



Major Event Report

Date of Major Event: November 10th, 2023

Prior to the Major Event

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

No

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?

n/a

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.

Other

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

On Friday, November 10 at 3:37am a vehicle struck and broke a hydro pole that was installed far away from the curb, behind a sidewalk, exceeding minimum clearance requirements. This caused an outage to 8,450 customers across two main feeders as this pole location carried two feeders. Furthermore, the customer count on the impacted feeders was higher than normal as the system was abnormally configured due to a construction process occurring on another feeder.

Using automated devices, 82% of the customers were restored within half an hour after reports were received of the accident. Due to the location of the incident, temporary switches were required to be installed on both feeders to safely isolate the accident location, and restore power to the remaining groups of customers.

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: November 10th, 2023

Time (for example HH:MM AM): 3:37 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 issued 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?

8,450 customers

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

5.06%

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

7 hours

Additional Comments

The major event started at 3:37am on November 10th, and over 90% of customers were restored by 10:25am on November 10th.

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

No

If so, please report on the duration and frequency of Loss of Supply outages.

n/a

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

No

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:

For the specific accident location, bollards have been installed to protect the pole and mitigate any future outages at this location. Additionally, sectionalizing switches were left installed at this pole location to provide switching capabilities to aid in the restoration of any future outages in the area.

Furthermore, we will be looking to enhance our design guidelines of these specific feeder configurations to allow for sectionalizing switches to be installed at initial construction. Existing feeders that fit this profile will be targeted and evaluated for proactive sectionalizing switch installation. This scenario will also be included in the ongoing critical intersection study that London Hydro is conducting.

This 'foreign interference – vehicle accident' could have potentially been prevented by undergrounding circuits near the intersection, however vehicle accidents can occur anywhere throughout the city and undergrounding all intersections is not a reasonable solution. London Hydro must tactfully determine the appropriate and cost effective reliability improvement measures (which may include the installation of overhead sectionalizing switches, automated devices, or undergrounding the circuits) for various intersections considering the design of the system in that area and the potential impact of a similar accident.