

**BEFORE THE WASHINGTON  
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION, d/b/a AVISTA UTILITIES

Respondent.

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DOCKETS UE-240006 & UG-240007 (*Consolidated*)

**CROSS-EXAMINATION EXHIBIT OF DAVID R. HOWELL  
ON BEHALF OF THE  
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL  
PUBLIC COUNSEL UNIT**

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**DRH-\_\_X**

*Avista Petition, in re Avista Corp Accounting Order Authorization Accounting and  
Ratemaking Treatment of Costs Associated with the Company's Wildfire Resiliency Plan,  
Docket UE-200894 (Oct. 30, 2020)*

**September 16, 2024**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Petition of )  
Avista Corporation, d/b/a Avista Utilities ) Docket No. UE-20\_\_\_\_\_  
For An Accounting Order Authorizing Accounting and ) PETITION OF AVISTA  
Ratemaking Treatment of Costs Associated With The ) CORPORATION  
Company's Wildfire Resiliency Plan )  
\_\_\_\_\_ )

**I. INTRODUCTION**

1 In accordance with WAC 480-100-203(3), Avista Corporation, doing business as Avista Utilities ("Avista" or "Company"), at 1411 East Mission Avenue, Spokane, Washington, hereby petitions the Commission for an order authorizing the accounting and ratemaking treatment related to the incremental costs the Company will incur associated with its Wildfire Resiliency Plan ("Wildfire Plan"). In this filing, the Company is requesting Commission approval to defer, for later rate-making treatment, incremental expenses detailed in this Petition related to the Company's Wildfire Plan efforts, until such time these costs are included in base rates. Avista would seek a prudence determination and recovery method of the deferred costs in a future Commission proceeding.<sup>1</sup>

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<sup>1</sup> On May 29, 2020 the Company filed with the Idaho Public Utilities Commission (IPUC), in Case No. AVU-E-20, its application requesting the Commission issue an order authorizing approval to defer, for later rate-making treatment the incremental costs the Company will incur associated with its Wildfire Resiliency Plan. On August 26, 2020, the Staff of the IPUC issued comments supporting deferral of the Company's incremental wildfire expenses. A final Commission Order is anticipated in November 2020.

2 On October 30, 2020, concurrent with the filing of this Petition, the Company filed with this Commission a general rate case requesting a change in electric base rates, effective October 1, 2021. The annual incremental Wildfire Plan expenses during the rate effective period have been pro formed in the Company's recently filed GRC, and if approved, would be included in base rates, and therefore the requested deferral of wildfire expenses would cease on September 30, 2021. Recovery of the estimated \$2.6 million of 2021 deferred expenses, requested in this Petition, are not included in the Company's recently filed GRC, and therefore would be the subject of a future GRC.

3 Avista is a utility that provides service to approximately 395,000 electric customers and 258,000 natural gas customers in a 26,000 square-mile area in eastern Washington and northern Idaho. Avista Utilities also serves approximately 105,000 natural gas customers in Oregon. The largest community served by Avista is Spokane, Washington, which is the location of its corporate headquarters. Please direct all correspondence related to this Petition as follows:

David J. Meyer, Esq.  
Vice President and Chief Counsel for  
Regulatory & Governmental Affairs  
P. O. Box 3727  
1411 E. Mission Avenue, MSC 27  
Spokane, Washington 99220-3727  
Telephone: (509) 495-4316  
Facsimile: (509) 495-8851  
E-mail: [david.meyer@avistacorp.com](mailto:david.meyer@avistacorp.com)

Patrick Ehrbar  
Director of Regulatory Affairs  
Avista Corp.  
P. O. Box 3727  
1411 E. Mission Avenue, MSC 27  
Spokane, Washington 99220-3727  
Telephone: (509) 495-8620  
Facsimile: (509) 495-8851  
E-mail: [patrick.ehrbar@avistacorp.com](mailto:patrick.ehrbar@avistacorp.com)

Avista Dockets (Electronic Only) - [AvistaDockets@avistacorp.com](mailto:AvistaDockets@avistacorp.com)

4 Rules and statutes that may be brought at issue in this Petition include RCW 80.01.040, RCW 80.28.020, and WAC 480-07-370(3)(b).

5 A table of contents for this Petition follows:

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Included with this petition are the following supporting Attachments A - E:

- Attachment A - Wildfire Resiliency Plan (May 2020)
- Attachment B - Wildfire Risk Analysis Summary, Proposed Actions (September 2019)
- Attachment C - Wildfire Resiliency Cost Forecast (January 2020)
- Attachment D - Proposed Wildland Urban Interface (WUI) Map
- Attachment E - Wildfire Resiliency Communications Plan.

## **II. BACKGROUND**

4 As the number of large wildland fires in the Pacific Northwest continue to trend upward, Avista, beginning in June of 2019, held a series of wildfire workshops<sup>2</sup> to evaluate opportunities to reduce the risk of wildfires associated with the Company’s electric transmission and distribution systems in its Washington and Idaho service territories. Data from Climate Central’s “2016 Western Wildfire Report” suggests a 300% increase in large fires, and a 600% increase in the number of acres burned, since 1970.<sup>3</sup> The escalation of risk is particularly acute in several states including Idaho, Wyoming and Montana, where a 10-fold increase has

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<sup>2</sup> These workshops were a series of employee held workshops involving transmission and distribution subject matter experts (“SMEs”) held to identify opportunities to reduce risk on the Company’s overhead transmission and distribution systems. The primary goal of the workshops was to 1) identify actions to reduce the probability of electric ignition and 2) quantify the consequence or impact of potential actions. For more detail on these workshops see Exh. DRH-3, pages 19-20.

