



e-FILING REPORT COVER SHEET

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REPORT NAME: Major Event Report

COMPANY NAME: Pacific Power

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? No Yes

If yes, please submit only the cover letter electronically. Submit confidential information as directed in OAR 860-001-0070 or the terms of an applicable protective order.

If known, please select designation: RE (Electric) RG (Gas) RW (Water) RO (Other)

Report is required by: OAR OAR 860-023-0161

Statute

Order

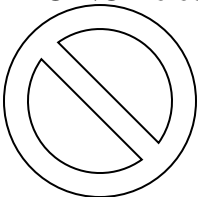
Other

Is this report associated with a specific docket/case? No Yes

If yes, enter docket number: RE 107

List applicable Key Words for this report to facilitate electronic search:
Major Event Report

DO NOT electronically file with the PUC Filing Center:



- Annual Fee Statement form and payment remittance or
- OUS or RSPF Surcharge form or surcharge remittance or
- Any other Telecommunications Reporting or
- Any daily safety or safety incident reports or
- Accident reports required by ORS 654.715

Please file the above reports according to their individual instructions.

May 24, 2016

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
201 High Street SE, Suite 100
Salem, OR 97301-1166

Attn: Filing Center

RE: PacifiCorp Major Event Report

In compliance with OAR 860-023-0161, PacifiCorp d/b/a Pacific Power (PacifiCorp or Company) submits the enclosed report describing a major event that occurred April 13 - 15, 2016, in the Company's Southern Oregon reliability reporting region.

The Company 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 Heide Caswell, Director, Engineering and Environmental, at (503) 813-6216.

Sincerely,



R. Bryce Dalley
Vice President, Regulation

Enclosure

cc: Lori Koho/Administrator, Safety, Reliability, and Security Division

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

Event Date:	April 13 - 15, 2016
Date Submitted:	May 24, 2016
Primary Affected Locations:	Southern, Oregon
Primary Cause:	Weather
Exclude from Reporting Status:	Yes
Report Prepared by:	April Brewer
Report Approved by:	Heide Caswell/Larry Young/Debbie Guerra

Event Description

On April 11, 2016 the National Weather Service sent out a weather advisory forecast for Wednesday night into Thursday evening, April 13-14, 2016. The forecast indicated gusts could be as high as 50 mph. These were expected around northern California and southern Oregon and would extend into the higher terrain east of the Cascades. On the afternoon of April 13, 2016, a storm bringing strong winds began impacting areas across the state, causing downed lines and tree-related outages.¹ At approximately 5:00 pm winds increased, and the electrical system became impacted by the storm as more wind and tree-related outages began. At 8:54 pm on April 13 the number of customers without power peaked at 10,604. During the event tree-related outages accounted for 81% of all customer minutes lost (effectively due to weather), while outages coded as weather accounted for 9%, with loss of transmission at 8%. Of the total customers who experienced an outage 71% were due to trees, 18% were due to loss of supply and 9% were attributed to weather. During the event 60% of all sustained customer outages occurred within the first 3 hours, signaling the severity of the storm and demonstrating its strain on resources over such a short period.

The CoastPlus reliability reporting region of Oregon was also impacted by this storm, but did not meet the reporting threshold CAIDI of greater than 300 minutes.² Please see the attached charts and tables for the interruptions experienced during the storm event.

¹ Distribution outage cause coding recommendations in IEEE 1782 advise that the source of the fault be designated even if conditions, such as weather, exacerbated the situation and resulted in the fault event.

² CoastPlus reliability reporting region also reached a major event threshold level, however the event CAIDI metric did not reach the 300 minute (5 hour) reporting threshold in 860-023-0161 which requires a major event filing. Metrics are listed below, and details will be provided in the company's 2016 Annual Reliability Report.

