



Puget Sound Energy
P.O. Box 97034
Bellevue, WA 98009-9734
pse.com

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Filed via Web Portal

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

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UTIL. AND TRANSP.
COMMISSION

**Re: *In the Matter of Utility Wildfire Preparedness, Docket U-210254*
Responses of Puget Sound Energy**

Dear Ms. Maxwell:

On October 5, 2022, the Washington Utilities and Transportation Commission (the “Commission”) issued a Notice of Recessed Open Meeting (“Notice”) in the above-captioned docket. In the Notice, the Commission scheduled a recessed open meeting to hear from the state’s regulated electric utilities about the effectiveness of wildfire mitigation and communication plans and lessons learned during the 2022 wildfire season. The Commission requested responses to the questions below. PSE respectfully submits the information below in response to the Notice. We look forward to discussing this information at the Commission’s recessed open meeting on November 3, 2022.

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.**

Table 1 below provides data concerning the four “Large Fires” that occurred in PSE’s service territory during the 2022 wildfire season. As defined by the Northwest Interagency Coordination Center and the National Wildland Coordinating Group, a “Large Fire” is any wildland fire that is (i) 100 acres or greater in timber, (ii) 300 acres or greater in grasslands/rangelands, or (iii) has an Incident Management Team assigned to it. As noted in Table 1 below, some of these fires remain active as of the date of this filing.

Table 1. “Large Fires” in PSE’s Service Territory During the 2022 Wildfire Season¹

Incident Name	Location	Date of Origin	Acres	Assets Impacted	Status
Vantage Highway	5 miles West of Vantage	8/1/2022	30,656*	Yes	No longer active
Bolt Creek	North of Skykomish	9/10/2022	14,820*	Yes	Active
Loch Katrine	13 miles Northeast of North Bend	9/2/2022	1,918**	No	Active
Murphy Lake	West of Murphy Lakes area	8/18/2022	444**	No	Active

**Perimeter acres*

***Reported acres*

In addition to the Large Fire incidents reported in the above Table 1, PSE closely monitored other fires occurring in parts of the state that neighbor but which did not ultimately pose risks to communities or infrastructure within PSE’s service territory.

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

The Vantage Highway and Bolt Creek fires were the most intense of the four “Large Fires” due to the number of acres burned.

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

i. The Vantage Highway Fire

The Vantage Highway Fire started during Red Flag Warning weather conditions, with warm temperatures, low humidity, and high winds that produced extreme fire

¹ See Northwest Coordination Center Daily Wildfire Situation Map, available at: [NWCC :: Home \(nifc.gov\)](https://www.nwcc.gov).

behavior. A Washington State Department of Natural Resources Type 3 Incident Management Team took command of the fire on August 4, 2022. The Type 3 Incident Management Team soon thereafter transitioned to a Type 2 Incident Management Team, which is equipped with more resources. The Vantage Highway Fire initially moved east toward the Columbia River then changed course back toward PSE's Wild Horse Wind Facility. Some areas in the town of Vantage were under level three evacuations. PSE self-evacuated site personnel and closed the visitor center at the Wild Horse Wind Facility. The Quilomene and Whiskey Dick Wildlife Area units within the L.T. Murray Wildlife Area Complex were also temporarily closed to protect public safety.

The fire reached the eastern boundary of the Wild Horse Wind Facility. The fire burned near one of the turbine access roads for the Wild Horse Wind Facility, at which point fire personnel were able to contain the fire. The gravel turbine access road acted as a firebreak, preventing the fire from expanding further. Approximately fifty (50) acres burned within the Wild Horse Wind Facility site boundary, but no wind turbines or infrastructure sustained damage. Fire Incident Command System instructed PSE to pause operation of approximately twenty-five (25) wind turbines and two (2) associated underground electrical circuits to support helicopter water drops in the area. The fire lasted ten (10) days and was 100 percent contained on August 11, 2022.

ii. The Bolt Creek Fire

The Bolt Creek Fire necessitated closures to Highway 2 and evacuations in the areas of Baring and Index, Washington. Due to the intensity and geographic location of this fire, PSE collaborated closely with Department of Natural Resources Incident Command System and local fire response agencies. To enhance situational awareness and real-time operations effectiveness, PSE initiated its Emergency Coordination Center team on September 10, 2022, including the integration of PSE's Electric Operations team into the Department of Natural Resources' Incident Command System.

