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July 1, 2021

Mark L. Johnson
Executive Director and Secretary
Washington Utilities & Transportation Commission
621 Woodland Square Loop SE
Lacey, WA 98503

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UTIL. AND TRANSP.
COMMISSION

Re: Docket No. U-210254 – In the Matter of Utility Wildfire Preparedness

Dear Mr. Johnson,

Avista Corporation, dba Avista Utilities (Avista or the Company), submits the following responses to the questions posed by the Commission in its June 14, 2021 request for information regarding Avista’s Wildfire Preparedness plans and strategies. For Avista’s 2020 Wildfire Resiliency Plan (“Wildfire Plan”), Avista filed its Wildfire Plan with the Commission on May 25, 2021 in this Docket UE-210254, file labeled: “210254-AVA-WFRES-Plan-5-25-21.” For ease of reference, the Company’s Wildfire Plan has been provided as Attachment A to these comments.

1. What vegetation management strategies and actions are you taking to mitigate the risk and potential impact of wildfire in your service territory?

AVISTA RESPONSE: In addition to the enhanced existing vegetation management practices as described in these comments, Avista added additional measures designed to reduce wildfire risk. These include (and are provided in more detail in Avista’s Wildfire Plan included as Attachment A):

- **Digital Data Collection:** Starting in 2021, Avista inspects 100% of its transmission and distribution systems via ground and aerial patrols each year. As part of enhancing our vegetation inspections specifically related to wildfire risk, Avista added a combination of LiDAR and satellite imagery of our distribution and transmission grids. The data collected by these means are highly quantitative and indicates vegetation present and identifies encroachment. Because these images are taken on a regular basis, they show the utility where vegetation is growing and

becoming problematic. The data also includes detailed images of equipment and infrastructure which is critical for inspections. This approach takes vegetation management to the next level. Rather than relying solely upon ground-based inspections, data collection is automated and much more thorough. High resolution satellite imagery can distinguish vegetation from other objects, differentiate between trees and grass or low-lying vegetation, measure the height of trees, identify both manmade and vegetation encroachments, and differentiate between healthy and diseased or dead trees. This allows Avista to prioritize vegetation management efforts and expenditures in areas where the work will have the most impact in hardening the system as well as reducing tree grow-ins and fall-ins. The data collected is stored in a database that can be used to perform a wide variety of analyses related to vegetation, as well as be utilized to aid in equipment inspections. This data is being collected at present and will be available within the next few months for analytical analysis.

- **Identification of Transmission Right-of-Way Issues:** This effort includes cataloging existing rights-of-way for the Transmission system (some of which were developed in the early 1900s) and using technology, data, and wildfire risk analysis to determine if existing rights-of-way are aligned with risk and performance objectives.
 - **Annual Risk Tree Reduction:** This involves inspections to identify and remove dead, dying and diseased trees. Prior to 2021, the vegetation management program operated on a five-year inspection cycle. This additional program, prioritized towards high risk fire areas, will cover 100% of the service territory annually.
 - **Customer Driven Right Tree Right Place Program:** This program, currently under development, will engage customers in high fire risk areas to remove tall growing trees from beneath powerlines and replace them with a low growing varieties that will not interfere with overhead power lines.
 - **Fuel Reduction Partnerships:** The Company is partnering with fire protection agencies like Washington Department of Natural Resources and First Nations to reduce or remove fuels near critical infrastructure by providing funding to support their efforts.
- How do these actions differ, if at all, from business-as-usual vegetation management practices?

AVISTA RESPONSE: As noted above and in the Wildfire Plan, the Company has significantly increased data collection related to vegetation. This new data collection was done directly as a result of the Wildfire Plan's goals and objectives. In addition,

