Report to the Washington Utilities and Transportation Commission

Electric Service Reliability - Major Event Report

Event Date: November 17-18, 2015

Date Submitted: January 27, 2016

Primary Affected Locations: Yakima and Walla Walla

Primary Cause: Wind and Rain Storm

Exclude from Reporting Status: Yes

Report Prepared by: April Brewer

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

Henderson / Kevin Putnam

Event Description

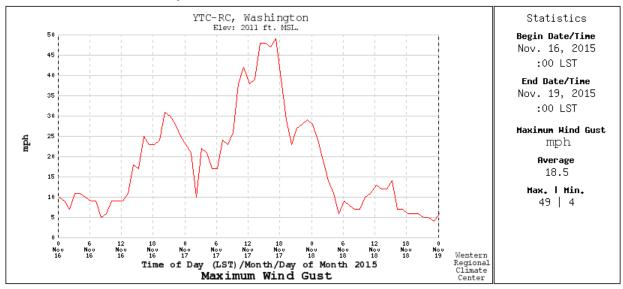
On November 17, 2015, the Yakima and Walla Walla area experienced a severe wind and rain storm. The storm brought high winds and rain to the northwest. Yakima sustained 63% of all the outages that occurred during the major event. Pole fire-related outages accounted for approximately 32% of all outages, affecting more than 2,200 customers, with a total of over 970,000 customer minutes lost. Tree related outages accounted for approximately 27% of all incidents, affecting over 1,800 customers, with over 445,000 customer minutes lost.

During the storm two significant outages occurred. The most substantial outage occurred at 6:14 pm in Walla Walla when a large tree fell on a primary overhead line. The outage affected 1,611 customers, with 924 customers restored at 9:34 pm, and 687 customers restored at 10:07 pm. In Yakima, circuit 5Y607 sustained the greatest impact during the event due to a pole fire, experiencing a total of 450,349 minutes lost.

Event Outage Summary			
# Interruptions (sustained)	106		
Total Customer Interrupted (sustained)	6,870		
Total Customer Minutes Lost	1,839,623		
State Event SAIDI Impact	13.4 Minutes		
CAIDI	268		
Major Event Start	11/17/15 11:13 AM		
Major Event End	11/18/15 5:30 PM		

¹ Pole fires occur when atmospheric conditions with light misting rain bonds with contaminants resulting in a breakdown of insulation, which leads to leakage current. If this leakage current passes through a dry wood pocket on its path to ground, it can ignite the crossarm or pole.

Wind Gust November 16-18, 2015



http://www.raws.com

Restoration Summary

During the storm a total of 106 sustained outages occurred, and at its peak 4,077 customers were without power. Restoration activities utilized 49 operations personnel. A total of 35 journeymen took part in the restoration efforts, replacing approximately 8,000 feet of conductor, 29 insulators, 25 cutouts, 28 crossarms, and five transformers. During the duration of the major event, 27% of customers interrupted were restored within 3 hours; no customers were off supply for more than 24 hours.

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.
6,870	1,873	4,997	0

Restoration Resources

Personnel Resources				
Service Coordinators	3			
Mechanics	1			
Metermen	2			
Plant Journeymen	3			
Collectors	2			
Estimators	1			
General Foreman	2			
Journeyman	35			
TOTAL	49			

Materials				
Insulators	29			
Pole top extender	8			
Cutouts	25			
Approximate Line Feet (conductor)	8,000 ft			
Crossarms	28			
Transformers (pole mounted)	5			

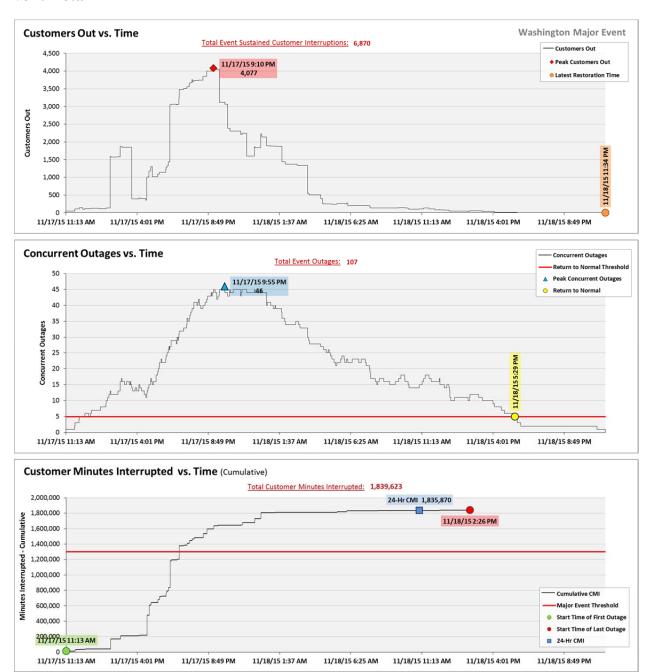
Estimated Major Event Costs

Estimate \$	Labor	Contracts	Materials	Total
Capital	\$13,000	\$25,000	\$27,000	\$65,000
Expense	\$119,000	\$123,000	\$24,000	\$266,000
Total	\$132,000	\$148,000	\$51,000	\$331,000

Major Event Declaration

Pacific Power is requesting designation of this event and its consequences to be classified as a "Major Event" for exclusion from network performance reporting with the IEEE 1366-2003/2012. This major event exceeded the company's current Washington threshold of 1,299,474 customer minutes lost (9.46 state SAIDI minutes) in a 24-hour period.

Event Detail



SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Please see the attached system-generated reports.