



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

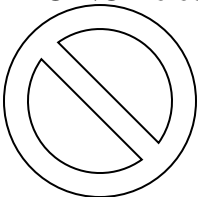
Other

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.



825 NE Multnomah, Suite 2000
Portland, Oregon 97232

April 4, 2017

VIA ELECTRONIC FILING

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

Attn: Filing Center

RE: RE 107 – 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 February 20-21, 2017, in the Company's southern Oregon service area.

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,

A handwritten signature in black ink that reads "R. Bryce Dalley". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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:	February 20 -21, 2017
Date Submitted:	April 4, 2017
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/Kevin Putnam

Event Description

On February 20, 2017, a storm bringing rain and high winds blew through Southern Oregon severely impacting services in the area, notably within Grants Pass and Roseburg. During the month of February heavy rainfall began saturated soil and groundwater flow systems, and on the morning of February 20th, high wind gusts, coupled with the overburdened soil caused several trees and limbs to fall, damaging company equipment. Tree-related outages were the cause of 93% of all customer minutes lost and 82% of all customer outage events. At 7:58 am on February 20th the number of customers without power peaked at 5,333 customers.

Event Outage Summary	
# Interruptions (sustained)	89
Total Customer Interrupted (sustained)	6,933
Total Customer Minutes Lost	2,918,385
State Event SAIDI	4.88 Minutes
CAIDI	421
Major Event Start	2/20/17 6:19 AM
Major Event End	2/21/17 2:33 PM