<sup>3</sup> See Attachment A, page 5-6.

occurred.<sup>4/5</sup> Though southwestern states are most at-risk, Washington and Idaho are ranked in the top ten of at-risk states. This increases the probability of fire starts and elevates the overall risk of fire impact.

5 As a result of the workshops, together with input from the Company's Wildfire Steering Committee<sup>6</sup> and the broader wildfire Subject-Matter-Experts ("SME")<sup>7</sup>, served to inform Avista's electric Washington and Idaho (combined) Wildfire Resiliency Plan. Avista developed its Wildfire Resiliency Plan ("Wildfire Plan") based on experience and information from its peers in the energy and forestry industries that focus on reducing wildfire risk in the Company's electric service territories in Washington and Idaho.<sup>8</sup> The Wildfire Plan, included as Attachment A to this Petition, details the development and implementation of a comprehensive multi-year effort that, as described later in this Petition, includes enhanced system hardening and vegetation management efforts that reflects a focus on reducing fire ignition events, as well as other situational awareness and operational efforts.<sup>9</sup>

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<sup>4</sup> Both the frequency and scope of wildfires are on the rise. Information from the 2016 Western Wildfires report also indicates that the number of days associated with "High Fire Danger" or "Red Flag" is increasing. See Attachment B, page 3.

<sup>5</sup> Washington State Department of Natural Resources (DNR) takes the lead on most large wildland fires, outside of federal lands, that occur within the state. In 2015, the DNR published a 20-year "Forest Health & Strategic Plan" for Central and Eastern Washington and identified 2.7 million acres (30%) as 'unhealthy forest.' As noted in the 2015 DNR plan, the state of Washington has more than 22 million acres of forestland with approximately 10 million forecasted acres in eastern Washington. As of 2015, 2.7 million acres – nearly 30% of all forestlands in eastern Washington – need treatment to become more resilient to insects, diseases and wildfires. This same information for Idaho is not as readily available or publicized. See Attachment B, page 4.

<sup>6</sup> The Wildfire Steering Committee is made up of Company management personnel across divisions including: Operations, Environmental, Risk, Legal, Regulatory and Communications.

<sup>7</sup> Wildfire Subject-Matter-Experts included Avista division managers and area operating engineers representing both Washington and Idaho electric facilities.

<sup>8</sup> To help inform Avista's Wildfire Resiliency Plan, Avista hosted a Pacific Northwest working group, including, Puget Sound Energy, PacifiCorp, Idaho Power Portland General, and Northwestern Energy. In Washington, Avista continues to partner closely with NW utilities, fire protection agencies, and local communities. Avista is also a member organization to the Western Energy Institute, participating in their Wildfire Taskforce meetings.

<sup>9</sup> The recommendations within the Company's Wildfire Plan seek to reduce 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. The recommendations represent Avista's initial Wildfire Plan that will periodically be reviewed to ensure that it is consistent with industry best practices and is providing benefits to customers and the communities Avista serves.

6 As provided in the Wildfire Plan, Avista is proposing a proactive, strategic, continuous improvement and risk informed approach to respond to the wildfire risks on our system, encompassing immediate steps, as well as long-term efforts to reduce wildfire risk. Specific Wildfire Plan objectives include a focus in the following areas:

- Protect lives and property;<sup>10</sup>
- Ensure emergency preparedness and align operating practices with fire threat conditions; and
- Protect Avista’s energy delivery infrastructure.

7 Avista provides electrical service to approximately 400,000 customers in Washington and Idaho, with over 120,000 of those customers living in elevated fire risk areas.<sup>11</sup> A key factor in Avista’s plan development is how best to reduce the likelihood of a wildfire related to the Company’s electric operations. The recommendations made in this plan are based on the ability to reduce the risks associated with public and worker safety, the risks to property and infrastructure, and to lessen the impact of electric system outages to customers and the community.

8 This Petition will provide a summary of the Company’s recommendations and forecasted costs<sup>12</sup> for the ten-year period 2020 through 2029.<sup>13</sup> Approval of the proposed incremental

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<sup>10</sup> Though many elements of the Wildfire Plan focus attention on Avista’s transmission and distribution infrastructure and the effort to reduce spark ignition events, the plan’s primary objective is to protect lives and property by reducing the number of utility-involved wildfires.

<sup>11</sup> As discussed below, the Company has created a wildland urban interface (WUI) map with designations of high fire risk areas (Tier 2 and Tier 3) within Avista’s Washington and Idaho service territories. Over 120,000 of Avista’s approximately 400,000 customers (or approximately 30%) live in WUI Tier 2 / Tier 3 high fire threat area.

<sup>12</sup> All costs provided in the Company’s Wildfire Resiliency Plan are provided as combined electric system (Washington and Idaho) expenditures. However, expenditures will be allocated or directly charged to Washington and Idaho depending on the type of cost and location of the activity. The split between Washington and Idaho is estimated to be approximately 55% to 65% Washington / 35% to 45% Idaho. A higher percentage (up to 45%) of the cost is expected in Idaho due to a higher concentration of WUI Tier 2 and Tier 3 areas at risk in Avista’s Idaho service territory compared to Washington.

<sup>13</sup> The Wildfire Resiliency Plan was informed by information and analysis completed and summarized in Attachments B, “Wildfire Risk Analysis Summary, Proposed Actions September 2019” and Attachment C, “Wildfire Resiliency Cost Forecast, January 2020.”

expenses through a form of cost-recovery, as proposed in this Petition, is an important element of the Company's plan and helps support the level of wildfire mitigation efforts proposed in the Company's Wildfire Plan. The proposed incremental expenses are not currently included in Avista customer rates, or otherwise recovered through other recovery mechanisms or tools.<sup>14</sup>

### **III. SUMMARY OF AVISTA'S WILDFIRE RESILIENCY PLAN**

9 In June 2019, Avista convened a series of subject matter expert wildfire workshops to evaluate opportunities to reduce the risk of wildfire associated with its electric transmission and distribution systems in its Washington and Idaho service territories.<sup>15</sup> The primary goal of these workshops was to: 1) Identify actions to reduce the probability of electric ignition; and 2) Quantify the consequence or impact of potential actions. As a result, during the course of the six workshops held, over one hundred and sixty (160) potential action items were identified and considered. (See Attachment B, pages 19-20 for more workshop information.)