	SAIDI threshold (min.)	Event SAIDI (min.)	Event SAIFI (events)	Event CAIDI (min.)
Coast Plus	9.45	12.23	0.080	153

Event Outage Summary	
# Interruptions (sustained)	118
Total Customer Interrupted (sustained)	19,448
Total Customer Minutes Lost	6,448,973
State Event SAIDI Impact	10.90 Minutes
CAIDI	332
Major Event Date	4/13/2016 5:18 pm 4/15/2016 1:03 am

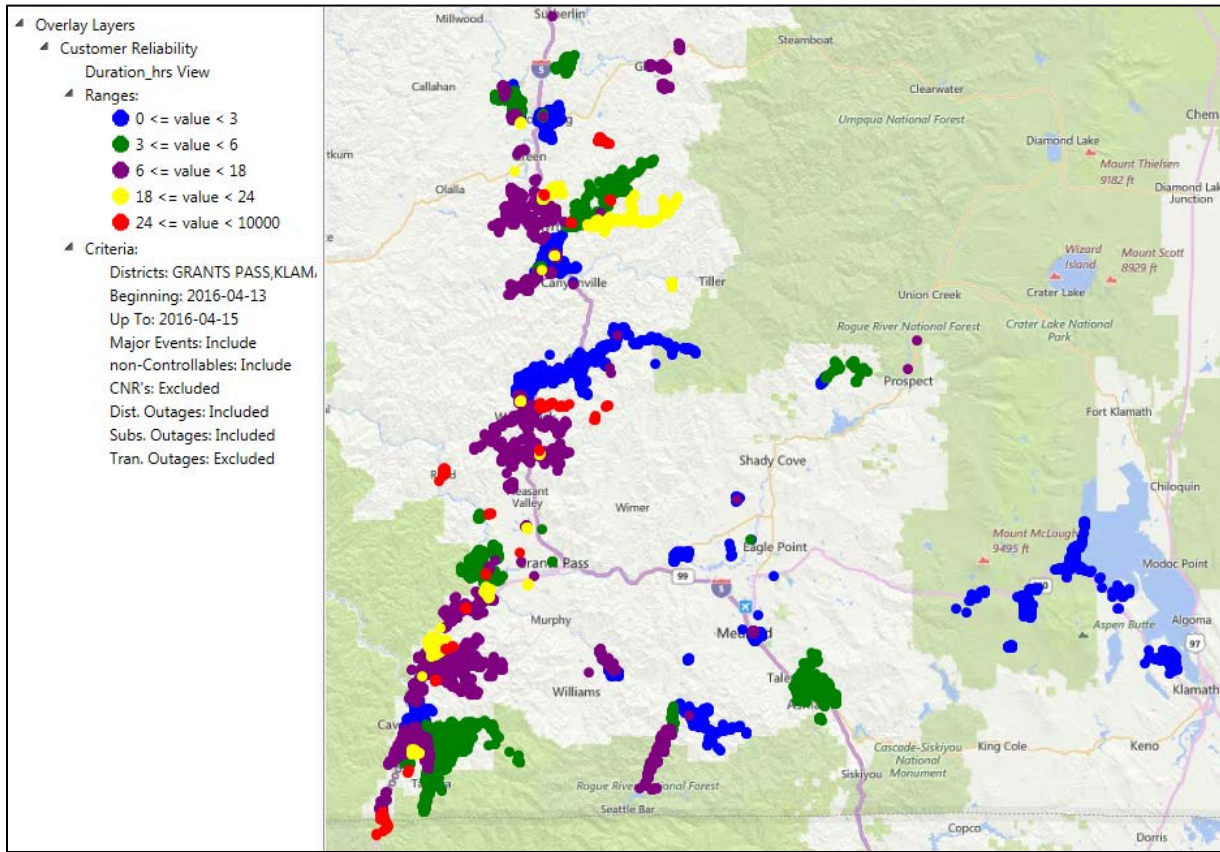
Restoration Summary

The fast onset of wind in the early evening of April 13 caused tree failures and wind-borne debris to become entangled in power lines. It was during these first few hours of the storm that more than half of the major event's outages occurred; high winds continued into the following day and impacted restoration efforts.

During the storm a total of 118 sustained outages occurred in the Southern Oregon reliability reporting region. All available employees were dispatched to assist in restoration activities in the impacted districts as they experienced weather-triggered outages. Five external contract crews were mobilized on the evening of April 13 and dispatched to the affected districts some as far away as Portland and Tumwater, Washington. Additional assistance was later augmented with three more crews. Crews worked around the clock to restore power. Numerous tree crews were dispatched to assist in restoration activities, clearing vegetation and debris from lines and access roads.