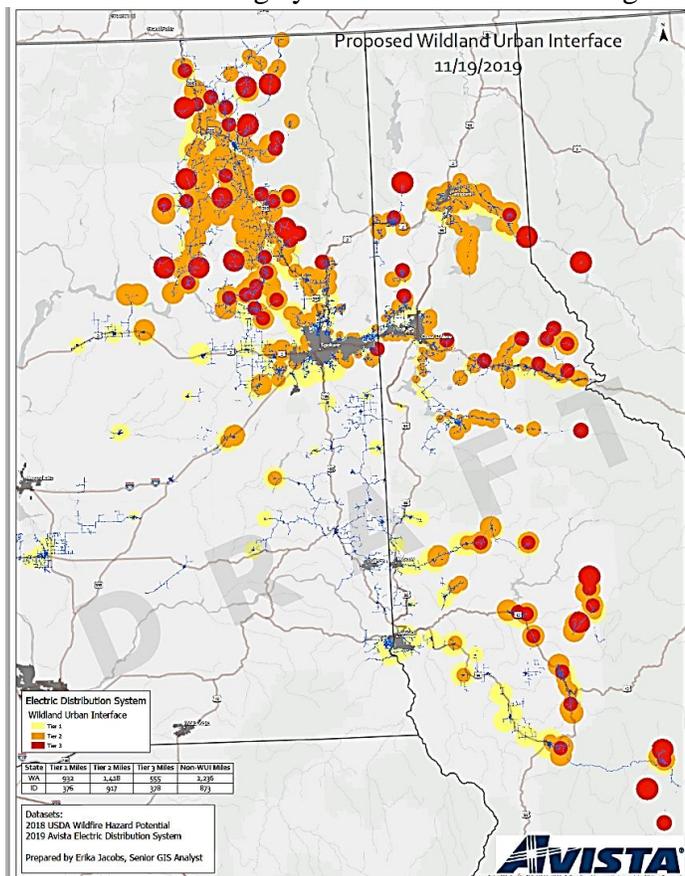
vegetation management efforts have been redirected to prioritize effort in high risk fire areas in our system. Vegetation management related routine maintenance has been separated from risk-based vegetation management practices for wildfire in order to allow tracking and analytics. Another significant reform is that the Company’s risk tree program has transitioned from a 5-year to 1-year cycle. New programs targeting high risk areas (as described above) are being developed to specifically reduce fire risk.

- Has the utility identified areas of concern within its service territory? Where are they? What are the risks and how has the utility determined those risks? What strategies will the utility use to mitigate risks in these areas?

AVISTA RESPONSE: Yes, Avista has identified high risk fire areas within our service territory. Known as Wildland Urban Interface (WUI) zones, these areas are generally characterized as the interface between forest and developed areas, areas which create an elevated probability of a wildfire burning into a populated area. Incorporated urban areas exceeding 10,000 in population are identified as ‘developed areas’ in the wildfire hazard potential and are considered non-WUI, as these areas tend to have well established fire response facilities and non-burnable hardscape areas such as roads and parking lots to serve as fire containment zones, thus fire spread potential is constrained.

Understanding the scope and scale of wildfire risk is largely an exercise in estimating the probability of an event occurrence and then multiplying that probability times the estimated cost impact of the event. This is a quantitative process. The Transmission and Distribution system performance and overall risk vary widely based on topography, weather, climate, maintenance regimes, and a host of other factors. For Wildfire, it was important to understand the correlation between three key variables:

1. Customer – the location and density of customers served via overhead distribution lines.
2. Fuel Concentration – the type, density, and fuel hazard associated with vegetation cover and climate.



3. Infrastructure- the location, performance, and health indices associated with power lines.

Avista leveraged its ESRI based Geographical Information System (GIS) together with subject matter experts including fire experts to produce its current Wildland Urban Interface Map. As reproduced for illustration purposes (see inset on previous page) the map differentiates between low and moderate fire risk zones (non-highlighted and yellow) with areas of higher levels of risk or high fire threat districts (orange and red). The current WUI map indicates that approximately 40% of Avista distribution grid is located in high fire threat districts (Tiers 2 & 3). Approximately 20% of the transmission grid is located in the high fire threat district.

To determining Avista’s WUI risk areas, our electric service grid was divided into ¼ square mile sections and each was evaluated as described below.¹

WUI Test:

- **Non-WUI:** ¼ mile sections with fewer than eight (8) electric service points that are agriculture, forest, non-production, large bodies of water, non-Avista electric service areas, or other Undeveloped Public Lands are considered non-WUI because the consequence impact is low or the area is outside Avista’s electric service territory.
- **WUI Zones:** The table below is used to conduct the initial WUI analysis. ¼ mile sections that have eight (8) or more electric service points are included in the WUI if the Wildfire Hazard Potential meets criteria as indicated below:

Electric Service Density Minimums (1/4 mile sections)	Radial Buffer Distance (miles)	Wildfire Hazard Potential (WHP) - See Addendum
8 (20-acre parcel)	3	Very High
16 (10-acre parcel)	2	High
24 (6.7-acre parcel)	1	Moderate

WUI Tier Designation:

The radial surface area is then compared against the USDA Wildfire Hazard Potential (WHP) dataset. This consists of areas with higher fuel loading which are associated with higher levels of fire ignition and fire spread rates. WUI areas are then classified as:

¹ This analysis considers only Avista electric distribution lines and does not include natural gas or electric transmission infrastructure.

