

Major Event Report

Prior to the Major Event

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

Additional Comments

N/A

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?

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?

N/A

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.

Loss of Supply

Please provide a brief description of the event (i.e. what happened?). If selected "Other", please explain.

On Saturday March 8th, 2025 at 11:32 am a Hydro One Transmission Loss of Supply event occurred, affecting the Talbot T3/T4 Station Q1&Q2 and J1&J2 Bus, and the Talbot T1/T2 Station BY Bus. At the time of this incident, the Talbot T3/T4 Transformer Station which is normally supplied by W36 and W37 transmission lines, was in an abnormal configuration due to Hydro One scheduled maintenance that had the T4 transformer (supplied by W37) out of service. Hydro One was performing switching to bring the T4 transformer back into service after completion of the scheduled maintenance. During switching, the drive mechanism for the T3-A transformer disconnect switch failed to operate correctly, which led to single phasing at the T3 transformer. Hydro One had to take the Talbot 230kV A Bus out of service to resolve the single phasing to customers, and isolate the T3-A transformer disconnect switch for future repairs. As per designed configuration, the operation of the Talbot 230kV A Bus breaker, which impacted the supply to Talbot T3 Station, also removes supply for the Talbot T1 Station. This impacted a total of 68,018 customers for 22 minutes.

2. Was the IEEE Standard 1366* used to derive the threshold for the Major Event?

*The OEB preferred option

Yes, used IEEE Standard 1366

3. When did the Major Event begin?

Date: March 8th, 2025

Time (for example HH:MM AM): 11:32 AM

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

If yes, please provide a brief description of the information. If no, please explain. London Hydro issues estimated times of restoration (ETR) for the various outage events through Twitter, IVR, Email, and Text. London Hydro also issued ETR through the outage map on our website, which gets updated every minute with the most updated information.

5. How many customers were interrupted during the Major Event? 68.018 customers

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

40.38%

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

Within 1 hour

Additional Comments

The major event started at 11:32 am on March 8th, and all customers were restored by 11:54 am.

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

Yes

If so, please report on the duration and frequency of Loss of Supply outages. This entire Major Event was a result of a Loss of Supply.

- 8. In responding to the Major Event, did the distributor utilize assistance through a third-party mutual assistance agreement with other utilities?
- 9. Did the distributor run out of any needed equipment or materials during the Major Event?

No

If so, please describe the shortages.

N/A

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)?

Others

Additional Comments:

After the incident occurred, London Hydro engaged Hydro One to provide details on (1) the root cause of the outage, (2) all equipment failures that were encountered, and (3) any remediation plans that are in place.

The root cause of the outage was due to a defect with a failed High-Voltage Gas Insulated Switchgear (HVGIS) in the transmission system. Hydro One has performed the necessary repairs, maintenance and performed testing on the HVGIS. Additional testing and repairs were completed by Hydro One on other equipment during the equipment outage as well.

London Hydro had a discussion with Hydro One to better understand the event and help minimize the risk of future occurrences, and discuss contingency plans for supply loss that occurs during abnormal configuration scenarios.