

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

Event Date: October 14-15, 2019
 Date Submitted: November 22, 2019
 Primary Affected Locations: Walla Walla
 Primary Cause: Loss of Substation
 Exclude from Reporting Status: Yes
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 Report Approved by: Heide Caswell / Carrie Laird / Pablo Arronte

Event Outage Summary	
# Interruptions (sustained)	3
Total Customers Interrupted (sustained)	4,186
Total Customer Minutes Lost	740,792
State Event SAIDI	5.42 Minutes
CAIDI	177
Major Event Start	10/14/19 8:08 AM
Major Event End	10/15/19 8:08 AM

Event Description and Restoration Summary

At 8:08 a.m., on October 14th, 2019, Walla Walla, Washington, experienced a system average interruption frequency index (SAIFI)-based¹ major event when a woodpecker caused a fault on a distribution circuit breaker, causing extensive damage to one distribution circuit breaker and bus which caused the high side transformer fuses to open. The outage affected two circuits fed from the Mill Creek Substation, affecting 4,167 customers (14% of customers served in Walla Walla) with all customers restored within 2 hours 58 minutes.

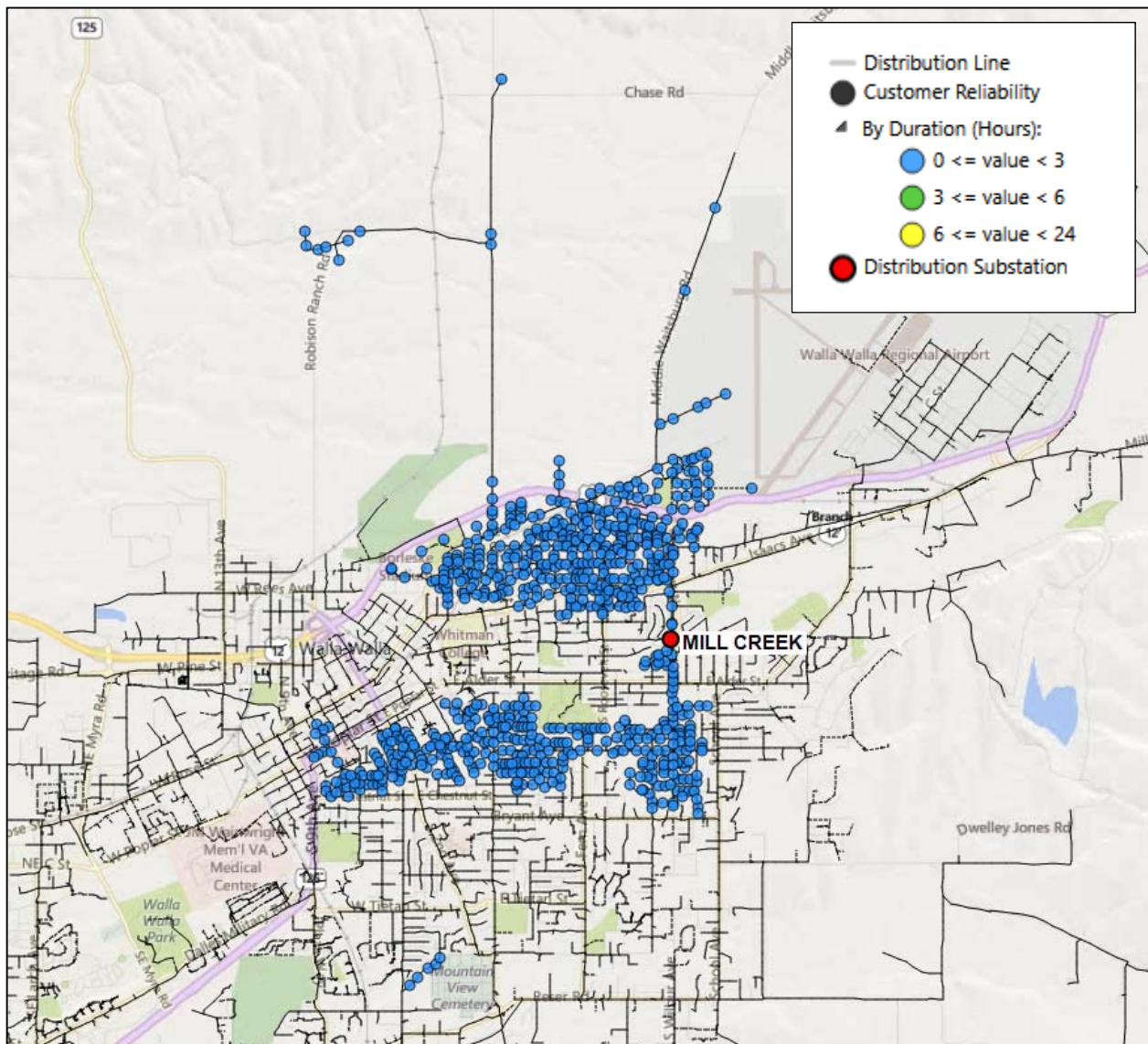
While crews were dispatched to the substation, engineers began analyzing loading levels of a second substation transformer to determine whether sufficient station capacity existed to energize the two tripped circuits in addition to the three circuits that it normally feeds. It was determined that there was capacity on the remaining 25mVA station transformer to support this, and crew members began efforts to transfer the two tripped circuits to restore customers. Before restoration of the circuit with the damaged breaker could be completed the bus tie