In the early afternoon hours of September 10, 2022, PSE, in collaboration with local fire response Incident Command System officials, took the action to de-energize the overhead transmission lines that route through the area affected by the fire for the safety of on-site first responders and community members. This is a common operational action taken when interacting with local emergency response personnel during evolving emergency conditions. This safety de-energization resulted in power outages to customers in the Skykomish area, but it was not a Public Safety Power Shutoff event.²

PSE performed a second de-energization on the transmission lines that route through the fire-affected area on October 7, 2022, in response to a request from the fire

² A "Public Safety Power Shutoff" event is an event, typically conducted during Red Flag conditions, where electric lines are de-energized to lessen the chance of wildfire ignition.

response Incident Command System. The de-energization that occurred on October 7, 2022, did not result in loss of service to PSE customers. For details about customer-focused communications related to the Bolt Creek Fire, please see the response to the second question.

During the 2022 wildfire season, PSE captured seventy-two (72) distribution ignition events and three (3) transmission ignition events. Capturing events with evidence of ignition enhances PSE's ability to report on wildfire season experiences, identify trends for correction, and improve situational awareness for planning and maintenance engineers.

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

Both the Vantage Highway and Bolt Creek Fires occurred in areas of PSE's service territory that include overhead infrastructure identified as higher wildfire risk in PSE's risk model. Given this designation, PSE performed targeted inspections in these areas before the 2022 wildfire season began. The thorough and proactive patrol of these and other power lines and equipment in PSE's higher wildfire risk areas before the start of the wildfire season yielded several follow-up items that PSE promptly and successfully addressed, thereby mitigating risk prior to the 2022 wildfire season.

Although both the Murphy Lake and Loch Katrine Fires were also within PSE's service territory, PSE does not own or operate infrastructure or assets near areas affected by those fires.

- **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.**

PSE's fire mitigation tools described in the 2022 Plan were effective. This plan outlines the thresholds for various operational actions PSE system operators can take to mitigate the risk of an ignition. These potential actions include

- (i) selective de-energization of lines that will not result in a loss of service to customers;
- (ii) disabling automatic switching schemes;
- (iii) recloser blocking;
- (iv) enabling of instantaneous trip settings on protective devices; and

- (v) work cancellations.

System Operators implement these actions in response to Red Flag Warnings issued by the National Weather Service and the existence of other environmental or weather conditions (e.g., forecasted high wind gusts in higher wildfire risk areas).

From June 1, 2022, to present, there were 16 Red Flag Warnings across the PSE service territory, with the first occurring on July 13, 2022. These events triggered actions including the requirement for immediate hotline patrol for transmission restoration events and, in one instance, the Woldale – Cle Elum transmission line was de-energized. The de-energization of the Woldale – Cle Elum transmission line did not result in loss of service to any customers.

PSE is in the process of developing a Public Safety Power Shutoff plan. PSE held a series of community meetings in various areas of those portions of the service territory identified as higher wildfire risk areas. During these community meetings, PSE engaged with customers, communities, local emergency response officials, and state and local government partners to begin the process of developing a comprehensive Public Safety Power Shutoff plan.

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

PSE's 2022 Plan worked as intended for the 2022 wildfire season. As described further in response to question two, PSE's 2022 wildfire communications focused on three areas:

- (1) general awareness and preparedness communications;
- (2) communications and customer engagement in higher wildfire risk communities within the PSE service territory; and
- (3) outage communications in response to the Bolt Creek Fire de-energization.

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

In June and July of 2022, PSE shared information with customers about wildfire preparedness efforts via PSE's "The Voice" customer newsletter, bill inserts, and on the PSE.com landing page. This information provided an overview of the steps taken by PSE

to prepare for wildfire season, with a link to PSE's wildfire preparedness webpage³ for more information. PSE's wildfire preparedness webpage received 1,716 unique page views between April 1, 2022, and October 15, 2022.

