

# **Major Event Response Reporting – July 28, 2018**

## **1 PRIOR TO THE MAJOR EVENT**

### **1.0 Did the distributor have any prior warning that the Major Event would occur?**

Toronto Hydro did not have prior warning. This event was due to a Loss of Supply<sup>1</sup> at the Finch Transmission Station operated by our transmission partner.

### **1.1 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.**

As stated above, Toronto Hydro did not have prior warning. However, the organization maintains standby schedule requiring senior management, supervisory and operational staff to be available on a 24/7 basis to support with event restoration.

### **1.2 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? If so, through what channels?**

Toronto Hydro did not have prior warning.

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<sup>1</sup> [Cause code 2 in Table 2.1.4.2.5 in OEB's Electricity Reporting and Record Keeping Requirements.](#)

**1.3 Did the distributor train its staff on the response plans for a Major Event? If so, please give a brief description of the training process.**

Yes. Toronto Hydro has an established training program for the management of Major Events with relevant training being executed throughout the year. The Ontario Incident Management System (IMS), the provincial recommended practice for incident management, forms the basis for Toronto Hydro's training curriculum for emergency management. Toronto Hydro's command and general staff are trained on IMS (IMS 100, IMS 200 and IMS 300) in addition to exercising emergency plans.

**1.4 Did the distributor have third party mutual assistance agreements in place prior to the Major Event? If so, who were the third parties (i.e., other distributors, private contractors)?**

Yes. Toronto Hydro is an active and participating member of two mutual assistance groups: the Canadian Mutual Assistance Group (CANMAG) and North Atlantic Mutual Assistance Group (NAMAG).

## **2 DURING THE MAJOR EVENT**

### **2.0 Please explain why this event was considered by the distributor to be a Major Event?**

The event was consistent with the definition of a “Major Event” as set out in Section 2.1.4.2 of OEB’s Electricity Reporting and Record Keeping Requirements. This includes events that are beyond the control of the distributor, take significantly longer than usual to repair, and affect a substantial number of customers.<sup>2</sup>

The event was unforeseeable, unavoidable and unpreventable and Toronto Hydro experienced greater than normal call volume.

### **2.1 Was the IEEE Standard 1366 used to identify the scope of the Major Event? If not, why not?**

Yes. The IEEE Standard 1366 was used to identify the scope of the Major Event.

### **2.2 Please identify the Cause of Interruption for the Major Event as per the table in section 2.1.4.2.5.**

The cause of interruption for the event was Loss of Supply<sup>3</sup> at the Finch Transmission Station operated by our transmission partner.

### **2.3 Were there any declarations by government authorities, regulators or the grid operator of an emergency state of operation in relation to the Major Event?**

Such declarations were not issued.

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<sup>2</sup> Toronto Hydro used the Canadian Electricity Association’s Major Event Determination Reference Guide to assess whether a substantial number of customers were affected and whether it took significantly longer to restore service than normal. This guide references reliability thresholds established by the Institute of Electrical and Electronics Engineers (IEEE).

<sup>3</sup> [Cause code 2 in Table 2.1.4.2.5 in OEB’s Electricity Reporting and Record Keeping Requirements.](#)

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

The event began on July 28, 2018 at approximately 00:39 hours.

**2.5 What percentage of on-call distributor staff was available at the start of the Major Event and utilized during the Major Event?**

100% of on-call distributor staff were available at the start and utilized during the Major Event.

**2.6 Did the distributor issue any estimated times of restoration (ETR) to the public during the Major Event? If so, through what channels?**

Toronto Hydro did not issue an ETR because it was not determined by nor available to Toronto Hydro.

**2.7 If the distributor did issue ETRs, at what date and time did the distributor issue its first ETR to the public?**

As noted above, an ETR was not communicated to the public.

**2.8 Did the distributor issue any updated ETRs to the public? If so, how many and at what dates and times were they issued?**

As noted above, an ETR was not communicated to the public.

