

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

Event Date:	December 31, 2021
Date Submitted:	February 2, 2022
Primary Affected Locations:	Sunnyside
Primary Cause:	Loss of Transmission Line
Exclude from Reporting Status:	Yes
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Report Approved by:	Heide Caswell / Mark Vanwinkle

Event Description and Restoration Summary

Event Outage Summary	
# Interruptions (sustained)	11
Total Customers Interrupted (sustained)	10,085
Total Customer Minutes Lost	109,641
State Event SAIDI	0.80 Minutes
CAIDI	11
Major Event Start	12/31/21 12:00 AM
Major Event End	1/1/22 12:00 AM

At 11:06 p.m. on December 31, 2021, Sunnyside, Washington, experienced a SAIFI-based major event due to a loss of supply outage. The event occurred when the Bonneville Power Administration (BPA) reported a tree had cause a permanent fault on the BPA-owned North Bonneville (BPA) - Outlook (PP) – Midway (BPA) 230 kilovolt (kV) transmission line. The fault tripped Outlook substation 2Y76 and 2Y80 circuit breakers which resulted in a loss of supply to distribution-fed substations Toppenish and Punkin Center (via PacifiCorp 115 kV transmission lines). Figure 1 below is a graphical representation of the affected network. Pacific Power immediately took actions to restore customers via alternate feed.

The Toppenish Substation lost feed to six distribution circuits serving a total of 6,031 customers. These customers were restored in nine minutes. The Punkin Center Substation lost feed to three distribution circuits, serving 4,046 customers. These customers were restored in 14 minutes. In total the event impacted 10,077 customers. Figure 2 depicts the customers out and the duration.

To date, there have been no commission or company complaints concerning this major event.

