



e-FILING REPORT COVER SHEET

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REPORT NAME: Major Event Report

COMPANY NAME: Pacific Power

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? [X]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: [X]RE (Electric) [ ]RG (Gas) [ ]RW (Water) [ ]RO (Other)

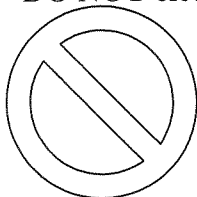
Report is required by: [ ]OAR OAR 860-023-0161
[ ]Statute
[ ]Order
[ ]Other

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

If yes, enter docket number: RE 107

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

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- Annual Fee Statement form and payment remittance or
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• 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 4, 2015, in the Company's *Coast Plus* 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 Public Utility Commission of Oregon**  
**Electric Service Reliability - Major Event Report**

Event Date: July 4, 2015

Date Submitted: August 13, 2015

Primary Affected Locations: Coast Plus, Oregon (Gearhart, Grove, Necanicum, and Seaside)

Primary Cause: Loss of supply

Exclude from Reporting Status: Yes

Report Prepared by: April Brewer

Report Approved by: Heide Caswell / David O'Neil / Kevin Putnam/Steve Henderson

**Event Description**

On July 4, 2015, a Mylar balloon made contact within the company's Seaside substation, causing a loss of supply within the Seaside substation. The balloon contact triggered a flash and failure of the low side arrestors on the substation transformer. The sustained arc caused the high side fuses to blow, thus de-energizing the transformer. During the event four distribution circuits were without power, affecting 8,404 customers.

<b>Event Outage Summary</b>	
<b># Interruptions (sustained)</b>	11
<b>Total Customer Interrupted (sustained)</b>	8,450
<b>Total Customer Minutes Lost</b>	2,768,949
<b>State Event SAIDI Impact</b>	4.56 Minutes
<b>CAIDI</b>	328
<b>Major Event Date</b>	7/4/15

**Restoration Summary**

A crew arrived at the substation shortly after the event to find the substation transformer de-energized, failed low side arrestors, and high side blown fuses. The arrestors were cut and cleared. During the restoration of the system, a transmission outage was taken on the 115 kV transmission line from Astoria to test the transformer; the transmission outage had no customer affect. At 9:44 p.m. the transmission line connection was reestablished, re-energizing the transformer, and power restoration began on the four distribution feeders. The step restorations occurred as follows: 9:44 p.m. Gearhart circuit restoring power to 3,171 customers; 9:51 p.m. Necanicum circuit restoring power to 1,195 customers; and 10:22 p.m. Central and Grove circuit restoration to 4,038 customers.

Seaside substation has a second transformer that was out of service for scheduled maintenance to replace lightning arrestors on the high and low sides. This transformer was put back into service in the early hours of July 5, 2015.

The event restoration activities utilized nine operations personnel. 100 percent of the sustained customer interruptions were restored within five hours 43 minutes.

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.
8,450	31	8,419	0

### Restoration Resources

Personnel Resources	
Substation Journeymen	5
Wires Journeymen	4
<b>TOTAL</b>	<b>9</b>

Materials	
# Fuses	2
Approximate Line Feet (conductor)	500
Animal Guards	6
Lightning Arrestors	3

