



Major Events RESPONSE REPORT

Issue: September 20th to September 21st, 2019 §2.1.4.2 Major Events Response Report

Date Issued: November 19, 2019

Prepared for: Publication and Electronic Filing with the Ontario Energy Board ("OEB")

Summary:

An extreme wind storm passed through the Red Lake Region of Northwestern Ontario on September 20th and 21st. Many areas experienced power outages as a result of this unusual weather event. The storm brought strong thunder and lightning storms with damaging winds to areas close to the Manitoba border.

Hydro One Remotes ("Remotes") customers in Pikangikum (510 customers) were directly impacted by the loss of supply from upstream (Red Lake) where Transmission and Distribution systems, operated by Hydro One Networks and Watay Power, were particularly hard hit. While customers in the community were interrupted, Remotes was not able to independently remedy the loss of supply from the upstream systems. Restoration was dependent on the work of the other utilities mentioned above.

This is the 1st Major Event for Remotes in 2019.

A. Prior to the Major Event

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

Yes. Environment Canada and other weather forecasters provided a weather warning throughout the region.

- 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.

No additional staff were scheduled in advance of the storm. In the past, storms most often miss Remotes' communities since they are small and isolated.

- 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?

No, Remotes did not issue any media announcements and does not normally do so.

- 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, specific response plans for a Major Event are reviewed once a year with the on-call and trades staff. In addition, the Remotes Outage Committee meets monthly to review outages, responses and operational improvements in a continuous effort to gain experience and implement best practices.

- 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, third party mutual assistance agreements with Hydro One Networks were in place prior to the Major Event. However, they were not called upon for this event.

B. During the Major Event

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

Remotes categorizes a Major Event under IEEE (Section 3.5) with a threshold value of 2.1 SAIDI minutes/day. These unusual wind storms on September 20th and 21st impacted a significant number of our customers, resulting in a 3.4 SAIDI minutes/day that exceeded our threshold value.

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

Yes. Remotes uses the IEEE 1366 method.

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

Date Range: 2019-09-20 to 2019-09-21

PRIMARY CAUSE CODE	Number of Interruptions	Customer Interruptions	Customer Hours of Interruption
0. Unknown/Other			
Customer interruptions with no apparent cause that contributed to the outage.			

Date Range: 2019-09-20 to 2019-09-21

PRIMARY CAUSE CODE	Number of Interruptions	Customer Interruptions	Customer Hours of Interruption
1. Scheduled Outage			
Customer interruptions due to the disconnection at a selected time for the purpose of construction or preventive maintenance.			
2. Loss of Supply			
Customer interruptions due to problems associated with assets owned and/or operated by another party, and/or in the bulk electricity supply system. For this purpose, the bulk electricity supply system is distinguished from the distributor's system based on ownership demarcation.	1	510	13,974
3. Tree Contacts			
Customer interruptions caused by faults resulting from tree contact with energized circuits.			
4. Lightning			
Customer interruptions due to lightning striking the distribution system, resulting in an insulation breakdown and/or flash-overs.			
5. Defective Equipment			
Customer interruptions resulting from distributor equipment failures due to deterioration from age, incorrect maintenance, or imminent failures detected by maintenance.			
6. Adverse Weather			
Customer interruptions resulting from rain, ice storms, snow, winds, extreme temperatures, freezing rain, frost, or other extreme weather conditions (exclusive of Code 3 and Code 4 events).			
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.			

Date Range: 2019-09-20 to 2019-09-21

PRIMARY CAUSE CODE	Number of Interruptions	Customer Interruptions	Customer Hours of Interruption
8. Human Element Customer interruptions due to the interface of distributor staff with the distribution system.			
9. Foreign Interference Customer interruptions beyond the control of the distributor, such as those caused by animals, vehicles, dig-ins, vandalism, sabotage, and foreign objects.			
Total	1	510	13,974

Note: The majority of the interruptions from this Major Event are due to the impact of this storm. The usage of the above cause codes adds the level of granularity needed for Hydro One Remotes to take only corresponding actions.