- Tier 1 (lowest: moderate to low - “yellow”) which are radial buffered areas with less than 10% WHP designated as moderate or higher.
- Tier 2 (medium: moderate to high – “orange”) which are radial buffered areas with 10-50% WHP designated as moderate or higher.
- Tier 3 (highest – “red”) which are radial buffered areas with greater than 50% WHP designated as moderate or higher.

The table below summarizes the WUI classifications:

WUI Tier 1	0-10% Area designated as \geq WHP Moderate
WUI Tier 2	10-50% Area designated as \geq WHP Moderate
WUI Tier 3	50-100% Area designated as \geq WHP Moderate

2. How is the utility considering infrastructure hardening in its plans?

AVISTA RESPONSE: Grid hardening efforts reflect the bulk of capital investment in the Wildfire Plan. On average, equipment, and conductor failures account for 10% of all forced outages and reducing those outages is a primary objective of the Wildfire Plan. 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, internal equipment failures are manageable and represent a cost-effective method to reduce spark-ignition events. The Company has implemented several grid hardening strategies in the Wildfire Plan, as described in more detail in the answers below.

- What cost-benefit and risk analyses have been conducted in relation to any proposed infrastructure improvements?

AVISTA RESPONSE: Avista began the risk analysis process in May and June of 2019 through a series of workshops. Avista leveraged subject matter experts from both inside and outside the Company to quantify the 10-year inherent risk of wildfires versus the 10-year managed risk of deploying mitigation strategies. Workshops included subject matter experts across the Company including Asset Management, Enterprise Risk, Engineering, Line Operations, System Operations, Regulatory Compliance, and other groups as well as outside expertise including fire professionals and state and federal agencies. The workshops were designed to provide baseline information and risk matrices for several potential strategies.

Though the primary driver was aimed at lowering the probability of a spark-ignition event, many factors were considered including employee and public safety, impacts to customers, and societal costs. This was conducted as a table-top exercise but was fully facilitated with

specific ground rules for tactics, methods, and results. This work formed the backbone of Avista’s 10-year investment strategy to reduce the overall risk of T&D-involved wildfires. However, we fully recognize that the Wildfire Plan and tactics will evolve over time as we collect data, deepen our experience, and adapt to changing climate (both on the ground and societal). It is important to note that Avista does not just consider direct impacts to the Company but moreover, the societal impacts of wildfires on people’s lives, their properties, and the communities where they live and work.

Avista’s Wildfire Plan incorporates these areas of financial impact:

1. **Public Safety** – the cost of injuries associated with Avista employees and the public.
2. **Service Reliability** – the costs associated with service disruption based on the Department of Energy’s Interruption Cost Estimator (ICE). For Avista customers, this value was \$63 dollars per customer-hour at the time of the workshops.
3. **Financial Impact**– the replacement costs of infrastructure (direct) and third-party claims to reimburse for property damage, timber loss, and fire suppression (indirect).

Provided as an example, the following table indicates the inherent risk matrix exercise associated with distribution pole fires. From 2014-2018, the five-year average of pole fires was 92 per year. This table illustrates how direct financial, safety, and service reliability impacts were quantified for pole fire risk.²

