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October 25, 2022

Ms. Amanda Maxwell, Executive Director and Secretary  
 Washington Utilities and Transportation Commission  
 621 Woodland Square Loop SE  
 Lacey, WA 98503

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 COMMISSION

**RE: Docket U-210254 - Avista's Response Related to Wildfire Preparedness**

Dear Ms. Maxwell:

Avista appreciates the opportunity to provide a response to the Commission's Notice of Recessed Open Meeting to discuss Utility Wildfire Preparedness ("Notice"). In the Commission's Notice, it required Avista, Pacific Power, and Puget Sound Energy to file updates or changes made to their 2022 wildfire preparedness and communications plans and lessons learned in the 2022 wildfire season. The Commission further asked that Avista, Pacific Power, and Puget Sound Energy respond to or address the requests for information as provided below.

On April 14, 2022, the Company filed in Docket U-210254 the following documents attached to the Company's April 14, 2022 filed comments:

- Attachment A** – Wildfire Resiliency 2021 Year End Report
- Attachment B** – Avista Utilities Wildfire Resiliency Plan 2022
- Attachment C** – Power Outage Safety Planning Brochure
- Attachment D** - Wildland Urban Interface (WUI) Map

At this time, the Company has not updated or changed these documents. However, certain lessons learned during the 2022 wildfire season and/or certain changes to be made to the Company's 2023 Wildfire Resiliency Plan, are noted in the responses provided below.

**1. Experience with the 2022 wildfire season, including data and statistics related to:**

- **The number of fires that occurred in the utility's service territory in the 2022 season.**

For wildfire tracking purposes, Avista defines its service territory as a zone from the centerline of its overhead electric facilities, extending 200 meters horizontally on both sides. Any fire that occurs within this zone is tracked. In 2022, there were 67 fires that occurred within this zone. 90% of these fires were less than 10 acres in size. The amount of acreage impacted by the incidents ranged from less than a tenth of an acre to 2000 acres.

- **The intensity of fires in the 2022 season.**

Fire intensity for the 2022 fire season was below statistical norms for our region. The Washington Department of Natural Resources (DNR) tracks fires against a 10-year rolling average. In 2022 the DNR reported 74% of normal fire responses. Fires burned less acreage in Washington in 2022 as well. Total acres impacted was well below average with burned acres at 24% of the 10-year average.

- **Whether the utilities' operations were impacted by fires, and, if so, how and where.**

Avista's electric system was impacted by fires in the 2022 fire season. Four separate circuits sustained impacts ranging from outages to structure damage. On July 17th, 2022, the lightning-caused Express fire just east of Lewiston, Idaho, caused an outage on the Lolo-Hatwai 230 kV line. There was no structure damage to our facilities associated with this fire because the line has steel transmission poles.

On August 4, 2022, a wildfire caused by farming equipment impacted the Lind-Washtucna 115kV transmission line and the Lind 711 distribution circuit. This fire destroyed 22 distribution poles and 12 transmission poles. Outages were also associated with this incident. Avista stepped up to provide amazing customer service related to this fire. They de-energized powerlines to protect fire crews but energized specific areas of feeders so firefighters could pump water to fight the fire. Once conditions were safe, Avista crews rushed to replace 34 lost structures, working through the night to restore service to all customers by the next morning, an amazing feat.

The Wagner Road fire, near St. John, Washington, started on August 18th, 2022. This fire destroyed 20 transmission structures on the Lind-Shawnee 115kV transmission line. The cause of this fire is still undetermined at the time of this report, but it appears that it is likely due to a harvest incident. As soon as fire crews released our people to work in the area, Avista crews from Pullman, Spokane, and Coeur d'Alene mobilized. It took them only four days to get this line back in service, including working in dust three feet deep in places, and bringing in special equipment to drill through solid basalt to place steel poles.

On August 30th, 2022, a train passing through Spokane, Washington, caused a small fire which spread uphill toward Avista's Metro-Sunset 115kV transmission line. The fire was quickly contained, but the result was one transmission pole destroyed.

