



e-FILING REPORT COVER SHEET

COMPANY NAME: PacifiCorp d/b/a Pacific Power

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? No Yes If yes, submit a redacted public version (or a cover letter) by email. Submit the confidential information as directed in OAR 860-001-0070 or the terms of an applicable protective order.

Select report type: RE (Electric) RG (Gas) RW (Water) RT (Telecommunications)
 RO (Other, for example, industry safety information)

Did you previously file a similar report? No Yes, report docket number: RE 107

Report is required by: OAR 860-300-0070

Statute

Order

Note: A one-time submission required by an order is a compliance filing and not a report (file compliance in the applicable docket)

Other

(For example, federal regulations, or requested by Staff)

Is this report associated with a specific docket/case? No Yes, docket number: RE 107

List Key Words for this report. We use these to improve search results.

Major Event Report

Send the completed Cover Sheet and the Report in an email addressed to PUC.FilingCenter@state.or.us

Send confidential information, voluminous reports, or energy utility Results of Operations Reports to PUC Filing Center, PO Box 1088, Salem, OR 97308-1088 or by delivery service to 201 High Street SE Suite 100, Salem, OR 97301.



825 NE Multnomah Street, Suite 2000
Portland, Oregon 97232

February 14, 2023

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street SE, Suite 100
Salem, OR 97301-3398

Re: RE 107—PacifiCorp Major Event Report

In compliance with OAR 860-023-0161, PacifiCorp d/b/a Pacific Power (PacifiCorp) submits the enclosed report describing a major event that occurred December 26-30, 2022, due to a series of storms that impacted PacifiCorp's service across the state.

PacifiCorp requests to exclude the outage information for this event from both its network performance reporting and customer guarantee failure payments.

If you require further information regarding this report, please contact Kevin Benson, Director, Asset Risk, at (541) 213-1990.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew McVee".

Matthew McVee
Vice President, Regulatory Policy and Operations

Enclosures

cc: Heide Caswell/Administrator, Utility Safety, Reliability, and Security Division

Report to the Oregon Public Utility Commission
Electric Service Reliability - Major Event Report

Event Date: December 26-30, 2022

Date Submitted: February 14, 2023

Primary Affected Locations: Oregon

Primary Cause: Winter storm

Exclude from Reporting Status: Yes

Report Prepared by: Tia Solis

Report Approved by: Kevin Benson

Event Customer Impact and Outage Summary

Event Outage Summary	
# Interruptions (sustained)	845
Total Customer Interrupted (sustained)	118,502
Total Customer Minutes Lost	57,336,302
State Event SAIDI	27.86 Minutes
CAIDI	484
Major Event Start	12/26/22 7:24 AM
Major Event End	12/30/22 10:10 AM

From December 26–30, 2022, Oregon experienced a major event as the result of series of storms with impacted service across the state. Widespread outages affected the Coast Plus, Southern, Willamette Valley and Northeast regions of Oregon. Southern Oregon was the first to experience widespread outages accounting for roughly 40% of the customer minutes lost and 30% of all customer outages during the major event. Outages then began in the Coast Plus region, followed by Northeast and finally Willamette Valley. Coast Plus accounted for approximately 43% of customer minutes lost and 33% of customer outages. Figure 1 below shows the impact of the storm across the state, which demonstrates the impact experienced by Oregon customers.

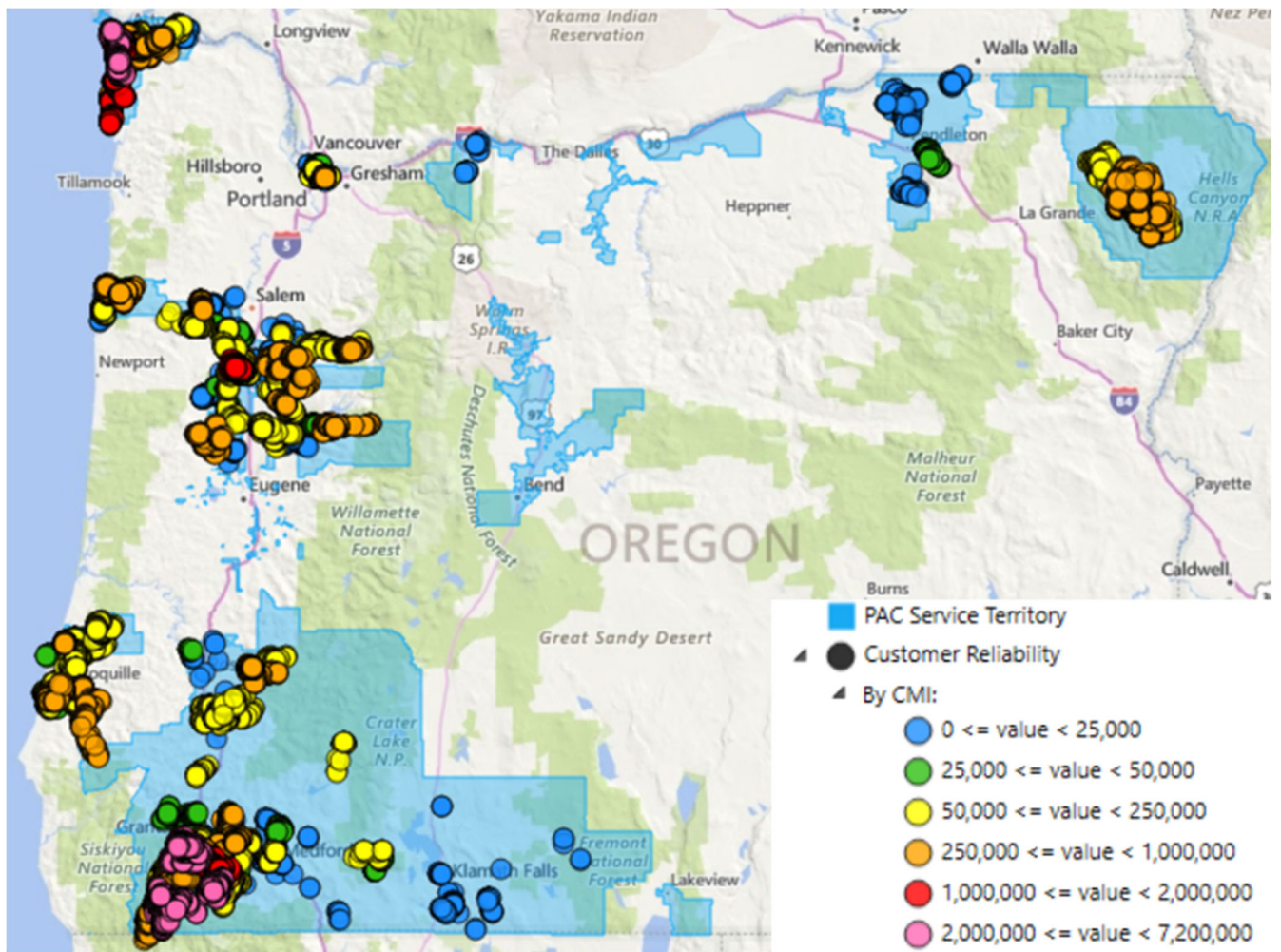
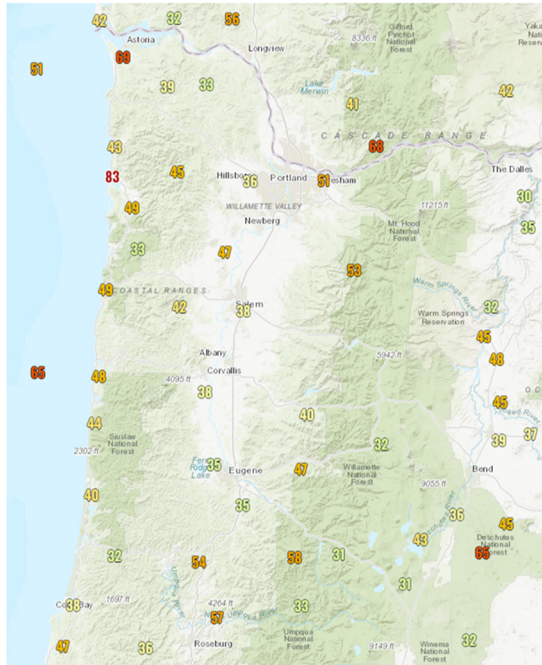