10 The workshops, together with input from the Wildfire Steering Committee and the wildfire SMEs, served to inform Avista's electric system Wildfire Resiliency Plan. Included as Attachment B, the "Wildfire Risk Analysis Summary, Proposed Actions" report, provides a summary of that effort and includes preliminary recommendations for systems and practices, along with modifications to existing maintenance and construction programs. As noted in the report, and summarized below, the stated goals of the Wildfire Resiliency Plan are:

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<sup>14</sup> Due to the current COVID19 pandemic and the delay of the Company's general rate case filed October 30, 2020 concurrent with this Petition, a deferral mechanism to capture the Company's Wildfire Plan expenses for 2021, prior to new rates going into effect, will help ensure recovery of these important costs, until such time as they can be included in base rates.

<sup>15</sup> These workshops were divided into three sub-sections: 1) Design based (material and construction standards; 2) Operations (control center and field operations) and 3) Maintenance (programmatic asset maintenance and vegetation management).

- Enhance Emergency Operation Preparedness (EOP)<sup>16</sup>: to recognize wildfire as a recurring threat to utility infrastructure, the communities we serve, and our customers.
- Promote Safety: to protect physical assets, property, and human lives. To manage the risk of wildfire through design-based, system operations, asset maintenance, and outreach activities.<sup>17</sup>
- Safeguard Company Assets: to mitigate the impact of direct financial costs and liability exposure associated with large-scale wildfire events.

11 In addition to these objectives, a model-framework was identified to promote a comprehensive approach to wildfire risk. The elements of this model approach include: 1) Planning, such as EOP response, insurance review, communications planning and outreach; 2) enhanced System Operations and Maintenance, such as system hardening, vegetation management, and fire resiliency “Ops Toolkit”; 3) Weather and Fire Risk Monitoring, such as situational awareness and performance metrics; and 4) Regulatory and Industry efforts, such as utility industry engagement, partnering with fire protection agencies, legislative opportunities and Commission engagement.<sup>18</sup>

12 As a part of the Company’s wildfire resiliency analysis, the Company focused on understanding the risk exposure of wildfires in general, but also the opportunity to reduce risk through specific actions taken associated with the Company’s transmission and distribution areas. Specifically, “Risk” was quantified as the probability of an event occurring, times the financial impact of the event ( $Risk = Probability \times Impact$ ), where impact is characterized as

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<sup>16</sup> Fire is unlike other storms that disrupt power, and utility experts recognize that service restoration must be in coordination with fire protection activities and, in many instances, be postponed until it is safe to enter an area. One of the recommended actions identified through Avista’s wildfire workshops is to delineate fire in Avista’s Emergency Operations Procedure to ensure close coordination with fire incident command and to promote the safety of employees and 1st responders above service restoration.

<sup>17</sup> The Wildfire Resiliency Plan includes an emphasis on collaboration with land-management and fire response agencies.

<sup>18</sup> The goals and objectives, as well as the framework of the Company’s Wildfire Plan are also summarized in Attachment A, page 8 - 9, “Wildfire Resiliency Plan,” Executive Summary.



the sum of: 1) Direct Financial Cost (replacement costs, fire suppression, 1<sup>st</sup> party damages) + 2) Customer (interruption cost estimate (ICE), 3<sup>rd</sup> party claims) + 3) Safety (public and employee injuries).

13 Prior to the SME workshops held in June 2019, Avista contracted with the Core Logic Consulting Group to conduct a risk analysis to ascertain the risk impact of a single large wildfire event. Core Logic's analysis was based on historic observation and was limited to the impact to property. It did not include the potential for loss of life, injury, fire suppression, timber loss, and other economic loss factors. This exercise was conducted to provide a baseline for the subsequent SME risk workshops and to determine if Avista's liability insurance levels were adequate to protect against a single large event.

14 The Wildfire Risk Analysis Summary report (Attachment B) reflects the findings of the SME workshop participants together with direct feedback from the Avista Wildfire Steering Committee, Operations & Technical Staff, and Executive Management. It forms the basis of Avista's 2020 Wildfire Resiliency Plan (Attachment A). Avista's risk analysis indicates that the accumulated 10-year risk of wildfires is at least \$8 billion dollars and is the driving force behind adding wildfire specific defense strategies.

15 The Wildfire Risk Analysis Summary report (Attachment B) provides a detailed description of all electric transmission and distribution inherent and managed risk costs together with the treatment implementation costs over the planned ten-year period.<sup>19</sup> Further, proposed treatment actions in these areas are identified and grouped as follows:

- **Base Level** – efforts that support or enable other actions; or standalone actions that can be readily incorporated by the organization.
- **Primary** – actions that represent significant value (risk reduction) and are recognized as industry best-practices.

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<sup>19</sup> All costs are indicated as 10-year accumulated amounts and are order of magnitude estimates.

- **Secondary** – actions that represent the highest risk value but require significant human and or financial commitments.
- **Future** – identified as providing value but of lower priority and therefore, not considered in the initial phase of the Wildfire Resiliency Plan.