At approximately 5:30 am on April 14, a significant loss of transmission outage occurred in Grants Pass when windblown vegetation caused an outage to the transmission line which feeds Provolt substation, affecting 1,393 customers for 6 hours 10 minutes. Rough terrain and difficult access slowed down the line patrol and delayed restoration. Winds began to settle on the morning of April 15 and shortly thereafter conditions returned to pre-event outage levels.

There were no company or commission customer complaints made regarding the major event. The graphic below displays the customer outages during the event colored by cumulative outage duration.



Restoration Intervals

Total Customers Sustained	< 3 Hrs.	3 - 24 Hrs.	24-48 Hrs.
12,064	9,952	2,104	8

Restoration Resources

Personnel Resources	
General Help	29
Estimators	6
General Foremen	5
Substation Journeymen	9
Journeymen	72
TOTAL	121

Materials	
Cutouts	38
Conductor	11,365 ft.
Insulators	59
Crossarms	35
Overhead transformers	16

State Estimated Major Event Costs

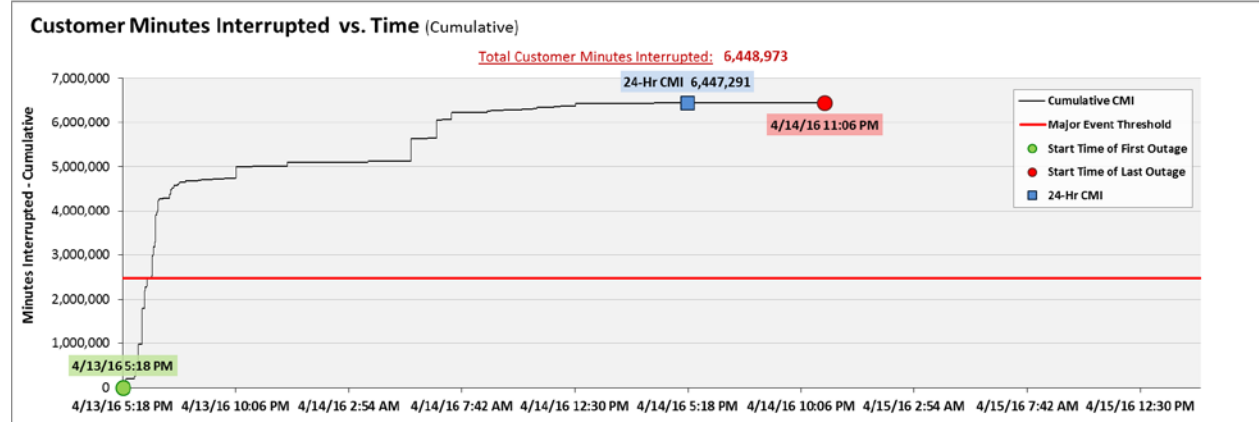
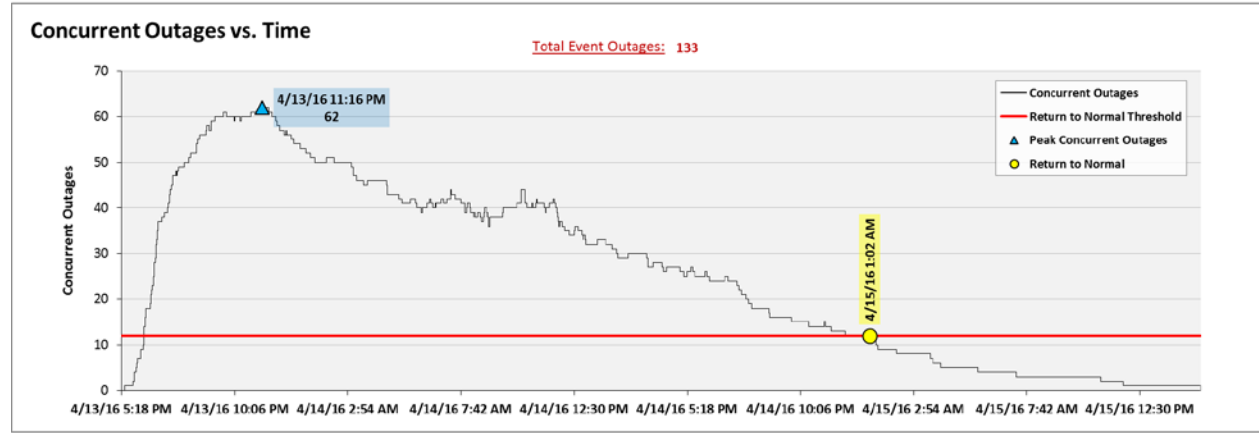
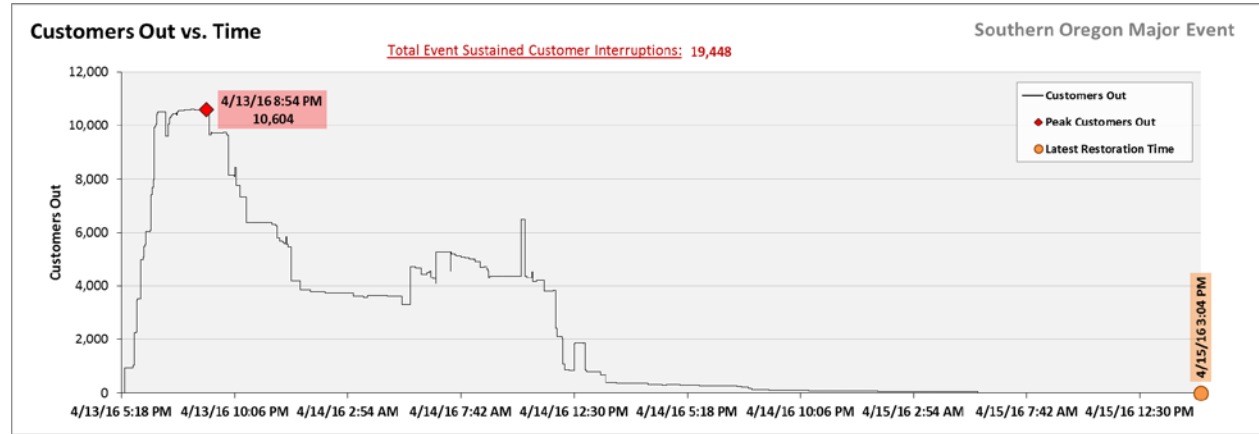
Estimate \$	Labor	Material	Vegetation Management	Contract Resources	Total
Capital	\$83,841	\$27,600	\$0	\$113,000	\$224,441
Expense	\$316,932	\$11,578	\$118,000	\$91,000	\$537,510
Total	\$400,773	\$39,178	\$118,000	\$204,000	\$761,951