Outcome	Probability per event	Impact Cost (\$)		Risk Cost (\$)		Notes
		Optimistic	Pessimistic	Optimistic	Pessimistic	
Direct Financial	1	\$1,500	\$7,500	\$1,500	\$7,500	Avista crews responding to pole fires
Indirect Financial (minor)	0.1	\$5,000	\$20,000	\$500	\$2,000	3 rd Party costs (e.g. suppression)
Indirect Financial (large)	.002	\$100,000	\$2,000,000	\$200	\$4,000	Ground fire spread by wind and fuel loading
Safety-Employee	.05	\$2,500	\$75,000	\$125	\$3,750	Employee injury ranging from minor burn to back or shoulder injury
Safety-Public (minor)	.01	\$10,000	\$50,000	\$100	\$500	Injury
Safety-Public (major)	.001	\$2,000,000	\$10,000,000	\$2,000	\$10,000	Fatality
Reliability (minor)	0.7	\$200	\$2,000	\$140	\$1,400	Service point (2-15 customers)
Reliability (moderate)	0.25	\$18,000	\$30,000	\$3,600	\$6,000	Lateral circuit (140-240 customers)
Reliability (major)	0.05	\$190,000	\$378,000	\$9,500	\$18,900	Feeder circuit (1500-3000 customers)
Total (per event)				\$14,515	\$48,800	
Inherent Risk = 92 events/year x \$/event				\$1,335,380	\$4,489,600	Pole fire risk cost per year.
Inherent Risk over 10-year planning horizon (assumes level rate)				\$13,353,800	\$44,896,000	<i>This is illustrative of the range used in the Wildfire Resiliency Plan for a sub element of distribution grid hardening</i>

² Source: Avista Utilities Wildfire Resiliency Plan 2020, Attachment A, page 22.

Risk and cost tables were developed for each program and included both inherent (current) and managed (potential) risk, as well as risk reduction expected from implementing the program, and projected Capital and O&M expenditures as shown in the table below. Note that the values shown for risk are percentage based and reflect a range for each category. Further, note that vegetation and grid hardening risk scores indicated a bounded range because the probability of occurrence is based on the frequency of forced outages, as the frequency of electrical outages is a known quantity. However, an event's impact can vary widely based on several factors including weather, fire risk levels, emergency response, and location. Note that the managed risk scores represent future state levels and lower levels of event probability and event outcome. The column labeled 'Risk Reduction' indicates the average percentage difference between current state and future state risk levels.³

Resiliency Risk and Cost Summary-Washington and Idaho Electric

2020-2029 Operating Horizon	Inherent Risk (range %)	Managed Risk (range %)	Risk Reduction (avg %)	10-yr Capital Investment (\$)	10-yr Operating Expense (\$)
Enhanced Vegetation Management	48.3-100	3.2-14.5	88%	\$5,100,000	\$51,175,000
Situational Awareness	25.9-100	0.8-1.1	98%	\$17,965,000	\$1,019,000
Operations & Emergency Response	19.7-100	5.3-23.4	76%	\$300,000	\$2,378,000
Grid Hardening & Dry Land Mode	41-100	0.7-2.7	98%	\$245,600,000	\$5,014,000
Plan Total	44.1-100	2.8-12.5	89%	\$268,965,000	\$59,586,000

- What infrastructure hardening strategies have been identified for the utility's system, including areas at higher risk, and how is the utility considering investment in these strategies, as well maintenance of its infrastructure?

AVISTA RESPONSE: The Company has several grid hardening measures in place specifically directed at reducing wildfire risk as shown below. Expected investments for these programs are shown in the table below.⁴

- **Transmission Fire Retardant Wrap Program:** The Company is installing Fire-Mesh wrap on wood transmission structures to protect assets against grassland fires.
- **Dry Land Operating Mode (DLM):** The Company is installing additional circuit

³ Source: Avista Utilities Wildfire Resiliency Plan 2020, Attachment A, page 13.

⁴ Grid Hardening Summary Table: Avista Utilities Wildfire Resiliency Plan 2020, Attachment A, pages 9-10, 30, 31-34.

reclosers in elevated fire risk areas. This operating mode, utilized during periods of elevated fire risk, disables the auto-reclosing feature for distribution circuits to reduce the probability of spark-ignition. Faulted circuits trip off and stay off until an inspection is performed to ensure safe re-energization.

- **Transmission Grid Hardening:** Avista is systematically replacing wood transmission structures with steel, with the focus on making these conversions in high fire risk areas.
- **Distribution Grid Hardening:** This program focuses on replacing wood crossarms with fiberglass crossarms, replacing obsolete copper wire, installing wildlife guards, eliminating open wire secondary districts, and installing wedge/bail clamps at hot tap connection points. All of these actions will serve to reduce spark-ignition events.
- **Substation SCADA:** This program will add automation and communication systems at substations located in high fire risk areas. This effort supports the Dry Land Mode operating program.