### **Electric Transmission**

16 Avista operates 2,270 miles of transmission in portions of western Montana, northern Idaho and eastern Washington. In 2006, Avista adopted tubular steel poles as the ‘standard installation’ for 115kV and 230 kV powerlines. Since that time, Avista has worked to replace its aging wooden structures with steel, and all new construction is exclusively steel. In 2009, NERC published the “Transmission Vegetation Management” standard FAC-003-2 which fundamentally reshaped the industry’s approach to transmission line clearance activities. For Avista, the combination of system hardening and well-maintained rights-of-way have increased the fire resiliency of its transmission system.

17 Transmission fire ignition events are relatively rare. From 2014 to 2018, there were 611 sustained outages, but only 252 between May and September (fire season). However, there were over 3,000 momentary outages and nearly half of those (1,500) occurred during fire season. Eighty percent (80%) of transmission line faults are momentary (less than 5 minutes) and are generally the result of lightning, wind, and planned switching operations.

18 Conversely, the impact of fire to transmission structures can be significant. For example, the replacement cost of a single wood transmission structure ranges from \$7,500 to over \$25,000, and damages to conductor can escalate into the millions of dollars. For treatment actions identified on the transmission system (base, primary, secondary and future), see Attachment B pages 6 – 11.

## **Electric Distribution**

19 The vast majority of electric outages occur on the distribution system, but the impact to customers is typically restricted by line fuse action (1-100 customers typical). To contrast this situation, transmission outages are infrequent (low probability) but often impact thousands of customers. However, from a fire prevention standpoint, the distribution system is the ignition source for most utility related fires. Data from the Outage Management System (OMT) indicates that annually, one hundred (100) fire ignition events are associated with overhead distribution lines. In almost all cases, these fires naturally extinguished or were extinguished by 1st responders, including Avista line servicemen. In the current risk environment, the distribution system warrants enhanced focus with respect to fire ignition, and this risk is especially acute in the wildland-urban interface (WUI) areas (discussed further below).

20 Fire ignition sources include tree contacts with powerlines, but also include animal contacts, equipment failure, and electrical pole fires.<sup>20</sup> Between 2014 and 2018, there were 1,933 tree related outages with 1,011 occurring during fire season. Over that time period there were 462 reported pole fires. Although the Company's distribution vegetation management spend is approximately \$8 million annually, as the number of danger trees increases and overall forest health declines, it is necessary to expand the amount spent on distribution vegetation management.<sup>21</sup> For treatment actions identified on the distribution system (base, primary, secondary and future), see Attachment B pages 12 - 17.

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<sup>20</sup> Whereas the risk profile of transmission is largely associated to the costs of fire impact to transmission lines, the risk profile of distribution is aligned with ignition. The 1991 Firestorm involved over ninety ignition events. A majority of those fire starts were related to distribution lines.

<sup>21</sup> A warming climate and drought conditions have stressed trees resulting in widespread damage from insects and disease. In many cases, trees subject to insect damage die within six to eighteen months making it difficult to identify dead or dying trees with ground patrols.

### **Wildland Urban Interface (WUI)**

21           Because the Company’s Wildfire Plan was developed using a risk-based approach, the Company has identified higher risk areas that can benefit the most from prudently applied expenditures, rather than blanket solutions applied to our entire service territory. The recommendations provided in the Company’s Wildfire Plan are based on each recommendations’ ability to reduce the operating and financial risk associated with wildfires. Therefore, understanding risk and how risk is monetized is an important component of understanding the content of the Wildfire Plan.

22           One element of risk reduction includes the prioritized application of solutions. Recommendations within the Wildfire Plan consider geographic location and apply risk reduction measures in areas with higher fire threat potential. The boundaries of forest lands and homes and businesses are referred to as the Wildland Urban Interface (WUI). Homes and businesses located near the WUI are determined to be most at-risk from the impact of wildfires and are often located in rural areas that lack fire suppression resources. In 2019, Avista’s GIS Technical Group created a combined WUI map for Avista’s electric Washington and Idaho service territories that is based on the following principles:

- Fuel Concentration – areas identified as having moderate to very high fuel concentrations (areas with a high volume of trees) were considered in the analysis. Fuels data was derived from the U.S. Department of Agriculture’s Wildfire Hazard Potential map (2018 USDA WHP).
- Housing Density – parcels smaller than 20 acres were included in the analysis but highly-developed urban areas were excluded. Urban areas do not meet the definition of Wildland Urban Interface.

23           Using this information, Avista “WUI Risk Levels” were established, similar to the work done in California, identifying three wildfire risk levels:

- Tier 1 – Moderate levels of fuel and low to moderate housing densities (low)

- Tier 2 – Moderate to high levels of fuel and moderate housing densities (medium); and
- Tier 3 – High fuel levels and moderate to high housing densities (high)

24 The WUI map helps the Company identify and prioritize areas of greatest risk and serves to inform our recommendations and operational decisions related to wildfire resiliency. The Wildfire Plan denotes the combination of WUI Tiers 2 & 3 as “elevated fire threat areas”. These areas comprise 40% of Avista’s electric distribution and 20% of the Company’s transmission systems. As shown on Attachment D (Avista’s Proposed Wildland Urban Interface Map), elevated fire threat levels are depicted in orange (Tier 2) and red (Tier 3) highlighted areas. Portions of the map not highlighted are classified as Non-WUI and represent areas with low fuel concentrations, very low housing densities, or large urban areas (> 10,000 population).

