



Kanata, Ottawa,
Canada Toronto,
28 December, Canada
2008 15 January,
2009

Virgin Islands,
26 November,
2008

Caracas,
Venezuela,
11 December,
2008

blackout

Watch

Analysis of system power outages can help us learn and avoid similar events in the future. If you have information on any blackouts, please e-mail to:

[http://editor@pacw.org](mailto:editor@pacw.org)

■ The entire St. Thomas-St. John District lost power after a generator failed due to the explosion of a boiler tube on a 36 megawatt steam turbine, triggering a massive shutdown at the Randolph E. Harley facility in Krum Bay.

■ The fourth major outage for the year hit the capital Caracas and some other areas of the country around 4 p.m. Electricity gradually began returning to parts of the capital after about 50 minutes. The cause of the blackout is not yet known.

■ Severe and unusual lightning strikes caused short circuits on the transmission lines between HECO's Kahe and Waiau generating plants triggered a series of generation shutdowns and the eventual island-wide power outage. The 6:30 p.m. power outage affected about 300 thousand customers. While



Oahu, Hawaii,
26 December,
2008

Singapore,
10 January,
2009

Auckland,
New Zealand,
3 February,
2009
Melbourne,
Australia,
30 January,
2009

most of the power was restored within 12 hours, some areas of Oahu were without power for 36 hours.

■ 7,500 customers in the Kanata North area were without electricity at about 10:30 a.m. with the cause of the outage unknown. Earlier that morning another 1,300 customers experienced an outage caused by a downed conductor.

■ A blackout caused by equipment failure at the substation of Block 442 lasted for at least two hours and affected areas of Singapore.

■ A faulty sprinkler system belonging to Ontario's Hydro One utility is to blame for a power blackout that left a quarter of a million people in Toronto without electricity and heat on one of the coldest nights of the year.

The water reached about 1 meter and soaked transformers and circuit breakers forcing crews to shut down the entire substation.

■ The mass blackout was caused by the failure of a transmission cable running between South Morang and Sydenham. Up to 300 thousand people have been affected in dozens

of suburbs including South Melbourne, Westgarth, Sunshine and Melton. 1000 MW of load was shed in order to keep another transmission line in service.

■ About 74,000 homes and businesses were hit by a power outage, stretching from Mt Wellington to Newmarket. The outage is believed to have started from a transformer fault at 1:10pm. One of the three substation transformers had been out of service for maintenance when a failure in the second caused the overload and the tripping of the third.

Time and location of the System & Power Disturbances in 2008