EXH. DJL-8 DOCKETS UE-240004/UG-240005 2024 PSE GENERAL RATE CASE WITNESS: DAVID J. LANDERS

#### BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

Docket UE-240004 Docket UG-240005

SEVENTH EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF

**DAVID J. LANDERS** 

**ON BEHALF OF PUGET SOUND ENERGY** 

**FEBRUARY 15, 2024** 

## PUGET SOUND ENERGY

### SEVENTH EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF DAVID J. LANDERS

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1	PUGET SOUND ENERGY
2 3 4	SEVENTH EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF DAVID J. LANDERS
5	I. STORM DEFERRAL OVERVIEW
6	Emergency outage response activations occur each year. Puget Sound Energy
7	("PSE") prepares to respond to these events through annual trainings as well as an
8	electric outage exercise. More than 800 employees have unique emergency roles to assist
9	in this effort, so outages are managed and restored in an efficient manner. Outages are
10	caused by windstorms, heavy snow and ice, and can also be caused by wide area
11	flooding, wildfires, or earthquakes.
12	In PSE's service territory, storm events are not a theoretical concern. PSE's
13	service territory is located in the Puget Sound Convergence Zone and is subject to
14	frequent severe weather. Major storm events can cause significant service disruption and
15	require PSE to focus substantial resources on timely storm repair. Timely storm response,
16	repair, and resolution of outages are very important to customers and PSE. Restoration
17	efforts result in significant costs that PSE should be allowed to recover so it can continue
18	to provide safe and reliable service to its customers. The events are beyond PSE's control
19	and create variability and volatility in rates for customers if not deferred.
20	PSE is allowed to defer storm costs associated with days that exceed the IEEE
21	Standard 1366 ("IEEE1366") definition of a major event day threshold value, $T_{MED}$ ,
22	which is based on values of daily SAIDI for the previous five years. The major event day
23	threshold is defined as 2.5 standard deviations from the average daily SAIDI.
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I					
1	Only incremental transmission and distribution electric system repair costs				
2	incurred by PSE during qualifying storm events may be deferred such as overtime pay for				
3	employees, outside contractor costs, and materials and material overheads. Straight-time				
4	labor costs associated with professional engineers that normally do not charge time to				
5	work orders, straight-time labor costs for material management personnel or fleet services				
6	personnel, are all examples of costs that are not deferred.				
7	PSE and its customers experienced eight IEEE1366 qualifying storm events in				
8	2021 and 2022, as described below.				
9	II. 2021 WEATHER EVENTS				
10	PSE and its customers experienced two IEEE1366 qualifying storm events from				
11	November 19, 2021 to December 31, 2021.				
10	A Description 11, 2021				
12	<u>A. December 11, 2021</u>				
13	On December 11, 2021, a powerful storm system brought heavy rain and winds				
14	with gusts up to 60 miles per hour, along with significant mountain snow, resulting in				
15	63,396 customers losing power. Crews worked to restore service at 265 outage locations.				
16	There was one transmission line segment and two substations impacted. The event SAIDI				
17	was 17.69 with a daily SAIDI on December 11 of 16.93, exceeding PSE's 2021 $T_{\text{MED}}$ of				
18	6.38 minutes for a qualifying event.				
19	<u>B. December 25, 2021</u>				
20	A snow and windstorm on December 25, 2021, left 52,527 customers without				
21	power primarily in the northern region of PSE's service territory. Twenty-one crews				
22	worked to restore damage to five transmission line segments and one substation and 427				
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1 outages through snow and ice conditions. The event SAIDI was 14.97 with a daily SAIDI 2 on December 25 of 7.21, exceeding PSE's 2021 T<sub>MED</sub> of 6.38 minutes for a qualifying 3 event. III. 4 **2022 WEATHER EVENTS** PSE and its customers experienced six IEEE1366 qualifying storm events during 5 6 2022. 7 January 3, 2022 А. 8 A winter storm on January 3, 2022, brought heavy rains and wind to lowlands 9 with significant mountain snowfall and as a result, 29,255 customers were without power. 10 Crews responded to 213 outages, primarily in the Kitsap region's distribution lines. There 11 were no transmission impacts and one substation was impacted. The event SAIDI was 12 11.02 with a daily SAIDI on January 3 of 8.29, exceeding PSE's 2022 T<sub>MED</sub> of 7.80 13 minutes for a qualifying event. 14 B. April 4, 2022 15 On April 4, 2022, a strong system brought high winds up to 55 miles per hour 16 along with periods of thunderstorms and rising river conditions to western Washington 17 that left 52,527 customers without power. Forty-eight crews responded to 487 outages 18 including 16 transmission segment outages and two substation circuit outages. The event 19 SAIDI was 25.77 with a daily SAIDI on April 4 of 28.17, exceeding PSE's 2022 T<sub>MED</sub> of 20 7.80 minutes for a qualifying event.

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# <u>C. November 4, 2022</u>

1

On November 4, 2022, thrashing winds across the Puget Sound region left
branches and trees scattered along roadways and leaving 227,590 PSE customers without
power. Seventy-three PSE crews responded to 1,033 outages with 19 transmission line
segments and ten substations sustaining damage. The event SAIDI was 119.38 with a
daily SAIDI on November 4 of 105.34, exceeding PSE's 2022 T<sub>MED</sub> of 7.80 minutes for a
qualifying event.

8 <u>D. November 29, 2022</u>

On November 29, 2022, a winter storm impacted areas of the Pacific Northwest
from Oregon to Washington bringing wind gusts as high as 78 miles per hour in the
Cascade Mountains along with heavy, wet snow in several areas impacting 136,529
customers over the course of the event. Thirty-eight crews worked to restore 607 outages,
11 transmission segments and three substations. The event SAIDI was 30.94 with a daily
SAIDI on November 29 of 21.12, exceeding PSE's 2022 T<sub>MED</sub> of 7.80 minutes for a
qualifying event.

### 16 E. December 3, 2022

In December 2022, several days of rain, snow, and high winds resulted in 36,404
customers being impacted in this short-duration event. Twenty PSE crews worked to
restore 187 outages mainly in the town of Skykomish as well as the Kitsap service area.
One transmission line was also impacted. The event SAIDI was 8.91 with a daily SAIDI
on December 3 of 9.63, exceeding PSE's 2022 T<sub>MED</sub> of 7.80 minutes for a qualifying
event.

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# 1 <u>F. December 23, 2022</u>

2	On December 23, 2022, lingering snow, followed by freezing rain, resulted in icy		
3	roadways, broken branches, and some broken power poles due to ice-covered power lines		
4	with some locations experiencing 0.10 inches of ice accumulation. During the storm, PSE		
5	crews restored power to over 202,765 customers associated with 906 outages. Seven		
6	transmission lines and three substations were impacted. Sixty PSE crews worked to		
7	restore power. The event SAIDI was 57.95 with the daily SAIDI on December 23 of		
8	16.01, exceeding PSE's 2022 $T_{MED}$ of 7.80 minutes.		
9	IV. CONCLUSION		
10	Q. Does this conclude your testimony?		
11	A. Yes, it does.		
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