



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

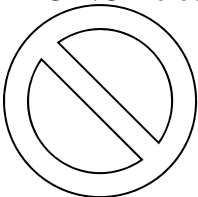
Other

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

June 21, 2017

VIA ELECTRONIC FILING

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

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 May 21, 2017, 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, appearing to read "Etta Lockey".

Etta Lockey
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: May 21, 2017
Date Submitted: June 21, 2017
Primary Affected Locations: Central Oregon
Primary Cause: Equipment Failure
Exclude from Reporting Status: Yes
Report Prepared by: April Brewer
Report Approved by: Heide Caswell / David O'Neill / Kevin Putnam

Event Description

On May 21, 2017, at 1:55 pm, 1,168 customers in Bend, Oregon, experienced an outage when a splice failed in an underground feeder which caused a fault to occur, tripping the circuit breaker open. At 9:55 pm the first restoration stage occurred, restoring power to all but two customers. At 10:12 pm the final two customers were restored.

Event Outage Summary	
# Interruptions (sustained)	4
Total Customer Interrupted (sustained)	2,432
Total Customer Minutes Lost	813,354
State Event SAIDI	1.36 Minutes
CAIDI	334
Major Event Start	5/21/17 12:00 AM
Major Event End	5/22/17 12:00 AM

Restoration Summary

Crews were quickly dispatched to the outage to begin an investigation. Overhead portions of the line were patrolled, extending to the first set of fault indicators located at the underground feeder dip, and no issues were found. Crews then reviewed and tested the beaker at the substation, which proved to be performing correctly, but left the response personnel unsure of the location of the fault event. Additional substation equipment was inspected and tested, all of which performed as expected. Underground cabinets were then verified and as crews began re-energizing the primary underground cable, fault indicator lights at the first underground cabinet began flashing, signaling a bad section of cable. Crews were able to narrow in on the fault location and began checking all vaults and cabinets, whereupon they discovered a failed underground cable splice. Once the failed splice was located crews isolated the faulted section of cable and customer restorations began.

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

Restoration Intervals

Total Customers Sustained	< 3 Hrs.	3 - 24 Hrs.	24-48 Hrs.
2,432	844	1,588	0

Restoration Resources

Personnel Resources	
Journeyman	9
Relay Technicians	1
General Foreman	1
Line Foreman	1
Apprentice	1
TOTAL	13

Materials	
Fault Indicator	6
Line splices	3
Sleeve	3

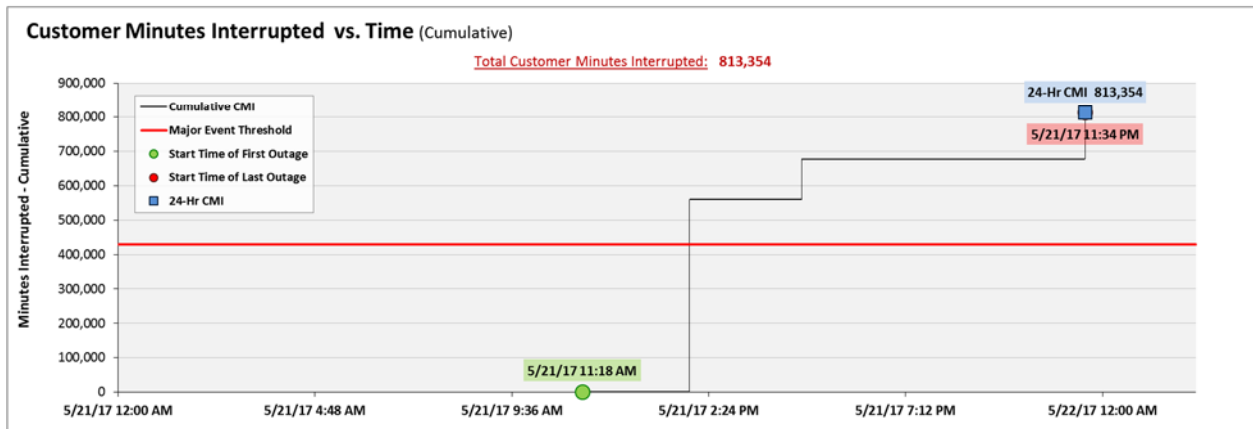
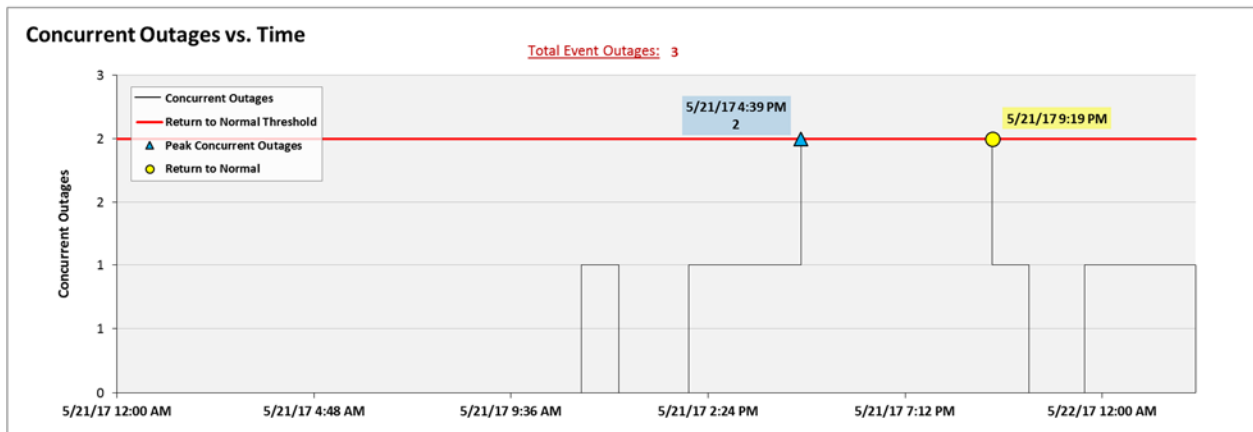
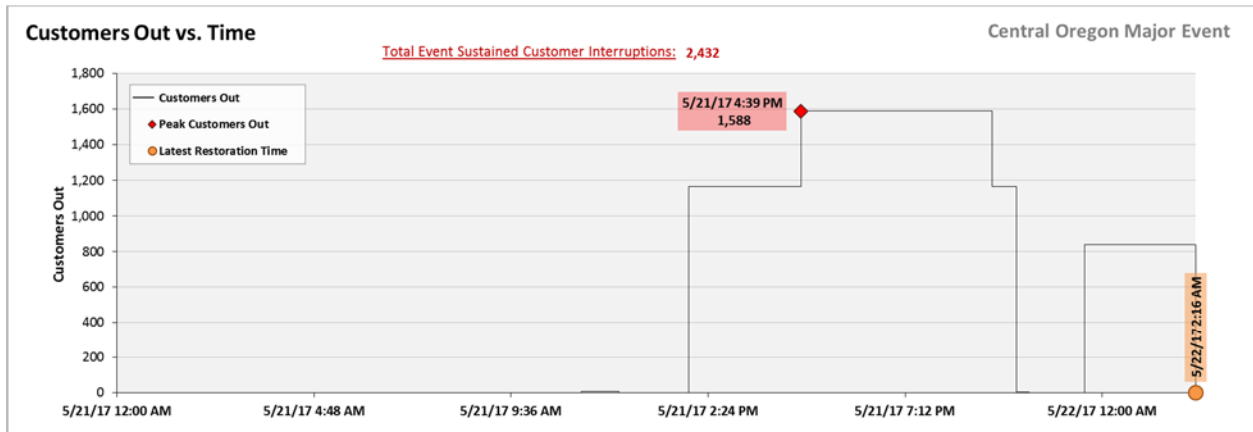
State Estimated Major Event Costs