Figure 1: Oregon major event customer minutes lost December 26th at 7:24 AM to December 30th at 10:10 AM

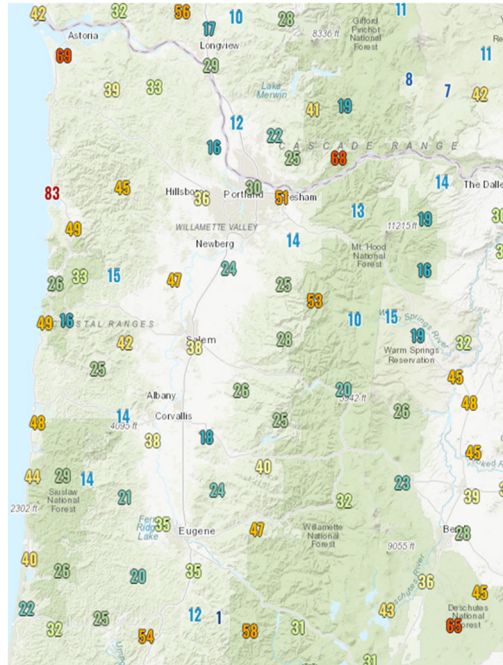
Weather

A strengthening area of low pressure approached the Oregon coast early on December 26. As this system approached the coast, it slowed down and moved northward, allowing for prolonged periods of windy conditions to most of Oregon. This system produced very strong winds across most of the Pacific Power districts located in Oregon, with the coastal regions seeing the strongest wind gusts. The following graphics show maximum wind gusts for areas across Oregon, both for December 26 and December 27.

