

## Major Event Report: Burlington Hydro January 8, 2018

### RRR 2.1.4.2.10 Major Event Response Reporting

When a distributor determines an outage was caused by a Major Event, it shall file a report with the OEB that outlines the distributor's response to the Major Event, including answers to all of the questions set out below. Distributor responses are identified in the text boxes below.

A distributor shall file this report with the OEB within 60 days of the end of the Major Event unless there are exceptional circumstances, in which case the report can be filed within 90 days of the end of the Major Event.

#### Prior to the Major Event

**1. Did the distributor have any prior warning that the Major Event would occur? (Yes/No)**

No. Burlington Hydro experienced power outages in multiple areas of the city, including Burloak Drive and Appleby Line. The outages were attributed to pole fires, caused by salt brine from the road accumulating on hydro poles over an extended period of cold weather. Burlington Hydro does take preventative measures to mitigate the risk of pole fires but had no prior warning of the changing weather conditions which contributed to these pole fires.

**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? If so, please give a brief description of arrangements.**

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? If so, through what channels?**

N/A

## Major Event Report: Burlington Hydro January 8, 2018

**4. 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. Burlington Hydro works safely to restore power to the largest areas first and then works its way down to single outages. Fire, police and wires down take priority.

**5. 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, Burlington Hydro has mutual aid agreements with 12 other LDCs as part of the Grid Smart City Cooperative, agreements with Hydro One and an alliance agreement with a third-party contractor.

### **During the Major Event**

**1. Please explain why this event was considered by the distributor to be a Major Event.**

A total of 4,462 customers were affected by the outage representing 6.6% of Burlington Hydro's customers. The event was beyond Burlington Hydro's control and exceeded Burlington Hydro's daily SAIDI threshold used to identify a Major Event.

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

Yes. Burlington Hydro used the IEEE Standard 1366 used to identify the scope of the Major Event.

## Major Event Report: Burlington Hydro January 8, 2018

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

7. Adverse Environment - Customer interruptions due to distributor equipment being subject to abnormal environments, such as salt spray, industrial contamination, humidity, corrosion, vibration, fire, or flowing.

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

No

5. When did the Major Event begin?

**Date:** January 8, 2018

**Time (For Example HH:MM AM):** 09:10 AM

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

The percentage of on-call staff available and utilized was 100%.

## Major Event Report: Burlington Hydro January 8, 2018

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

Yes, via Twitter and Burlington Hydro's Outage Map webpage -  
<http://outagemaps.burlingtonhydro.com/OutageMap/OutageMap.html>

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

ETRs are issued immediately in most cases (if multiple outages are being reported at one time, there may be a delay in getting an outage posted on the Outage Map) and updated as required. The first ETR was issued via twitter early morning of January 8 as the first outages were identified.

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

See Twitter record attached.

**10. 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.**

As is normal practice, customer service numbers, and direct links to the 'Outage Portal' and Outage Map webpage are shared on Twitter. These resources are readily identified from Burlington Hydro's homepage on its website.

<http://outagemaps.burlingtonhydro.com/OutageMap/OutageMap.html>

<https://www.burlingtonhydro.com/outageportal>

<https://www.burlingtonhydro.com/>

## Major Event Report: Burlington Hydro January 8, 2018

**11. Did the distributor issue press releases, hold press conferences or send information to customers through social media notification? If so, how many times and what was the general content?**

Burlington Hydro sent information to customers through social media notification (Twitter).

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

IVR calls are not available for this event. 196 calls were dealt with by a live representative.

**13. 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?**

1. The Outage Map on the BHI website included information on the cause / # of customers affected / ETR / and updates as required. Burlington Hydro did not track the number of times the website was updated.
2. Customers can also access a live twitter feed from the homepage of the website's outage portal. Similar information was conveyed directly via Twitter.

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

No. The website was always accessible. There was a minor delay in getting outages displayed on the outage map at the start of event.

## Major Event Report: Burlington Hydro January 8, 2018

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

A total of 4,462 customers were interrupted during the major event, representing approximately 6.6% Burlington Hydro's customer base.

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

It took 16.8 hours to restore 90% of the customers - they were restored on Jan 9th at 02:37AM.

**17. Was any distributed generation used to supply load during the Major Event? (Yes/No)**

No

**18. 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.**

No

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

No

## Major Event Report: Burlington Hydro January 8, 2018

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

No.

### 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)?

Burlington Hydro is reviewing the hardware which supports its Outage Management System to mitigate technical issues in the future. This will ensure the public is notified in a timely manner on outages and ETRs.

2. What lessons did the distributor learn in responding to the Major Event that will be useful in responding to the next Major Event?

## Major Event Report: Burlington Hydro January 8, 2018

**3. 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.**

No. Incoming questions/accolades/complaints during the outage on social media or via customer service were handled at the time.

### **Additional Information**

In addition to responding the questions above, distributors may provide supplemental information to the OEB in an attachment.