Estimate \$	Labor	Material	Overhead	Total
Capital	\$ 7,199	\$ -	\$ -	\$ 7,199
Expense	\$ 15,722	\$ 2,576	\$ 898	\$ 19,197
Total	\$ 22,922	\$ 2,576	\$ 898	\$ 26,396

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 Central 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 Central Oregon reliability threshold is 429,381 customer minutes lost (5.40 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

Central - Oregon		Customer Analysis 5/21/2017 through 5/22/2017					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	2,432	0%	813,354	4	1,900,047	-	844	1,588	-	-	-	-	35%	0.43	0.001	334
PP	Pacific Power	2,432	0%	813,354	4	779,477	-	844	1,588	-	-	-	-	35%	1.04	0.003	334
OR	Oregon	2,432	0%	813,354	4	598,577	-	844	1,588	-	-	-	-	35%	1.36	0.004	334
OR	BEND/REDMOND	2,007	3%	695,613	2	62,949	-	839	1,168	-	-	-	-	42%	11.05	0.032	347
OR	MADRAS	425	3%	117,740	2	16,623	-	5	420	-	-	-	-	1%	7.08	0.026	277

*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 5/21/2017 through 5/22/2017		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
5/21/2017	2,432	0%	813,354	4	598,577	-	844	1,588	-	-	-	-	35%	1.36	0.004	334

Data as of
6/13/2017

PacifiCorp Major Event Report
SSC by State Analysis

	Central - Oregon	Event 05/21/17 through 05/22/17						Month 05/01/17 through 05/31/17						YTD FY2017 01/01/17 through 05/31/17					
		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	2.43	0.016	148	0.55	0.014	40	12.89	0.111	117	11.01	0.108	102	128.76	0.715	180	52.45	0.474	111
PP	Pacific Power	5.32	0.030	177	0.75	0.024	32	18.45	0.131	140	13.89	0.125	111	219.06	1.070	205	50.74	0.573	89
OR	Oregon	6.90	0.039	177	0.95	0.031	31	18.59	0.130	143	12.65	0.122	104	226.07	1.111	203	48.45	0.601	81
OR	BEND/REDMOND	1.16	0.003	347	-	-	-	1.38	0.005	287	0.22	0.001	150	7.35	0.026	284	0.98	0.006	150
OR	MADRAS	0.20	0.001	277	-	-	-	0.87	0.004	201	0.68	0.004	186	1.31	0.008	163	0.98	0.007	143

*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
6/13/2017