Oregon Coast and Willamette Valley – December 26-27, 2022

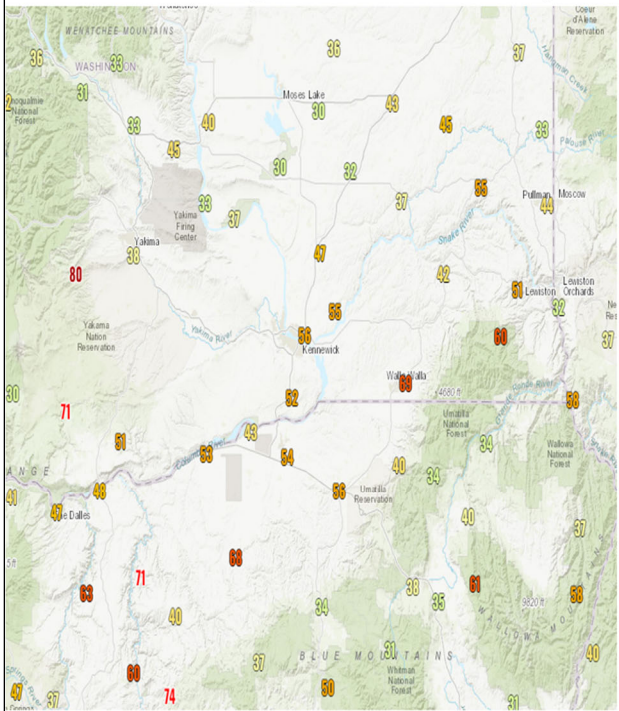


Maximum Wind Gust, ending 1159pm, December 26, 2022

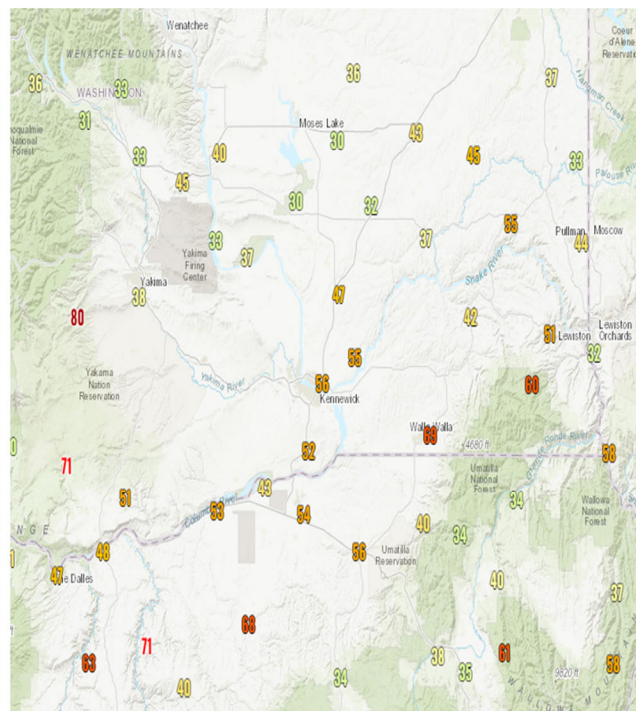


Maximum Wind Gust, ending 1159pm, December 27, 2022

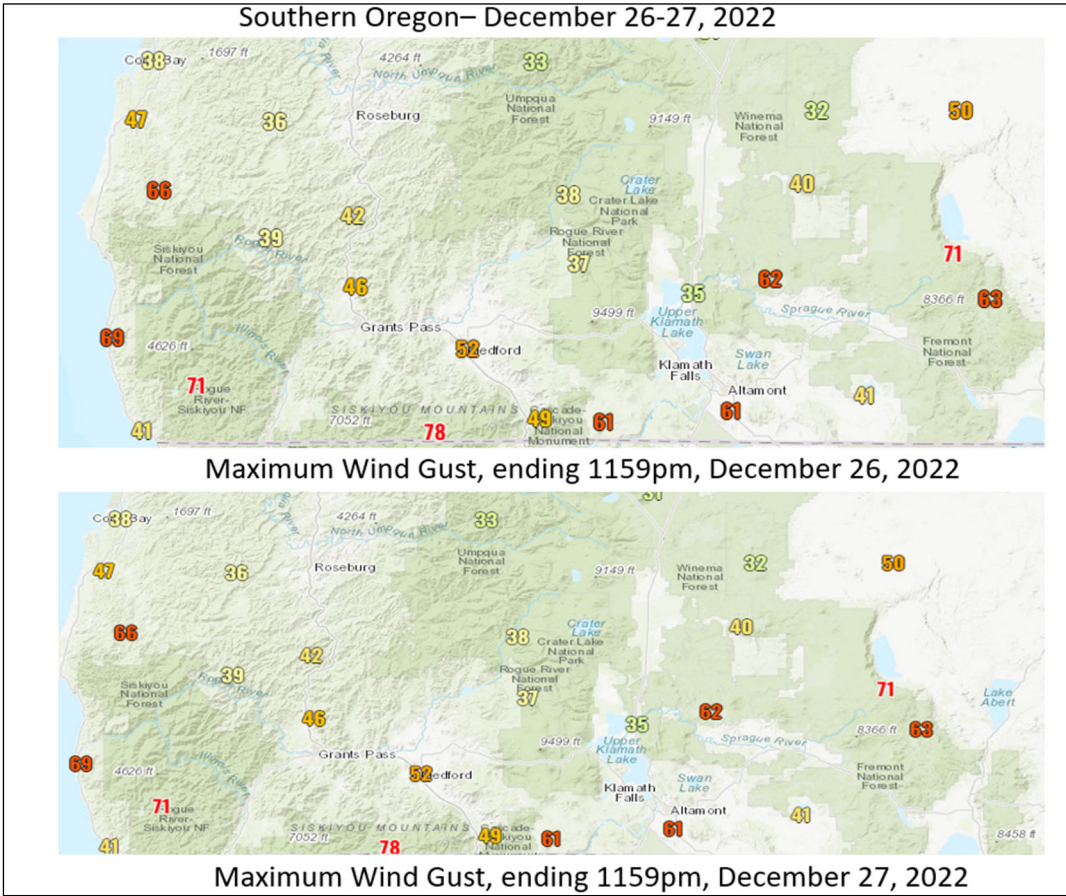
Northeastern Oregon and Southeastern Washington – December 26-27, 2022



