



Major Event Report

Date of Major Event: June 2nd, 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, June 2nd at 10:40am a truck 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 12,613 customers across two main feeders as this pole location was a tie point between both 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.

Due to the varying unclear reports received of the incident, London Hydro crews had to get eyes on the scene to understand the exact damage and nature of the work required. Additionally, there was a critical customer adjacent to the accident location, a hospital, which had both of its power supplies affected due to this outage. Recognizing the complexity of the situation, London Hydro needed to determine a holistic plan and procedure that would allow for the safe restoration of power to all in a timely manner.

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: June 2nd, 2023

Time (for example HH:MM AM): 10:40 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?

12,613 customers

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

7.58%

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

2 hours

Additional Comments

The major event started at 10:40am on June 2nd, and over 90% of customers were restored by 12:41pm on June 2nd.

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:

London Hydro performs post event analysis following each Major Event in order to identify points of strength and areas for improvement.

For the critical customer adjacent to this accident location, we are evaluating various options to improve reliability, including the provision of an alternative supply that minimizes the risk of a common mode failure/incident interrupting power to the entire hospital.

Although the circumstances of this specific outage were abnormal, we will use this 'foreign interference – vehicle accident' scenario at a tie point between two feeders as an input to assess other similar locations as part of an 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. For this specific location, a combination of sectionalizing switches and other protective device installations are being evaluated.