**2.9 Did the distributor inform customers about the options for contacting the distributor to receive more details about outage/restoration efforts? If so, please describe how this was achieved.**

Yes. Toronto Hydro updated customers through the media on a regular basis and informed the public that more updates would be provided on Twitter. Through Twitter, Toronto Hydro proactively communicated that more updates would be provided as they became available and retweeted updates from sources of information.

**2.10 Did the distributor issue press releases, hold press conferences or send information to customers through social media notifications? If so, how many times did the distributor issue press releases, hold press conferences or send information to customers through social media notifications? What was the general content of this information?**

Toronto Hydro did not issue any press releases or conduct any press conferences. However, the organization responded to media inquiries, communicated with the City Councillor for the affected area, and provided updates via Twitter. The general content of the updates included outage boundaries, number of customers affected, general restoration process updates and request for residents in the area to conserve power.

Throughout the event there were:

- 29 media inquiry responses
- 23 tweets were posted on Twitter
- 1 email was sent to a City Councillor

**2.11 What percentage of customer calls were dealt with by the distributor's IVR system (if available) versus a live representative?**

90% of customer calls were dealt with by the distributor's IVR system versus a live representative.

**2.12 Did the distributor provide information about the Major Event on its website? If so, how many times during the Major Event was the website updated?**

Yes. The outage map on Toronto Hydro's website was updated every 15 minutes throughout the event.

**2.13 Was there any point in time when the website was inaccessible? If so, what percentage of the total outage time was the website inaccessible?**

Toronto Hydro's website was not inaccessible during the event

**2.14 How many customers were interrupted during the Major Event? What percentage of the distributor's total customer base did the interrupted customers represent?**

Approximately 45,475 customers were affected at some point during the event. This represents approximately 6% of Toronto Hydro's total customer base.

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

It took approximately 14 hours to restore 90% of the affected customers.

**2.16 Was any distributed generation used to supply load during the Major Event?**

Distributed generation was not utilized.

**2.17 Were there any outages associated with Loss of Supply during the Major Event? If so, please report on the duration and frequency of Loss of Supply outages.**

Yes, the Loss of Supply caused 22 sustained interruptions, the duration and frequency are as follows:

SAIDI<sup>4</sup>: 15.10

SAIFI<sup>5</sup>: 0.06

**2.18 In responding to the Major Event, did the distributor utilize assistance through a third party mutual assistance agreement?**

Mutual assistance was not utilized.

**2.19 Did the distributor run out of any needed equipment or materials during the Major Event? If so, please describe the shortages.**

Shortages of equipment or materials were not experienced.

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<sup>4</sup> [OEB Electricity Reporting and Record Keeping Requirements Section 2.1.4.2.1](#)

<sup>5</sup> [OEB Electricity Reporting and Record Keeping Requirements Section 2.1.4.2.2](#)

### **3 AFTER THE MAJOR EVENT**

#### **3.0 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)?**

Through its Disaster Preparedness Management (DPM) program, Toronto Hydro develops, implements and sustains a state of emergency readiness and response proficiency. In addition, Toronto Hydro reviews contingency readiness of feeders and where needed, install new feeder ties or upgrade existing manual switches with SCADA capability for quick response to transfer load. The organization's asset renewal program reviews configuration of the distribution system and makes additional upgrades or improvements where needed to minimize reliability impact of events such as Loss of Supply. Toronto Hydro also maintains a close working relationship with its transmission partner to better understand its systems and operations.

#### **3.1 What lessons did the distributor learn in responding to the Major Event that will be useful in responding to the next Major Event?**

The Major Event reinforced the importance of Toronto Hydro's training and preparedness for Major Events. Overall, the response to the Major Event was well-executed and highlighted the value of clearly defined roles and responsibilities throughout Toronto Hydro's response structure.

#### **3.2 Did the distributor survey its customers after the Major Event to determine the customers' opinions of how effective the distributor was in responding to the Major Event? If so, please describe the results.**

Toronto Hydro did not survey its customers after the event.