Maximum Wind Gust, ending 1159pm, December 26, 2022



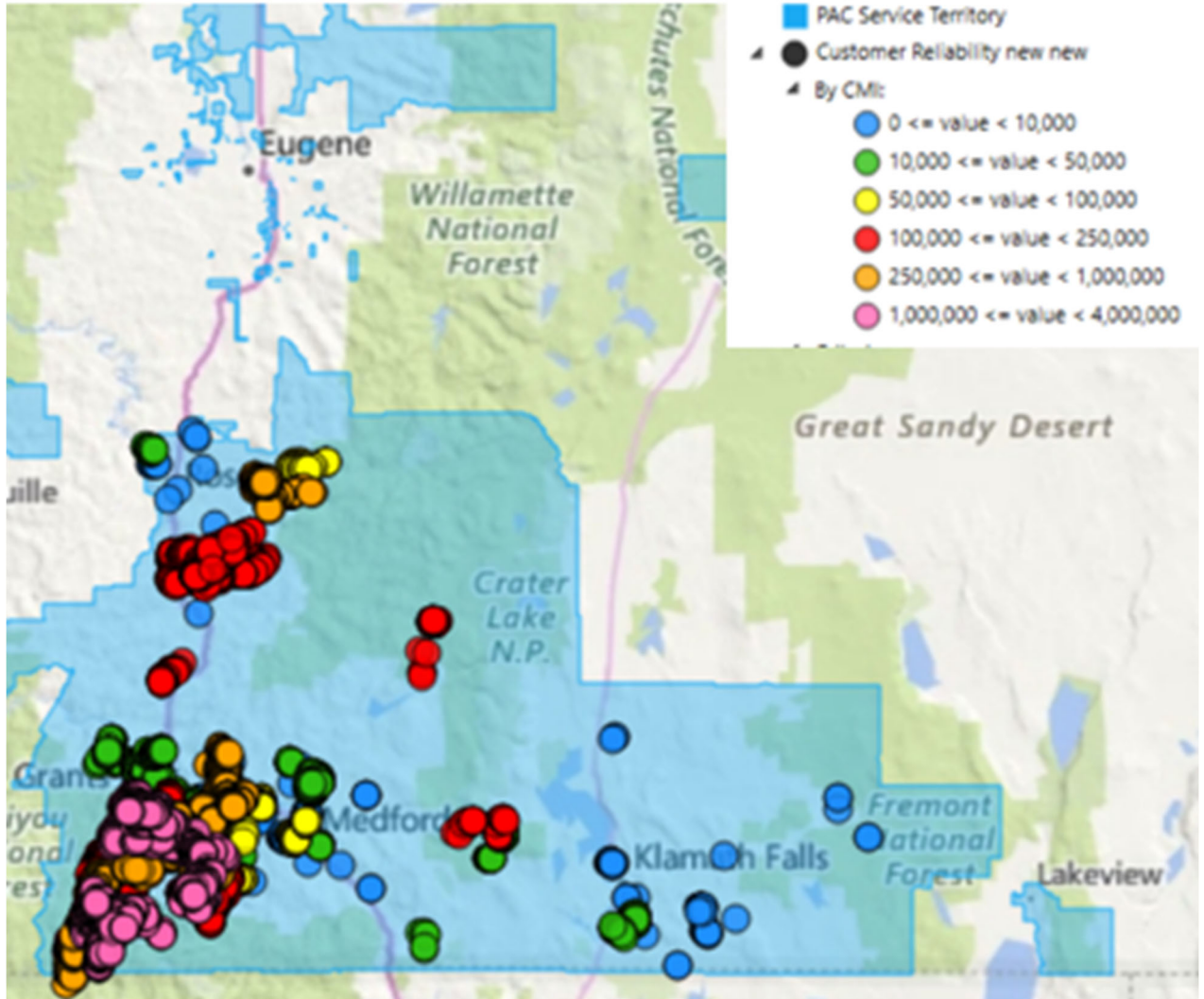
Maximum Wind Gust, ending 1159pm, December 27, 2022



Area Outages and Restoration Details

On December 26, 2022, the coast of Oregon began seeing strong wind gusts that proceeded to move east causing outages throughout most of the service territory in Oregon. The effects of these winds over December 26th and 27th damaged vegetation and impacted electrical infrastructure. The strong wind gusts caused branches and trees to give way, downing lines across the area. As the weather continued, further and continual impacts to electric infrastructure was experienced. During the first day of the major event there were 214 outage events, the majority of which impacted the Coast Plus and Southern regions. During the event, tree crews cleared interfering vegetation while line crews followed, making repairs and restoring customers. Approximately, 63% of customer minutes lost (CML) was related to tree damage with Astoria and Grants Pass having the greatest impact. The below figures show the CML by region over the course of the major event.

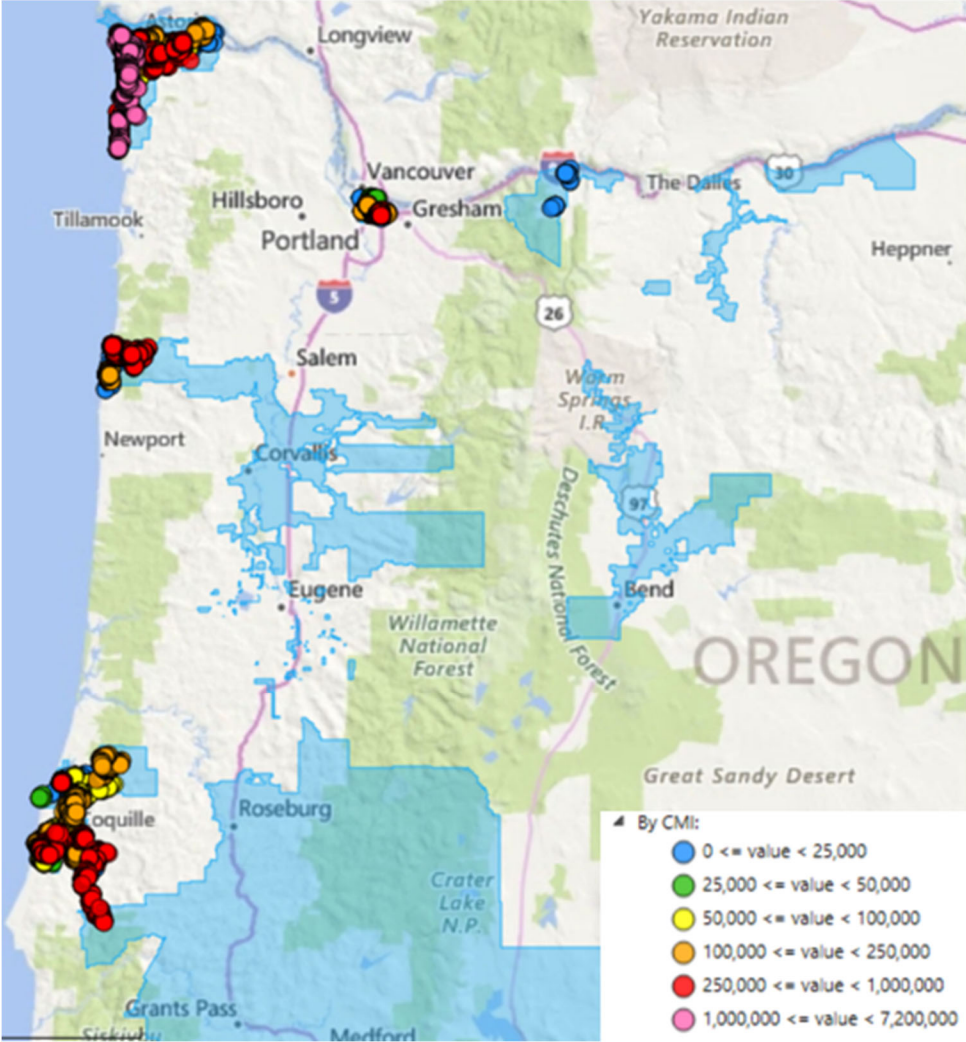
Southern CML December 26th at 7:24 to December 30th at 10:10



