

Prior to the Major Event

1. Did the distributor have any prior warning that the Major Event would occur?

High wind warnings were forecasted by Environment Canada prior to the event.

2. If the distributor did have prior warning, did the distributor arrange to have extra employees on duty or on standby prior to the Major Event beginning? If so, please give a brief description of arrangements.

Yes. Regular on call/standby operational resources that were in place included line department employees (2) on call as well as a control room system operator (1) and stations employee (1) on standby. In addition, arrangements were made with a number of regular staff, supervisors and managers to be available if needed and a third party contractor was also placed on call along with a forestry crew from the Town of Whitby who was on notice to assist if needed. Whitby Hydro engages the services of a third party call centre who provides 24/7 outage assistance for customers and answers customer calls after-hours.

3. If the distributor did have prior warning, did the distributor issue any media announcements to the public warning of possible outages resulting from the pending Major Event? If so, through what channels?

No media announcements were issued in advance.

4. Did the distributor train its staff on the response plans for a Major Event? If so, please give a brief description of the training process.

Whitby Hydro operations (including line, control room and stations) employees are provided job-related training and are on-call or on standby as part of their regular employment. This ensures operations staff are available 24/7 and prepared to respond quickly to address outages of varying significance. Applicable staff are trained on the outage management system, customer call handling and routine website updates. Processes for communication between Whitby Hydro and its third party call centre are in place to ensure information is made available to customers calling in, and through social media (Twitter) and a website outage map. Operations management will contact appropriate staff to communicate, provide or engage additional resources if required to address a major event.

5. Did the distributor have third party mutual assistance agreements in place prior to the Major Event? If so, who were the third parties (i.e., other distributors, private contractors)?

Yes - Whitby Hydro is one of nineteen electricity distributors who participate in the South Central Ontario LDC Mutual Assistance Plan. This includes neighbouring utilities who can provide additional equipment, material or staff. Whitby Hydro also has the ability to call upon contractors as necessary depending on the type of event. This particular event did not require the engagement of additional assistance from the mutual assistance plan.



During the Major Event

1. Please explain why this event was considered by the distributor to be a Major Event.

For the event that spanned May 4-5, the IEEE 1366 TMED threshold was exceeded. During this timeframe Whitby Hydro experienced a loss of supply from Hydro One. High winds and gusts ranging up to 120 km/hour also contributed to the major event. The event was not preventable by Whitby Hydro.

2. Was the IEEE Standard 1366 used to identify the scope of the Major Event? If not, why not?

Yes, IEEE Standard 1366 (preferred method) was used to identify the scope of the Major Event.

3. Please identify the Cause of Interruption for the Major Event as per the table in section 2.1.4.2.5.

Cause Code 2 – Loss of Supply Cause Code 6 – Adverse Weather

4. Were there any declarations by government authorities, regulators or the grid operator of an emergency state of operation in relation to the Major Event?

No.

5. When did the Major Event begin (date and time)?

The event began on May 4th at 5:25pm.

6. What percentage of on-call distributor staff was available at the start of the Major Event and utilized during the Major Event?

All regular on-call staff was available at the start of the event. In addition, approximately 11 line staff (80% of those not on call) made themselves available and were utilized over the course of the major event to maintain coverage during restoration. Operations supervisors and management staff worked a portion of both days. Management from engineering and customer service also provided technical, customer service and communications assistance.

7. Did the distributor issue any estimated times of restoration (ETR) to the public during the Major Event? If so, through what channels?

Yes, there were estimates released to the public during the major event through media statements, website updates and through Twitter.

8. If the distributor did issue ETRs, at what date and time did the distributor issue its first ETR to the public?



Whitby Hydro issued the following information to the public on May 4th & 5th:

- Media Statements (5) were issued at approximately 7pm, 9pm, 10:30pm, midnight, and 5am. The first two media statements were largely related to the outage due to loss of supply from Hydro One and as a result, did not include ETRs. As more information became available and restoration efforts continued, the latter three media statements included ETRs.
- Twitter (16) updates were made starting at 6pm on May 4th and ending just after 12pm on May 5th. All but two tweets indicated an ETR or provided information that power in specific areas had been restored.
- Website contained updates from the outage map and Twitter feed
- 9. Did the distributor issue any updated ETRs to the public? If so, how many and at what dates and times were they issued?

Please see the outline of communications provided in question 8.

