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

Event Date:	January 9, 2022
Date Submitted:	February 15, 2022
Primary Affected Locations:	Walla Walla
Primary Cause:	Loss of Supply
Exclude from Reporting Status:	Yes
Report Prepared by:	April Brewer
Report Approved by:	Heide Caswell / Tyler Andreatta

#### **Event Description and Restoration Summary**

Event Outage Summary					
# Interruptions (sustained) 6					
Total Customers Interrupted (sustained)	4,205				
Total Customer Minutes Lost	251,914				
State Event SAIDI	1.83 Minutes				
CAIDI	60				
Major Event Start	1/9/22 12:00 AM				
Major Event End	1/10/22 12:00 AM				

On the afternoon of January 9, 2022, Walla Walla, Washington, experienced a SAIFI-based major event that was the result of a winter storm culminating in a loss of supply outage when the circuit breaker at the Millcreek substation operated to lockout. The winter storm brought high winds and snow to the area. In the days prior to the substation outage the region experienced several outages due to snow and high winds which downed trees, resulting in equipment damage. As a result of the prior storm and tree related outages a helicopter patrol was requested on January 7<sup>th</sup>. On January 9<sup>th</sup> the helicopter patrol was available and dispatched. With the use of the helicopter and a snowcat, ground crews were quickly able to patrol the area to identify the location and clear damaged trees and debris from lines and right of way areas. Due to the responsiveness of the local operations team dealing with the multi-day weather outages, crews were primed for quick response to this loss of supply event.

The event on January 9<sup>th</sup>, affected three substations which serve a total of five distribution feeds. Personnel were able to quickly begin assessing the outages and develop a plan for stage restorations. Feed was quickly restored to the Waitsburg Substation, bringing power back to 1,085 customers within 19 minutes. Shortly thereafter, feed was restored to the Dayton substation, where 1,919 customers were restored in 32 minutes. Meanwhile, personnel dispatched a helicopter from Portland to patrol the transmission line, as ground access was

limited due to high snow drifts which blocked access to patrol the line. Once the patrol of the last section of the transmission line was complete crews were able to restore power to the Pomeroy Substation, serving 1,175 customers, restored within two hours 21 minutes. During the patrol no permanent damage was found on the line, and responders believed the outage was the result of high wind gusts combined with icing. Figure 1 below is a graphical representation of the affected network. Figure 2 highlights the geographical which was affected by the SAIFI-based major event.

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

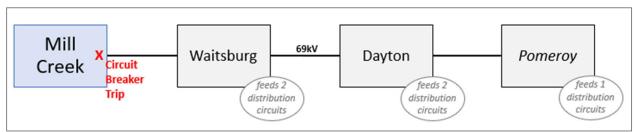


Figure 1. Affected system diagram

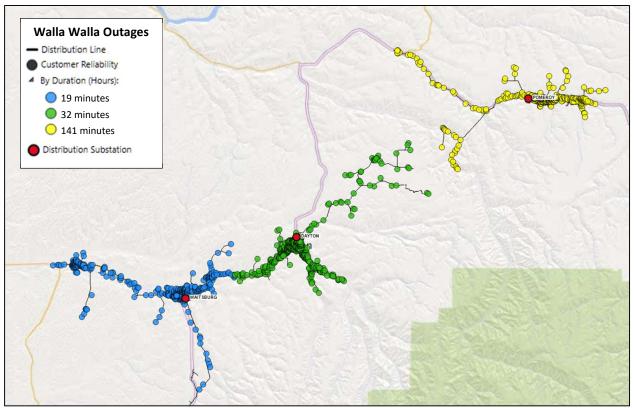


Figure 2. Walla Walla Major event outages.

#### **Restoration Intervals**

Total Customers Sustained	< 3 Hrs.	3 - 24 Hrs.	24-48 Hrs.	
4,205	4,205	0	0	

### **Restoration Resources**<sup>1</sup>

Personnel Resources					
Troubleman/assessors	3	Tree crewman	4		
Substation crewmembers	2	Foreman	1		
# Support staff	2	Warehouseman	1		
Line crewman	4	Total	17		

Resources					
Insulators	1	Helicopters	1		
Line fuses	6	Sid by side	1		
Snowcat	4				

### **State Estimated Major Event Costs**

Estimate \$	Labor	Contracts	Overhead	Total
Capital	\$0	\$0	\$0	\$0
Expense	\$41,670	\$7,022	\$1,607	\$50,299
Total	\$41,670	\$7,022	\$1,607	\$50,299

#### **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 indexdriven (SAIFI) threshold of 10% total operating area customers served sustained interruptions (4,179 customers were interrupted out of 28,323 Walla Walla operating area customers, or 15% of the operating area customers) simultaneously in a 24-hour period.

<sup>&</sup>lt;sup>1</sup> 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**

Custor	mers Out vs	. Time	Total Even	t Sustained Custome	r Interruptions: 4,20	15			
		tomers Out k Customers Out				1/9/22 1:17 PM 4,179	<b>◆</b> ┐		
		est Restoration Time							
± <sup>3,0</sup>	000 -								
Customers Out	500 -								
2,0 Custon	000								
1,5	500 -							1	M4 L1
	500 -								Mq 72:722/9/1
	0		r						1/9
1/9	9/22 12:00 AM	1/9/22 2:24 AM	1/9/22 4:48 AM	1/9/22 7:12 AM	1/9/22 9:36 AM	1/9/22 12:00 PM	1/9/22 2:24 PM	1/9/22 4:48 PM	1/9/22 7:12 PM
oncui	rrent Outag	es vs. Time		Total Eve	nt Outages: 6				
	6	rrent Outages				1/9/22 1:17 PM 5			
	5 - Return	to Normal Threshold				5	<b>†</b> ]		
ges		Concurrent Outages n to Normal							
Concurrent Outages	3 -								
curren	3								
Con	2								
	1								
	0								
1/9/	/22 12:00 AM	1/9/22 2:24 AM	1/9/22 4:48 AM	1/9/22 7:12 AM	1/9/22 9:36 AM	1/9/22 12:00 PM	1/9/22 2:24 PM	1/9/22 4:48 PM	1/9/22 7:12 PN
uston	mer Minute	s Interrupted	l vs. Time (Cur		linutes Interrupted:	251,914			
8,000,0									
7,000,0	Cumi	lative CMI							
6,000,0	Majo	r Event Threshold							
5,000,0	• Start	Time of First Outage Time of Last Outage							
4,000,0	2410	CMI							
2,000,0									
1,000,0								Hr CMI 251,914	
2,000,0	0					1/9/22	21:17 PM	1/9/	224:49 PM
1/9,	/22 12:00 AM	1/9/22 2:24 AM	1/9/22 4:48 AM	1/9/22 7:12 AM	1/9/22 9:36 AM	1/9/22 12:00 PM	1/9/22 2:24 PM	1/9/22 4:48 PM	1/9/22 7:12 P

# SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Please see the attached system-generated reports.