Throughout the 2022 wildfire season, PSE held a series of community meetings in (i) the Ronald, Roslyn, and West Cle Elum communities; (ii) the Greenwater community; and (iii) the South Cle Elum community. These community meetings occurred on June 8, July 20, and October 5, 2022, respectively. Objectives for these community meetings included educating customers about the 2022 Plan, wildfire preparedness and response efforts, the potential development of a Public Safety Power Shutoff plan for use in their communities, and gathering feedback through small-group discussions focused on community concerns and customer communications needs during any future potential Public Safety Power Shutoff events. PSE will incorporate feedback received from these discussions into future wildfire planning, including the development of a Public Safety Power Shutoff plan as a tool in PSE's wildfire mitigation toolkit.⁴

Across all three (3) community meetings, PSE sent direct mail pieces (meeting invitations and fact sheets) to 5,450 customers in these communities. PSE also sent community meeting information to 4,075 emails and connected with community-based organizations and partner agencies to disseminate information through their existing channels. In addition to these formal engagement opportunities, PSE also manages an email account, voicemail, and web-based comment form, and engaged with more than forty (40) customers through these channels since April 2022.

For more information about incident-specific communications, please see below.

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

PSE has cultivated several mutually beneficial partnerships with first responders, county emergency management departments, fire and sheriff departments, and state agency partners. In May and June of 2022, PSE participated in five (5) summer hazards meetings held by county emergency management departments in areas served by PSE to discuss a variety of topics, including wildfire risk. These meetings provided an opportunity for PSE to (i) share details about the 2022 Plan, (ii) learn how partner

³ See "Wildfire-Preparedness." Puget Sound Energy. <https://www.pse.com/pages/Wildfire-preparedness>.

⁴ Presentation materials and summary reports of feedback received at the June 8 and July 20 community meetings are available PSE's Wildfire Preparedness webpage. Similar materials for the October 5 meeting are forthcoming. *See id.*

agencies can better interface before, during, and after wildfire incidents, and (iii) begin engaging with these agencies to develop a Public Safety Power Shutoff plan.

Similarly, at the Kittitas County Wildfire Preparedness event on May 7, 2022, PSE strengthened partnerships through interactions and discussions with the community and other agency partners. Entities present at this meeting included Kittitas Fire Districts 1 and 7, the Kittitas County Sheriff's Office, the Department of Natural Resources, and Kittitas Fire Adaptive Communities.

PSE also invited local fire departments with jurisdiction over each of the three communities in which PSE held community meetings to participate at these meetings. Fire department leadership actively engaged in all three (3) community discussions.

In preparation for the 2022 wildfire season, PSE participated in a wildfire tabletop exercise led by Whatcom County Sheriff's Office. Recently, PSE was invited to take part in quarterly Pierce County Wildfire Mitigation collaboration meetings with local Fire Chiefs, Tacoma Power, and Lakeview Light and Power.

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

PSE has long-established relationships with emergency management and fire agencies across its service territory. PSE routinely participate in meetings and after-action debriefings pertaining to various emergencies regardless of the cause or nature of the emergency. PSE's emergency management department also assists in providing information related to emergency response and coordination for various emergency plans when requested.

Fire agencies, the Commission, and state, county, and local emergency management agencies have PSE's emergency contact information. PSE also has their emergency response contact information, including phone numbers that are restricted for use only for coordination during emergencies. The Commission, State Emergency Operations Center, county Emergency Operations Centers, and many local Emergency Operations Centers also receive situation reports when PSE activates its Emergency Coordination Center. When not activated, PSE sends status emails to the Commission's Emergency and Resilience Manager and to affected county Emergency Operations Centers through PSE's emergency management department. These entities also reach out to PSE's emergency manager, and PSE's municipal liaisons and government affairs teams are in contact with state and local elected officials as needed.

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

In the case of the Bolt Creek Fire, PSE collaborated with the Department of Natural Resources and local fire response agencies by integrating into the Incident Command System and establishing a presence at the local command headquarter site. This resulted in integrated operational decision-making and information sharing into the Department of Natural Resources' Incident Command System. As part of this integration, PSE, in collaboration with the Fire Incident Command's request, de-energized overhead electrical lines to elevate the safety of first responders and community members during the active fire.

As noted above in response to question one, PSE collaborated with fire incident command during the Department of Natural Resources' response to the Vantage Highway Fire. PSE paused operations of approximately twenty-five (25) wind turbines at the Wild Horse Wind Facility to support helicopter water drops in the area to contain the spread of the fire.