### **Plan Recommendation Summary**

25 As provided in Attachment A, the Wildfire Plan includes detailed information on the 28 individual “Plan Recommendations,” grouped into four categories. Similar to other utility wildfire plans (including those from Pacific Gas and Electric, San Diego Gas and Electric, Southern California Edison, and PacifiCorp) these categories include:

- **Grid Hardening** – Replacing infrastructure in fire prone areas. The likelihood of a spark-ignition source is mitigated and critical infrastructure is protected from the impacts of fire. (See Attachment A, pages 25, 28-37)
- **Enhanced Vegetation Management** – Identifying potential conflicts on an annual basis and prioritizing those risks from highest to lowest. Wildfire Resiliency aligns resources with risk. (See Attachment A, pages 26, 38-49)
- **Situational Awareness** – Adding line and monitoring equipment, system operators can respond quickly to variable weather and fire threat conditions. (See Attachment A, pages 26, 50-56)
- **Operations and Emergency Response** – Through training and simulation, Avista personnel

will be better prepared to work with fire professionals during an event.<sup>22</sup>  
(See Attachment A, pages 26, 57-65)

Plan recommendations also reflect cost prudence and were adopted on their basis to:

- Leverage existing asset programs and operating practices;
- Promote public safety; and
- Mitigate financial risks.

26 Within the Wildfire Plan each recommendation is described, and the “Current” and “Future State” of each distribution and transmission operation recommendation, as well as expected benefits, are provided. (See summary tables on pages 9-11 of Attachment A.) Further detail of the costs associated with these recommendations is described further in Avista’s Wildfire Plan (pages 25 – 65) and summarized below.

### **Wildfire Resiliency Communications Plan**

27 A key element of the Company’s Wildfire Resiliency Plan is ensuring that Avista stakeholders know 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 the Company to ensure broad awareness and demonstrate Avista’s commitment to reducing the impact of wildfires. This plan must be in place and directed at all of Avista’s key stakeholders, including customers, employees, state and local government officials and regulators, law enforcement and fire departments, local

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<sup>22</sup> This category includes the creation of “Wildfire Performance Metrics.” Electric reliability is determined through a series of metrics established by the Institute of Electrical and Electronics Engineers (IEEE), and includes outage frequency and duration. Indices such as MAIFI (momentary outage frequency), SAIDI (sustained outage duration), and CEMI (customers experiencing multiple interruptions) are commonplace throughout the industry. In contrast, fire metrics are characterized as the number of acres burned, suppression costs, structures damaged, and injuries. Avista does track some fire-related information, such as the number of pole fires. This recommendation, however, would implement a set of performance measures to quantify and better understand the risk of wildfire on its operating systems. Avista will be monitoring the effectiveness of its wildfire mitigation measures over time and sharing these results with the Commission. The creation of performance measures should allow for evaluation and continuous improvement following the “Plan-Do-Check-Act” model. See Attachment A, page 60.

media, and shareholders. The Company's Wildfire Resiliency Communication Plan objectives include the following:

- Ensure awareness among all key stakeholders of the significant actions and investment Avista is taking to prevent or mitigate the risk of wildfires.
- Instill confidence in Avista as a proactive and responsible corporate citizen.
- Get "buy-in" support and recognition from key stakeholders that Avista is taking wildfire safety seriously and has a Wildfire Resiliency Plan in place.
- Help generate support and recognition for Avista as a leader that is doing all it can to help avoid wildfires and has in place a strong wildfire prevention and safety program.
- Demonstrate Avista's focus on prioritizing the safety and well-being of its customers and the communities it serves.

28           The first phase of the Wildfire Resiliency Communication Plan was focused on the plan's initial launch and the communications objectives noted above. The timing and implementation of the tactics was aligned with the finalized plan and made publicly available. No communications began until the organization was ready from an operational and regulatory standpoint.

29           The second phase of the Wildfire Resiliency Communication Plan supports specific strategies included within the Wildfire Plan, such as enhanced vegetation management. Each initiative that requires customer or external stakeholder behavior changes, would have its own communications plan with objectives, tactics and timelines associated.

30           Included as Attachment E is a summary of Avista's Wildfire Resiliency Communication Plan.

#### **IV. FORECASTED RISK AND COST SUMMARY**

31           Precise identification of the risk and cost for any given year is not possible nor realistic, and for wildfires in particular, there are a significant difference between small fire events, which can occur many times each season, versus a large event, which occur infrequently. Therefore,

in order to represent a more realistic picture of relative risks and costs, a 10-year planning horizon was adopted.

32 As noted above, Avista developed its Wildfire Plan based on our own experience as well as information from peers in the energy and forestry industries that focuses on reducing wildfire risk in our electric service territories of Washington and Idaho. As a part of this development, and included as Attachment C, is Avista’s “Wildfire Resiliency Cost Forecast,” dated January 2020, which provides detailed information of the 10-year cost forecast for the period 2020 through 2029. This cost information, along with the detailed risk analysis of the selected plan recommendations, helped inform Avista’s Wildfire Plan recommendations (Attachment A), and is consistent with the “Wildfire Risk Analysis Summary – Proposed Actions” report included as Attachment B.

33 The Wildfire Resiliency Cost Forecast report (Attachment C) focuses on forecasted capital investments and operating expenses based on the recommendations from the Risk Analysis Summary (Attachment B). The cost forecast reflects a refinement in scope versus that of Attachment B and includes preliminary cost estimates. Several estimates are based on results of Avista’s Subject-Matter-Expert Fire Workshops (June 2019), while others reflect parametric estimates based on subsequent efforts to develop the Wildland Urban Interface (WUI) map (Attachment D). Feasibility estimates generally reflect accuracy levels between 30 and 50%. Definitive cost estimates require final engineering design and contractual commitments for materials and labor.

34 Consistent with what is discussed above, in developing the cost forecast for the 10-year planning horizon from 2020 to 2029, activities were grouped into the four main areas:

**Enhanced Vegetation Management** – This includes actions in excess of Avista’s current Vegetation Management program and reflects a focus on reducing fire ignition events.



Plan elements include collecting vegetation data via digital hi-resolution photography and Light Imaging, Detection, and Ranging (LIDAR), increasing the frequency of the Risk Tree treatments in fire prone areas, and conducting a public outreach campaign associated with ‘right tree-right place’ concepts.