- **Whether wildfires developed in areas defined as greater risk or in other areas designated as lesser risk.**

Fires in Avista service territory, sourced by all causes, occurred at random in relation to Avista's risk areas. Avista's risk mapping is oriented towards potential utility caused fires combined with significant impact to communities. 90% of the fires in our service territory in 2022 (all causes) were less than 10 acres and the majority were third party human caused or unknown, meaning there is little correlation to Avista's predictive risk areas.



- **Whether thresholds for use of the current set of fire mitigation tools (such as PSPS and dry land mode) are effective, if they have been working as intended, and if any new tools have been added or are needed.**

Avista has changed system protection settings during wildfire season since the early 2000s. Internally, this is known as Dry Land Mode (DLM). Historically, Dry Land Mode is initiated in mid-July and runs through early October. As part of the 2020 Wildfire Resiliency Plan, we have committed to several activities to modernize both equipment infrastructure and risk assessment tools to mitigate the risk of powerline-involved fire activity and to support our use of Dry Land Mode.

In August of 2020, Avista began forecasting short-term fire risk, combining elements of the 7-day weather forecast with circuit health and performance metrics. This system has been refined and benchmarked against historic fires in Eastern Washington and Northern Idaho. Known as the Fire-Weather Dashboard, this tool provides daily fire risk potential metrics and helps system operators and planners make better informed decisions on managing the risk potential of powerline operations. Closely coupled to this risk monitoring system is the multi-year effort to modernize Dry Land Mode equipment and communications systems. Avista developed a tiered system of protection levels including Base DLM, Elevated DLM, and Extreme DLM levels. When forecasted fire risk potential reaches certain trigger points, Avista makes changes to system protection to reduce faulted circuit energies and, in turn, the probability of fire ignition. In 2022, Avista elevated protection levels from Base DLM to Elevated DLM on two separate occasions involving 8 distribution circuits that serve approximately 8,500 Washington customers. Elevating system protection does increase the number of potentially impacted customers and will increase outage duration due primarily to the follow-up inspections required. However, none of the circuits experienced contingency outages while operating in Elevated DLM and no customers were impacted. The system worked as intended.

- **Whether communication plans worked as intended and any gaps identified.**

Our wildfire communications goals are to create awareness of Avista’s plan to prevent or mitigate the risk of wildfires, promote the safety and well-being of all customers, and to engage customers in programs that impact them and their communities. This continues to be an ongoing effort, and each year we build a new communications plan to build on previous work. There is always more to be done. A new feature of the Wildfire Plan for 2023 is to pull lists of customers on every Dry Land Mode circuit before the season starts. That will help us be more efficient in notifying customers on those circuits if we elevate Dry Land Mode settings. This can be done manually each time, but having dynamic lists created ahead of time enables us to notify customers more quickly.

The Company is currently developing an overall business strategy to incorporate equity into our decision making, focused on how to better engage with our Highly Impacted Communities and Vulnerable Populations (“Named Communities”). These customers comprise about 34% of our Washington service territory. The Company created a team called the Equity Advisory Group, which is an enterprise-wide endeavor with the goal of compliance with Washington

State's Clean Energy Transformation Act (CETA). The primary focus for this team is helping us understand inequities. To better understand and reach our customers, this team hired an external consultant, P3, who will help Avista more effectively engage with its customers, especially those in Named Communities. P3 is helping us identify languages, and cultural and economic barriers that we can address as we work with customers. The information gained from this work will be leveraged by the Wildfire team in their customer interactions.

As we are developing an overall business strategy to address inequity, in the interim we are creating:

- Energy Availability Customer Benefit Indicators (looking CAIDI and CEMI in relationship to Named Communities).
- An Outreach Customer Benefit Indicator (looking at economic, cultural, and other barriers and how we can overcome them to benefit customers).
- A Named Community Fund: The Company has set aside \$5 million to specifically address Named Community communication and preparedness related to Wildfire preparedness and resiliency.