- **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?**

As noted in question one and described in more detail in question two, PSE followed the communications plan set forth in section 6 of the 2022 Plan. This communications plan included general awareness and preparedness messaging at the start of wildfire season, customer engagement in higher risk areas, and customer communications in response to the Bolt Creek Fire de-energization.

(i) Communications and Outreach with Vulnerable Populations

For targeted customer communications, PSE worked with community partners and used the EPA's Environmental Justice Screening and Mapping Tool to identify customers with potentially unique needs, including older adults (age 65 and over), low-income residents, people who rely on electricity for medical equipment, and non-English speaking residents. PSE then leveraged relationships with community-based organizations and local first responders to conduct outreach to these groups. Examples of this outreach include:

- PSE held a community meeting at the Putnam Centennial Center, in which the Upper Kittitas County Senior Center operates, in October of 2022. The Upper Kittitas County Senior Center helped PSE disseminate information to ensure older adults attended the

community meeting. The Upper Kittitas County Senior Center also serves as an emergency shelter, has a generator, and will be an important partner in the future as PSE develops a Public Safety Power Shutoff plan.

- PSE held a community meeting in the Greenwater area to provide internet access to members of the community who had poor internet connection. PSE learned the community center also serves as an emergency shelter and a hub for the community. The community center shares the building with the fire district. Together, these organizations provide emergency information to the Greenwater community. The Greenwater Fire Chief mentioned at the meeting that he is familiar with medically vulnerable people in the community and that he could help PSE reach medically vulnerable people in a Public Safety Power Shutoff event.
- PSE worked with HopeSource, Coal Community Clothing Center, and Hospice Friends in the Cle Elum area to reach low-income customers, including those who may speak Spanish or rely on medical equipment. These organizations shared PSE's information with members of the community. HopeSource also provided information in English and Spanish about their energy assistance program for the community meeting. A representative from the Community Outreach and Lifeskills Center (or COAL Center) participated in the community meeting in Cle Elum area.
- PSE invited Kittitas County Fire District 7 to speak during town hall meeting presentations, staff an information table, and participate in breakout sessions. At the information table, the Kittitas County Fire District 7 provided information about how to reduce wildfire risks at home. During the breakout sessions, PSE learned that the Kittitas County Sheriff's Office and Kittitas County Fire District 7 know medically vulnerable people in their communities and can help PSE reach these people. Kittitas County Fire District 1 and the Kittitas County Sheriff's Office also participated in small group discussions.
- During community meeting discussions, PSE shared information about the process for adding a medical flag to a customer account through PSE's existing process and encouraged those who rely on electricity-powered medical equipment to reach out to PSE's customer care center for assistance in adding a flag to their accounts.

PSE will continue to build and strengthen partnerships with community organizations, agencies, and jurisdictions, including partners that serve highly impacted, vulnerable, and hard to reach populations as PSE's wildfire mitigation plan matures. Based on PSE's risk model, thirty-eight (38) higher risk circuits serve highly impacted and vulnerable populations. As PSE develops system-hardening projects and community outreach and communications plans, PSE will continue to incorporate considerations for equity for these identified communities.

(ii) Communications About Specific Wildfire Events (the Bolt Creek Fire)

During the wildfire-related outage this season during the Bolt Creek Fire, PSE sent targeted emails and robocalls directly to customers. PSE sent the initial robocalls and emails on Saturday, September 10, 2022—the day the fire began—to explain access challenges inhibiting power restoration efforts. PSE sent follow-up phone calls and emails on Monday, September 12, 2022, once PSE had more information to share. These targeted emails and robocalls supplemented automatic emails, phone calls, and text messages triggered by outage updates in PSE's Outage Management System.

Robocalls went to all 615 customers served by the Skykomish Substation using the phone number listed on customers' PSE accounts. Of those 615 customers, 479 customers had an email on file and received email communications as well. Additionally, PSE sent targeted emails to local businesses in the area, and PSE Municipal Relations, Business Services, and Government Affairs representatives for the Skykomish community received communications to share through their channels.

No customers on the customer list for the affected area had a medical flag on their PSE accounts. As a result, PSE did not conduct any targeted outreach to medically vulnerable customers.

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

PSE received positive feedback for targeted customer communication in higher wildfire risk areas. PSE's engagement efforts resulted in a better understanding of community considerations as PSE continues to build out wildfire mitigation and response plans. Additionally, PSE has identified and connected with community and agency partners providing diverse services with whom PSE will continue to engage as plans evolve.