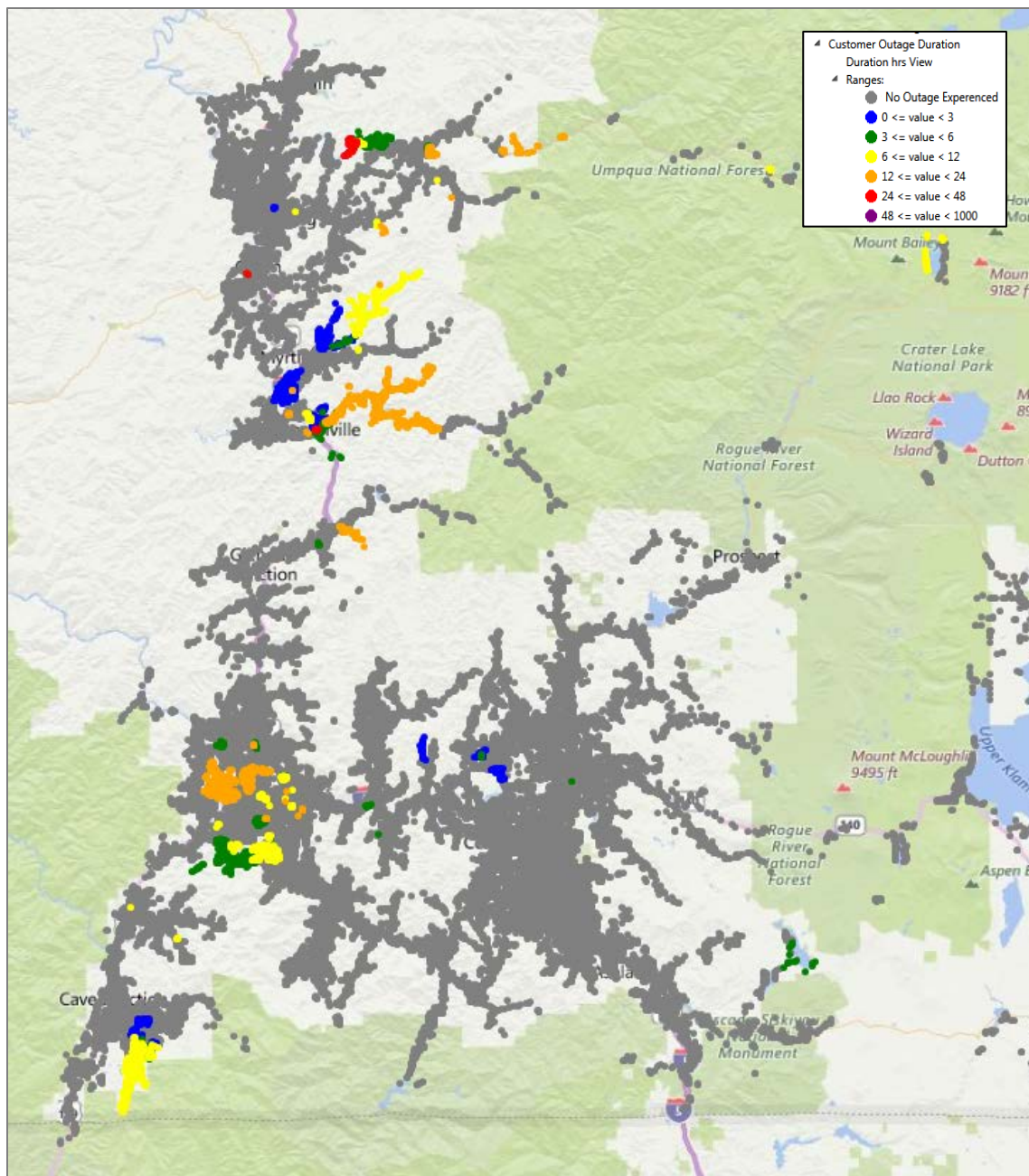
Restoration Summary

During the event, 89 sustained outage events occurred, causing almost 7,000 customer interruptions. Of these outage events, 49 occurred in Grants Pass and 31 occurred in Roseburg while the remaining 9 occurred in Klamath Falls and Medford. The large volume of outages in such a short time period caused response resources to be strained and heavily impacted restoration times, as crews and dispatch worked to identify and restore power to outages that affected the greatest number of customers. In addition, restoration activities were slowed as line crews needed tree crew assistance to remove fallen trees and branches entangled in lines before repairing damaged equipment. Area landslides from the heavy and persistent rain impacted

transportation corridors and the unstable terrain limited access to downed lines. In several cases a helicopter was used in several instances to patrol and locate damaged equipment in more remote locations. During the major event, 35% of customer outages were restored within 3 hours, 64% were restored within a day and 1% of customer outages were over 24 hours long.

Approximately 169 Pacific Power linemen, tree trimmers, support staff, and contractors were utilized during the event. In addition to personnel, 1 pole, 6 crossarms, and over 11,600 conductor feet were needed to restore power. There was one company and no 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.
6,933	2,459	4,422	52

Restoration Resources

Personnel Resources	
Journeyman	75
Estimators	6
Collectors	1
General Foreman	5
Mechanic Foreman	2
Meter Reader	7
Metermen	2
Service Coordinators	4
Senior Warehouse Workers	5
Vegetation	15
Contractors	47
TOTAL	169

Materials	
# Poles (D)	1
# Approx. Conductor Line (feet)	11,654
# Crossarms	6
Insulators	104
Cutouts	17
Line fuses	10
Line splices	389
Guy wire (feet)	8

State Estimated Major Event Costs

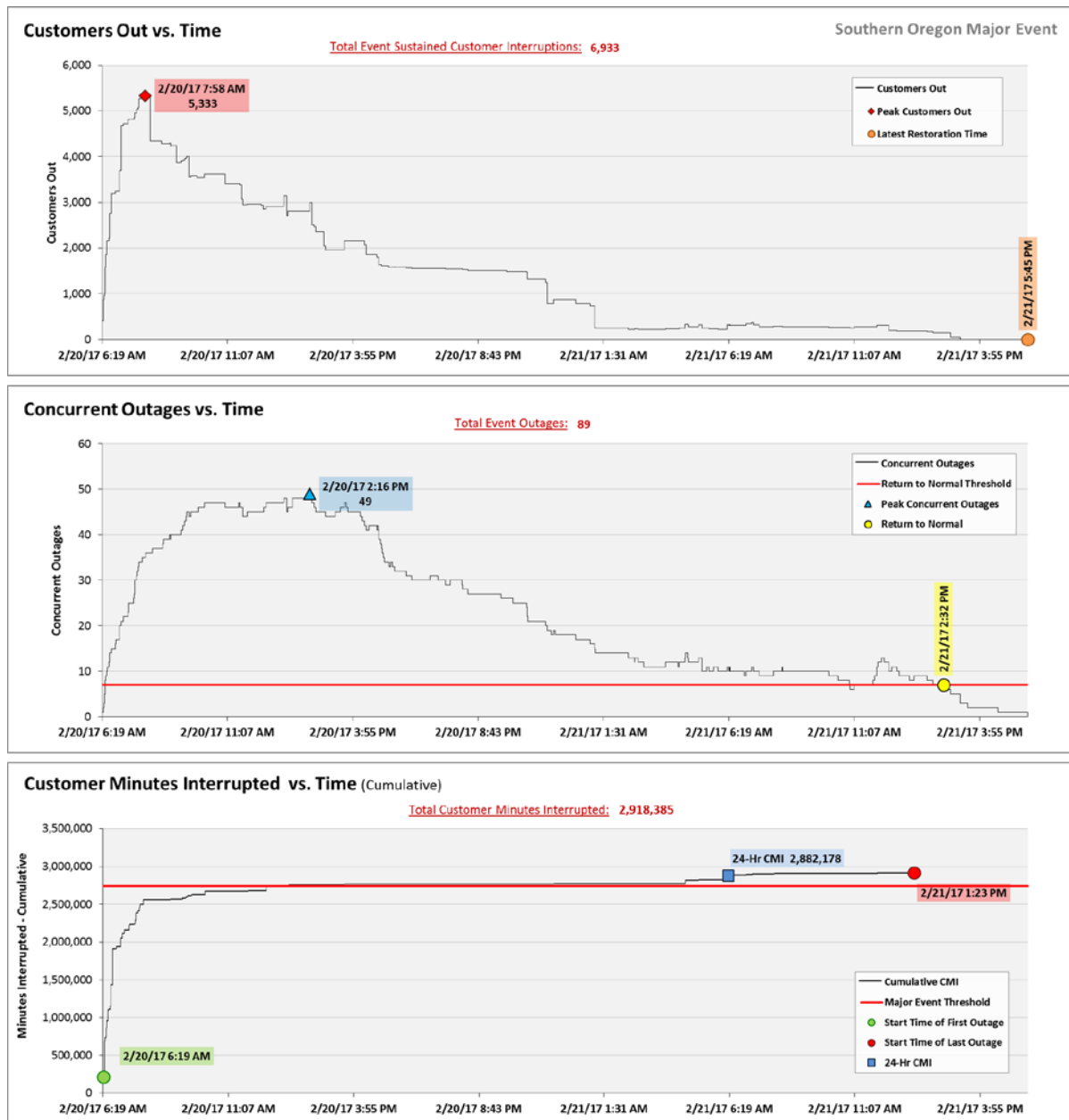
Estimate \$	Labor	Material	Contract Resources *	Overhead	Total
Capital	\$ 10,714	\$ 2,328	\$ 1,087	-	\$ 14,129
Expense	\$ 196,080	\$ 267,783	\$ 10,315	\$ 2,042	\$ 474,178
Total	\$ 206,794	\$ 270,111	\$ 11,402	\$ 2,042	\$ 488,307

