



Major Event Reporting
February 22-23, 2023

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PREFACE

On February 21, 2023, at 7:05 am, Environment Canada issued a Winter Storm Watch for certain locations within Southwestern Ontario (including Chatham-Kent) for February 22 and 23, 2023. On February 21, 2023, at 6:09 pm, Environment Canada replaced the Winter Storm Watch with a Freezing Rain Warning. Subsequently, on February 22, 2023, at 4:15 am, Environment Canada issued a Freezing Rain Warning for Chatham-Kent indicating that “extensive utility outages are possible due to the combination of ice accretion and moderate winds”.

Entegrus experienced its first distribution system outage at 6:15 pm on February 22, 2023 in Blenheim, caused by freezing rain and tree contact. Thereafter, additional distribution system and Loss of Supply outages occurred in Bothwell, Chatham, Erieau, Merlin, Ridgetown, Tilbury, Wallaceburg and Wheatley. The primary cause of the distribution system outages (and the Loss of Supply) was the development of ice on trees due to the freezing rain, which caused tree limbs to break and damage Entegrus infrastructure.

As the outages occurred, Entegrus notified customers through its company website, 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 reminders to report downed power lines.

Entegrus maintains third party mutual assistance agreements for restoration efforts. Entegrus requested restoration assistance from Bluewater Power and London Hydro. Bluewater Power and London Hydro were contacted on the morning of February 23 and crews from both arrived during the afternoon of February 23. Entegrus operational staff restoration efforts continued after-hours throughout the evening of February 22 until 3:00 pm on February 24, 2023.

The following media article from the Chatham Voice provides additional details on the storm and associated restoration: <https://www.chathamdailynews.ca/news/local-news/ice-storm-results-in-multiple-power-outages-in-chatham-kent>

Entegrus serves approximately 63,000 customers. During the Major Event, inclusive of the evening of February 22 and February 23, 2023, there were 13,395 customers without electricity (not related to Loss of Supply), representing approximately 21% of Entegrus customers. In addition, there were an additional 5,534 customers interrupted due to Loss of Supply within the transmitter or host distributor system, for an aggregate total of 18,929. The storm qualified as a Major Event under both the Fixed Percentage (i.e. 10% of Customers affected¹) methodology and the IEEE Standard 1366 methodology.

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. Environment Canada issued a Winter Storm Watch for certain locations within Southwestern Ontario (including Chatham-Kent) one day before the first outage. On February 21, 2023, at 6:09 pm, Environment Canada replaced the Winter Storm Watch with a Freezing Rain Warning. Subsequently, on February 22, 2023, at 4:15 am, Environment Canada issued a Freezing Rain Warning for Chatham-Kent indicating that “extensive utility outages are possible due to the combination of ice accretion and moderate winds”.

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

¹ See Report of the Board, EB-2015-0182, Electricity Distribution System Reliability: Major Events, Reporting on Major Events and Customer Specific Measures, page 11

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. Entegrus contacted vegetation contractors and had them on standby prior to the storm. Entegrus also participated in multiple conversations with the Ontario Mutual Assistance Program (“OnMAG”) prior to the storm. Restoration efforts continued after-hours throughout the evening of February 22 into the afternoon of February 24, 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 February 22 at 9:22 am that a freezing rain warning had been issued for 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 cause of the Major Event was “Adverse Weather – Freezing Rain”. The storm resulted in numerous tree limbs falling and making contact with infrastructure. This resulted in broken poles, downed lines, and faults.

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

Yes. In accordance with OEB guidance, Entegrus has historically utilized the Fixed Percentage methodology (i.e. 10% of Customers affected). On March 2, 2023, the OEB issued updated guidance and removed the option to utilize the Fixed Percentage methodology to identify the scope of Major Events. Accordingly, Entegrus calculated this Major Event using the IEEE Standard 1366 and this Major Event qualified under both the Fixed Percentage and the IEEE Standard 1366 methods. Going forward, Entegrus will use the IEEE Standard 1366 method.

3. When did the Major Event begin?

The Major Event began on February 22, 2023, at 6:15 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, including the outage map. Updates were also posted on Twitter and Facebook. All posts included information on investigation efforts, causes and ETRs (where possible). The updates also included safety information, as well as reminders to report downed power lines.

The Entegrus website contains an embedded Twitter 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 the evening of February 22 and February 23, 2023, there were 13,395 customers interrupted (unrelated to Loss of Supply), representing approximately 21% of Entegrus customers.

There are no Loss of Supply outages included in the above-noted outage numbers, as Loss of Supply is to be normalized from Major Event calculations². 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 23 hours and 26 minutes.

7. Were there any outages associated with Loss of Supply during the Major Event?

Yes. In addition to the interruptions noted in #5 above, there were additional Loss of Supply outages in the communities of Blenheim, Bothwell, Chatham, Erieau, Merlin, Ridgetown, Tilbury, Wallaceburg and Wheatley aggregating to an additional total of 5,534 customers interrupted.

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 and London Hydro for restoration assistance. Bluewater Power and London Hydro were contacted on the morning of February 23, and crews from both arrived the afternoon of February 23. Entegrus operational staff restoration efforts continued after-hours throughout the evening of February 22 until 3:00 pm on February 24, 2023.

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

No.

² See Report of the Board, EB-2015-0182, Electricity Distribution System Reliability: Major Events, Reporting on Major Events and Customer Specific Measures, page 12

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 frequency and duration of outages.