Restoration Intervals

Total Customer Sustained Outage Events	< 3 Hrs.	3 – 24 Hrs.	24+ Hrs.
28,016	8,942	13,804	5,270

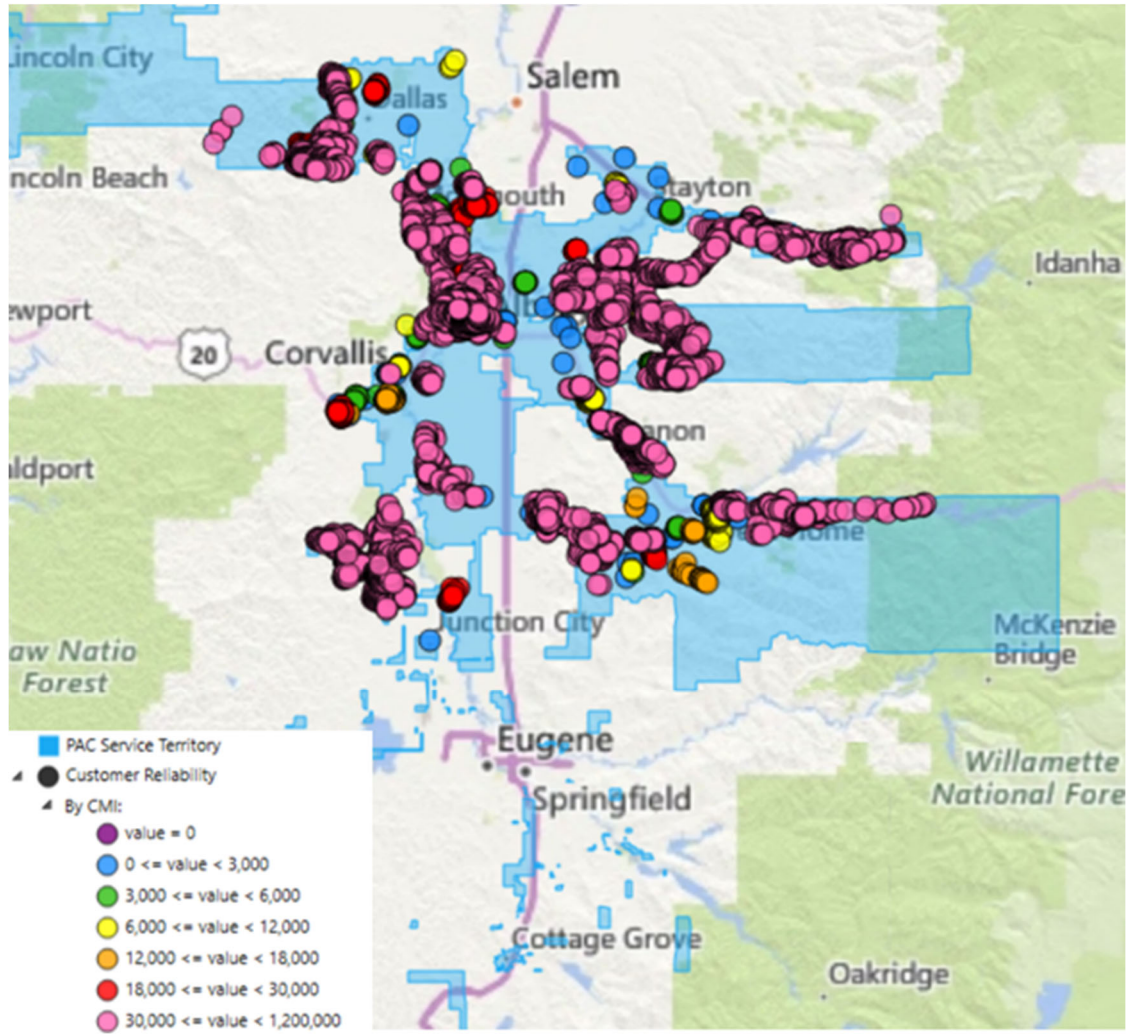
Coast Plus CML December 26th at 7:55 to December 29th at 18:11



Restoration Intervals

Total Customer Sustained Outage Events	< 3 Hrs.	3 – 24 Hrs.	24+ Hrs.
66,967	25,995	40,019	953