Grid Hardening Measures:	Annual Capital	Total Capital Over 10 Years	Annual O&M	Total O&M Over 10 Years
<i>Transmission Wood Pole Wraps</i>			\$250,000	\$2,450,000
<i>Dry Land Mode Circuit Reclosers</i>	\$600,000	\$5,400,000	\$44,400	\$444,000
<i>Transmission System Grid Hardening</i>	\$5,000,000	\$44,000,000		
<i>Distribution System Grid Hardening</i>	\$23,000,000	\$193,200,000		
<i>Substation SCADA</i>	\$2,000,000	\$17,000,000	\$9,700	\$97,000

3. What strategies will the utility use or explore for this wildfire season to enhance situational awareness for utility operations and for its customers?

AVISTA RESPONSE: Avista’s Situational Awareness strategies are designed to enable remote monitoring and control of equipment, and provide risk assessments including:

- **Fire Weather Dashboard 2.0:** In August of 2020, Avista began systematically quantifying the 7-day Fire Risk Potential (FRP) for every distribution and transmission line on the system. Again, Avista leveraged its ESRI based GIS mapping system together with the 7-day National Weather Service data to produce what is internally known as the Fire-Risk Dashboard. The approach was modeled after similar efforts at San Diego Gas & Electric and Idaho Power. This model does not influence long term programs such as grid hardening or vegetation management but forms the basis of Avista’s operational response. An example output of this system is included for illustration purposes.

FIRE RISK

Area_Office	Feeder	05-04	05-05	05-06	05-07	05-08	05-09	05-10	05-11	05-12	Max
Colville	VAL12F1	4.2	4.7	5.9	5.5	5.2	4.0	4.5	4.2	4.2	5.9
Colville	GIF34F2	4.3	4.7	5.9	5.9	4.9	4.3	4.6	4.8	4.6	5.9
Colville	CHW12F3	4.4	5.1	5.8	5.6	4.7	4.5	4.8	4.8	4.3	5.8
CDA	SPL361	4.3	4.3	5.5	5.2	4.8	4.2	4.6	4.2	3.9	5.5
CDA	IDR252	4.9	4.6	5.1	5.4	5.1	4.2	4.7	4.7	4.0	5.4
CDA	PF212	4.6	4.6	5.1	5.2	5.0	4.3	4.7	4.7	4.1	5.2
Davenport	ODS12F1	5.8	6.1	6.2	6.5	6.3	5.7	6.1	5.9	5.6	6.5
Davenport	DVP12F1	5.4	5.4	6.1	5.9	5.8	5.0	5.8	5.5	5.1	6.1
Davenport	LL12F1	5.3	5.1	5.7	5.8	null	null	null	null	null	5.8
Deer Park	LOO12F2	4.4	4.6	5.7	5.2	4.7	3.4	4.0	3.8	3.8	5.7
Deer Park	COB12F1	4.7	4.4	5.6	5.3	5.0	4.0	4.7	4.2	4.0	5.6
Deer Park	DEP12F2	4.4	4.4	5.4	5.0	4.7	3.7	4.2	3.8	3.4	5.4

This computer system will be used to inform operating decisions and serve to illustrate that fire risk mitigation requires both long term and short-term strategies. In the short term, operational readiness is a crucial element in deploying the manpower and system safeguards necessary to offset the weather-related risks. In the long term, the goal is to reduce the number and severity of line equipment and tree related incidents most likely to produce fire ignition. Avista's Wildfire Resiliency Plan is firmly rooted in risk analytics, and we will continue to monitor, measure, benchmark, and refresh the risks associated with wildfire.

- What information, datasets, or programs does the utility have at its disposal?

AVISTA RESPONSE: The Company's Wildfire Resiliency efforts have provided the opportunity to develop and acquire data sources beyond what the Company has utilized in the past. For example, historically the Company has not specifically tracked wildfire events. Our current outage system focuses on cause, not effect, to focus efforts on repair and restoration. Going forward Avista is tracking spark-ignition events as part of an overall effort to quantify the effectiveness and costs of mitigating wildfire risk.

The Company's Fire Weather Dashboard is an example of new data and analyses the Company has developed related to identifying risk. This robust tool identifies the risk for each distribution circuit in our system based on a number of key factors such as wind speed and direction, vegetation levels, humidity, health of the feeder, topography, and more.

Information is being acquired using LiDAR for our transmission system, creating robust datasets which will help us identify vegetation issues across our entire service territory.