10. Did the distributor inform customers about the options for contacting the distributor to receive more details about outage/restoration efforts? If so, please describe how this was achieved.

Whitby Hydro's website contains contact information including the 24/7 outage line. This information is provided on the website home page in the outage map section as well as various other areas of the website.

Just under half of the Tweets posted reminded customers of Whitby Hydro's outage phone contact information. All media statements included phone and email contact information. Further, three of the media statements included the outage phone contact information for customers.

11. Did the distributor issue press releases, hold press conferences or send information to customers through social media notifications? If so, how many times did the distributor issue press releases, hold press conferences or send information to customers through social media notifications? What was the general content of this information?

Whitby Hydro issued five media releases. Updates were available through the Whitby Hydro outage map (updated every 5 minutes) and Twitter was updated 16 times (approximately every $1 - 1\frac{1}{2}$ hour). The type of communication and timing is outlined in response to questions 8 and 10.

The content of media releases and Twitter postings provided an update on the general cause of the outage, the approximate number of customers without power and to confirm that power was restored or timing of when it was expected to be restored for any remaining customers affected. Customers were also provided with a contact phone number.



Public safety messages regarding downed wires were included in three of the five media releases and in three Twitter posts. Outage boundaries were identified in some of the Twitter postings.

12. What percentage of customer calls were dealt with by the distributor's IVR system (if available) versus a live representative?

Whitby Hydro does not use an IVR system. All customer calls were addressed by Whitby Hydro customer service staff or through third party call centre resources.

13. Did the distributor provide information about the Major Event on its website? If so, how many times during the Major Event was the website updated?

The website outage map is updated every five minutes (please see response to question 14). Twitter was updated 16 times during the event and the Twitter feed is displayed on the website alongside of the outage map.

14. Was there any point in time when the website was inaccessible? If so, what percentage of the total outage time was the website inaccessible?

The website was accessible during the major event. There were some technical difficulties associated with refreshing the outage map with updated information which occurred at the beginning of the event for a short period of time however, these were quickly identified and resolved within a two hour window. During that period, customers could continue to view the Twitter information on the website (alongside of the outage map) for updates and ETRs.

15. How many customers were interrupted during the Major Event? What percentage of the distributor's total customer base did the interrupted customers represent?

Overall, 32,641 customers were affected by the outage which represents about 77% of Whitby Hydro's customer base. Further details are provided in response to question 16.

16. How many hours did it take to restore 90% of the customers who were interrupted?

The event initially caused an outage at 5:25pm on May 4, 2018 due to adverse weather. At 5:49pm, a large number of customers were affected by the loss of supply from Hydro One. Over 70% of customers affected had their power restored in less than 2 hours and within 3.5 hours just under 90% of customers had power restored.

17. Was any distributed generation used to supply load during the Major Event?

No.

18. Were there any outages associated with Loss of Supply during the Major Event? If so, please report on the duration and frequency of Loss of Supply outages.



Yes, there were two Loss of Supply outages. One lasted 6 minutes and the other was 4 hours and 37 minutes. The Hydro One Loss of Supply outages affected 19,226 Whitby customers and represented 15,559 customer outage hours.

19. In responding to the Major Event, did the distributor utilize assistance through a third party mutual assistance agreement?

No.

20. Did the distributor run out of any needed equipment or materials during the Major Event? If so, please describe the shortages.

No shortage of equipment or materials occurred during the major event.



After the Major Event

1. What steps, if any, are being taken to be prepared for or mitigate such Major Events in the future (i.e., staff training, process improvements, system upgrades)?

The following additional steps are being taken to ensure a state of readiness for major events:

- Continue to review and update Whitby Hydro's emergency protocols including coordination with the Town of Whitby for larger scale emergencies. Continue participation in mock emergency drills with the Town of Whitby.
- Continue to look for opportunities to make effective system improvements to maximize benefits to the system with a view to reduce outages.
- Continue to explore possible opportunities to further leverage system technology.
- 2. What lessons did the distributor learn in responding to the Major Event that will be useful in responding to the next Major Event?

The restoration effort was well handled. Benefits were recognized from the recent enhancements to communication protocol and the subscription to a media newswire service. This helped to keep customers and stakeholders informed during the major event.

3. Did the distributor survey its customers after the Major Event to determine the customers' opinions of how effective the distributor was in responding to the Major Event? If so, please describe the results.

No. Whitby Hydro did not survey its customers about this event.