment	820	967	838					
Outage Event Distribution	Pole Fire	140	51	56					
Outage Event Distribution	Public	520	579	602					
	Vegetation Caused 56		471	355					
	Weather	3582	1715	445					
	Unknown	481	425	401					
	Animal	0	0	0					
	Planned	5	16	16					
	Equipment	13	29	28					
Outage Event Transmission	Pole Fire	14	0	11					
Outage Event Transmission	Public	15	2	3					
	Vegetation Caused	1	10	6					
	Weather	112	50	15					
	Unknown	21	31	3					

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Appendix B

B.1 Commerce Reported DNR Reported Utility Involved Wildfires

OBIECT			General		Discovered		Longitud					Avista Info
	Incident Name	Fire Number 🔻	Cause -	Acr 🔻	Date 🔻	Latitur 🔻	-ое 🔻	Utility Nam -	Shared Fi 🔻	x 🔻	v 🔻	Available
5	ALADDIN FORK	2023-WANES-001335	Powergen	0.1	06/10/2023	48.6196	-117.776	AVISTA CORP	Not Shared	-117.776	48.6196	No Information
6	COLUMBIA DAISY	2023-WANES-001342	Power gen	0.1	06/11/2023	48.36533	-118.163	AVISTA CORP	Not Shared	-118.163	48.36533	No Information
10	ALADDIN POLE	2023-WANES-001322	Power gen	0.4	06/08/2023	48.61038	-117.802	AVISTA CORP	Not Shared	-117.802	48.61038	No Information
17	MARTIN ROAD	2023-WANES-001555	Power gen	0.1	07/06/2023	48.27855	-118.13	AVISTA CORP	Not Shared	-118.13	48.27855	No Information
20	SKIDMORE ROAD	2023-WANES-001717	Power gen	0.1	07/24/2023	48.45862	-117.897	AVISTA CORP	Not Shared	-117.897	48.45862	No Information
22	GOLD	2023-WANES-001789	Power gen	0.3	08/02/2023	48.5399	-117.971	AVISTA CORP	Not Shared	-117.971	48.5399	No Information
25	SILVER QUEEN	2023-WANES-001822	Power gen	0.1	08/05/2023	48.56475	-118.113	AVISTA CORP	Not Shared	-118.113	48.56475	No Information
38	HOUSE CANYON	2023-WANES-002032	Power gen	0.2	08/25/2023	47.9318	-117.685	AVISTA CORP	Not Shared	-117.685	47.9318	No Information
42	ONION	2023-WANES-002148	Power gen	0.1	09/13/2023	48.72088	-117.877	AVISTA CORP	Not Shared	-117.877	48.72088	No Information
45	SPRINGDALE	2024-WANES-001059	Power gen	0.1	03/20/2024	48.04417	-117.777	AVISTA CORP	Not Shared	-117.777	48.04417	No Information
47	LONG PRAIRIE	2024-WANES-001093	Power gen	0.1	04/04/2024	48.1498	-117.763	AVISTA CORP	Not Shared	-117.763	48.1498	No Information
51	MUDGETT	2024-WANES-001203	Power gen	9.6	05/16/2024	48.0238	-118.216	AVISTA CORP	Not Shared	-118.216	48.0238	Some Information
55	PARK RAPIDS	2024-WANES-001362	Power gen	0.1	06/23/2024	48.51275	-117.683	AVISTA CORP	Not Shared	-117.683	48.51275	No Information
60	WALLBRIDGE	2024-WANES-001559	Power gen	0.1	07/21/2024	47.96086	-117.552	AVISTA CORP	Not Shared	-117.552	47.96086	No Information
62	STENSGAR CREEK	2024-WANES-001638	Power gen	0.1	07/27/2024	48.2953	-117.938	AVISTA CORP	Not Shared	-117.938	48.2953	No Information
64	HUNTERS CAMPGROUND	2024-WANES-001671	Power gen	3.5	08/01/2024	48.11668	-118.223	AVISTA CORP	Not Shared	-118.223	48.11668	Some Information
