



Major Event Reporting
August 24-25, 2023

TABLE OF CONTENTS

TABLE OF CONTENTS	1
Preface	2
Prior to the Major Event	3
During the Major Event.....	4
After the Major Event	6

PREFACE

On August 22, 2023, at 1:03 pm, Environment Canada issued a multi-day Severe Thunderstorm Warning for certain locations within Southwestern Ontario (including Chatham-Kent) for August 23 - August 24, 2023. On August 24, 2023 at 10:59 pm, Environment Canada replaced the Severe Thunderstorm Warning with a Tornado Warning.

Entegrus experienced its first distribution system outage at 11:00 pm on August 24, 2023 in Chatham, caused by adverse weather – wind. Thereafter, additional distribution system and Loss of Supply outages occurred in Bothwell, Chatham, Erieau, Tilbury and Wheatley. The primary cause of the distribution system outage was adverse weather which caused multiple instances of tree contact and equipment breakage.

As the outages occurred, Entegrus notified customers via social media channels, Twitter and Facebook. Outage information was also provided via the Entegrus website's outage map. All posts included information on investigation efforts, causes and Estimated Time of Restoration ("ETR") (where possible). The updates also contained safety information, including how to prepare for an outage.

Entegrus maintains third party mutual assistance agreements for restoration efforts. Entegrus requested assistance from Bluewater Power for this storm. Bluewater Power arrived the morning of Friday, August 25 and stayed until the evening of Saturday, August 26. Entegrus operational staff restoration efforts continued until August 28 at 3:57 pm.

The following media article from the Chatham Daily News provides additional details on the storm and associated restoration: <https://www.chathamdailynews.ca/news/local-news/storm-ravages-chatham-kent-knocks-out-power-to-thousands>

The storm was considered a Major Event because it met the Major Event criteria using the IEEE Standard 1366 methodology¹. Entegrus serves approximately 63,000 customers. During the Major Event on

¹ Ontario Energy Board, Electricity Reporting and Record Keeping Requirements, Section 2.1.4.2.

August 24 – August 25, 2023, there were 20,755 customers without electricity (not related to Loss of Supply), representing approximately 33% of Entegrus customers. In addition, there were an additional 2,000 customers interrupted due to Loss of Supply within the transmitter or host distributor system, for an aggregate total of 22,755.

The remainder of this report is in the format prescribed by the Ontario Energy Board (“OEB”).

PRIOR TO THE MAJOR EVENT

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

Yes. On August 22, 2023, at 1:03 pm, Environment Canada issued a multi-day Severe Thunderstorm Warning for certain locations within Southwestern Ontario (including Chatham-Kent) for August 23 - August 24, 2023. On August 24, 2023 at 10:59 pm, Environment Canada replaced the Severe Thunderstorm Warning with a Tornado Warning.

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.

The boundaries of the EPI service territory stretch from Wheatley in the southwest to Parkhill in the northeast. The boundaries are non-contiguous, and the distance across the Entegrus service territory is approximately two hours travel time by vehicle. Accordingly, Entegrus operates two operational centres, one in the Entegrus southwest region (located in Chatham) and another in the Entegrus northeast region (located in St. Thomas).

As described in question #1 above, Entegrus had prior warning about the storm. The event occurred after business hours, and as such Entegrus had on-call staff ready to respond and other staff on standby. Restoration efforts continued after-hours throughout the afternoon of August 28, 2023.

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. Entegrus posted on its Facebook and Twitter page on August 24 at 4:28 pm that severe thunderstorms were expected throughout its service area. Entegrus encouraged customers to keep safety top of mind if the severe weather occurred and provided tips related to safety precautions during an outage.

4. Did the Distributor train its staff on the response plans to prepare for this type of major event?

Yes.

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. Please provide a brief description of the event.

The main contributing causes of the Major Event were “Tree Contact from Adverse Weather” and “Equipment Breakage from Adverse Weather”. The storm resulted in tree limbs falling and making contact with infrastructure as well as equipment breakage.

2. Was the IEEE Standard 1366 used to identify the scope of the Major Event?

Yes. In accordance with OEB guidance, Entegrus calculated this Major Event using the IEEE Standard 1366 methodology.

3. When did the Major Event begin?

The Major Event began on August 24, 2023 at 11:00 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? If Yes, please provide a brief description of the information. If No, please explain.

Yes, Entegrus provided continual updates on outage and restoration efforts at each specific community level, as there were multiple concurrent outages throughout the Entegrus service

territory. The updates were shown on the Entegrus website, specifically the outage map page. Updates were also posted on social media channels, Twitter and Facebook. All posts included information on investigation efforts, causes and ETRs (where possible). The updates also contained safety information, including how to prepare for an outage.

The Entegrus website contains an embedded Facebook feed to allow for customers who do not follow social media to receive updates.

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

Entegrus serves approximately 63,000 customers. During the Major Event on August 24, 2023, there were 20,755 customers interrupted (unrelated to Loss of Supply), representing approximately 33% of Entegrus customers.

See #7 below for additional details regarding Loss of Supply from this storm.

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

The time to restore 90% of the customers who were interrupted was 15.5 hours.

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

Yes. In addition to the interruptions noted in #5 above, there were additional Loss of Supply outages in the communities of Tilbury, Wheatley and Erieau aggregating to an additional total of 2,000 customers interrupted. The duration of the outages were 3.93 hours in Tilbury, 11.78 hours in Wheatley and 17.51 hours in Erieau.

8. In responding to the Major Event, did the Distributor utilize assistance through a third party mutual assistance agreement with other utilities?

Yes. Entegrus maintains third party mutual assistance agreements for restoration efforts, including membership in the Ontario Mutual Assistance Program ("OnMAG"). Entegrus contacted Bluewater

Power for restoration assistance. Bluewater arrived the morning of August 25, 2023 and stayed until late Saturday, August 26, 2023 to assist with restoration efforts. Entegrus operational staff restoration efforts continued until August 28 at 3:57 pm.

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

No.

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)?

Entegrus conducted a debriefing after the conclusion of the Major Event, which reinforced the benefits of recent and ongoing Distribution System Plan investments in mitigating additional storm outages that may have otherwise been experienced. These recent and ongoing investments have included:

- Advance inventory purchases to mitigate pandemic-related supply risk;
- Continual investment in vegetation management in all communities; and,
- Additional system sectionalization, utilizing automated and remotely operable switches, including reclosers and sensory equipment, in order to reduce the magnitude, frequency and duration of outages.