



e-FILING REPORT COVER SHEET

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

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

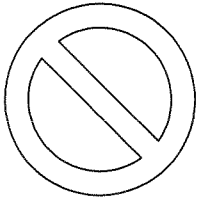
Other

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

August 13, 2015

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 July 6-7, 2015, in the Company's *Central 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,

A handwritten signature in black ink that reads "R. Bryce Dalley" with a small mark to the right.

R. Bryce Dalley
Vice President, Regulation

Enclosure

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

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

Event Date: July 6, 2015 4:50pm – July 7, 2015 8:09pm

Date Submitted: August 13, 2015

Primary Affected Locations: Central Oregon (Bend, Redmond, & Madras)

Primary Cause: Loss of transmission, and substation supply

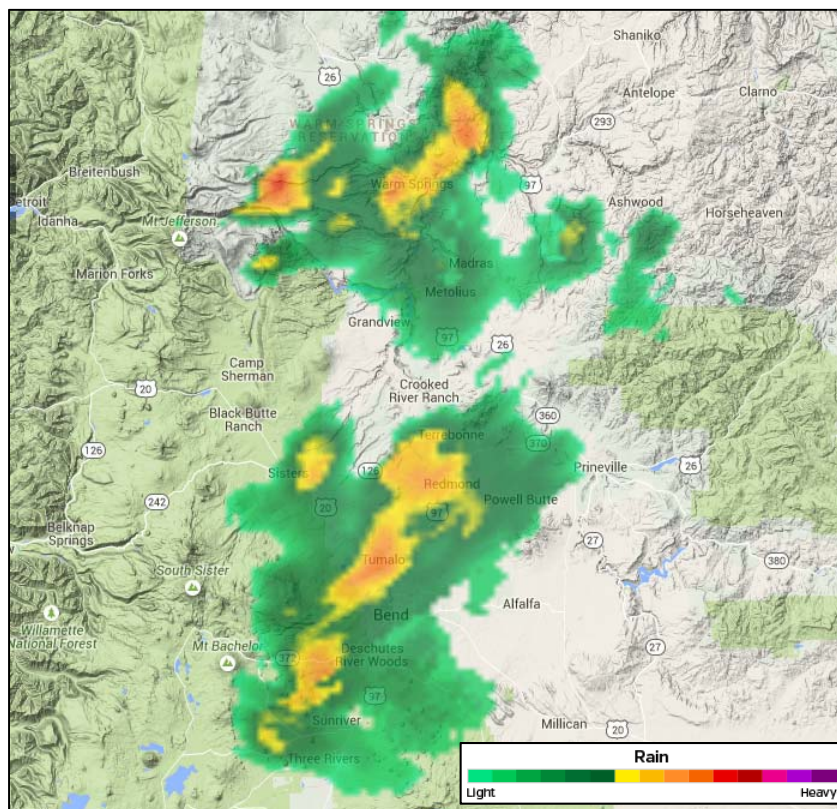
Exclude from Reporting Status: Yes

Report Prepared by: April Brewer

Report Approved by: Heide Caswell / David O’Neill / Steve Henderson / Kevin Putnam

Event Description

On July 6, 2015, a summer storm passed through Central Oregon bringing heavy rain and lightning to Madras and Bend. Lightning strikes occurring in close proximity to the Cove transmission substation, near Madras, tripped transmission feeds to various substations and damaged the 69 kV lightning arresters inside the Culver substation. The initial outage (also the peak) affected 5,429 customers and de-energized four circuits, at 4:50 p.m. The graphic below shows the storm on July 7, 2015 at 5:00 p.m.