*Includes vegetation costs

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 Southern 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 2017 Southern Oregon reliability threshold is 2,740,682 customer minutes lost (12.35 Southern Oregon SAIDI minutes) in a 24-hour period.

Event Details



SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Please see the attached system-generated reports.

PacifiCorp Major Event Report

Customer Analysis

Oregon		Customer Analysis 2/20/2017 through 2/21/2017					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	6,933	0%	2,918,385	89	1,900,047	586	2,459	4,422	52	-	-	-	35%	1.54	0.004	421
PP	Pacific Power	6,933	1%	2,918,385	89	779,477	586	2,459	4,422	52	-	-	-	35%	3.74	0.009	421
OR	Oregon	6,933	1%	2,918,385	89	598,577	586	2,459	4,422	52	-	-	-	35%	4.88	0.012	421
OR	GRANTS PASS	3,070	6%	1,569,489	49	51,217	-	389	2,681	-	-	-	-	13%	30.64	0.060	511
OR	KLAMATH FALLS	1	0%	17	1	37,472	-	1	-	-	-	-	-	100%	0.00	0.000	17
OR	MEDFORD	137	0%	24,791	8	88,569	25	75	62	-	-	-	-	55%	0.28	0.002	181
OR	ROSEBURG/MYRTLECREEK	3,725	9%	1,324,088	31	42,286	561	1,994	1,679	52	-	-	-	54%	31.31	0.088	355

*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 2/20/2017 through 2/21/2017		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
2/20/2017	6,498	1%	2,775,045	66	598,577	561	2,335	4,111	52	-	-	-	36%	4.64	0.011	427
2/21/2017	435	0%	143,340	23	598,577	25	124	311	-	-	-	-	29%	0.24	0.001	330

Data as of
4/4/2017

PacifiCorp Major Event Report

SSC by State Analysis

	Oregon	Event 02/20/17 through 02/21/17						Month 02/01/17 through 02/28/17						YTD FY2017 01/01/17 through 02/28/17					
		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	2.50	0.011	223	0.96	0.008	127	14.06	0.122	115	10.62	0.112	95	59.44	0.266	223	20.30	0.175	116
PP	Pacific Power	4.76	0.015	322	1.02	0.006	173	20.40	0.201	101	12.02	0.177	68	112.18	0.452	248	19.90	0.238	84
OR	Oregon	5.82	0.016	367	0.94	0.004	221	23.40	0.239	98	12.50	0.206	61	113.21	0.462	245	19.07	0.261	73
OR	GRANTS PASS	2.72259	0.005271	517	0.1006	0.000142	708	9.98	0.030	331	1.33	0.004	300	73.99	0.116	639	1.99	0.008	246
OR	KLAMATH FALLS	0.00003	0.000002	17	0.0003	0.000002	151	1.05	0.010	108	1.05	0.010	108	1.83	0.019	95	1.23	0.011	107
OR	LAKEVIEW	-	-	-	-	-	-	0.01	0.000	159	0.01	0.000	159	0.01	0.000	156	0.01	0.000	156
OR	MEDFORD	0.04167	0.000231	181	-	-	-	1.43	0.017	86	1.39	0.016	84	14.93	0.045	330	2.57	0.022	119
OR	ROSEBURG/MYRTLECREEK	2.21282	0.006226	355	0.0008	0.000003	227	2.88	0.011	257	0.67	0.005	134	4.18	0.016	258	1.32	0.008	175

*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
4/4/2017