PSE processes to communicate updates to customers concerning the Bolt Creek Fire and related outages worked as planned. From a messaging standpoint, however, PSE learned the importance of continuing focus on educating customers, media, and key stakeholders about the differences between de-energization events performed for the safety of local first responders during an active fire scenario (e.g., the de-energization that

occurred during the Bolt Creek Fire outage) and Public Safety Power Shutoff events. Typically, a Public Safety Power Shutoff event would involve a power outage before an active fire has started and would occur during Red Flag weather conditions. In the case of the Bolt Creek Fire, there was some confusion generated by media reports that incorrectly referred to this de-energization as a Public Safety Power Shutoff. As a result, PSE added information to community meetings to help clarify the key distinctions between these two types of events.

As noted above, PSE received valuable community feedback throughout our wildfire community meeting series about how customers prefer to receive communications during a Public Safety Power Shutoff scenario. PSE received feedback trends across the communities with which it engaged, as well as community-specific feedback on communication channels. Following the community meetings, PSE is sharing summary reports detailing the customer feedback received, and PSE will use that feedback—as well as ongoing coordination with fire response agencies—to aid in the development of PSE’s Public Safety Power Shutoff communications approach and the evolution of PSE’s broader wildfire communications.⁵

Specifically, PSE learned the following through its engagement efforts:

- Many customers in areas of higher wildfire risk have a thorough understanding of wildfire mitigation and risk reduction actions from emergency management organizations, such as FireWise. PSE partnerships with fire experts will be advantageous in reaching existing audiences of fire experts and an effective way for PSE to communicate and share information with customers.
- Customers expressed interest in vegetation management opportunities. Working to educate customers on existing resources in these areas could be highly effective.
- The de-energization in response to the Bolt Creek Fire resulted in customers expressing interest in understanding the difference between de-energizing electrical lines for the safety of first responders and community members during an emergency compared to de-energizing lines in a Public Safety Power Shutoff scenario. PSE created a new slide for presentations in community meetings and discussed these differences in the October community meeting.

⁵ These summary reports are available on PSE’s Wildfire Preparedness webpage. See footnote 4, *supra*.

- The three communities in which PSE conducted community meetings (i.e., the Ronald, Roslyn, and West Cle Elum communities; the Greenwater community; and the South Cle Elum community) trust fire chiefs and local emergency response officials and look to these organizations first for information in an emergency. Local emergency response personnel know many medically vulnerable community members and are willing to help PSE reach these people.
- Some customers lack reliable internet access at home and may not be able to participate in virtual meetings. Upon learning about this potential barrier to participation, PSE collaborated with a community center so that customers could access the internet and participate in the meeting at the center. After that meeting, PSE held a hybrid meeting to provide more access for customers.
- PSE initially changed meetings from in-person meetings to virtual meetings due to the COVID-19 pandemic. During this engagement process, PSE tried several variations of virtual meetings and held a hybrid meeting where attendees could participate in-person or online. Going forward, PSE plans to hold hybrid meetings to provide more access for customers.

For more details on feedback received, please visit PSE's wildfire preparedness webpage.⁶

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

As noted throughout this response, PSE communicated broadly with customers regarding general wildfire risk information and details about the 2022 Plan. PSE targeted communications about the Bolt Creek Fire and related outages only to those customers affected or potentially affected, as noted above.

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

As noted above, PSE shared general information about the 2022 Plan and related wildfire risk mitigation work with customers in advance of wildfire season via PSE's

⁶ See footnote 3, *supra*.

“The Voice” customer newsletter, bill inserts, and on the PSE.com landing page. This information is also available on PSE’s wildfire preparedness webpage.⁷

PSE also held a series of community meetings with customers and community partners in higher wildfire risk areas throughout the 2022 wildfire season to gather direct customer feedback on elements of the 2022 Plan and develop other wildfire mitigation tools, such as a Public Safety Power Shutoff plan. PSE included a fact sheet regarding wildfire mitigation that explains PSE’s wildfire mitigation efforts in the invitations to the 5,450 customers invited to the three community town hall meetings. The fact sheet is available in English and Spanish on PSE’s wildfire preparedness webpage.⁸