## 2. **What strategies did the utility use or explore for this wildfire season to enhance situational awareness for its customers?**

Avista conducted a series of telephone townhall meetings to share information and gather feedback associated with Avista's Wildfire Plan with a focus on Company strategies to alter system protection settings (Dry Land Mode) during critical fire weather events. 35,885 customers were invited to attend these meetings and more than 7% participated. In addition, Avista Regional Business Managers convened meetings with 8 county emergency management agencies and 3 tribal governments. The goal of these meetings was to inform first responders on Avista's Wildfire Plan and to share information on how best to coordinate activities before, during, and after an event. As noted, Avista elevated system protection levels to "Elevated DLM" on two separate occasions in 2022. Direct customer emails along with Interactive Voice Recordings (IVR) were sent to potentially impacted customers. Social media channels such as Facebook and Twitter were also used to increase awareness of these events.

- **What partnerships has the utility cultivated with first responders, land managers, and emergency operations personnel in preparing for the 2022 wildfire season?**

Avista's Wildfire Resilience Plan includes a partnership initiative called Expedited Response. Avista piloted this concept with Spokane County Fire during the 2020 and 2021 seasons. We are currently in the process of expanding this arrangement to nearby counties including Kootenai, Bonner, Stevens, and Nez Perce Counties. The expedited response agreements allow the Avista transmission system operator to request a fire patrol following fault activity on the transmission system to ensure there are no spark events.

Avista has also engaged several land management agencies to advance fuel reduction efforts and further expand our partnerships. Avista is working with Washington Department of Natural Resources, U.S. Department of the Interior (Bureau of Land Management), the U.S.

Forest Service, the City of Spokane, Idaho Department of Lands and four tribal nations including Spokane, Colville, Nez Perce and Coeur d' Alene. So far this year more than 90 acres have been treated.

- **What communication channels and procedures are in place to coordinate planning and response efforts with these entities?**

Avista attends weekly planning and situational awareness briefings hosted by state firefighting agencies such as the Washington Department of Natural Resources and the Idaho Department of Lands. We are also in close contact with the U.S. Forest Service and Bureau of Land Management. Email, phone calls, virtual, and in-person meetings account for the bulk of conversations. In addition, Avista hosts a weekly Fire Planning Unit meeting/call and has invited several external state and local partners to participate.

- **How were those partnerships leveraged in the utility's wildfire response?**

The benefits of these partnerships are numerous. For example, Avista has developed excellent communication channels that allow participation in external briefings and collaborator meetings when large fires occur, especially those that may involve Company facilities and customers. Avista's operations staff are invited to attend daily briefings and meetings on large fires with external fire managers to gain information on their planned suppression activities and as a forum for strategizing on joint assistance or response. This type of coordination also helps communicate externally with customers related to the possibility of disruptions to energy delivery. These large fire meetings also inform planning restoration needs that may arise due to a wildfire and subsequent suppression requirements.

- **What plans did the utility have in place to communicate with customers, including Highly Impacted Communities, Vulnerable Populations, medically vulnerable customers, and Access and Functional Needs customers, about wildfire risk for this season overall, as well as specific wildfire risks or events?**

A key element of the Company's Wildfire Resiliency Plan is ensuring that Avista stakeholders know that the Plan is in place and that the Company is taking the right precautionary steps to reduce the potential for and impact of a wildfire. A strong and effective strategic communications campaign is critical to ensuring broad awareness and to demonstrate Avista's commitment to reducing the impact of wildfires. This communications plan is targeted to reach all of Avista's key stakeholders, including customers, employees, state and local government officials and regulators, law enforcement and fire departments, local media, and shareholders. Our wildfire communications goals are to create awareness of Avista's plan to prevent or mitigate the risk of wildfires, promote the safety and well-being of all customers, and to engage customers in programs that impact them and their communities. Some examples in 2022:

- Avista Connections: Articles in Avista's mailed and emailed customer newsletters in advance of fire season in May and June help educate all customers about Avista's Wildfire Resiliency Plan and in preparing property for wildfires. We also included updates in July, August and September newsletters.



