

.cc. Councillor Shad Qadri (Shad.Qadri@ottawa.ca)

Subject: August 17th Power Outage

Dear Resident,

We received your email about the power outages that affected our customers in Stittsville on August 17th and I want you to know that we regret the inconvenience you experienced. Providing dependable service, day in and day out, is our core customer commitment and we continue to take steps to deliver on that commitment.

Allow me to explain what happened on August 17th, to outline our plans to improve service reliability in the Stittsville area, and to provide more information about Hydro Ottawa's power outage communications systems.

Causes and Resolutions of August 17th Outages in Stittsville

The first outage in Stittsville on August 17th occurred at 3:36 in the afternoon at which time our system control and monitoring system identified that an overhead switch (the RX2010, located outside of Alexander Distribution Station on the Alex F3 circuit), which feeds part of Stittsville had opened, causing 3000 customers to lose power. Shortly after, the Ottawa Fire Department called our System Desk to report a "pole fire" in John Woods/Mika area. Immediately, we dispatched a service crew to this area.

By 5:00, Hydro Ottawa field staff determined that there was a broken connection on an overhead switch in this area. This broken connection resulted in a short circuit, which caused both the fire and the overhead switch to open. Our staff completed the repairs, tested and confirmed the operability of the switch, which we then reclosed at 6:39 in the evening, restoring power to customers.

At 6:47, our system control office received reports of more outages occurring at the Fernbank end of Stittsville, for customers served by another switch (RX2013). This older switch is not remotely monitored and controlled from our system office. We immediately dispatched a crew to investigate. By 7:08, the crew reported that this switch had opened and that they were examining the line for any associated problems.

At the same time, our system office called back several customers who had reported power outages earlier in the day, thereby determining that some of these customers had been without power since 3:36 pm. The crew found no problems on the line and attempted to close this switch at 7:30 pm. The switch re-opened, so the crew attempted to close it a second time, but again the switch re-opened.

Under normal circumstances, this measure would restore power. But unfortunately, August 17th was an unusually hot day and a large number of customers had their air conditioners in use. Consequently, the demand for power was extraordinarily high and our crew had to restore power to groups of customers in a sequenced way to ensure that

the switch would not trip again. Within the next 90 minutes, the power was restored to all customers.

Current Reliability Issues in Stittsville

Hydro Ottawa is aware that the reliability of the electricity system in Stittsville has not been up to our expectations in 2010. The electric utility industry measures system reliability using two key indicators: SAIFI (System Average Interruption Frequency Index) which is the measure of the average number of interruptions customers experience in a year, and SAIDI (System Average Interruption Duration Index) which is the measure of the average length of each outage in hours.

In 2010, due largely to periods of high temperatures, unusually intense lightning, wind and rain storms, and perhaps the heaviest road construction season in recent memory, SAIDI and SAIFI numbers for Stittsville have been higher than usual.

Hydro Ottawa Improvements Now Underway

Currently, most of the Stittsville community is fed from a single distribution station owned by Hydro One. This distribution station is connected to a long sub-transmission line (44 kV), which has some exposure to failure. As such, Hydro Ottawa has identified Stittsville as a priority area for upgrades. To improve reliability in Stittsville, we have several projects now underway, including:

- New remotely monitored and controlled switches have been installed on the two circuits out of the Alexander Distribution Station, which supplies power to many of our customers in Stittsville. This will enable us to isolate problems at the Alexander Station, without requiring Hydro One involvement. In addition to better overall service, this will enable Hydro Ottawa to restore power more quickly to our Stittsville customers when an outage does occur.
- Hydro Ottawa is replacing much of the old equipment still operating in the Stittsville area. We are installing new transformer connections for 23 ground mounted transformers, four new connection boxes (pedestals) and three new ground mounted switches.
- Hydro Ottawa is purchasing land adjacent to the Hydro One transmission corridor near Terry Fox Drive and preparing the engineering needed for the construction of a new transformer station, called the Terry Fox Transformer Station.
- To provide back-up support for this new station and further flexibility and capacity in the Stittsville area over the short-term, we are planning to connect two new feeders to the existing circuits from the Janet King station on Hazeldean Road this year. These new feeders will share the load with the Alexander circuits which supply much of Stittsville. They will also provide backup supply to the Alexander Distribution Station and the Bridlewood Municipal Station, which also supplies power to a portion of Stittsville.

Plans for Future Improvements to Stittsville's Electricity System

Over the next two years, we have several major projects planned to further improve service to our customers in Stittsville. These include:

- The new Terry Fox Transformer Station will be constructed during 2011 and 2012 and is scheduled to be in service in 2013. This new station and new distribution circuits from the station will provide immediate support for south Kanata and Stittsville and the long-term capacity required to meet the high growth anticipated for these areas.
- Hydro Ottawa will continue to replace transformer connections throughout Stittsville and will install another remotely operated switch to provide further back up to the Stittsville area. This will allow Hydro Ottawa's system operators to remotely transfer loads and restore power faster without having to dispatch crews to the problem area.
- Equipment on the Stittsville main overhead system will also be revitalized beginning in 2011, including the replacement of "fuse" cut-outs with modern equipment that will facilitate faster restoration times in the event of an outage.

Hydro Ottawa's Power Outage Reporting Systems

Hydro Ottawa has two systems in place for power outage reporting and information. The first is designed to enable customers to report outages and the second is to alert the media about power outages.

When a customer calls our power outage line at 613-738-0188, this customer service prompts the caller for their street number and automatically matches the incoming call to Hydro Ottawa's database of customer phone numbers and addresses. Immediately, an outage report is generated, and our outage management system adds that new information to what is already known. Typically, this takes less than 30 seconds.

To date, this automated system has significantly improved our ability to field customer calls quickly and effectively during outages, dramatically reducing the number of busy signals and improving outage diagnostics and response times. Any feedback from customers about their experience with our outage line is welcome and taken into account as we continue to enhance its functionality.

Hydro Ottawa also has a system in place to inform the media by e-mail about outages affecting more than 500 customers. These e-mail alerts provide key information about the outage, including the number of customers affected, the area affected, the estimated time of restoration (if known) and the cause of the outage (if known). If the outage is prolonged, updates are sent regularly. This service helps to ensure that important outage information is available to Ottawa homes and businesses in a timely way.

I trust that this email has answered your questions about what happened on August 17th to our system in Stittsville. I also hope that it has addressed your concerns by explaining the many positive steps Hydro Ottawa is taking to address reliability issues in Stittsville and to keep our customers informed when outages do occur.

As a company that delivers an important service to the public, nothing is more critical to Hydro Ottawa's success than providing reliable service and investing for the future. Please rest assured that we are committed to meeting these vital objectives to the benefit of our customers in Stittsville.

Sincerely,

Norm Fraser
Chief Operating Officer
Hydro Ottawa Limited