Event Outage Summary	
# Interruptions (sustained)	14
Total Customer Interrupted (sustained)	5,726
Total Customer Minutes Lost	1,897,409
State Event SAIDI Impact	3.12 Minutes
CAIDI	331
Major Event Start	7/6/15 4:50PM
Major Event End	7/7/15 8:09PM

Restoration Summary

During the event dispatch was able to switch many of the affected substations to an alternative feed, resorting power to Warm Springs and Crooked River Substations. The Warm Springs substation was the first to restore in 20 minutes, bringing power back to 1,088 customers. Next was the re-energizing of the Crooked River substation which renewed power supply to two circuits (1,272 customers) within three hours. Tests were performed via SCADA in an attempt to restore power to the Culver Substation from the Cove substation, however the line tripped out. Substation crews were dispatched to perform testing and troubleshooting at Culver substation. After discovering the lightning arresters were damaged on the transformer bank, the crew disconnected the arresters, test energized the transformer bank, and restored service to customers. The outage at Culver Substation was the longest outage during the event, lasting just under 13 hours and restored power to 1,797 customers. In total 5,726 customers experienced outages during the event.

The event restoration activities utilized 10 operations personnel. More detail can be found in restoration resources.

There were no company or commission customer complaints made regarding the major event.

Restoration Intervals

Total Customers Sustained	< 3 Hrs.	3 - 24 Hrs.	24+ Hrs.
5,726	3,916	1,810	0

Restoration Resources

Personnel Resources	
Substation Journeymen	7
Wires Journeymen	3
TOTAL	10

Materials	
Fuses	3
69 kV Lightning Arrester	3

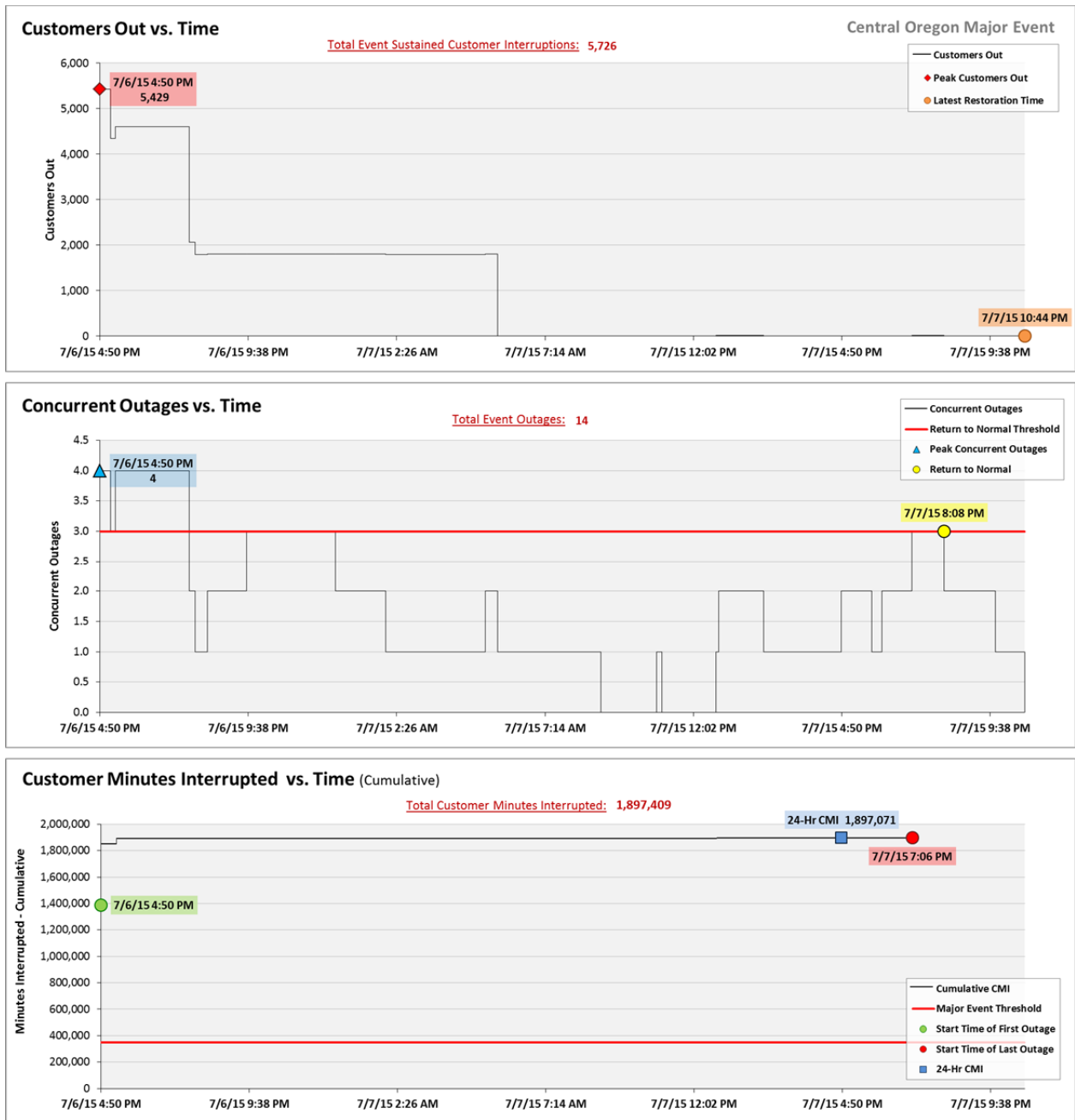
State Estimated Major Event Costs

Estimate \$	Labor	Materials	Total
Capital Expense	\$27,838 0	\$9,861 0	\$37,699 0
Total	\$27,838	\$9,861	\$37,699