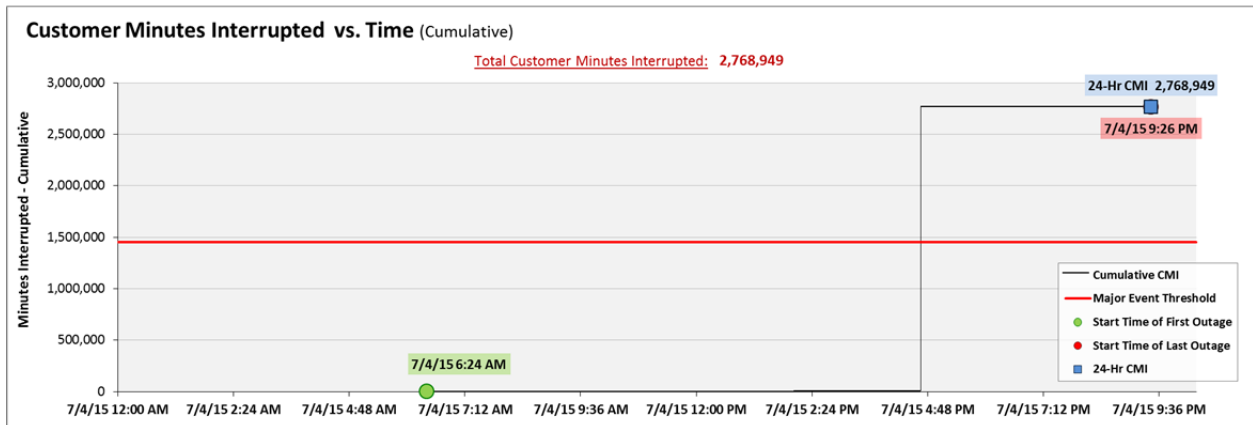
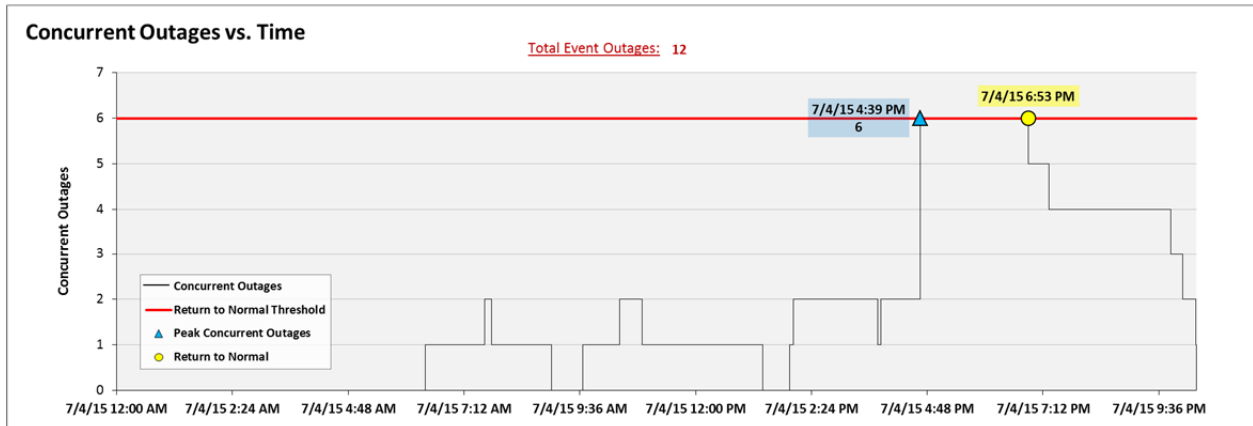
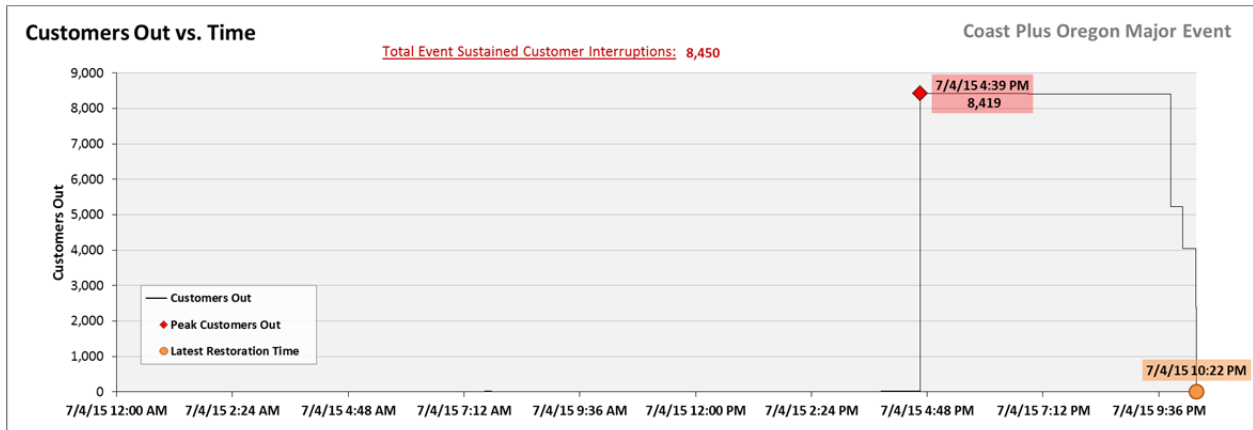
### State Estimated Major Event Costs

Estimate \$	Labor	Materials	Total
Capital	\$8,454	\$5,232	\$13,686
Expense	\$18,152	\$3,930	\$22,082
<b>Total</b>	<b>\$26,606</b>	<b>\$9,162</b>	<b>\$35,768</b>

## 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 Coast Plus reliability reporting region threshold is 1,452,428 customer minutes lost (9.6 Coast Plus SAIDI minutes) in a 24-hour period.