Major Event Declaration

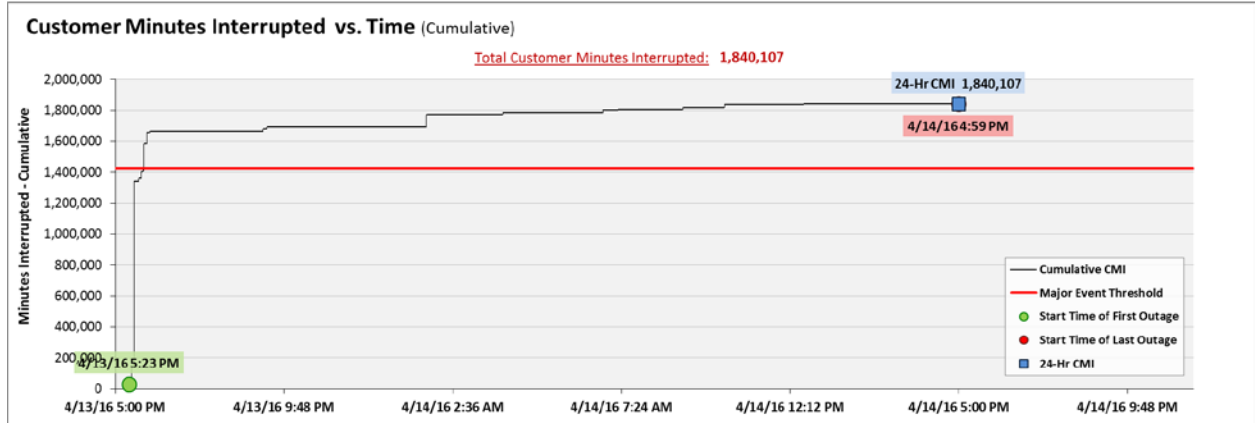
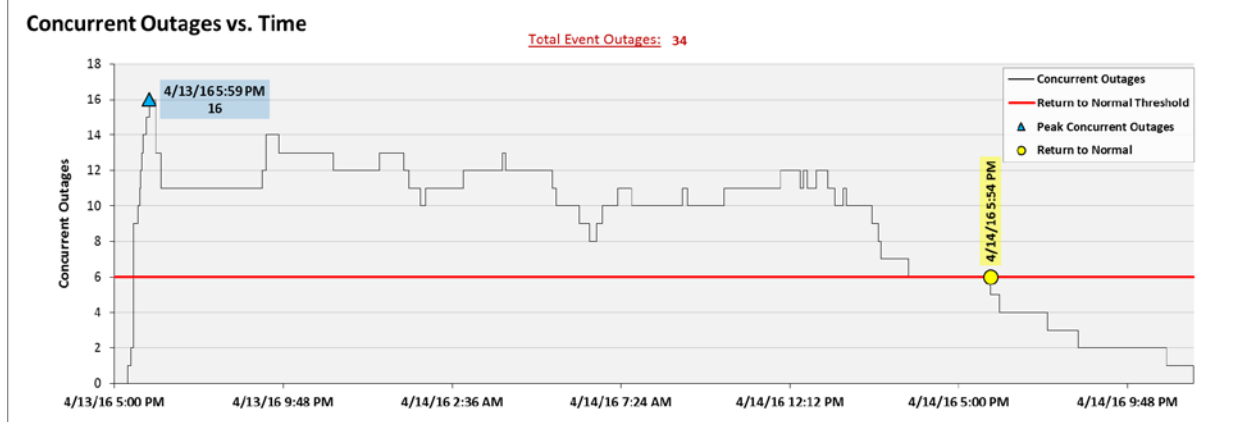
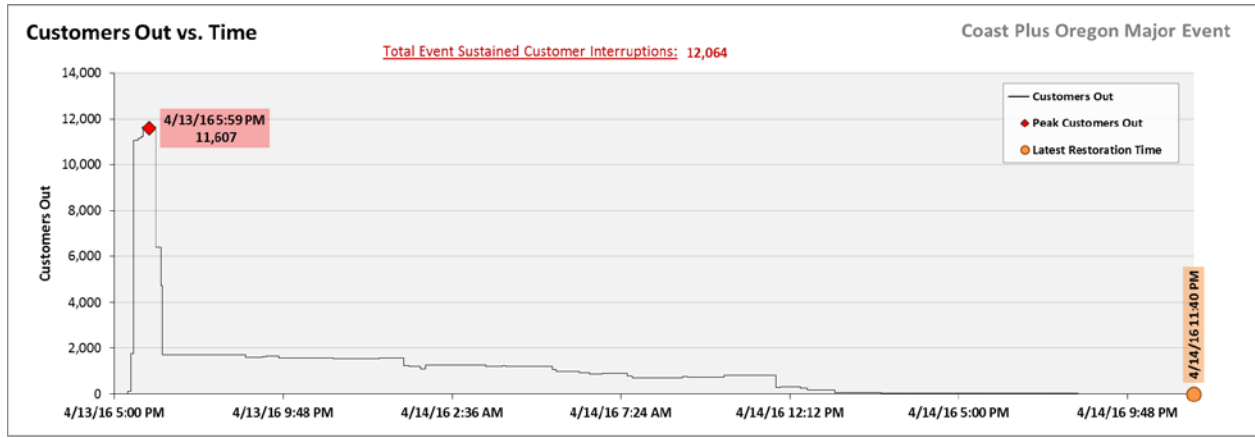
PacifiCorp designates these events and the consequences thereof a major event in accordance with OAR 860-023-0161. This is a major event because it exceeded the design or operating limits of the system, and the Major Event Threshold for the reliability reporting region as calculated annually by the company according to IEEE 1366-2003 methodology (commonly referred to as the 2.5 beta method). The company's 2016 Southern Oregon reliability reporting region threshold is 2,471,653 customer minutes lost (11.2 Southern Oregon SAIDI minutes) in a 24-hour period.