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). This company's 2015 Central Oregon reliability reporting region threshold is 349,230 customer minutes lost (4.34 Central 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 7/04/2015 to 7/04/2015		7/6/2015 through 7/7/2015 Customer Analysis					Customers Restored by Intervals								Major Event Only		
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	5,726	0%	1,897,409	14	1,887,237	0	3,916	1,810	0	0	0	0	68%	1.01	0.00	331
PP	Pacific Power	5,726	1%	1,897,409	14	793,118	0	3,916	1,810	0	0	0	0	68%	2.39	0.01	331
OR	Oregon	5,726	1%	1,897,409	14	607,450	0	3,916	1,810	0	0	0	0	68%	3.12	0.01	331
CE	CentralOR	5,726	7%	1,897,409	9	80,435	0	3,916	1,810	0	0	0	0	68%	23.59	0.07	331
OR	BEND/REDMOND	2,838	4%	487,393	9	63,110	0	2,827	11	0	0	0	0	100%	7.72	0.04	172
OR	MADRAS	2,888	17%	1,410,016	5	17,325	0	1,089	1,799	0	0	0	0	38%	81.39	0.17	488

Date	Customer Interrupted by Date 7/6/2015 through 7/7/2015					Customers Restored by Intervals							
	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
7/6/2015	2,808	4%	482,871	5	63,110	0	2,806	2	0	0	0	0	100%
7/6/2015	2,885	17%	1,409,432	2	17,325	0	1,088	1,797	0	0	0	0	38%
7/7/2015	30	0%	4,522	4	63,110	0	21	9	0	0	0	0	70%
7/7/2015	3	0%	584	3	17,325	0	1	2	0	0	0	0	33%

Data as of
7/15/2015

PacifiCorp Major Event Report
SSC by State Analysis

	Oregon 7/04/2015 to 7/04/2015 <i>PacifiCorp Major Events Report SSC by State</i>	Event 07/06/15 through 7/7/2015						Month 07/01/15 through 07/15/15						YTD FY2016 01/01/15 through 07/15/15					
		Major Events Included			Major Events 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
PC	PacifiCorp	1.01	0.003	331	0	0	0	13.92	0.101	138	9.78	0.087	113	124.71	0.787	158	82.75	0.651	127
PP	Pacific Power	2.39	0.007	331	0	0	0	17.77	0.109	162	7.92	0.075	105	121.52	0.733	166	63.87	0.533	120
OR	Oregon	3.12	0.009	331	0	0	0	17.99	0.096	187	5.13	0.052	99	115.08	0.716	161	62.67	0.532	118
CE	Central OR	3.12	0.009	331	0	0	0	3.50	0.012	295	0.38	0.002	155	10.84	0.084	128	3.94	0.050	79
OR	BEND/REDMOND	0.80	0.005	172	0	0	0	1.16	0.007	167	0.36	0.002	156	7.71	0.069	111	3.13	0.040	79
OR	MADRAS	2.32	0.005	488	0	0	0	2.34	0.005	477	0.02	0.000	130	3.13	0.015	208	0.81	0.010	79

Data as of
7/15/2015