



Peterborough Distribution Inc.
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November 15, 2017

Ontario Energy Board
PO Box 2319
27th Floor, 2300 Yonge St
Toronto ON M4P 1E4

ELECTRICITY REPORTING AND RECORD KEEPING REQUIREMENTS
Section 2.1.4.2.10 - Major Event Response Reporting

Peterborough Distribution Inc. (PDI) is submitting this letter to report details of a Major Event that occurred in Peterborough on October 15th, 2017 in accordance with the Ontario Energy Board's (OEB) Electricity Reporting and Record Keeping Requirements.

“When a distributor determines an outage was caused by a Major Event, it shall file a report with the OEB that outlines the distributor’s response to the Major Event, including answers to all of the questions set out below. The distributor shall file this report with the OEB within 60 days of the end of the Major Event unless there are exceptional circumstances, in which case the report can be filed within 90 days of the end of the Major Event. The distributor shall also post this report on its website at the same time it is filed with the OEB.”

Prior to the Major Event

Q1. Did the distributor have any prior warning that the Major Event would occur?

A1. Yes. There were weather advisories that were in place in advance of the storm that warned of high winds and intense storm cells due to a cold front moving across the province. However, the potential impact of the storm was difficult to quantify when compared to a hurricane, tornado, or major ice storm.

Q2. 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.

A2. No extra employees were called on standby ahead of the storm. There was no clear indication that this storm would cause as much significant damage as it did.

Q3. 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?

A3. No prior media announcements were provided ahead of this storm. There was no clear indication that this storm would cause as much significant damage as it did.

Q4. 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.

A4. We perform periodic test scenarios for major outages in our control centre to enhance our state of readiness.

Q5. 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)?

A5. Yes. Peterborough Distribution Inc. (PDI) is part of the South Central Ontario LDC Mutual Assistance Plan which includes seventeen other utilities. PDI has also provided regional assistance to Hydro One during major events.

During the Major Event

Q1. Please explain why this event was considered by the distributor to be a Major Event.

A1. This event should be considered to be a Major Event since it was caused by an intense windstorm with gusts up to 90 km/h. The trees that were brought down onto our lines during this event caused extensive damage to our assets, took significantly longer than usual to repair, and affected a substantial number of customers.

Q2. Was the IEEE Standard 1366 used to identify the scope of the Major Event? If not, why not?

A2. Yes. The SAIDI/day on the event date of October 15th, 2017 was 45.7. The threshold for a major event based on the previous five years of data from 2012 to 2016 is 15.7 SAIDI/day.

Q3. Please identify the Cause of Interruption for the Major Event as per the table in section 2.1.4.2.5.

A3. The cause of the interruption was split between three codes:

- 2 – Loss of Supply
- 3 – Tree Contacts
- 6 – Adverse Weather

Q4. Were there any declarations by government authorities, regulators or the grid operator of an emergency state of operation in relation to the Major Event?

A4: No. The Peterborough Police and Fire personnel provided assistance for closing the sections of roads that were affected by fallen trees.

Q5. When did the Major Event begin (date and time)?

A5: The major event started on Sunday, October 15th at 4:11 pm.

Q6. What percentage of on-call distributor staff was available at the start of the Major Event and utilized during the Major Event?

A6: Three on-call operations staff members were on duty as well as one social media coordinator. All of these staff members were utilized during the Major Event. Other staff members were called in to help with the outage response.

Q7. Did the distributor issue any estimated times of restoration (ETR) to the public during the Major Event? If so, through what channels?

A7. The outage information was communicated to the public through social media and press releases. The estimated time of restoration was communicated as updates were available. Continual communication was provided on the status of the outage.

Q8. If the distributor did issue ETRs, at what date and time did the distributor issue its first ETR to the public?

A8. The first social media notification was at 4:22 pm. The first press release was provided at 5:59 pm. The press release noted that crews were on site patrolling the area for further damage.

Q9. Did the distributor issue any updated ETRs to the public? If so, how many and at what dates and times were they issued?

A9. Fourteen separate social media notifications were provided to inform the public of the status of the restoration process. Eight media releases were sent out to provide details on the outage status and the number of customers affected.

Q10. 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.

A10. The main form of communication during the event was through social media platforms. Our contact information is provided on our website but it was not specifically re-communicated back to our customers during the event.

Q11. 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?

A11. Please see the answer to Question 9 for the number of press releases and social media notifications. No press conferences were held during the event.

Q12. What percentage of customer calls were dealt with by the distributor's IVR system (if available) versus a live representative?

A12: No calls were dealt with through the distributor's IVR. This event happened on a Sunday when the office was initially closed. The calls were handled by a live representative through our after-hours call answering service until staff were brought into the office to directly answer customer calls.

Q13. 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?

A13: Yes, our social media channels are automatically re-broadcasted on our website. There were fourteen separate updates about this event on our website.

Q14. Was there any point in time when the website was inaccessible? If so, what percentage of the total outage time was the website inaccessible?

A14: No

Q15. How many customers were interrupted during the Major Event? What percentage of the distributor's total customer base did the interrupted customers represent?

A15: The peak amount of customers interrupted was 11,700 which are 31% of our customer base.

Q16. How many hours did it take to restore 90% of the customers who were interrupted?

A16. 69% of our customers were unaffected by this storm
74% of customers were restored within 2 hours and 49 minutes
79% were restored within 3 hours and 28 minutes
83% were restored within 3:42
93% were restored within 4:24

Q17. Was any distributed generation used to supply load during the Major Event?

A17. Yes. Distributed generation was interrupted during the initial event. It was brought back online during the subsequent restoration to support the loading of a temporarily overloaded feeder.

Q18. 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.

A18: Yes, there were eight separate outages due to loss of supply during the major event. These eight outages were separately accounted at the 27.6 kV and 4.16 kV distribution levels but were all caused by the loss of supply of one incoming 44 kV transmission feeder. The duration of these outages varied from 6 minutes to 3 hours and 42 minutes.

Q19. In responding to the Major Event, did the distributor utilize assistance through a third party mutual assistance agreement?

A19. No

Q20. Did the distributor run out of any needed equipment or materials during the Major Event? If so, please describe the shortages.

A20. No

After the Major Event

Q1. 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)?

A1. PDI has implemented a fault location, isolation, and restoration on our 27.6 kV distribution system. It is currently in test mode since full staff training is scheduled for later this year. This system triggered a switching order which would have automatically restored power to some customers during the event. This system will be brought into automatic mode once the staff training is completed.

Q2. What lessons did the distributor learn in responding to the Major Event that will be useful in responding to the next Major Event?

A2. The public awareness of outages continues to increase due to the increased adoption of social media and mobile devices. The public's expectation of communication during outages is higher than in the past. Every effort is made to communicate as much as possible when accurate information is available.

Q3. 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

A3. No. Customer surveys were not conducted after the Major Event; however the feedback from our social media platforms on our outage response was quite positive.

Please contact the undersigned if further information or clarification is required. Peterborough Distribution Inc. continues its effort to work safely and improve its system reliability in order to best serve their customers.

Respectfully,

A handwritten signature in black ink, appearing to read "Michael Ploc", is displayed on a light gray rectangular background.

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