## Event Detail



**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		7/4/2015 through 7/5/2015															
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	8,450	0%	2,768,949	12	1,887,237	0	31	8,419	0	0	0	0	0%	1.47	0.00	328
PP	Pacific Power	8,450	1%	2,768,949	12	793,118	0	31	8,419	0	0	0	0	0%	3.49	0.01	328
OR	Oregon	8,450	1%	2,768,949	12	607,450	0	31	8,419	0	0	0	0	0%	4.56	0.01	328
CO	CoastPlus	8,450	6%	2,768,949	12	151,320	0	31	8,419	0	0	0	0	0%	18.30	0.06	329
OR	CLATSOP (ASTORIA)	8,404	34%	2,762,325	5	24,462	0	0	8,404	0	0	0	0	0%	112.92	0.34	329
OR	COOS BAY/COQUILLE	12	0%	3,082	2	27,376	0	3	9	0	0	0	0	25%	0.11	0.00	257
OR	LINCOLN CITY	8	0%	1,387	3	12,060	0	2	6	0	0	0	0	25%	0.12	0.00	173
OR	PORTLAND	26	0%	2,154	2	77,877	0	26	0	0	0	0	0	100%	0.03	0.00	83

		7/4/2015 through 7/5/2015												
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	
7/4/2015	8,404	34%	2,762,325	5	24,462	0	0	8,404	0	0	0	0	0%	
7/4/2015	12	0%	3,082	2	27,376	0	3	9	0	0	0	0	25%	
7/4/2015	8	0%	1,387	3	12,060	0	2	6	0	0	0	0	25%	
7/4/2015	26	0%	2,154	2	77,877	0	26	0	0	0	0	0	100%	

<b>Data as/of</b>
<b>8/1/2015</b>

**PacifiCorp Major Event Report**  
SSC by State Analysis

	Oregon 7/04/2015 to 7/04/2015 <b>PacifiCorp</b> Major Events Report by State	Event 07/04/15 through 7/5/2015						Month 7/1/2015 through 7/31/2015						YTD FY2016 01/01/15 through 07/31/15								
		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	SAIDI	SAIFI	CAIDI
PC	PacifiCorp	1.47	0.004	328	0	0	0	21.89	0.017	131	17.05	0.144	118	124.98	0.809	155	82.54	0.665	124			
PP	Pacific Power	3.49	0.011	328	0	0	0	23.86	0.162	147	14.01	1.280	109	124.19	0.753	165	66.55	0.553	120			
OR	Oregon	4.56	0.014	328	0	0	0	23.34	0.138	170	10.48	0.093	113	117.28	0.721	163	64.87	0.537	121			
OR	CoastPlus	4.56	0.014	328	0	0	0	5.76	0.024	240	1.21	0.010	121	19.76	0.130	152	12.02	0.103	117			
OR	CLATSOP (ASTORIA)	4.55	0.014	329	0	0	0	4.70	0.015	316	0.16	0.001	147	6.86	0.033	210	2.15	0.018	118			
OR	COOS BAY/COQUILLE	0.01	0.000	257	0	0	0	0.09	0.001	113	0.09	0.001	110	2.42	0.015	166	2.41	0.014	166			
OR	HOOD RIVER	0.00	0.000	0	0	0	0	0.03	0.001	49	0.03	0.000	49	1.41	0.005	270	0.33	0.004	84			
OR	LINCOLN CITY	0.00	0.000	173	0	0	0	0.02	0.001	141	0.18	0.001	140	3.96	0.026	155	3.93	0.025	155			
OR	PORTLAND	0.00	0.000	83	0	0	0	0.76	0.001	113	0.76	0.001	113	5.12	0.051	101	3.21	0.042	77			

<b>Data as/of</b>
<b>8/1/2015</b>