- Customer email: Information about wildfire safety and preparation is sent to all customers in May in preparation for wildfire season. Email is also used to notify customers when there is a specific event in their area that might impact them or their Avista service.
- Dry Land Mode Specific Communications: We sent an email and a press release at the start of Dry Land Mode for all customers. When there was a need for an elevated Dry Land Mode, we sent emails and did Interactive Voice Response (IVR) call-outs (recorded phone messages) to all customers on the impacted circuits, including times we planned to go into the elevated mode.
- Telephone Town Halls: Avista uses this platform to communicate broadly with customers in highly impacted communities, including vulnerable populations and medically vulnerable customers, about overall wildfire risk and preparations for this season. 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 shared updates on our wildfire plan progress and plans for the future and invited emergency management professionals from that region for each town hall. We held four telephone town halls this summer.
- Print ads: We ran a series of print ads in more rural communities about our wildfire resiliency efforts, including changes to Dry Land Mode. We asked customers to make sure their contact information is up to date with Avista so we can be sure to reach them when/if we need to about changes to operations in their area.
- Community Meetings: Lead by our regional business manager team, Avista hosted meetings with emergency management organizations in counties that have the highest wildfire risk within our service territory.

○ **How effective was customer communication regarding wildfire events? Were there any lessons learned?**

We did not have specific wildfire events that required communications. However, we did follow our plan for notifying customers when we went into elevated Dry Land Mode, which happened two times at the end of July/early August. We were able to get lists of customers pulled for each circuit, send emails, and make phone calls to all of these potentially impacted customers. We are working on streamlining this process for next year by having those lists ready to go in our email system prior to the start of the season.

○ **If communications were not distributed to all customers, please explain who was excluded and why.**

When we entered into an elevated Dry Land Mode, communications were sent out to customers on the specific circuits who would potentially be impacted. Our community meetings and telephone town halls were focused in areas of higher risk based on our WUI map.

• **What information did the utility provide to customers about the wildfire risk mitigation work it is performing?**

We have a variety of ways we communicate with customers about our work. We utilize our newsletters, customer emails, phone calls, social media, Avista's website and earned media



with our local media outlets. When projects directly impact customers, they are directly notified of work happening in their area and its purpose. For example, informational postcards are sent to customers who live near grid hardening projects. We also reach out directly to customers who are eligible for vegetation management work through mail, email and phone. For work that involves outages, we communicate multiple times. For example, for a transmission project that replaces wood with steel, we send letters to customers in the area and followed up with phone calls (through outbound interactive voice response calls) and a series of ads in the local newspaper. There is not a one-size-fits all approach, and we work to reach customers through many different channels.

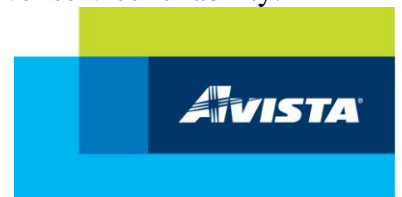
- **Were there any additional changes to utility communication plans since those plans were filed in April 2022?**

The telephone town halls were added, and we added more materials to explain the different levels of Dry Land Mode. Also, as mentioned earlier, the Company created the Clean Energy Implementation Plan Team, an enterprise-wide endeavor with the overall goal of compliance with Washington State’s Clean Energy Transformation Act. A primary focus for this team is customer communications. This team hired an external consultant, P3, who will help Avista better understand our customers, their language and other needs, and how to most effectively communicate with them on a wide variety of issues including Wildfire. The information gained from this work will be leveraged by Wildfire in their customer interactions and help us to better prepare our customers in protecting their properties and in understanding and reacting to Dry Land Mode operations that may impact their service.

**3. What strategies did the utility use or explore for this wildfire season to enhance situational awareness for utility operations?**

Many of Avista’s strategies involve long term projects to reduce the number of system outages during summer operations. Programs such as distribution grid hardening, transmission steel conversion, fire-resistant mesh pole wraps, and the 100% system risk tree inspection and remediation address long-term fire ignition potential. However, transmission and distribution infrastructure will continue to experience outages (weather, lightning, vegetation) that pose a risk for fire ignition. Avista has provided information related to the Dry Land protection system and we continue to modernize and enhance the equipment, risk assessment, and also the internal and external communication associated with that system.