Event Detail for Southern Oregon and Coast Plus

Southern Oregon



Coast Plus



SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Please see the attached system-generated reports.

PacifiCorp Major Event Report

Customer Analysis

Oregon		Customer Analysis 4/13/2016 through 4/15/2016					Customers Restored by Intervals								Major Event Only - metric by operating area customer counts		
PacifiCorp Major Events Report Customer Analysis*		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
PC	PACIFICORP*	19,448	1%	6,448,973	118	1,868,631	16,286	4,616	14,743	89	-	-	-	24%	3.45	0.010	332
PP	Pacific Power*	19,448	3%	6,448,973	118	771,210	16,286	4,616	14,743	89	-	-	-	24%	8.36	0.025	332
OR	Oregon*	19,448	3%	6,448,973	118	591,456	16,286	4,616	14,743	89	-	-	-	24%	10.90	0.033	332
OR	GRANTS PASS	9,410	19%	3,967,223	46	50,709	4,216	67	9,307	36	-	-	-	1%	78.24	0.186	422
OR	LAKEVIEW	8	0%	1,898	1	2,410	-	-	8	-	-	-	-	0%	0.79	0.003	237
OR	MEDFORD	6,058	7%	680,583	30	87,494	5,075	4,516	1,542	-	-	-	-	75%	7.78	0.069	112
OR	ROSEBURG/MYRTLECREEK	3,972	9%	1,799,269	41	42,116	6,995	33	3,886	53	-	-	-	1%	42.72	0.094	453

*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.

Customer Interrupted by Date 4/13/2016 through 4/15/2016		Customers Restored by Intervals								Major Event Only - metric by state customer counts						
Date*	Sustained Customers Off	% Sustained Customers Off	CML	Number of Sustained Interruptions	Average 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
4/13/2016	12,042	2%	5,008,957	68	591,456	10,913	1,096	10,867	79	-	-	-	9%	8.47	0.020	416
4/14/2016	7,406	1%	1,440,016	50	591,456	5,373	3,520	3,876	10	-	-	-	48%	2.43	0.013	194

Data as of
5/13/2016

PacifiCorp Major Event Report
SSC by State Analysis

	Oregon	Event 04/13/16 through 04/15/16						Month 04/01/16 through 04/30/16						YTD FY2017 01/01/16 through 04/30/16					
		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*	6.73	0.036	185	2.29	0.020	117	22.14	0.132	168	10.85	0.095	114	62.15	0.412	151	35.85	0.316	114
PP	Pacific Power*	14.12	0.068	208	3.37	0.027	125	23.53	0.138	170	9.07	0.082	111	77.28	0.478	162	37.23	0.328	114
OR	Oregon*	17.22	0.084	206	3.21	0.030	105	28.04	0.153	183	9.20	0.079	116	88.11	0.514	171	36.26	0.320	113
OR	GRANTS PASS	6.72	0.016	421	0.01	0.000	274	7.29	0.020	369	0.58	0.004	150	11.99	0.037	323	5.28	0.021	248
OR	KLAMATH FALLS	0.34	0.002	142	0.34	0.002	142	0.78	0.009	91	0.78	0.009	91	2.61	0.031	85	2.61	0.031	85
OR	LAKEVIEW	0.00	0.000	237	-	-	-	0.01	0.000	179	0.00	0.000	144	0.40	0.003	136	0.40	0.003	136
OR	MEDFORD	1.15	0.010	112	0.00	0.000	125	2.24	0.015	149	1.09	0.005	226	6.15	0.048	127	5.00	0.038	131
OR	ROSEBURG/MYRTLECREEK	3.04	0.007	449	0.00	0.000	31	4.05	0.015	274	1.01	0.008	125	6.81	0.030	225	3.77	0.024	160

*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
5/13/2016