For the Distribution system, Avista has partnered with the Satellite technology company AiDash. Satellite-based analysis combines system performance with successive satellite images to quantify the risk of both grow-in and fall-in trees. From a value proposition, using satellites is much more cost favorable than either ground-based or LiDAR inspections. Satellite collection costs around \$70/mile compared to LiDAR at \$400/mile and manual inspections for risk tree at about \$150/mile. This year, we will image the entire

electric distribution network. This is an exciting technology and will help us transform from strictly 5-year cycle-based routine trimming to a system based on risk and return on investment.

In 2019, we conducted an internal review of wildfire risk and determined that about 60% of the electric distribution system was in low to moderate risk areas with 40% located in fire likely areas. In 2021, E Source Consulting group was hired to provide a third-party perspective of Avista's fire risk. They considered over 350 climatic, performance and terrain-based attributes. Their study determined that about 23% of our service territory is located in high risk fire areas and that 88% of recent fires occurred in those areas. Our 2019 analysis was intentionally conservative in its approach, as we knew that it would be easier to shift towards a smaller footprint rather than a larger one. We still need some time to fully digest this large and complex data set, but it seems likely we will be re-baselining some of our efforts based on this new analysis, especially with respect to Grid Hardening.

- Are there specific deficiencies in information that the utility plans to address to prepare for this wildfire season?

AVISTA RESPONSE: Specific locations of likely fire ignition are very difficult to predict. Avista developed the WUI risk area map using internal expertise and resources to help us focus on areas which are most likely at risk. We are now in the process of incorporating the E Source Consulting Group data into this dataset to provide a more detailed look at those areas which may be most at risk for wildfire situations, which should improve our targeted efforts.

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

AVISTA RESPONSE: Avista is routinely engaged with U.S. Forest Service, the Washington State Department of Natural Resources, the Idaho Department of Lands, the Bureau of Land Management, and has begun discussions with local Tribes. State and Federal Agencies participated in developing our Wildfire Plan, providing significant expertise and guidance. These external groups will be included in a weekly operations call if there is a risk of fire that could impact them, in order to coordinate response and share information. Our Wildfire Resiliency Manager gets daily fire briefs from the DNR.

There are 750 fire districts in Avista's service territory. We are working with the local fire districts in part via a relationship with Brian Schaeffer, the fire chief for the City of Spokane. Chief Schaeffer is a leader in the Inland Empire Fire Chiefs Committee (IEFFC) which encompasses all the fire districts in Spokane County. He helps provide a communication channel to this group. Our Wildfire Resiliency Manager is also an active member of this group. They regularly communicate via phone conferences and emails. Note that these fire experts also provided input into the development of Avista's Wildfire Plan.

We also have an Expedited Response Agreement with Spokane County. During Dry Land Mode operations (fire season), the Avista System Operator will initiate a 911 call whenever there is an isolated transmission fault. Fire fighters will be dispatched to the scene. A pilot program was conducted during the 2020 fire season and was considered a success by both parties. The agreement was renewed for 2021 with plans to extend this arrangement to other firefighting agencies. These talks are underway.

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

AVISTA RESPONSE: As mentioned earlier, these partners participated in developing our Wildfire Plan and will remain engaged throughout fire season, including inclusion in Avista’s Weekly Operations Calls if an event looks likely and/or their areas could be impacted. In between those meetings, our Wildfire Manager participates in regular calls and emails with the Washington Department of Natural Resources and the Inland Empire Fire Chiefs Committee. As we work to develop additional Expedited Response Agreements with other fire agencies, more contacts will be made to allow additional communications.

- What plans does the utility have in place to communicate with customers about wildfire risk for this season, as well as specific wildfire risks or events?

AVISTA RESPONSE: Avista communicates to customers about wildfire via a number of different channels. Avista utilizes a multi-channel approach to communicate with customers about a specific event and will tailor/target the communications appropriately based on the incident. This could include a direct customer email to those customers in impacted areas, social media posts, news release/media communication and outbound calls. Beginning in May, we sent an email to all customers letting them know the steps we are taking to prevent wildfire and strengthen our system, which includes operational changes that may impact them. We began putting this in our customer newsletters, and this will continue throughout the summer months. We also included information from Washington Department of Natural Resources on its new Wildfire Ready Neighbors campaign and promoted the program on Avista’s social media. Avista is also hosting a telephone town hall in July for business, civic and community leaders to inform them on our wildfire preparedness.

4. What operational tools are in the utility’s toolkit for responding to wildfire events or potential triggers of wildfire events this season?