**Situational Awareness** – This category includes extending Supervisory Control and Data Acquisition (SCADA) systems to a portion of Avista’s thirty-three non-communication substations (dark stations). Using SCADA to monitor and control powerlines is a fundamental tenant of utility wildfire plans across the western U.S. and Canada. Avista also plans to develop a web-based ‘fire-weather dashboard’; combining publicly available weather and fire threat information to inform operational readiness and enable enhancements to the Dry Land Mode (DLM) distribution protection scheme.

**Operations “Toolkit” & Metrics** – Avista has a number of existing work processes and programs aimed at reducing the impact of wildfire. Enhancements to existing programs and the addition of other ‘operating’ elements are included in this group.

**Grid Hardening & Dry Land Mode** – Avista developed a non-reclosing distribution protection scheme back in the early 2000’s to mitigate fire ignitions. The protection scheme known internally as Dry Land Mode (DLM) will be updated to ensure alignment with program objectives. Additionally, infrastructure replacements or *grid hardening* will be implemented to reduce fire ignitions.

35 Summarized risk values, along with cost values, for these categories are shown in Table No. 1 below, representing the 10-year electric system (Washington and Idaho) planning horizon for both incremental operating expense as well as capital improvements to infrastructure. In simple terms, risk is the product of the probability of an event and its consequence:

*Risk = (The likelihood of occurrence, or probability) X (The financial impact of an event)*

- Inherent Risk - describes the current state risk level and reflects defense strategies already in place.
- Managed Risk - describes the future state risk level with the addition of Wildfire Resiliency elements

The values shown for risk in Table No. 1 are percentage based and reflect a range for each category.

36 Vegetation and grid hardening risk scores indicate a “bounded range” because the probability of occurrence is based on the frequency of forced outages. Although the probability

of electrical outages is well understood, an event’s impact can vary widely based on many factors, including weather, fire risk levels, emergency response, and location. Managed risk scores represent future state levels, and lower levels of event probability and event outcome. In Table No. 1, the column labeled ‘Risk Mitigation’ indicates the average percentage difference between current state and future state risk levels.

**Table No. 1 Resiliency Risk and Cost Summary (system)**

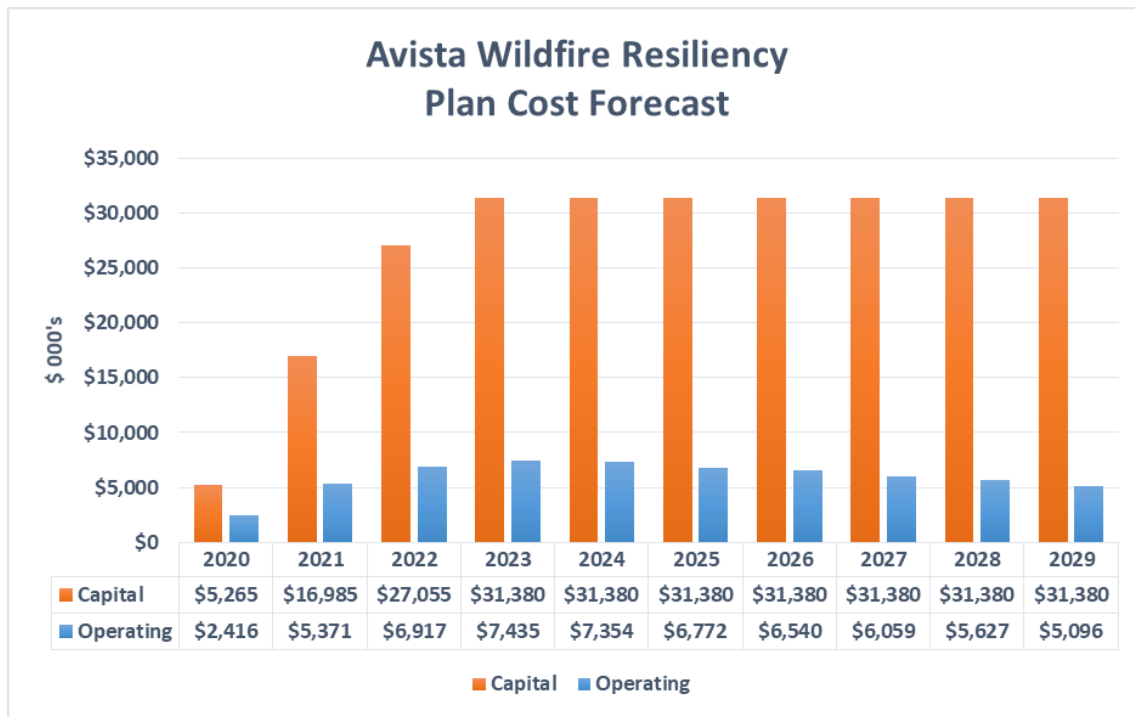
<b>Resiliency Risk and Cost Summary</b>					
<b>2020-2029 Operating Horizon</b>	<b>Inherent Risk (range %)</b>	<b>Managed Risk (range %)</b>	<b>Risk Mitigation (avg %)</b>	<b>10-yr Capital Investment (\$)</b>	<b>10-yr Operating Expense (\$)</b>
Enhanced Vegetation Management	48.3-100	3.2-14.5	88%	\$5,100,000	\$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
<b>Plan Total</b>	<b>44.1-100</b>	<b>2.8-12.5</b>	<b>89%</b>	<b>\$268,965,000</b>	<b>\$59,586,000</b>

37 As noted in the Table No. 1, the wildfire resiliency program includes a capital investment of \$268,965,000 over a 10-year period with corollary operating expenses of \$59,586,000 (all electric system numbers).<sup>23</sup> Comprehensive risk analysis indicates a 10-year inherent potential risk exposure of at least \$8 billion dollars. This value includes the accumulated risks associated with all 28 Wildfire Plan recommendations and should not be interpreted as a precise financial estimate. A better metric is the percentage of risk mitigation which reflects an 89% reduction for the overall plan.