In 2020, Avista protection and distribution engineers conducted a full review of Dry Land Mode operations and recommended several changes and upgrades to the system. Those recommendations included installing modern circuit breaker and communication systems to allow remote changes to system protection levels from Avista’s Distribution Operations control center. These systems now support three distinct levels of DLM protection: 1) Base – used during the bulk of fire season to limit automatic reclosing of faulted circuits and to reduce spark-ignition energy levels and associated fire ignition, 2) Elevated – used during critical fire weather events such as moderate to high wind levels combined with low relative humidity levels which prohibits line fuse operation to limit the scope of outage impact but significantly reduces fault energy and associated fire ignition potential, 3) Extreme – used during periods of high wind to minimize the spark-ignition risk. At the Extreme setting, spark-ignition takes precedent over service reliability.



As noted, these DLM levels were used during the 2022 fire season. By all accounts, the 2022 fire season was mild compared to the drought-influenced fire seasons of 2020 and 2021 or the record fire season in 2015. We expect to use these higher levels of DLM protection well into the future.

Avista also developed a Fire Weather Dashboard based on GIS mapping of electric infrastructure. This system combines the 7-day National Weather Service forecasts with powerline metrics to produce a daily Fire Risk Potential. Each Monday during fire season, this data is shared and reviewed with internal operation, engineering, communication employees, together with Avista leadership. Subsequent Fire Planning units are then scheduled to align with weather events. In addition to this meeting, a weekly email summary is sent to over 150 employees to increase awareness and support transparency of fire weather conditions across the electric system.

- **What tools does the utility have available to respond to wildfire threats?**

The utility has a fire weather predictive model that allows some insight into wildfire threats as they occur in real time. Using this data, we are able to take action to alert customers, prepare to respond to outages, and take steps to reduce ignition potential.

- **What changes, if any, have been made to operational tools in the utility’s toolkit for responding to wildfire events or potential triggers of wildfire events since April?**

There have been no significant changes to the weather forecasts analysis of fire weather and our potential triggers of wildfire events.

- **Are thresholds/triggering events for the current set of tools effective? Have the tools been working as intended?**

Yes, there are thresholds in the Company’s Fire Weather Dashboard that trigger action. Those triggers worked as intended.

- **Does the utility offer programs for customers to request vegetation management work if they identify trees or vegetation that is in contact with power lines? How successful are these programs?**

Avista has two programs that manage customer-identified concerns relating to vegetation, the “Check Tree Program” and the “Safe Tree Program.” The Check Tree Program is a part of Avista’s Distribution Vegetation Management Program. It relies on customers calling into the call center to ask for an assessment on trees that they believe pose a risk to power lines. This call from the customer generates a service request and is assigned to vegetation management staff for assessment. Once the assessment is done and a problem is identified, a line clearance crew is scheduled for trimming.

The Safe Tree Program, also known as the Customer Choice Right Tree Right Place, is like the Check Tree Program in that it requires customers to drive an action regarding vegetation management. However, instead of trimming trees, the Safe Tree Program removes non-compatible vegetation (i.e., likely to grow into powerlines), cleaning up the debris, and then replacing the old tree with a low-growing species of the customer’s choice, all at no cost to the customer. These low growing species mature to a height that will not interfere with





overhead powerlines and should not require ongoing trimming to keep them from becoming hazards to powerlines.

- **Were there additional changes to utility wildfire operations plans in April 2022?**

Starting in May of 2022, Avista created a multidisciplinary team to plan and implement a Community Outreach effort. Avista's Regional Business Managers took the lead on developing content for a series of meetings that included State, County, and City/District fire protection agencies and emergency management coordinators. These meetings helped to raise awareness of Avista's Wildfire Resiliency projects with a particular focus on operational strategies deployed for the 2022 fire season. A number of topics were discussed including what support Avista can provide to emergency first responders during an event. For example, Avista has committed to assigning a Company representative to attend all Fire Incident Command briefings and to act as a single point of contact for Incident Command. Avista has and will continue to work with fire protection agencies to 'make safe' electric infrastructure during firefighting activities. Avista personnel routinely respond to emergency requests to curtail power or to de-energize electrical equipment when fire fighters are suppressing structure and wildland fires. As noted, Avista conducted four telephone townhall meetings with customers in high fire threat districts. These meetings provided customers an opportunity to ask questions about Wildfire preparedness and related projects as well as to connect with resources.