67	EVANS LINE	2024-WANES-001777	Power gen	0.5	08/13/2024	48.72453	-118.036	AVISTA CORP	Not Shared	-118.036	48.72453	Some Information
68	DEEP LAKE	2024-WANES-001494	Power gen	2.2	07/12/2024	48.8699	-117.6	AVISTA CORP	Not Shared	-117.6	48.8699	Some Information
70	CEDAR CREEK	2024-WANES-001885	Power gen	0.1	08/23/2024	48.98337	-117.567	AVISTA CORP	Not Shared	-117.567	48.98337	No Information
71	CASHMERE	2024-WANES-001871	Power gen	0.6	08/23/2024	48.3312	-117.874	AVISTA CORP	Not Shared	-117.874	48.3312	No Information
72	ADDY	2024-WANES-001870	Power gen	0.3	08/23/2024	48.3375	-117.871	AVISTA CORP	Not Shared	-117.871	48.3375	No Information
73	ROCKY LANE	2024-WANES-001872	Power gen	0.1	08/23/2024	48.49813	-117.899	AVISTA CORP	Not Shared	-117.899	48.49813	No Information
74	MELLENBERGER	2024-WANES-001874	Power gen	0.4	08/23/2024	48.60058	-118.142	AVISTA CORP	Not Shared	-118.142	48.60058	No Information
75	MCNITT	2024-WANES-001876	Power gen	0.3	08/23/2024	48.80247	-118.112	AVISTA CORP	Not Shared	-118.112	48.80247	No Information
76	DOYLE	2024-WANES-001878	Power gen	0.2	08/23/2024	48.74817	-118.135	AVISTA CORP	Not Shared	-118.135	48.74817	No Information
83	BOULDER	2024-WANES-002069	Power gen	0.27	09/25/2024	48.95685	-118.212	AVISTA CORP	Not Shared	-118.212	48.95685	No Information
84	WEBLEY	2024-WANES-002060	Power gen	0.3	09/25/2024	48.56625	-117.979	AVISTA CORP	Not Shared	-117.979	48.56625	Some Information
87	PACKMULE	2023-WANES-001253	Power gen	0.2	05/27/2023	47.88848	-117.459	AVISTA CORP	Shared	-117.459	47.88848	No Information
88	KEENE	2023-WANES-001375	Power gen	0.1	06/15/2023	47.58278	-117.659	AVISTA CORP	Shared	-117.659	47.58278	No Information
89	KATIE LANE	2023-WANES-001770	Power gen	12.4	07/30/2023	47.57868	-117.333	AVISTA CORP	Shared	-117.333	47.57868	Inland
90	PEASE HILL	2023-WANES-001964	Power gen	0.1	08/17/2023	47.85587	-117.458	AVISTA CORP	Shared	-117.458	47.85587	No Information
91	GRAY	2023-WANES-001974	Power gen	####	08/18/2023	47.53803	-117.744	AVISTA CORP	Shared	-117.744	47.53803	Inland
92	MONROE	2023-WANES-002004	Power gen	0.1	08/21/2023	47.82957	-117.443	AVISTA CORP	Shared	-117.443	47.82957	No Information
93	NORTH EUCLID	2024-WANES-001202	Power gen	1	05/16/2024	47.68643	-117.559	AVISTA CORP	Shared	-117.559	47.68643	Inland
94	HAWK CREEK	2024-WANES-001256	Power gen	1.5	06/03/2024	47.71127	-118.272	AVISTA CORP	Shared	-118.272	47.71127	Inland
95	HAWK	2024-WANES-001259	Power gen	0.1	06/04/2024	47.71872	-118.277	AVISTA CORP	Shared	-118.277	47.71872	No Information
96	HELENA	2024-WANES-001627	Power gen	0.1	07/26/2024	47.60014	-117.388	AVISTA CORP	Shared	-117.388	47.60014	No Information
97	STERLING	2024-WANES-001756	Power gen	0.2	08/10/2024	47.36118	-117.623	AVISTA CORP	Shared	-117.623	47.36118	No Information
98	WAVERLY	2024-WANES-002031	Power gen	0.1	09/19/2024	47.37628	-117.316	AVISTA CORP	Shared	-117.316	47.37628	No Information