38 The following Graph No. 1 illustrates the total estimated capital and operating expense, on a per year basis (Washington and Idaho electric) from 2020 to 2029.

<sup>23</sup> All operating expenses provided in this report reflect incremental amounts above existing expense levels and are specific to the Wildfire Resiliency Plan.

**Graph No. 1 – Avista Annual Wildfire Resiliency Plan Cost Forecast (system)**



39 While capital plan elements are projected to sunset in 10-years, the majority of operating  
 expense items are on-going and are generally related to enhanced vegetation management.<sup>24</sup>

40 As discussed above, the 28 specific individual plan recommendations that result in these  
 costs estimates are provided in the Wildfire Plan. By far the single largest capital investment is  
 associated with electric distribution grid hardening. This accounts for \$193,200,000 invested in  
 distribution systems located in elevated fire risk areas, with another \$44,000,000 invested to  
 convert wood poles to steel on the transmission system. These two plan elements account for  
 88% of total capital spend, over the ten-year period.

<sup>24</sup> As noted above, the majority of the incremental operating expenses are generally related to enhanced vegetation management. Current vegetation management expenses included in Washington base rates are based on 2018 electric system levels totaling approximately \$7.9 million for distribution and \$1.3 million for transmission operations. Washington’s share of these amounts included in base rates today is approximately \$5.7 million for distribution and \$850,000 for transmission.

41 For operating expense, three elements: transmission and distribution digital data collection; annual risk tree; and the public safety initiative ‘right tree right place,’ account for \$42,700,000 (72%) over the same 10-year period. Though the Wildfire Plan includes 28 recommendations to mitigate the risk of wildfire, five of the elements account for 85% of the total program costs.

**Potential Operating & Maintenance Expense Offsets**

42 The goal of wildfire resiliency is to reduce the overall risk associated with wildfires. In short, the benefits of this plan are largely measured in terms of risk reduction for all parties involved. The Company, however, recognizes a potential for costs savings and cost shifts from operating and maintenance expense towards capital investment. The overall impact of cost savings and cost shifts will not be well understood until the plan is operational and performance data can be obtained and analyzed. However, one of the objectives of this plan is to reduce the number of equipment failures and tree related outages and by doing so, avoid emergency response.

43 The following Table No. 2 lists a number of potential cost savings opportunities associated with the Wildfire Resiliency Plan.

**Table No. 2 – Potential Cost Savings Opportunities**

<b>Plan Element</b>	<b>Benefit</b>	<b>Cost Savings/Shift</b>
<b>Annual Risk Tree and Right Tree Right Place Programs</b>	Improved System Performance (fewer outages)	Reduced spend on emergency response and unplanned repairs
<b>Digital Data Collection</b>	Automates data gathering process for vegetation and structure condition inspection	Reduces field inspection activities. Enables computerized QA/QC functions
<b>Grid Hardening</b>	Improves System Performance (fewer outages)	Reduced spend on emergency response and unplanned repairs
<b>Situational Awareness (communication &amp; control systems)</b>	Enables remote monitor and control of equipment	Reduced service related truck rolls
<b>Operations &amp; Emergency Response</b>	Better prepared and equipped first responders	Reduces the risk of injury and accidents

44 It should also be noted that this plan indicates program level spend estimates and does not differentiate between incremental and embedded cost elements. Though many plan elements represent incremental costs, some activities will simply be absorbed by the workforce. For example, annual fire safety training will occur at monthly safety meetings which are already in place. This is an embedded cost estimated at \$1,300,000 over 10-years. However, the bulk of plan elements including enhanced vegetation management and grid hardening represent additional activities and incremental costs. As previously indicated, these categories account for 85% of overall program costs.

## **V. PROPOSED ACCOUNTING TREATMENT**

45 In this Petition, the Company is requesting an Order allowing the Company to defer, for later rate-making treatment, incremental wildfire expenses incurred in 2021, prior to new rates going into effect. These expenses include incremental costs, detailed in this Petition (or its attachments), related to the Company's Wildfire Resiliency Plan efforts starting in January 2021, until such time the expenses can be included in future base rates.<sup>25</sup> The expected amount to be deferred during the nine-month period January 1, 2021 through September 30, 2021 is estimated at \$2.6 million.<sup>26</sup>

46 Avista proposes to record the monthly deferral as a regulatory asset in FERC Account 182.3 (Other Regulatory Assets), and credit FERC Account 407.4 (Regulatory Credit). The

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<sup>25</sup> As noted previously, on October 30, 2020, concurrent with the filing of this Petition, the Company filed with this Commission a general rate case requesting a change in electric base rates, effective October 1, 2021. The annual incremental Wildfire Plan expenses during the rate effective period have been pro formed in the Company's recently filed GRC, and if approved, would be included in base rates, and therefore the requested deferral of wildfire expenses would cease on September 30, 2021.

<sup>26</sup> Recovery of the estimated \$2.6 million of 2021 deferred expenses, requested in this Petition, are not included in the Company's recently filed GRC, and therefore would be the subject of a future GRC.

costs as incurred will be debited to various expense accounts. The Company proposes that interest will not accrue on the unamortized balance.

47 Approval by this Commission to defer the incremental expenses in 2021 associated with the Company's Wildfire Plan, would allow the Company to set these costs aside for an opportunity to recover these costs in a future rate proceeding. Furthermore, the Commission will have the opportunity to review the costs after-the-fact and make a prudence determination prior to the Company receiving recovery of the prudently incurred costs through retail rates.