At these community meetings, PSE provided information on (i) wildfire risk areas within its service territory, (ii) PSE’s approach to wildfire risk modeling, (iii) the pre-season wildfire risk inspections and remediation performed, (iv) PSE’s weather-monitoring practices, (v) past and future investments to harden electric infrastructure, and (vi) vegetation management practices. PSE also discussed the development of a Public Safety Power Shutoff plan, what a Public Safety Power Shutoff event would mean for customers and communities, and the anticipated steps to restore power following a Public Safety Power Shutoff event. These community meetings included question and answer sessions and small group discussions to obtain customer input on implementation of the Public Safety Power Shutoff plan. PSE solicited information regarding how customers would like to receive information before and during a Public Safety Power Shutoff event, concerns about being without power during a Public Safety Power Shutoff, and ways that PSE and partners could assist customers during any such event.⁹

PSE also requested that local community groups, key stakeholders, fire response agencies, and elected officials share information about PSE’s community wildfire events in their established communications channels. Some organizations did share information with their networks. For example, the Cle Elum Downtown Association included an article about the community event in its newsletter, and the Greenwater Community Center shared information regarding the community event on its Facebook page and the reader board at the center.

Additionally, PSE issued media releases to local publications in its service territory, advertised community meetings in local publications, and posted meeting materials on the wildfire webpage after each community meeting. Several customers also provided comments on wildfire preparedness, Public Safety Power Shutoffs, and communications via PSE’s wildfire email address.

⁷ See *id.*

⁸ See *id.*

⁹ See footnote 4, *supra*.

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

No, PSE did not make changes to the communication plans since it filed the plan in April of 2022.

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

PSE conducted comprehensive pre-season inspections in higher wildfire risk areas, as outlined in section 4 of the 2022 Plan, prior to the 2022 wildfire season. Pre-season inspection and mitigation activities remain one of the most effective ways to prevent ignitions during the wildfire season.

This year, PSE completed targeted patrol, inspections, and mitigation activities for 281 miles of transmission lines and 460 miles of distribution lines. These inspections resulted in the submission of forty (40) crew jobs, including pole replacement, cross arm replacement, and tightening existing hardware to secure power lines. PSE also trimmed 2,400 trees and removed twenty-one (21) imminent vegetation threats.

In the initial stages of the 2022 wildfire season, PSE followed through on its 2022 Plan commitment to develop and implement enhanced methods for capturing and logging fire ignition events in PSE's service territory. PSE's implementation of this improved ignition tracking solution elevated visibility into emerging wildfire risks. Over time, this data and the trends that result from ongoing analysis should help inform the development of additional proactive wildfire mitigation and situational awareness solutions. PSE also refined elements of wildfire operational protocols to define roles and responsibilities more clearly for monitoring fire weather forecasts.

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

The 2022 Plan provides information about the tools used by PSE to mitigate and respond to wildfire risks. These include a variety of tools to enhance situational awareness (e.g., risk dashboards, fire weather monitoring, ignition tracking, enhanced inspection technology, and pre-season inspections) and reduce or protect against faults (e.g., vegetation management, asset management, reclose blocking, overhead conductors and strategic undergrounding, and the use of arc suppression fuses).

From the standpoint of situational awareness and response to wildfire threats, PSE enhances readiness with operator dashboards that utilize public risk and weather datasets, as well as detailed information about PSE's electrical system, assets, and equipment. Electrical grid operators use these dashboards to evaluate both forecasted and real-time conditions and assess the need for operational decisions to mitigate risk. In early 2022,

PSE improved its dashboard interface to include more granular wildfire hazard potential data provided by the United States Forest Service for the annual Wildfire Risk Model, formalization of fire weather monitoring by grid operators, and other upgrades to the Daily Wildfire Dashboard focused on incorporating real-time weather data.

In the field, PSE implements logistics and operations tactics applicable to other emergency response scenarios to wildfire response. These practices and techniques helped PSE integrate effectively into state and local fire response Incident Command Systems during the 2022 wildfire season. These tactics proved helpful in PSE's coordinated responses to the Bolt Creek and Vantage Highway Fires.

PSE also actively monitors evolving environmental and weather conditions on the ground with the assistance of drones and helicopters as needed. After assessing conditions using these technologies, PSE can adopt wildfire-specific protocols to enhance operational safety. For example, these protocols may direct the use of non-spark emitting equipment, including battery-powered tools, limiting the use of chain saws, use of 300-gallon water wagons with crews, pressurized water fire extinguishers, and parking blankets in higher wildfire risk areas.