**4. Were there additional lessons learned from the 2022 wildfire season?**

Scaling the vegetation management risk tree program to complete 100% risk inspection annually proved to be a bigger lift than anticipated. Avista has expanded its risk/hazard tree program from a program concurrent with cycle trimming (20% annually) to a 100% risk tree inspection and remediation program. Vegetation planners had forecasted the volume of dead, dying, and diseased trees that could potentially strike powerlines prior to 2022. To date, over 5,000 miles of powerlines have been inspected, but the number of risk trees is nearly double initial estimates. Avista has never conducted an annual 100% inspection of risk trees and are finding that forest health issues are much worse than anticipated. This situation was made worse by the historic drought of 2021 but also reflects increased levels of insect activity combined with human activity, all leading to higher levels of tree mortality than expected. However, tree fall-in risk represents the highest risk of spark-ignition potential and Avista remains committed to inspecting 100% of the grid system on an annual basis. As of the end of September, Avista has removed over 13,000 dead, dying, or diseased trees within strike distance of our powerlines. That is a record level of tree removals for Avista.

In addition to finding more risk trees than anticipated, labor resources have been an issue. Utilities across the western U.S. are all competing for the same labor resources and Avista's primary inspection contractor was repeatedly unable to recruit and retain enough inspectors to complete the work. The Company had to contract with 4 additional vendors to have enough people to inspect the entire system. These inspectors are from out of the area and command 60-hour work weeks, lodging, and per diem allowances, increasing costs. Impacts to the system from forest health issues (drought, insects, disease, weather, and fire) continue to create spikes in the number of risk trees and necessitate the addition of labor accordingly, which will likely continue to elevate

costs. Also in 2022, Avista began to incorporate remotely sensed LiDAR and satellite imagery data into the vegetation management programs. These are new technologies to the Company and will need more experience and refinement before they truly begin replacing boots-on-the-ground labor resources.

**5. Are there any other anticipated changes for the 2023 wildfire season not mentioned above?**

In 2019, Avista developed a Wildland Urban Interface (WUI) map to help assess the high fire threat districts within the service territory. The model was informed by consultation with Idaho Power Company, San Diego Gas & Electric, internal risk management, and mapping resources. The WUI model has informed the bulk of Distribution Grid Hardening activity and helps to prioritize vegetation management work. The model was recently updated and is in the process of full release to planner and designers for the 2023 construction season. The new model incorporates the USDA data for Housing Unit Impact along with the USDA Wildfire Hazard Potential and internal-use data for outage rates and vegetation risk. The 2023 model indicates that 35% of Avista's distribution grid or approximately 2,750 miles is located in high fire threat districts. These areas are slated for grid hardening projects from 2023 through 2029.

Avista also conducted a review of underground and overhead line infrastructure associated with new commercial and residential customers. As part of the 2023 Wildfire strategy, we will commit to 100% underground facilities to connect new customers in high fire threat districts whenever financially feasible. This will be an addition to the Plan and serve as a guiding principle across the Avista service territory.

During our 2022 Community Outreach, it became apparent that we need to better understand both critical infrastructure customers (fire, police, communication, water, sewer, transportation) together with individual life-support customers that rely on in-home medical equipment. Efforts are currently underway to integrate these customer rosters with Dry Land Mode operations so that we can better and more quickly inform these customers about changes to system protection levels.

Lastly, Avista will review industry trends and best practices associated with Public Safety Power Shutoffs (PSPS). Several Oregon utilities including PacifiCorp and Portland General Electric implemented a PSPS on September 9, 2022. We are aware that Idaho Power, Puget Sound Energy, and NorthWestern Energy have or are in the process of developing PSPS strategies. As part of Avista's 2023 Wildfire Resiliency Plan, we will review the practice and develop criteria that would support activating a pre-emptive power shutoff in order to mitigate the risk of wildfires.

If you have any questions regarding this filing, you can contact me at 509-495-8601 or [liz.andrews@avistacorp.com](mailto:liz.andrews@avistacorp.com).

Sincerely,

/S/Elizabeth Andrews

Elizabeth Andrews  
Sr. Manager of Revenue Requirements