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 2019 Frozen Customer Count is 28,792 customers.

breaker needed to be utilized in place of the damaged breaker. An attempt to close the bus tie breaker failed and had to be investigated before switching could be completed. A blown internal fuse was found in the station house and replaced. Switching resumed, after the remaining energized circuits were transferred to the main bus the first circuit breaker was re-energized restoring 2,102 customers after 2 hours 56 minutes. Switching continued to restore the de-energized circuit by placing the load onto the bus tie breaker, restoring the remaining 2,065 customers after 2 hours 58 minutes.

Subsequently the company determined that additional bird guarding in the substation was warranted, and is being initiated.

To date, there have been no company or commission customer complaints made regarding the major event.



Restoration Intervals

Total Customers Sustained	< 3 Hrs.	3 - 24 Hrs.	24+ Hrs.
4,186	4,186	0	0

Restoration Resources ²

Personnel Resources	
Relay Tech	2
Servicemen	2
Substation Wireman	2
Managers	2
Total	8

Equipment	
69kV Transformer Fuses	3

State Estimated Major Event Costs ²

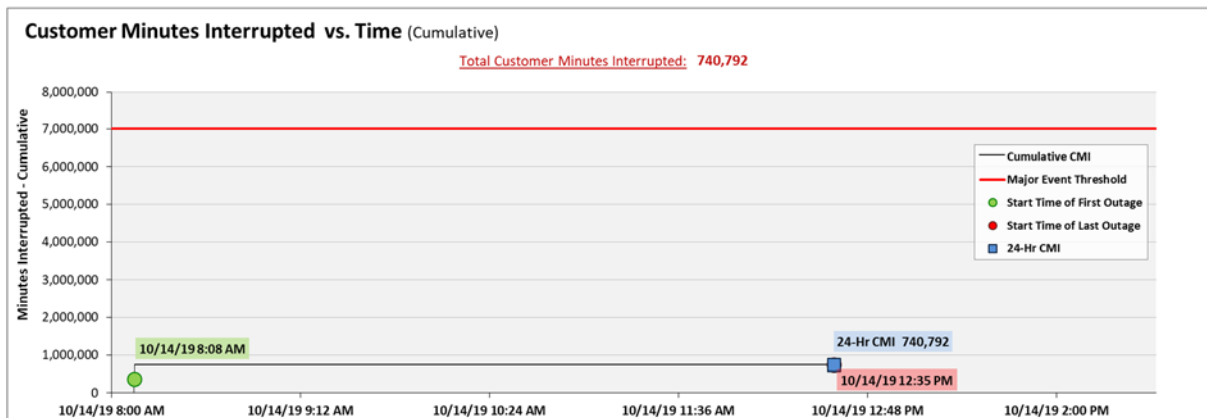
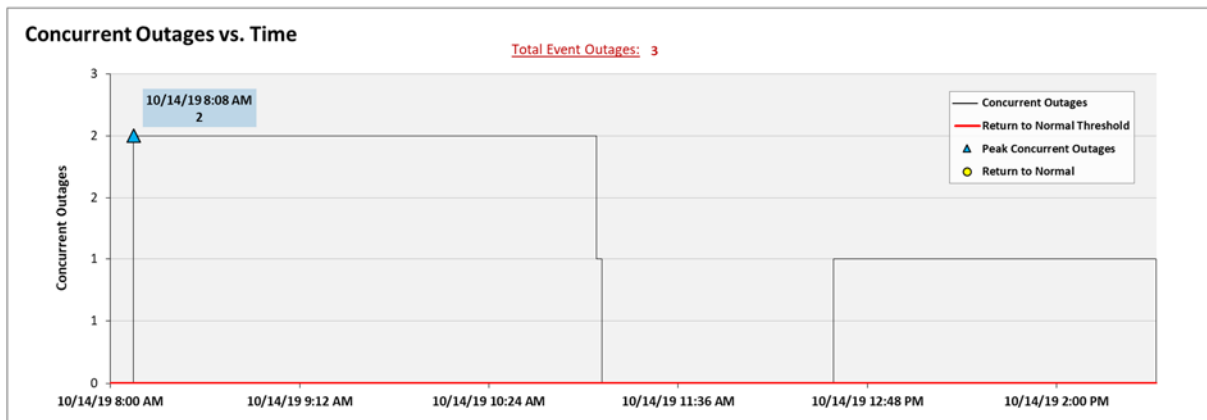
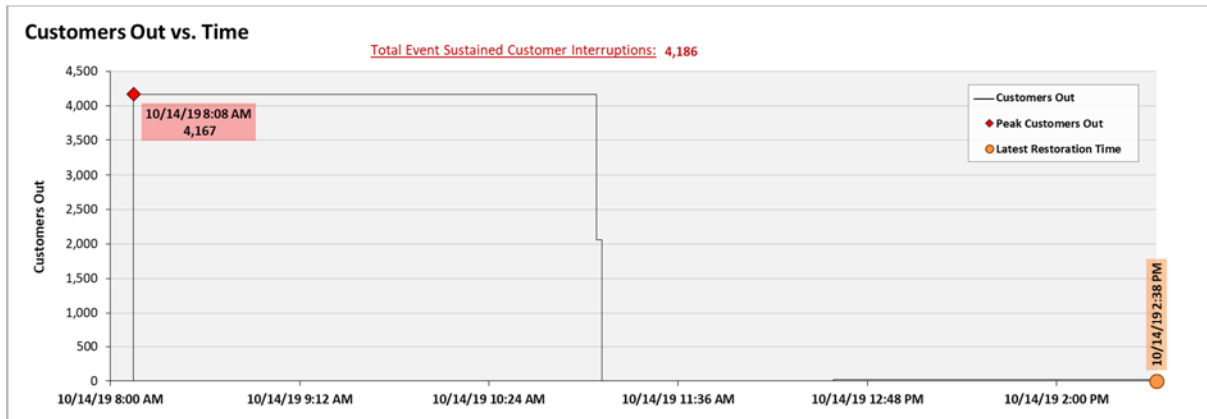
Estimate \$	Labor	Material	Overheads	Total
Capital	\$7,513	\$7,950	\$2,693	\$15,463
Expense	\$0	\$0	\$0	\$0
Total	\$7,513	\$7,950	\$2,693	\$15,463

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 (4,167 customers were interrupted out of Walla Walla’s 28,792 operating area customers, or 14% of the operating area customers) simultaneously in a 24-hour period.

² Data provided represents specific system records for personnel, resources, and costs; and is specific to the event, not inclusive of state delineation. However additional resources whose participation did not get individually captured in transaction recording systems were utilized during the event, thus the data presented here effectively understates the resources, including cost, involved in restoring the system to normal.

Event Detail



SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Please see the attached system-generated reports.