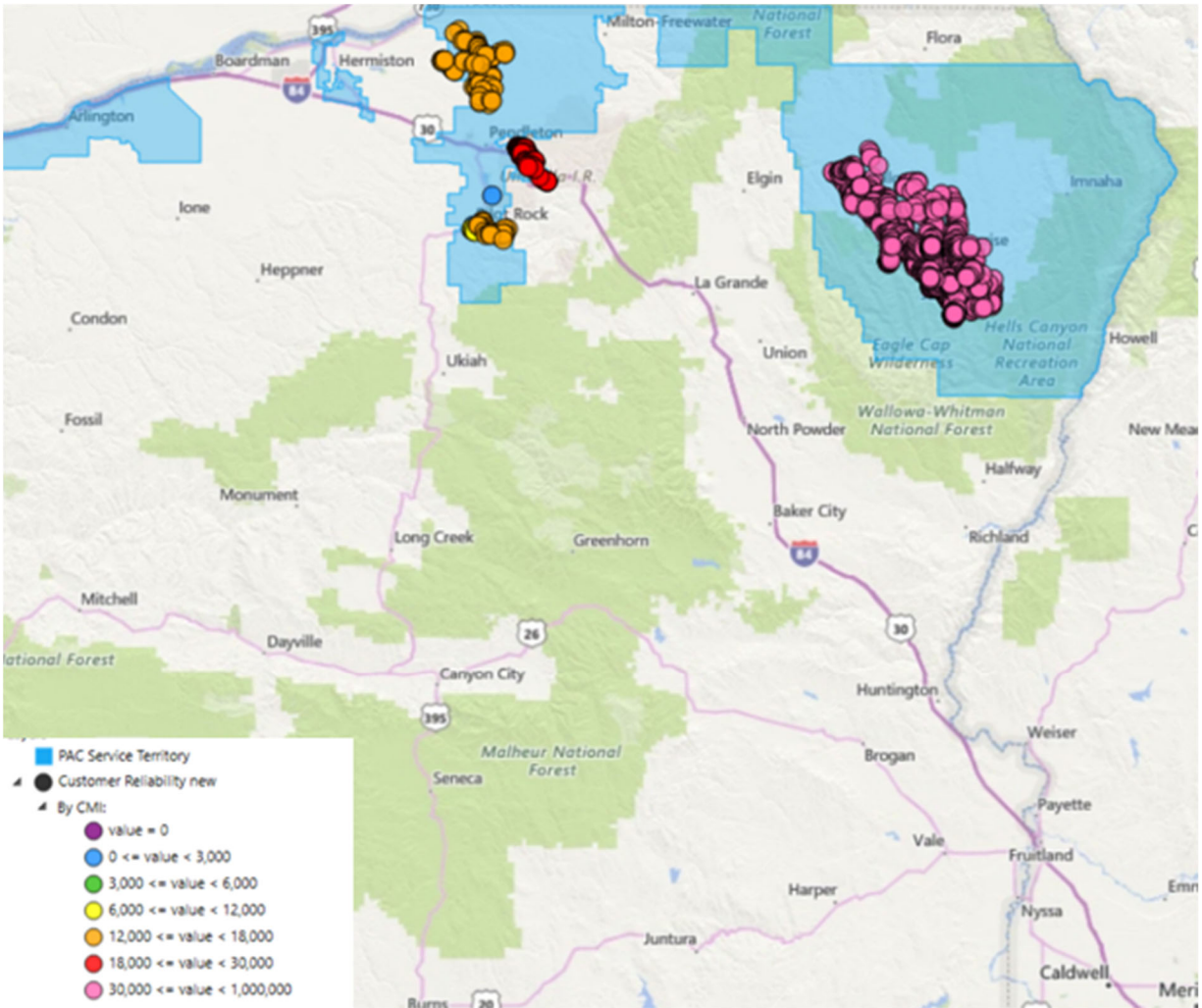
Willamette Valley CML December 26th at 18:02 to December 29th at 17:22



Restoration Intervals

Total Customer Sustained Outage Events	< 3 Hrs.	3 – 24 Hrs.	24+ Hrs.
16,846	3,619	12,316	911

