

Report to the Washington Utilities and Transportation Commission Electric Service Reliability - Major Event Report

Event Date:	January 5, 2018
Date Submitted:	February 14, 2018
Primary Affected Locations:	Walla Walla
Primary Cause:	Loss of Transmission
Exclude from Reporting Status:	Yes
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Report Approved by:	Heide Caswell / Kevin Putnam / David O’Neil / Pablo Arronte

Event Description

On January 5, 2018, Walla Walla, Washington, experienced a system average interruption frequency index (SAIFI)-based major event when transmission line conductors made contact phase to phase causing a fault that operated breakers at Mill Creek and Pomeroy. The outage affected 4,215¹ customers, or approximately 15% of the Walla Walla operating area’s customers with 3,037 customers restored in 20 minutes and the remaining 1,178 customers restored in 30 minutes.

Event Outage Summary	
# Interruptions (sustained)	5
Total Customer Interrupted (sustained)	4,215
Total Customer Minutes Lost	94,643
State Event SAIDI	0.70 Minutes
CAIDI	22
Major Event Start	1/5/18 12:00 AM
Major Event End	1/6/18 12:00 AM

¹ A SAIFI-based major event threshold (as identified in PacifiCorp’s reporting plan, pursuant to Washington Administrative Code (WAC) 480-100-393 & 398 Electric Reliability Annual Monitoring and Reporting Plan) is defined as an event in which more than 10% of an operating area’s customers are simultaneously without service as a result of a sustained interruption. Walla Walla operating area’s Calendar 2018 Frozen Customer Count is 28,594 customers.

Restoration Summary

Starting on January 4, 2018, a winter storm entered the Blue Mountain area of southeastern Washington and northeastern Oregon. During that time Walla Walla began experiencing icy weather conditions and heavy fog. By the morning of January 5, up to 3 inches of hoarfrost had developed on power lines. At 11:30 a.m. the hoarfrost which had grown on the 69 kV transmission line from Millcreek to Pomeroy unloaded from the conductor causing the transmission phases to contact, initiating a fault event at circuit breakers at the Mill Creek and Pomeroy substations to trip, which de-energized three substations that serve five circuits. Using SCADA, dispatch quickly responded, isolating sections on the line and successfully testing feeds to quickly restore all customers within 30 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.
4,215	4,215	0	0