**Attachment provided (Yes/No): Yes**



## JAN 8 TO 10, 2018 OUTAGE INCIDENT – POLE FIRES – TWITTER ACTIVITY



**Burlington Hydro** @BurlingtonHydro · Jan 10

Some important powerline safety information from the ESA

**ESA** @homeandsafety

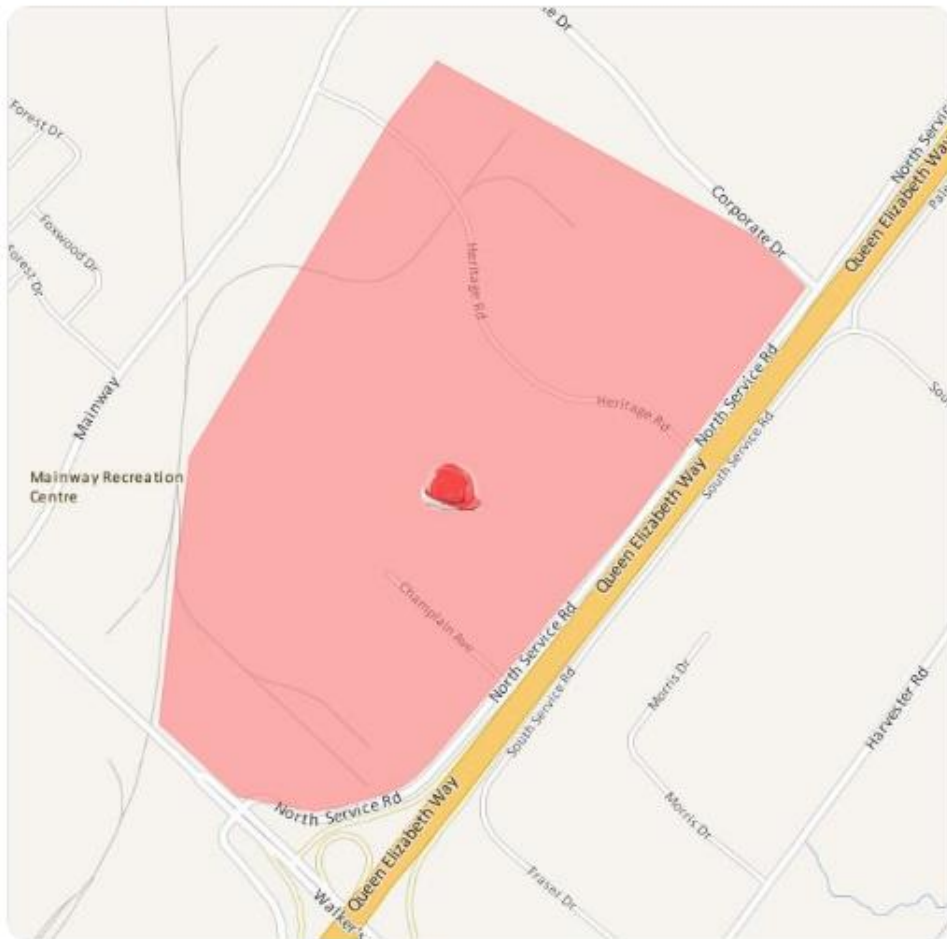
Steps to keep safe during powerline contact:

1. Stay in the vehicle, away from potential shock hazards
2. Call 911 and report incident
3. If you're not in the vehicle, keep back min. 10 metres...



**Burlington Hydro** @BurlingtonHydro · Jan 8

Those customers affected by outage on North Service Rd between Walkers & Corporate Dr are expected to have power restored by 6 pm. Crews are on-site conducting repairs to a broken pole.





**Burlington Hydro** @BurlingtonHydro · Jan 8

For outage between Appleby & Burloak, in corridor just north & south of QEW - residential customers will be restored in next hour or so, and a small number of commercial customers by 9 pm. Crews are on-site repairing major pole damage.