- **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?**

Since April 2022, PSE has refined various situational and emergency response plans to delineate more clearly the key procedural actions to be taken and PSE personnel to be contacted during both small and large fire incidents. For example, PSE revised internal emergency response documents related to various emergency types to include key wildfire personnel.

As noted in the 2022 Plan, PSE also adopted a new operational solution to capture data about ignition events in PSE's service territory. PSE began implementing this solution in June of 2022. The resulting data should help PSE identify emerging trends associated with wildfire risk (e.g., geographic indicators, equipment failures, and data related to both forecasted and real-time weather conditions).

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

Yes, PSE's wildfire response procedures are working as intended, and the thresholds have been effective. Real-time operations teams have successfully monitored, identified, and initiated appropriate response actions for all fire weather watch and Red Flag Warning conditions.

PSE is continuing to mature its wildfire mitigation plans to respond to the evolving risk of wildfire due to climate change. As noted elsewhere, PSE is in the preliminary stages of engaging customers, agency partners, and local communities to develop a Public Safety Power Shutoff plan. Developing this plan will require PSE to continue to work with affected communities in higher wildfire risk areas to understand public safety concerns, as well as understanding community preferences and needs for communications. Additionally, PSE continues to work on developing and implementing the technical tools needed to implement a Public Safety Power Shutoff. PSE will continue this work across multiple wildfire seasons.

PSE is currently evaluating third-party vendors of wildfire risk models used by utility peers to improve its understanding of wildfire risk at the granular level necessary to develop a Public Safety Power Shutoff plan. PSE's internal risk model currently identifies higher wildfire risk areas and the corresponding overhead electrical circuits, but these models provided by third-party vendors may offer additional situational awareness and aid in further refining risk modelling. In addition, models developed by third-party vendors may help PSE to identify appropriate geographic sub-areas for potential Public Safety Power Shutoff implementation.

- **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?**

Yes. PSE customers can call a toll-free number or visit PSE's website to provide information about potential vegetation management issues. A PSE-certified arborist will review and investigate customer-identified tree concerns. PSE will then notify the customer of whether action is necessary and, if necessary, assign a line clearance qualified tree crew to perform the work.

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

PSE refined elements of the wildfire operational protocols to define roles and responsibilities for monitoring fire weather forecasts and initiating fire mitigation actions. These enhancements ensure around-the-clock monitoring by PSE's control center leadership and define the specific operational actions that PSE would take based on specific thresholds and action levels.

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

PSE learned a great deal during the 2022 wildfire season. This learning has helped PSE mature its Wildfire Program. This letter summarizes many of these lessons learned, including the extensive feedback from customers during community meetings.

Overall, PSE effectively responded to evolving wildfire risk and other emergency conditions this year across its geographically diverse service territory. As noted elsewhere, PSE identified opportunities for refinement of certain wildfire response roles and responsibilities. PSE is also working with the Energy Resilience and Emergency Management Director to ensure clear lines of communication during future de-energization events similar to the one that occurred in response to the Bolt Creek Fire.

PSE also updated wildfire-related operational protocols this wildfire season to synchronize wildfire response with PSE's broader comprehensive Energy Restoration Plan. PSE believes the consistency created by this effort will streamline decision-making when operating in emergency scenarios.

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

In addition to the changes discussed above, PSE plans to update the Wildfire Mitigation and Response Plan in the spring of 2023 and will continue to carry out planned activities included in the 2022 Plan. This includes completing and scoping additional system hardening projects, enhancing the risk model and risk knowledge, engaging with customers and communities further, continuing to expand collaboration with wildfire response agencies, and developing our Public Safety Power Shutoff plan.

* * * *

PSE appreciates the opportunity to submit this response. Please contact Brett Rendina at (360) 294-9558 for additional information about this filing. If you have any other questions, please contact me at (425) 456-2142.

Sincerely,

/s/ Jon Piliaris

Jon Piliaris
Director, Regulatory Affairs
Puget Sound Energy
PO Box 97034, BEL10W
Bellevue, WA 98009-9734
(425) 456-2142
Jon.Piliaris@pse.com

cc: Lisa Gafken, Public Counsel
Sheree Strom Carson, Perkins Coie