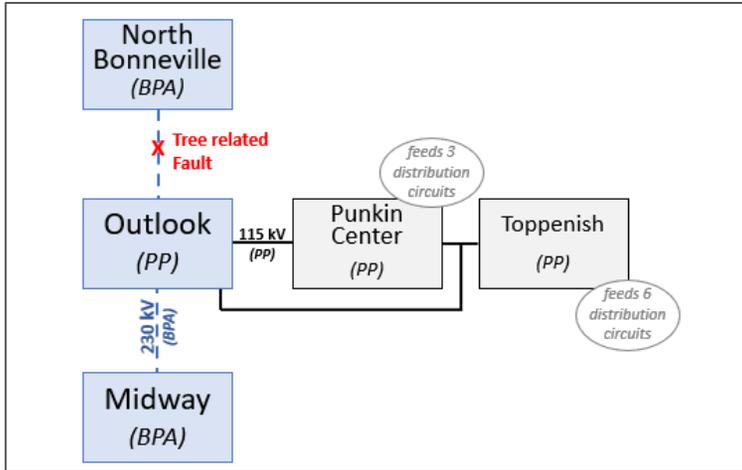


Figure 1. Affected system diagram

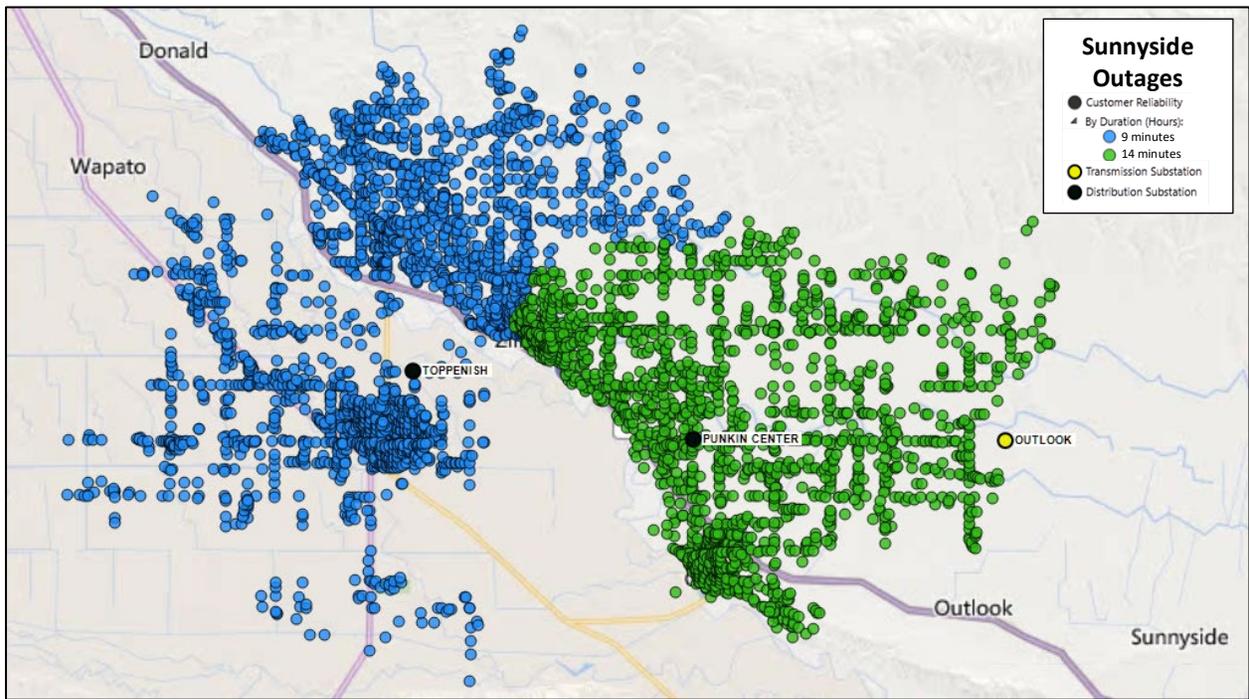


Figure 2. Sunnyside Major event outages.