Northeast CML December 26th at 15:46 to December 28th at 2:30



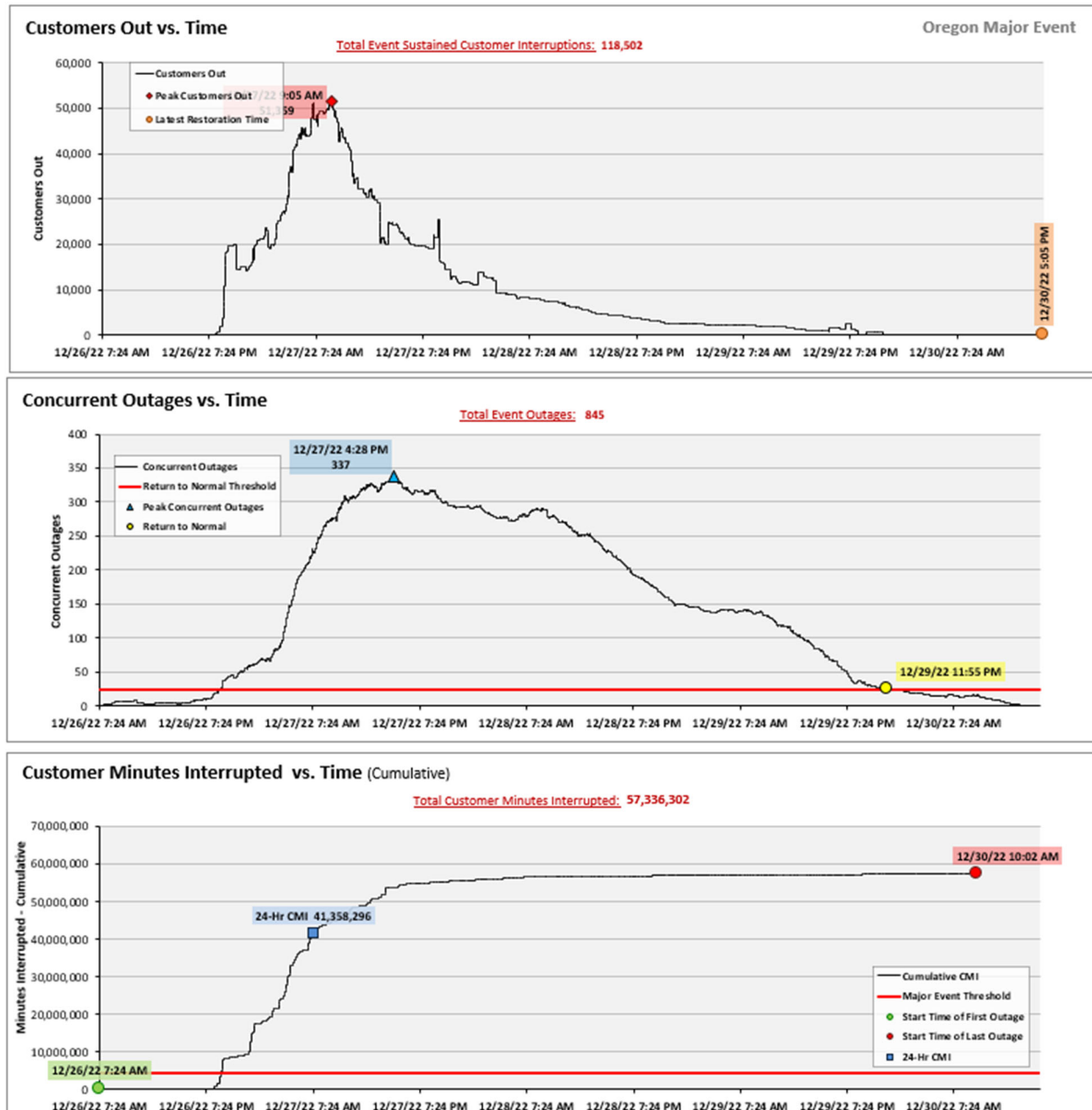
Restoration Intervals

Total Customer Sustained Outage Events	< 3 Hrs.	3 – 24 Hrs.	24+ Hrs.
5,061	2,277	2,784	0

Major Event Declaration

PacifiCorp designates these events and the consequences thereof a major event in accordance with OAR 860-023-0161. This is a major event because it exceeded the design or operating limits of the system, and the Major Event Threshold for Oregon as calculated annually by the company according to IEEE 1366-2003 methodology (commonly referred to as the 2.5 beta method). The company's 2021 Oregon reliability threshold is 4,589,806 customer minutes lost (7.30 Oregon SAIDI minutes) in a 24-hour period.

Event Details



SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Region	SAIDI	SAIFI	CAIDI	Customers out at peak
Willamette Valley	3.91	0.008	476	11,521
Coast Plus	12.02	0.033	368	25,033
Southern	11.12	0.014	813	17,047
Northeast	0.80	0.002	325	4,501
Oregon	27.86	0.057	484	51,359

Attachment A

PacifiCorp Major Event Report
Customer Analysis

	Oregon	Customer Analysis 12/26/2022 through 12/30/2022					Customers Restored by Intervals								Major Event Only - metric by operating area customer counts		
		Sustained Customers Off	% Sustained Customers Off	CML	Number of Sustained Interruptions	Customer Count	< 5 min	5 min - 3 hrs	3 hrs - 24 hrs	24 hrs - 48 hrs	48 hrs - 72 hrs	72 hrs - 96 hrs	96 + hrs	% Sustained Customers Restored in 3 Hours PS4	SAIDI	SAIFI	CAIDI
	PacifiCorp Major Events Report Customer Analysis*																
PC	PACIFICORP	116,890	6%	57,074,183	813	2,048,818	23,986	40,833	68,923	5,455	1,669	10	-	35%	27.86	0.057	488
PP	Pacific Power	116,890	14%	57,074,183	813	813,940	23,986	40,833	68,923	5,455	1,669	10	-	35%	70.12	0.144	488
OR	Oregon	116,890	19%	57,074,183	813	629,028	23,986	40,833	68,923	5,455	1,669	10	-	35%	90.73	0.057	488
OR	ALBANY	4,864	15%	1,632,339	31	32,925	2	1,090	3,760	13	1	-	-	22%	49.58	0.148	336
OR	CLATSOP (ASTORIA)	47,374	188%	17,294,272	96	25,251	307	17,134	30,141	99	-	-	-	36%	684.89	1.876	365
OR	COOS BAY/COQUILLE	8,731	33%	5,124,450	108	26,382	9,531	2,441	5,436	787	67	-	-	28%	194.24	0.331	587
OR	CORVALLIS	622	2%	349,805	34	30,457	1	214	376	7	25	-	-	34%	11.49	0.020	562
OR	COTTAGE GROVE/J.CITY	1,256	11%	517,765	12	11,390	-	21	1,232	3	-	-	-	2%	45.46	0.110	412
OR	DALLAS/INDEPENDENCE	1,881	12%	1,440,610	46	15,858	-	-	1,645	176	60	-	-	0%	90.84	0.119	766
OR	ENTERPRISE	4,578	83%	1,566,606	11	5,531	-	1,869	2,709	-	-	-	-	41%	283.24	0.828	342
OR	GRANTS PASS	21,994	42%	21,192,242	167	52,543	2,264	4,741	12,090	3,678	1,475	10	-	22%	403.33	0.419	964
OR	HOOD RIVER	48	1%	28,171	8	9,595	-	4	44	-	-	-	-	8%	2.94	0.005	587
OR	KLAMATH FALLS	593	2%	176,179	34	38,015	-	376	217	-	-	-	-	63%	4.63	0.016	297
OR	LEBANON	4,077	19%	2,419,686	77	21,085	4,625	1,447	2,286	340	4	-	-	35%	114.76	0.193	593
OR	LINCOLN CITY	4,643	38%	622,042	32	12,080	623	4,149	494	-	-	-	-	89%	51.49	0.384	134
OR	MEDFORD	2,114	2%	639,535	32	89,893	1,806	1,052	977	85	-	-	-	50%	7.11	0.024	303
OR	PENDLETON	458	4%	63,460	7	13,036	-	408	50	-	-	-	-	89%	4.87	0.035	139
OR	PORTLAND	6,171	7%	1,557,898	37	85,630	-	2,267	3,904	-	-	-	-	37%	18.19	0.072	252
OR	ROSEBURG/MYRTLECREEK	3,315	8%	779,448	22	42,940	1	2,773	520	22	-	-	-	84%	18.15	0.077	235
OR	STAYTON	4,146	30%	1,654,720	56	13,707	4,826	847	3,017	245	37	-	-	20%	120.72	0.302	399
OR	WALLA WALLA	25	1%	14,956	3	2,320	-	-	25	-	-	-	-	0%	6.45	0.011	598

*Only current event specific metric impact shown. Does not include values from other events which may have occurred in other regions during the same time period.

