Major Events
RESPONSE REPORT

Issue: December 15th to December 18th, 2022, §2.1.4.2 Major Events Response Report

Date Issued:

Prepared for: Publication and Electronic Filing with the Ontario Energy Board ("OEB")

Summary:

On the morning of Thursday, December 15th, 2022, a Colorado low weather system with freezing rain, wet snow and strong wind gusts swept across Ontario. Freezing rain impacted the following areas: Georgian Bay region, London-to-Bruce Peninsula region and Kitchener-to-Waterloo region extending north to Wellington County. High winds also impacted southwestern Ontario, Georgian Bay, and Central Ontario. This storm affected a total of ~232,000 (approximately 16%) customers.

This is the fourth Major event in 2022.

A. Prior to the Major Event

1. Did the distributor have any prior warning that the Major Event would occur?
   ☒ Yes ☐ No
   Additional Comments:
   The IBM Predication Software and Weather Monitoring tool indicated the potential for a significant 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?
   ☒ Yes ☐ No
   Brief description of arrangements, or explain why extra employees were not arranged: N/A

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?
   ☒ Yes ☐ No

4. Did the distributor train its staff on the response plans to prepare for this type of Major Event?
   ☒ Yes ☐ No

B. During the Major Event

1. Please identify the main contributing Cause of the Major Event as per the table in section 2.1.4.2.5 of the Electricity Reporting and Record Keeping Requirements.
   ☒ Loss of Supply
   ☐ Lightning
   ☐ Adverse Weather-Wind
   ☐ Adverse Weather-Snow
   ☐ Adverse Weather-Freezing rain/Ice storm
   ☐ Adverse Environment-Fire
   ☐ Adverse Environment-Flooding
   ☒ Other
   Please provide a brief description of the event (i.e., what happened?). If selected "Other," please explain: _____
   The main contributing causes of the Major Event were tree contacts and equipment failures.

2. Was the IEEE Standard 1366 used to derive the threshold for the Major Event?
   ☐ Yes, used IEEE Standard 1366*
   ☐ No, used IEEE Standard 1366 2-day rolling average
   ☒ No, used fixed percentage (i.e., 10% of customers affected)
   *The OEB preferred option

3. When did the Major Event begin (date and time)?
   An elevated emergency level was declared at 10:33AM on 12/15/2022.
   A level 1 emergency was declared at 8:34AM on 12/16/2022.

4. Did the distributor issue any information about this Major Event, such as estimated times of restoration, to the public during the Major Event?
   ☒ Yes ☐ No
   If yes, please provide a brief description of the information. If no, please explain:
   During this event, restoration priority was provided to the crews. Once damage was assessed, each incident ticket was updated to include cause code and Estimated Time Restoration (ETR). For those incidents where crews were not available, Damage Assessors were used to assess the

damage and provide updates. All ETR updates could be viewed by our customers on the Hydro One Outage Map and were also available on our automatic notification system via the Interactive Voice Response (IVR) system.

5. How many customers were interrupted during the Major Event?

Approximately 232,000 customers[1]

What percentage of the distributor's total customer base did the interrupted customers represent?

Approximately 16%

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

It took 82 hours and 34 minutes from the onset of the Major Event to restore 90% of the impacted customers.

7. Were there any outages associated with Loss of Supply during the Major Event?
☒ Yes ☐ No
If yes, please report on the duration and frequency of the Loss of Supply outages: _____

PRIMARY CAUSE	NUM INT	CUST INT	CUST HRS INT
Loss of Supply	1	248	273.5

8. In responding to the Major Event, did the distributor utilize assistance through a third-party mutual assistance agreement with other utilities?
☒ Yes
☐ No
☐ Do not have third party mutual assistance agreements with other utilities
If yes, please provide the name of the utilities who provided the assistance?

Durham High Voltage	K-Line	Ainsworth
Iconic	Lakefront Utilities	North Bay Hydro
Entegrus	ERTH	EPCOR
Devries Power and Utility	Sproule Powerline Construction	Holland Power
T&T Line Construction	Vickers Power Line	Kingston Utilities

[1] Including loss of supply events

9. Did the distributor run out of any needed equipment or materials during the Major Event?

☐ Yes ☒ No

If yes, please describe the shortages: _____

C. After the Major Event

1. What actions, if any, will be taken to be prepared for, or mitigate, such Major Events in the future?

☐ No further action is required at this time

☒ Additional staff training

☒ Process improvements

☐ System upgrades

☐ Other

Additional Comments:

A storm debrief meeting took place on January 6th, 2023 to identify lessons learned and develop recommendations.