You Retweeted



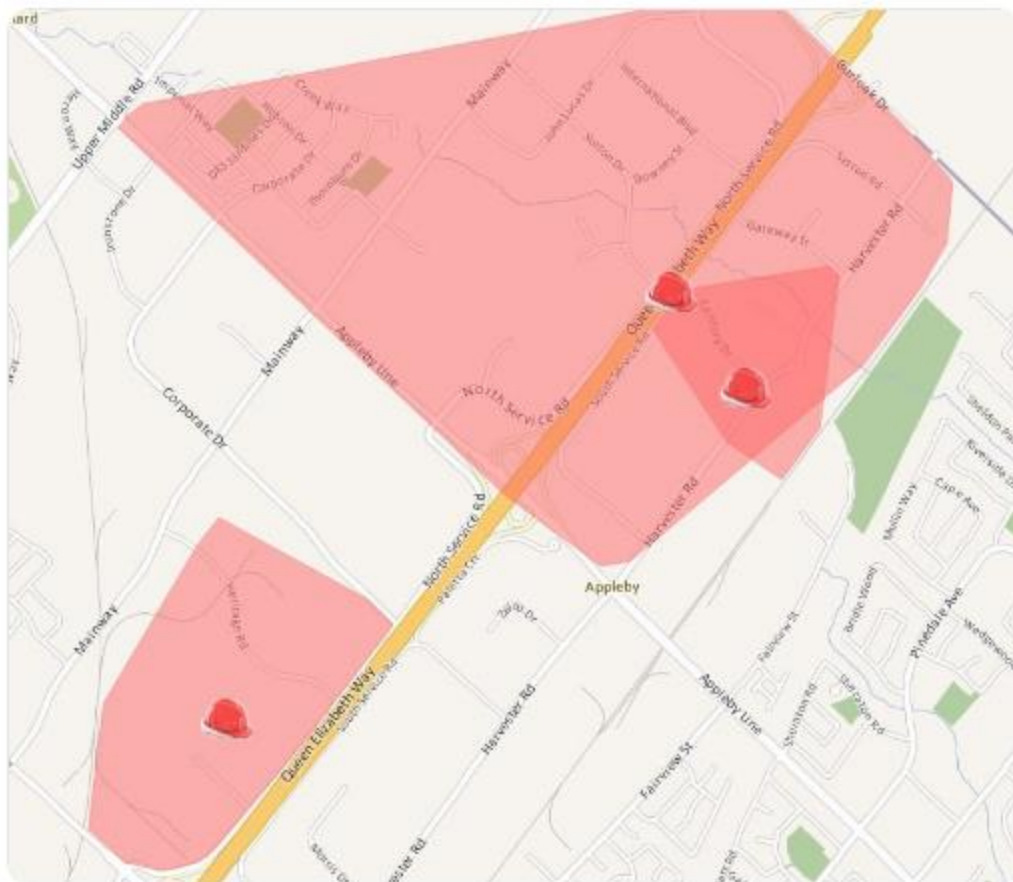
**HRPS Burlington** @HRPSBurl · Jan 8

#RoadClosure: North Service Road between Walkers Line and Champlain.  
@BurlingtonHydro are on scene to repair the wires. Approximate reopening time will be 4pm ^ao



**Burlington Hydro** @BurlingtonHydro · Jan 8

1,400 customers have been restored in the east end due to earlier pole fires. Just over 400 customers remain without power. Crews are making repairs as quickly as possible. ETR is 3 - 3:30.





**Burlington Hydro** @BurlingtonHydro · Jan 8



Power outage north of Upper Middle btw Appleby & Burloak was due to a downed tree limb on a power line. All but 2 customers have had power restored.



↻ 2

♡ 2



**Burlington Hydro** @BurlingtonHydro · Jan 8



Crews continue to work as quickly & as safely as possible to restore power to neighbourhoods in the east end. Work will extend past the ETR reported earlier, which is now estimated to be 3 pm for some customers.  
[outagemaps.burlingtonhydro.com/OutageMap/Outa...](https://outagemaps.burlingtonhydro.com/OutageMap/Outa...)

💬 1

↻ 9

♡ 2



**Burlington Hydro** @BurlingtonHydro · Jan 8



Correction - Previous tweet should have read: Outage north of MAINWAY to south of 407, between Appleby and Burloak. Crews dispatched. ETR 1 pm.



↻ 6

♡ 1



**Burlington Hydro** @BurlingtonHydro · Jan 8



Outage north of Upper Middle to south of 407, between Appleby and Burloak. Crews dispatched. Estimated time of restoration 1 pm.



↻ 2

♡ 1



You Retweeted



**Halton Police** @HaltonPolice · Jan 8

Reminder: If traffic lights are not functioning at an intersection, please treat as a FOUR-WAY STOP and always watch for pedestrians. ^jh

**Burlington Hydro** @BurlingtonHydro

Outage Appleby Ln to Burloak, Upper Middle to Fairview due to pole fire. Estimated time of restoration 1 pm.

2 25 29



**Burlington Hydro** @BurlingtonHydro · Jan 8

Current outages due to build up of road brine on hydro poles. With the break to milder temps the salty brine is tracking on pole insulators which is sparking the pole fires.

1 8 3



**Burlington Hydro** @BurlingtonHydro · Jan 8

Outage Walkers Ln to Burloak, North Service Rd to south of Fairview due to pole fire. Estimated time of restoration 1 pm.

6 2



**Burlington Hydro** @BurlingtonHydro · Jan 8

Outage Appleby Ln to Burloak, Upper Middle to Fairview due to pole fire. Estimated time of restoration 1 pm.

1 1 1



**Burlington Hydro** @BurlingtonHydro · Jan 8

Outage Guelph Ln to Corporate Dr, Mainway to Harvester due to pole fire. Estimated time of restoration 11:30 am.

1 2



**Burlington Hydro** @BurlingtonHydro · Jan 8

Crews have been dispatched to power outage between Appleby & Burloak, Mainway to Harvester. Updates to follow.

7 12 11



**Burlington Hydro** @BurlingtonHydro · Jan 8

Crews have been dispatched to outage north & south of QEW between Guelph Ln and Corporate. Updates to follow.