AVISTA RESPONSE: Avista has several tools in place now, including:

1. Avista will embed personnel in all Fire ICS. We will commit resources to Fire Incident Command to liaison between fire authorities and Avista system operations.
2. Engineering review - Avista will conduct a formal review of major events and incorporate lessons learned into future event strategies as we go, to allow us to integrate best practices as we proceed through this fire season. We plan to follow the Plan-Do-Check-Adjust model to continually improve methods and plans and ensure we are capturing current best practices within our Wildfire Plan.
3. Avista is tracking wildfire resiliency performance, outcomes, and costs on a monthly basis to keep tabs on how we are performing and what may need to change.
4. Avista plans to provide fire safety training and power safety training with first responders. This activity has been delayed due to COVID 19 but will commence in over the next several weeks.
5. Avista has renewed its MOU with Spokane County Fire to provide courtesy patrols associated with transmission level outages during fire season. We plan to replicate this model in other counties. COVID 19 and resource constraints have also slightly delayed this activity, but it has been very successful with Spokane County and we anticipate acceptance with other fire agencies as well.
6. Avista has conducted a comprehensive fuse coordination study to inform operating engineers of any conflicts or deficiencies in our system that should be addressed in the service of reducing fire risk.
7. Avista is in the early stages of updating its Wildland Urban Interface map for the 2022 Grid Hardening and Vegetation Management work planning using the E Source data as described earlier.
8. Avista uses the USFS Fire Science Laboratory Fire Threat Index to determine the initiation of Dry Land Mode operation, thus these operations are based upon a scientifically backed methodology.
9. Avista is conducting a Fire Planning Unit conference call each Monday to assess the 7-day fire threat indicators. Additional in-week calls will be used to make operational changes aligned with fire threat levels, and external partners will be brought in if they may be impacted in order to share information and make joint preparations.
10. Avista plans to conduct a formal review of Fire EOP strategies starting in Q4 of 2021.

- Do these tools include public safety power shutoffs (PSPS)?

AVISTA RESPONSE: At the present time, Avista does not have a PSPS strategy in place. It is a complex and expensive endeavor and we are approaching it in a thoughtful, careful, measured way. Avista is in the process of learning more about how a PSPS might work, the costs and benefits involved, and what is required to both develop and implement a PSPS strategy. We researched and interviewed the major utilities in California who have extensive experience in this area and have explored what our Northwest counterparts have learned or are planning. Through working directly with these utilities, researching their Commission filings, websites, and other resources, we have collected a well-rounded information set. This information should help guide Avista down the path of examining our own potential implementation of a PSPS, as well as informing us on just what is involved in this endeavor.

As it relates to PSPS, the Company would be interested in participating and would actively engage in any workshops or rulemakings that the Commission may undertake in the future. In our view there could be mutual benefit gained from such discussions. As the Commission and interested parties know, PSPS programs are very complex both from an operational but also from a communications and education standpoint. Further discussions could provide more clarity on PSPS for all interested parties.

- If yes, what are the criteria, triggering events, provisions, or thresholds that would result in a utility implementing a PSPS?

AVISTA RESPONSE: N/A

- What communication protocols are in place to notify and prepare customers, first responders, and state and federal emergency operations personnel of such an event? In particular, what are the utility's plans for communicating with medical and life support customers, vulnerable and low-income customers, and customers with limited English proficiency or other language or accessibility needs?

AVISTA RESPONSE: N/A

- If PSPS is not part of a utility's toolkit, what provisions are in place as an alternative, specifically in circumstance where high winds and dry conditions are predicted? How does the utility plan to communicate these provisions with customers, including medical and life support customers, vulnerable and low-income customers, and customers with limited English proficiency or other language or accessibility needs?

AVISTA RESPONSE: Avista notifies all customers when we enter Dry Land Mode, explaining that they may experience longer outages during this time period. We send an email to all impacted customers as well as a press release that goes to media outlets throughout our service territory when we enter Dry Land Mode. If Avista decides to add PSPS as an option, there would be a robust communications and community

outreach plan to reach medical and life support customers, vulnerable and low-income customers, and customers with limited English proficiency or other language or accessibility needs.

Please direct any questions regarding these comments to me at 509-495-8601 or liz.andrews@avistacorp.com.

Sincerely,

/s/Liz Andrews

Liz Andrews
Senior Manager, Revenue Requirements