48 The monthly accounting entries for the Washington electric deferral of expenses are provided in Table No. 3:

**Table No. 3**

<b><u>Accounting Entry to Record the Deferral of Expense - Recorded Monthly</u></b>			
<b><u>Account Description</u></b>	<b><u>FERC Account</u></b>	<b><u>Debit</u></b>	<b><u>Credit</u></b>
Regulatory Asset - Deferred Costs	182.3XX ED.ID	XXX	
Regulatory Credit - Deferred Costs	407.4XX ED.ID		XXX
The Company's monthly accounting entries will include the standard calculations, including adjusting for revenue related expenses (i.e. uncollectible customer accounts, commission fees and Washington excise tax) and deferred federal income taxes.			

49 In the absence of a deferred accounting order from the Commission, the costs will remain in the various capital and expense FERC accounts.

50 In a future proceeding, Avista would address the prudence of the costs incurred and request recovery of the deferred costs, including a carrying charge on the deferral at the authorized rate of return. At that time, the Company would also propose an amortization period to recover the costs from Washington customers over a future period.

51 The amortization of the regulatory asset, after approval in a future proceeding, would be accounted for as provided in Table No. 4:

**Table No. 4**

<b><u>Accounting Entry to Record Amortization of Deferral - Recorded Monthly</u></b>				
<b><u>Account Description</u></b>	<b><u>FERC Account</u></b>		<b><u>Debit</u></b>	<b><u>Credit</u></b>
Customer Accounts Receivable	142.100	ED.ID	XXX	
Customer Revenue	44X.XXX	ED.ID		XXX
Regulatory Debit - Amortization of Costs	407.3XX	ED.ID	XXX	
Regulatory Asset - Deferred Costs	182.3XX	ED.ID		XXX

The Company's monthly accounting entries will include the standard calculations, including adjusting for revenue related expenses (i.e. uncollectible customer accounts, commission fees and Washington excise tax) and deferred federal income taxes.

**VI. CONCLUSION**

52 The risk of large wildfire events is increasing across the western United States. Recent fire events Washington, Oregon and California, illustrate that utility operating risk is increasing related to wildfires. Reducing the risk of wildfires 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 this plan, the Company has identified additional wildfire defenses for implementation. The goals, strategies, and tactics set forth in this plan reflect a quantitative view of risk. Additional research, conversation and analysis with Avista's operating staff and steering group provided critical qualitative and contextual information that also shaped the recommendations. This combination of quantitative and qualitative analysis ensures the recommendations are robust, well-rounded, and thoughtful, and that they align with the plan goals and are appropriate.

53 As noted above, the comprehensive risk analysis indicates a 10-year inherent electric system risk exposure of at least \$8 billion dollars. This value includes the accumulated risks associated with all 28 plan recommendations included in the Wildfire Plan and should not be interpreted as a precise financial estimate. A better metric of the value provided by the Wildfire Plan is the percentage of risk mitigation, reflecting an estimated 89% reduction. This reflects the combination of the reduction in event probabilities, primarily through enhanced vegetation and grid hardening efforts, and also a reduction in impact severity through improved emergency response and better situational awareness.

54 Though planned investments in infrastructure and vegetation maintenance defenses represent the bulk of costs, human investments in training, partnerships, and engagement with customers are another important feature of Wildfire Resiliency. Wildfire Resiliency represents a departure from traditional utility strategies aligned with meeting customer demand (capacity) and maintaining service continuity (reliability). Avista's strategy aligns with other utility wildfire plans by adding defenses in four key areas: vegetation management, grid hardening, situational awareness and operations and emergency response.

55 Approval by this Commission to defer incremental expenses associated with the Company's Wildfire Resiliency Plan, would allow the Company to set these costs aside for an opportunity to recover these costs in a future rate proceeding. Furthermore, the Commission will have the opportunity to review the costs after-the-fact and make a prudence determination prior to the Company receiving recovery of the prudently incurred costs through retail rates.



**VI. REQUEST FOR RELIEF**

56 WHEREFORE, Avista respectfully requests that the Commission issue an Order authorizing the deferred accounting treatment detailed in this Petition related to the Company's Wildfire Resiliency Plan expenses. The costs associated with the Company's actual operating expenses of implementing its Wildfire Resiliency Plan, would be deferred to preserve the opportunity in a future proceeding to address the prudence and recovery of these costs.

DATED this 30<sup>th</sup> day of October 2020



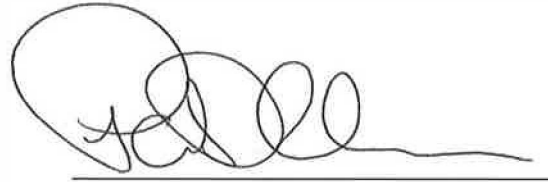
By: \_\_\_\_\_  
Patrick D. Ehrbar  
Director of Regulatory Affairs

**VERIFICATION**

STATE OF WASHINGTON )  
 )  
 County of Spokane )

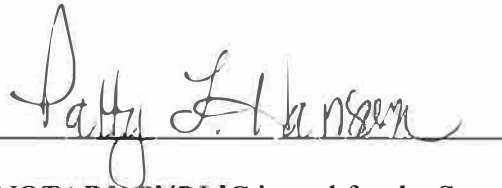
Patrick D. Ehrbar, being first duly sworn on oath, deposes and says: That he is a Director of Regulatory Affairs of Avista Corporation and makes this verification for and on behalf of said corporation, being thereto duly authorized;

That he has read the foregoing Petition, knows the contents thereof, and believes the same to be true.



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SIGNED AND SWORN to before me on this 30th day of October 2020.

\_\_\_\_\_

NOTARY PUBLIC in and for the State of Washington, residing at Spokane.

Commission Expires: 11-23-21