Restoration Intervals

Total Customers Sustained	< 3 Hrs.	3 - 24 Hrs.	24-48 Hrs.
10,085	10,085	0	0

Restoration Resources ¹

Personnel Resources	
Support Staff	1
Substation Manager	1
Relay Tech	1
Total	3

State Estimated Major Event Costs

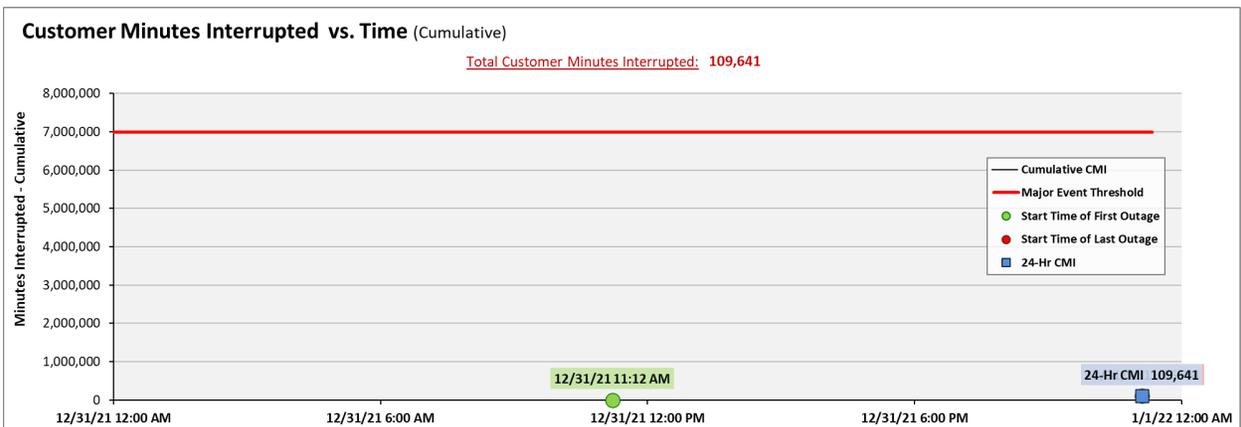
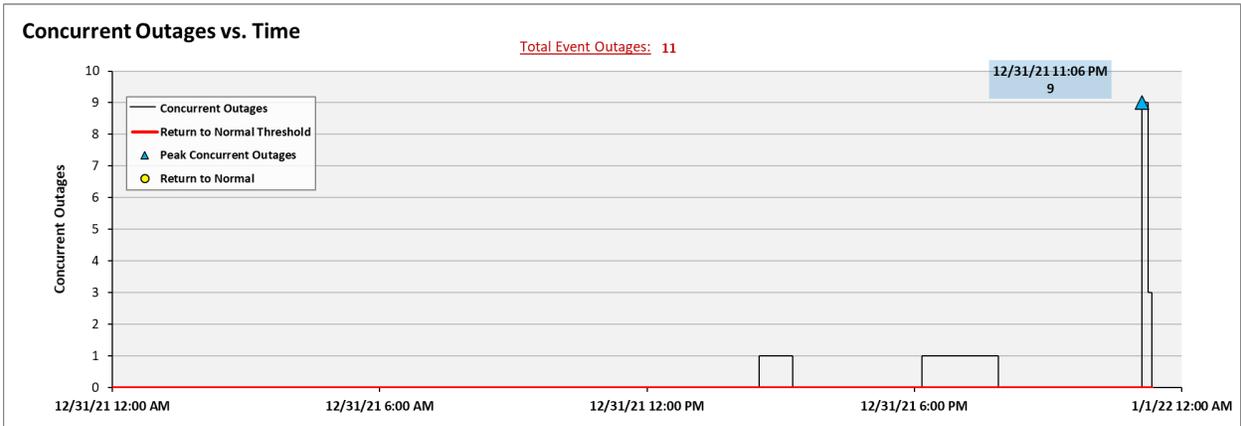
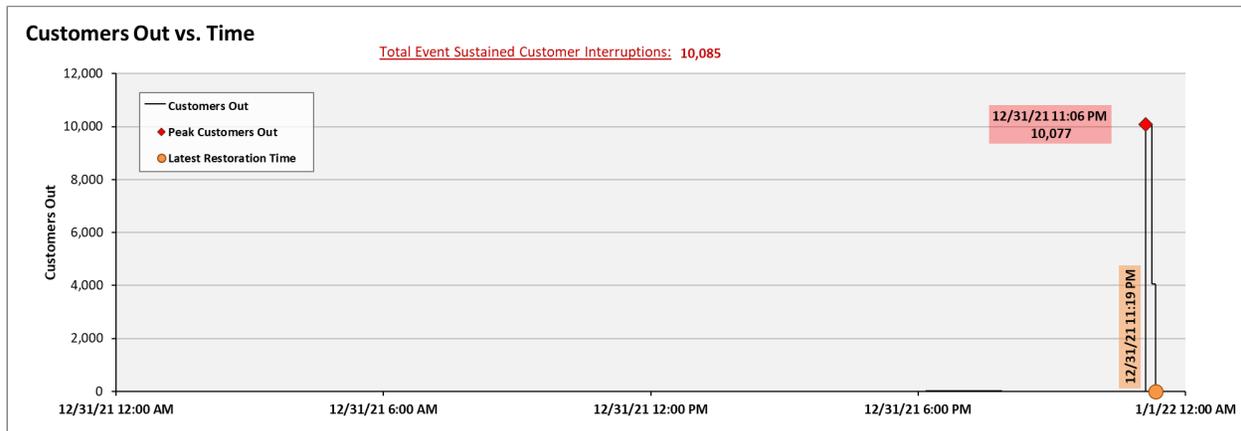
Estimate \$	Labor	Contracts	Material	Total
Capital	\$0	\$0	\$0	\$0
Expense	\$950	\$0	\$0	\$950
Total	\$950	\$0	\$0	\$950

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 (10,085 customers were interrupted out of 24,993 Sunnyside operating area customers, or 40% of the operating area customers) simultaneously in a 24-hour period.

¹ 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 may have been 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.