Data as of
2/9/2023

PacifiCorp Major Event Report

SSC by State Analysis

	Oregon	Event 12/26/22 through 12/30/22						Month 12/01/22 through 12/31/22						YTD FY2024 01/01/22 through 12/31/22					
		Major Events Included			Major Event Excluded			Major Events Included			Major Events Excluded*			Major Events Included			Major Events Excluded*		
		SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI
	PacifiCorp Major Events Report SSC by State																		
PC	PACIFICORP	28.29	0.058	485	0.43	0.001	330	33.35	0.087	382	3.28	0.019	170	94.35	0.528	179	41.15	0.337	122
RMP	Rocky Mountain Power	71.20	0.147	485	1.08	0.003	330	83.94	0.220	382	8.27	0.049	170	237.49	1.329	179	103.57	0.848	122
UT	Utah	92.13	0.190	485	1.40	0.004	330	108.61	0.284	382	10.70	0.063	170	307.31	1.720	179	134.02	1.097	122
OR	ALBANY	2.60	0.008	336	-	-	-	2.95	0.010	303	0.35	0.002	178	11.46	0.107	107	8.80	0.099	89
OR	BEND/REDMOND	0.17	0.001	182	0.17	0.001	182	1.97	0.007	275	0.48	0.002	194	12.09	0.129	94	5.32	0.042	126
OR	CLATSOP (ASTORIA)	27.50	0.075	365	0.00	0.000	150	32.35	0.092	351	2.35	0.009	267	45.32	0.204	222	9.57	0.072	133
OR	COOS BAY/COQUILLE	8.33	0.015	541	0.18	0.002	120	8.56	0.017	497	0.37	0.003	121	28.49	0.084	338	4.44	0.036	125
OR	CORVALLIS	0.56	0.001	562	-	-	-	0.68	0.002	362	0.13	0.001	141	8.84	0.043	204	4.42	0.023	189
OR	COTTAGE GROVE/J.CITY	0.82	0.002	412	-	-	-	0.82	0.002	411	0.00	0.000	134	2.80	0.035	79	1.41	0.021	66
OR	DALLAS/INDEPENDENCE	2.30	0.003	743	0.01	0.000	72	2.49	0.004	642	0.20	0.001	224	9.46	0.045	211	2.59	0.016	161
OR	ENTERPRISE	2.49	0.007	342	0.00	0.000	172	2.54	0.008	329	0.05	0.000	113	10.71	0.063	170	1.29	0.014	94
OR	GRANTS PASS	34.61	0.036	961	0.92	0.001	869	36.08	0.045	795	2.39	0.010	229	61.71	0.232	266	21.88	0.168	130
OR	HERMISTON	-	-	-	-	-	-	0.05	0.000	196	0.05	0.000	196	1.25	0.013	97	1.21	0.013	95
OR	HOOD RIVER	0.05	0.000	555	0.00	0.000	174	0.12	0.000	263	0.07	0.000	196	2.58	0.015	176	1.45	0.009	153
OR	KLAMATH FALLS	0.29	0.001	272	0.01	0.000	84	0.93	0.007	134	0.65	0.006	108	12.16	0.120	101	10.93	0.113	97
OR	LAKEVIEW	-	-	-	-	-	-	0.00	0.000	105	0.00	0.000	105	0.59	0.003	191	0.59	0.003	191
OR	LEBANON	3.85	0.006	593	-	-	-	3.94	0.007	550	0.10	0.001	139	10.02	0.044	229	3.43	0.027	129
OR	LINCOLN CITY	0.99	0.007	134	-	-	-	2.27	0.017	135	0.43	0.004	117	9.60	0.064	150	5.10	0.043	120
OR	MADRAS	0.06	0.000	294	0.06	0.000	294	1.31	0.009	145	0.10	0.000	227	3.39	0.025	136	2.11	0.016	132
OR	MEDFORD	1.02	0.003	302	0.00	0.000	91	1.72	0.012	139	0.71	0.009	78	26.42	0.196	135	24.60	0.187	132
OR	PENDLETON	0.10	0.001	139	-	-	-	0.24	0.002	159	0.14	0.001	178	3.43	0.023	148	1.79	0.013	143
OR	PORTLAND	2.48	0.010	252	0.00	0.000	223	4.80	0.025	196	1.24	0.007	184	26.65	0.138	193	11.36	0.078	145
OR	ROSEBURG/MYRTLECREEK	1.24	0.005	235	0.00	0.000	189	1.82	0.008	217	0.58	0.003	186	13.30	0.096	138	8.87	0.079	113
OR	STAYTON	2.67	0.007	391	0.04	0.000	178	2.85	0.009	325	0.22	0.002	101	6.19	0.034	182	2.58	0.022	118
OR	WALLA WALLA	0.02	0.000	598	-	-	-	0.10	0.001	188	0.08	0.001	156	0.87	0.005	177	0.28	0.004	77

*may include other regional major event exclusions during the same period. Operating areas are calculated by the state frozen customer count metrics.

Data as of
2/9/2023