- 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?

The Municipality of Red Lake declared a "State of Emergency".

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

The major event began during the afternoon of September 20th. Remotes started to receive outage calls from customers at approximately 15:00 hours on September 20th.

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

All (100%) of the on-call distributor staff was available at the start of the event and they were utilized.

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

Most of the damage was to the Transmission and Distribution system in the Red Lake region to the south of the community. This resulted in an outage due to loss of supply for which Remotes had no direct control in resolving and accurate ETR estimation by Remotes was difficult. General communication was done with the Deputy Chief and council members of the community. Actions and timelines were provided regularly to the council as well as to those customers who contacted the Call Centre. Remotes also provided outage updates to Indigenous Services Canada (ISC) in case further community emergency response was required.

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

N/A

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

N/A

- 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.

Communication was directly with Pikangikum's Deputy Chief and council member. As information became available, updates were provided to those customers who contacted the Call Centre. If further information or more details were required, the on-call supervisor called the customer back personally.

- 11) 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?

N/A

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

100% Live Customer 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?

No. Remotes does not use its website for the purpose of outage notification and information.

- 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 accessible during this period.

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

510 customers, representing about 12% of Remotes' total customer base, were interrupted during the Major Event.

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

Power was restored to all customers at 18:30 hours on September 21st, resulting in an interruption lasting 27.5 hours.

17) Was any distributed generation used to supply load during the Major Event?

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.

Date Range: 2019-09-20 to 2019-09-21

PRIMARY CAUSE CODE	Number of Interruptions	Customer Interruptions	Customer Hours of Interruption
2. Loss of Supply Customer interruptions due to problems associated with assets owned and/or operated by another party, and/or in the bulk electricity supply system. For this purpose, the bulk electricity supply system is distinguished from the distributor's system based on ownership demarcation.	1	510	13,974

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

No.

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

No equipment or materials ran out during the event.

C. 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)?

Remotes plans to explore its operational processes as well as mutual assistance agreements with Watay Power. Issuance of press releases, press conferences and social media notifications during these types of events will be more fully explored.

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

Remotes continues to proactively prepare for each Major Event by conducting lessons learned sessions. These sessions provide valuable insight into what specific tactics can be developed to address areas of improvement. Remotes learned that it is challenging to communicate loss of supply outages when it does not have direct control over the factors causing the interruption. As such, developing a communication and coordination plan with other parties may be an objective.

- 3) Did the distributor survey its customers after the Major Event to determine the customers' opinions of how effective the distributor was in responding?

No formal surveys were done. Discussions with the Deputy Chief confirmed that outage response was appropriate given the weather experienced. The Deputy Chief was well aware of the weather conditions in the area as well as the logistical and operational challenges required to restore power. No other service inquiries were made about the specific outage or restoration efforts after the event.

APPENDIX

Red Lake Declares State of Emergency

By Pino Damasi

On September 21, 2019 at 3:06 pm



[RED LAKE, ON] – The Municipality of Red Lake declared a “State of Emergency” on Saturday, September 21st, 2019, after a brutal storm ripped through the area. Below is the statement released by the municipality.

At 10:05 a.m. Saturday, September 21, 2019, Mayor Fred Mota issued a declaration of emergency pertaining to the severe weather event which occurred on Friday, September 20, 2019.

Due to the extreme wind conditions, Municipal infrastructure has been damaged, a loss of hydro electricity, and numerous trees are down blocking roadways and driveways.

Mayor Mota states: “While we experience this extreme event, we are pleased to report that nobody was injured. This being said, I urge everyone to check in on their neighbours and assist people where possible during the power outage. Please use caution when out on our streets. Municipal employees along with community partners are currently evaluating the situation and have commenced the cleanup.”

