Report to the Washington Utilities and Transportation Commission

Electric Service Reliability - Major Event Report

Event Date: August 15, 2016

Date Submitted: October 20, 2016

Primary Affected Locations: Sunnyside

Primary Cause: Animal Interference

Exclude from Reporting Status: Yes

Report Prepared by: April Brewer

Report Approved by: Heide Caswell / Kevin Putnam / David

O'Neil / Steve Henderson

Event Description

On the morning of August 15, 2016, six circuit feeds from the Sunnyside substation were lost, when a squirrel damaged insulators within the substation. The outage event affected 6,395 customers with all customers restored within 6 hours 33 minutes. The event affected 27% of the total customers served within the Sunnyside operating area.

Event Outage Summary				
# Interruptions (sustained)	13			
Total Customer Interrupted (sustained)	6,452			
Total Customer Minutes Lost	1,744,288			
Event SAIDI	13.09 Minutes			
CAIDI	270			
Major Event Start	8/15/16 12:00 AM			
Major Event End	8/16/16 12:00 AM			

Restoration Summary

At 8:01 am on the morning of August 15, 2016, Sunnyside, Washington, experienced a loss of supply event when five of six transformer high side fuses operated at the Sunnyside substation, causing a loss of feed to 6 distribution circuits, serving 6,395 customers. Crews were quickly dispatched to the area to assess damage and begin restoration activities, with the first responder arriving at 08:39 am. Once personnel arrived at the substation it was determined that a squirrel had damaged insulators to the main bus, one circuit breaker, and also had damaged three disconnect switches.

Crews began working with dispatch and area engineers to develop the appropriate substation switching orders in an effort to begin restoring power to customers concurrent with isolating power feeds to the equipment needing repair. At 09:33 am implementation of the switching

orders started and service restorations began. By 12:17 pm all switching orders were completed, restoring power to 5,464 customers. The remaining 931 customers remained out of power until 2:34 pm, when equipment repairs were completed. Upon the completion of the repairs substation switching was restored to its normal configuration.

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.
6,452	57	6,395	0

Restoration Resources

Personnel Resources			
Troublemen	16		

Materials			
15KV Post Insulators	8		
Misc. Fasteners	31		

State Estimated Major Event Costs

Estimate \$	Labor	Contracts	Materials	Total
Capital	\$20,680	\$150	\$5,210	\$26,040
Expense	\$0	\$0	\$0	\$100
Total	\$20,680	\$150	\$5,210	\$26,040

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 1,297,750 customer minutes lost (9.74 state SAIDI minutes) in a 24-hour period.

Event Detail



SAIDI, SAIFI, CAIDI by Reliability Reporting Region

Please see the attached system-generated reports.