

APRIL 23 SKAGIT COUNTY AND WHIDBEY ISLAND OUTAGE

Reason, Response and Recovery - Initial Review

PSE

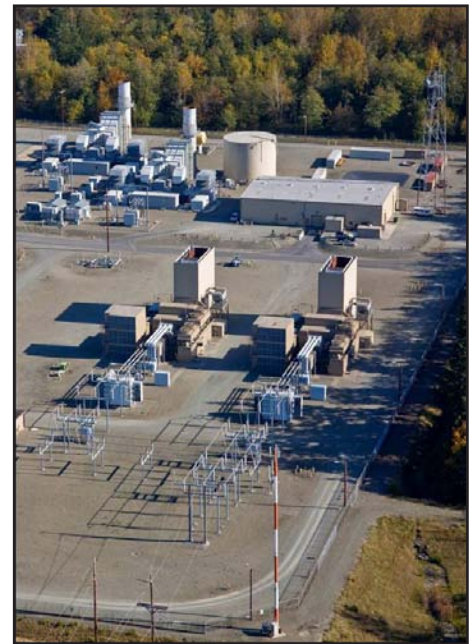
PUGET SOUND ENERGY

The Energy To Do Great Things

On April 23, 2009, Puget Sound Energy experienced a widespread power outage, which impacted 93,000 customers and 244 megawatts of generation in Skagit County and Whidbey Island. PSE has determined that the outage, which began at 5:44 p.m. with PSE restoring power to all by mid-night, resulted from a combination of scheduled and unplanned events.

Why did it happen?

- Three components of our transmission system were out for scheduled construction upgrade work
 - March Point substation
 - Sedro-Woolley - Bellingham No. 4 115 kV line
 - Beaver Lake - Beverly Park 115 kV line
- A transmission line connector failed three miles south of Bellingham on the Sedro-Woolley - Bellingham No. 4 115 kV line
- This was a rare, prolonged and disguised equipment failure; it acted as multiple failures
- These multiple failures were recognized by our protection systems, which tripped off two transmission components: Sedro-Woolley transformer and the Sedro-Woolley - Bellingham No. 4 line
- A car-pole accident, which was reported simultaneously with the Sedro-Woolley - Bellingham No. 4 line tripping off line, was not the cause of the outage; however, because of the coincidental timing, limited information, public safety issues, and our focus to restore power, the accident was initially reported by the news media as the most likely cause
- These two system events combined with the three planned and scheduled major construction upgrades on our transmission system took us beyond where it is safely designed to operate – and to protect itself, the system, as designed, shut the power off, allow us to isolate the problem to safely restore service as quickly as possible



March Point substation

Restoration

- PSE crews quickly began restoring power to Whidbey Island and Skagit County customers within an hour of the outage
 - Within one hour, all power was restored on Whidbey Island
 - Within three hours 75 percent of our customers were restored in Skagit County
 - All widespread outage customers in Skagit were restored within six hours
- PSE was able to bring our March Point substation online and used its generation facilities in Skagit County—Fredonia natural gas facilities and the Baker River Hydroelectric Project—to restore power