

Major Event Response Report

Toronto Hydro

May 21, 2022

Wind Storm

Filed: July 20, 2022

1 PRIOR TO THE MAJOR EVENT

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

No

Additional Comments:

Toronto Hydro did not have prior warning of the severe wind storm (the “Major Event”).

1.2 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?

No

Brief description of arrangements, or explain why extra employees were not arranged

While Toronto Hydro did arrange to have additional forestry crews on standby over the May long weekend because of the weather forecast showing a risk of thunderstorms, it did not arrange for any additional overhead resources since the available weather forecasts provided no prior warning of the Major Event. Toronto Hydro maintains a standby schedule requiring senior management, supervisory and operational staff to be available on a 24/7 basis to support with event restoration. This standby schedule was in place and operationalized during the Major Event.

1.3 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?

Toronto Hydro did not have prior warning about the Major Event and so it did not make any media announcements prior to its onset. At the onset of the Major Event, Toronto Hydro began notifying customers of power outages on Twitter.

1.4 Did the distributor train its staff on the response plans to prepare for this type of Major Event?

Yes, within the framework of its Disaster Preparedness Management program, Toronto Hydro has a comprehensive training program for the management of Major Events. Relevant training is conducted on an ongoing basis. The utility uses the provincial recommended practice for incident management, the Ontario Incident Management System (“IMS”), as the basis for its emergency management training curriculum. Following these processes, Toronto Hydro’s emergency response employees are trained on a number of IMS programs, emergency plans and emergency scenarios.

2 DURING THE MAJOR EVENT

2.1 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
- Lightening
- Adverse Weather- Wind
- Adverse Weather- Snow
- Adverse Weather- Freezing rain/ice storm
- Adverse Environment- Fire
- Adverse Environment- Flooding
- Others

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

On May 21, 2022, at approximately 12:45 p.m., a major storm with wind gusts as high as 120 kilometres per hour swept through Toronto Hydro’s service territory. The extreme winds caused substantial damage to vegetation, which in turn damaged overhead distribution wires and equipment. Toronto Hydro declared a Level 2 emergency in response to these system impacts and the exceptionally high volume of trouble calls it received.

2.2 Was the IEEE Standard 1366 used to derive the threshold for the Major Event?

- Yes, used IEEE Standard 1366
- No, used IEEE standard 1366 2-day rolling average
- No, used fixed percentage (i.e., 10% of customers effected)

2.3 When did the Major Event begin (date and time)?

The Major Event began on May 21, 2022, at approximately 12:45 p.m.

2.4 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.

Toronto Hydro used several forums to engage with customers. Toronto Hydro shared frequent updates on Twitter that detailed restoration updates and safety information. Toronto Hydro also communicated outage boundaries through the Toronto Hydro mobile app and the online outage map (except for a period of time when the outage map was unavailable due to technical issues).

Between Saturday, May 21 and Wednesday, May 25, Toronto Hydro issued the following types of updates for customers on Twitter:

- Status updates on restoration efforts, including customer counts
- Safety tips, especially relating to downed wires
- Reminders to help keep crews safe
- Damage assessments and challenges in the field (severe damage to electrical equipment, fallen trees and wires, etc.)
- Breakdowns of the restoration process

- Homeowners' responsibilities following storms (i.e. how to address damaged customer-owned equipment)

Toronto Hydro's usual communication channels, including live chat, were also available to customers.

2.5 How many customers were interrupted during the Major Event?

Approximately 142,000 customers were interrupted during the Major Event.

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

This represents approximately 18% of the total customer base.

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

Approximately 12 hours.

Additional comments:

N/A

2.8 Were there any outages associated with loss of supply during the Major Event?

There were no outages associated with a loss of supply during the Major Event.

If so, please report on the duration and frequency of the loss of supply outages.

N/A

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

No, Toronto Hydro did not use assistance through a third-party mutual assistance agreement.

If so, please provide the name of the utilities who provided the assistance?

N/A

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

No, Toronto Hydro did not run out of any needed equipment during the Major Event.

If so, please describe the shortages.

N/A

3 AFTER THE MAJOR EVENT

3.1 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)?

- No further action is required at this time
- Additional staff training
- Process improvements
- System upgrades
- Others

Additional comments:

An After-Action Review process was conducted following Toronto Hydro's response to the Major Event. This process engaged stakeholders who participated in restoration activities to review Toronto Hydro's response, identify any opportunities for continuous improvement and action these opportunities as applicable.

Toronto Hydro also strives for continuous improvement in the area of Major Event preparedness through its Disaster Preparedness Management program. This program

aims to prepare the company to better respond to a wide range of large-scale emergencies by optimizing processes to enhance continuity of the organization's functionality in all types of disruptions. Disaster preparedness activities include, but are not limited to, the following:

- All-hazard disaster planning — plans outline incident response structures, roles and responsibilities, and communication, logistics and customer engagement strategies
- Employee emergency role assignment and training
- Emergency response process improvements
- System implementation and optimization
- Scenario-based emergency exercising/testing