



2.1.4.2.10 Major Event Response Reporting – August 24, 2023

Please note that, except Loss of Supply events, a Major Event shall meet all of the criteria listed under the first, second and fourth paragraph of the Major Event definition written under section 2.1.4.2 of the Electricity Reporting and Record Keeping Requirements (RRR).

Prior to the Major Event

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

Yes No

Additional Comments:

Environment Canada had issued warnings in the late afternoon and evening of August 24, 2023, describing the potential of a storm with high winds and a risk of tornado activity. A sample of an Environment Canada alert received is provided below.

Issued at 2023-08-24 6:30PM EDT by Environment Canada:

Severe thunderstorm watch continued severe thunderstorm watch for:
Windsor - Leamington - Essex County, Ont. (041420)

Current details:

Conditions are favourable for the development of dangerous thunderstorms that may be capable of producing damaging wind gusts, large hail and torrential rain.

Hazards:

Damaging wind gusts of 100 to 120 km/h.

Torrential rainfall producing local amounts of 50 to 75 mm over just a few hours.

Nickel to ping pong ball size hail.

Risk of tornadoes.

Timing:

This evening into the early overnight.

Discussion:

Thunderstorms developing over Lower Michigan will track into southwestern Ontario this evening. The primary threats will be damaging wind gusts and torrential rainfall, followed by large hail. Saturated ground may result in an increased likelihood of down trees in the event of damaging winds. A tornado threat cannot be ruled out this evening.

Fast-moving water across a road can sweep a vehicle away. Large hail can damage property and cause injury. Very strong wind gusts can damage buildings, down trees and blow large vehicles off the road. Heavy downpours can cause flash floods and water pooling on roads.

Lightning kills and injures Canadians every year. Remember, when thunder roars, go indoors!

Emergency Management Ontario recommends that you take cover immediately if threatening weather approaches.

Severe thunderstorm watches are issued when atmospheric conditions are favourable for the development of thunderstorms that could produce one or more of the following: large hail, damaging winds, torrential rainfall.

Please continue to monitor alerts and forecasts issued by Environment Canada. To report severe weather, send an email to ONstorm@ec.gc.ca or tweet reports using #ONStorm.



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 Not Applicable

Brief description of arrangements, or explain why extra employees were not arranged:

ENWIN was aware of the potential for approaching severe weather during the afternoon and evening of August 24, 2023. However, the Environment Canada warnings of a potential windstorm were received later in the evening, with the storm ultimately reaching Windsor at approximately 10:27 pm.

Due to the timing of the weather alert and the uncertainty of potential impacts, ENWIN did not call-in additional employees to standby in advance of the storm. ENWIN regularly maintains an afternoon shift of a single bucket truck, and this crew was on shift the evening of August 24, 2023. This crew was immediately mobilized to assess the damage and address hazards during the weather event.

As the scale of outages became evident shortly after the beginning of the storm, a call out for additional ENWIN line crews was executed. ENWIN management simultaneously scheduled field crews, system control, and supervisory staff to provide 24-hour storm restoration. Shifts of crews worked 24 hours per day beginning August 24, 2023. As noted below, approximately 90% of customers were restored in under 6 hours of the outage peak occurring.

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 Not Applicable

At 4:02 pm on August 24, 2023, ENWIN tweeted a message in response to an Environment Canada rainfall warning. This tweet noted the adverse weather warning and precautions customers should take (please see a copy below).



ENWIN Utilities Ltd. @ENWINUtilities

A rainfall warning is in effect for this evening in the Windsor-Essex area. ENWIN is reminding customers that poor weather conditions may cause downed wires. Drive with care. Stay at least 30 feet away from downed wires and report any to ENWIN at 519-255-2727.

16:02 · 2023-08-24 from Earth · 4,149 Views

4. Did the distributor train its staff on the response plans to prepare for this type of Major Event?

Yes No

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:

A significant summer storm was experienced in southwestern Ontario during the evening of August 24, 2023. The storm produced very high



winds, which post-event, were determined to also include two separate tornado touch downs within ENWIN's service territory. There were many incidents of fallen trees, broken poles and similar wind-driven damage throughout the City of Windsor.

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
- *The OEB preferred option

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

Date	August 24, 2023
Time	10:27 pm

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:

ENWIN posted tweets describing areas affected by the storm and an approximate restoration time when that information was determined. Tweets included directions to visit the ENWIN website to view the outage map, to read information about power restoration, and actions to take during prolonged power outages.

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

A peak of approximately 19,800 customers were without power.

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

21.2%

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

5 hours, 45 minutes. The outage peak occurred at approximately 12:30 am on August 25, 2023. At that point, approximately 19,800 customers were



without power. By 6:15 am August 25, 2023, greater than 90% of the peak load loss had been restored.

Additional Comments:

None.

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:

Not Applicable.

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?

Essex Powerlines Corporation

Assistance was also provided by a third-party line contractor, Black & McDonald.

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

Yes No

If yes, please describe the shortages

Not Applicable.



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:

The Major Event was caused by a storm with very high winds, which post-event, was determined to include two separate tornado touch downs within ENWIN's service territory. ENWIN has invested in system automation/remote operation that allow for remote reconfiguration of distribution feeders in event of upset. These system automation devices are in place to allow for the smallest area of feeder circuit to be automatically isolated due to the fault condition while allowing for quick restoration of the remaining load.

ENWIN also continues to focus on continual improvement. It is currently working on upgrades to its outage management system, which will offer enhancements to its customer outage map, with more granularity of information provided to customers including confirmation of the outage area and estimated times of restorations for each outage. This will also assist with process improvements to further enhance outage response and reporting.