Restoration Resources

Personnel Resources	
Journeyman	1
TOTAL	1

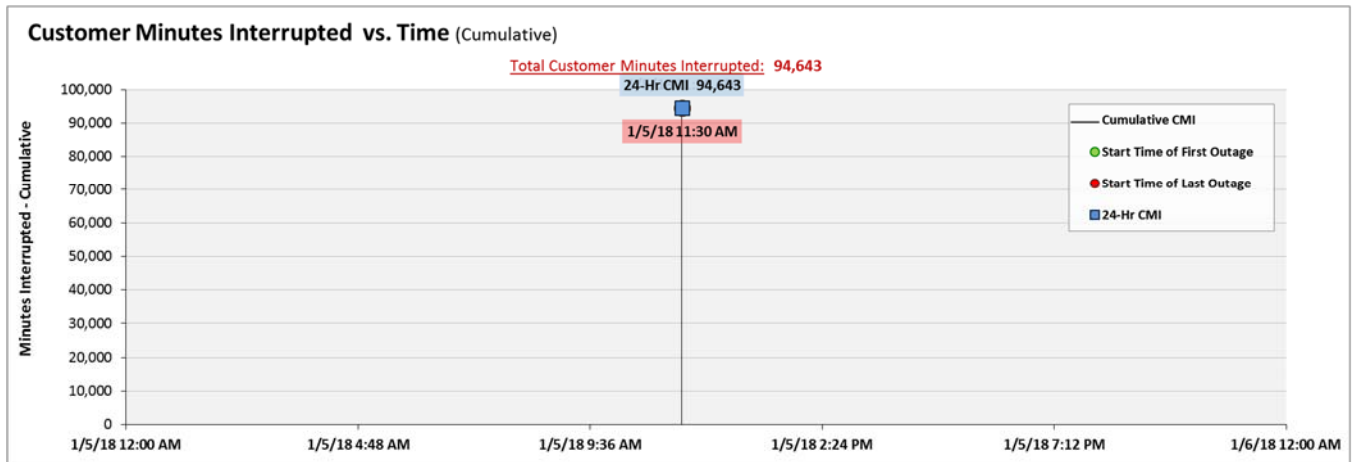
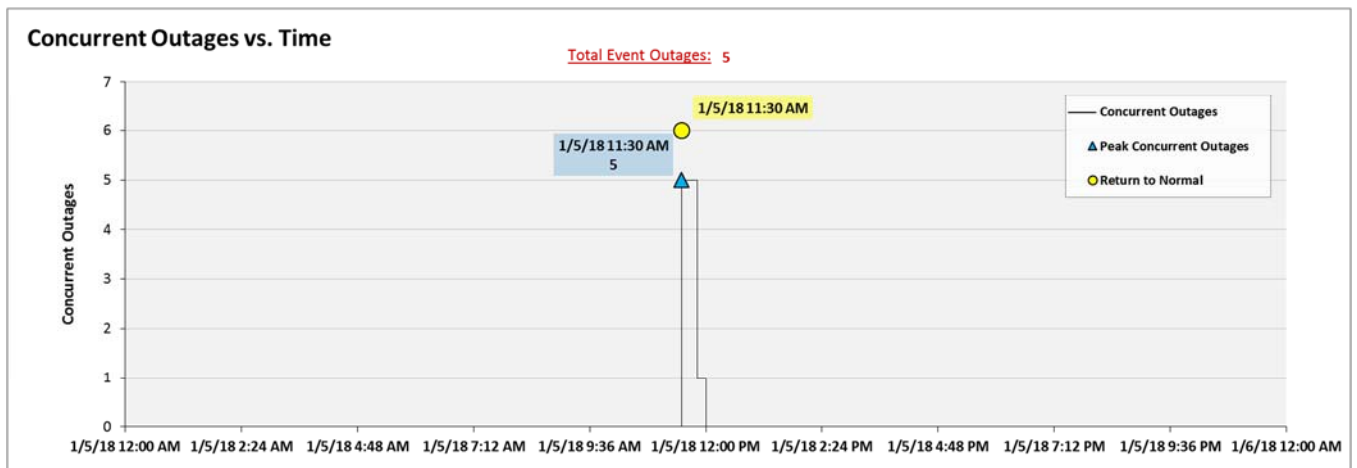
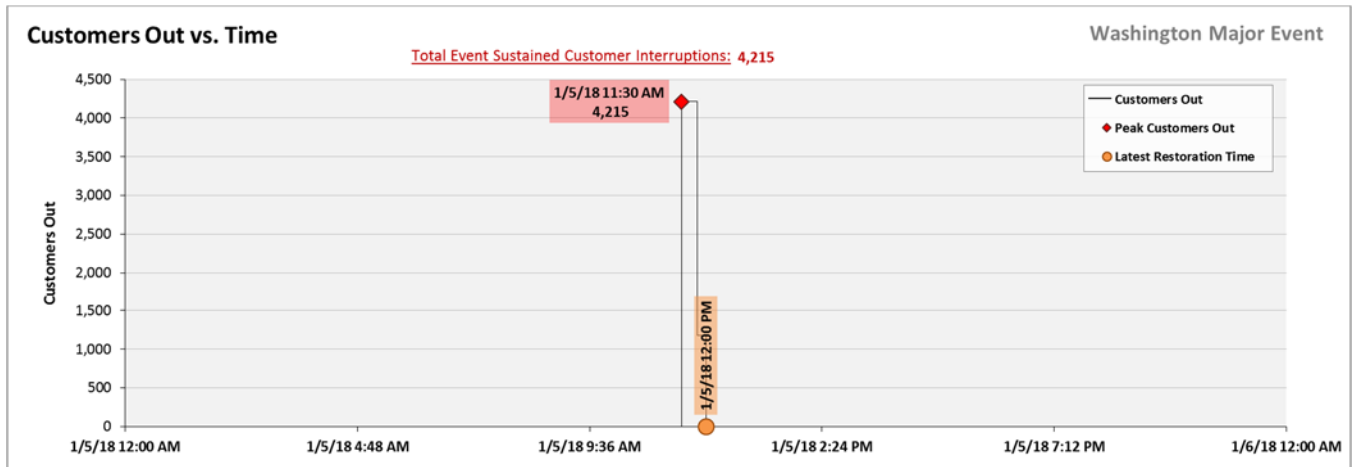
State Estimated Major Event Costs

Estimate \$	Labor	Material	Contract Resources *	Total
Capital	\$0	\$0	\$0	\$0
Expense	\$810	\$0	\$0	\$810
Total	\$810	\$0	\$0	\$810

Major Event Declaration

Pacific Power is requesting designation of this event and its consequences to be classified as a "Major Event" for exclusion from underlying network performance reporting. This major event exceeded the company's current Washington system average interruption frequency index-driven (SAIFI) threshold of 10% total operating area customers served sustained interruptions (4,215 customers interrupted out of 28,594 Walla Walla operating area customers, or 15% of the operating area customers) simultaneously in a 24-hour period.

Event Detail



SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Please see the attached system-generated reports.