

All service areas of E.L.K. were impacted by an ice storm on February 22<sup>nd</sup>. The first outage was reported at 5:00 PM in Kingsville. Soon after the first outage report Kingsville Essex, Harrow, Cottam, and Comber also reported outages. The cause of these large-scale outages was due to heavy ice accumulation on power lines causing them to sag into trees and falling on ground. Another reason for these outages was the trees and tree branches falling onto power lines due to substantial amount of ice.

Due to the magnitude of the outage, all of E.L.K.'s Operation crews were called in for power restoration efforts. E.L.K. used Twitter to notify customers about the outages. All Twitter posts included the affected areas, restoration efforts, cause and estimated time of restoration where possible. The Twitter posts also reminded the public about reporting any downed power lines and keeping safe distance from them.

On February 23<sup>rd</sup>, E.L.K. engaged a local power contracting company and requested assistance in power restoration. Once the contractors arrived, they were dispatched to different service areas for restoration. On the evening of February 23<sup>rd</sup>, E.L.K. also requested Entegrus Powerlines Inc. and Essex Powerlines Corp. to assist in restoration. E.L.K.'s operational staff with the help of contractors and neighboring utilities continued working from February 22<sup>nd</sup> until 8:00PM on February 25<sup>th</sup> to successfully restore all known power outages.

The storm was considered a Major Event because the number of customers that experienced a power outage for more than 15 minutes exceeded 10% of total E.L.K. customers. E.L.K. serves a total of approximately 12,600 customers. During the ice storm, a total of 3,077 customers without power caused by downed wires or tree contact within E.L.K.'s distribution system. This represents approximately 24% of E.L.K.'s customers. Additionally, all other customers in E.L.K.'s service area experienced a power outage that exceeded 15 minutes due to Loss of Supply from transmitter.



## **Prior to the Major Event**

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

Yes. Environment Canada issue Winter Storm Watch for majority of areas in Southwestern Ontario. On February 21<sup>st</sup>, Environment Canada changed from Winter Storm Watch to Freezing Rain Warning. On February 22<sup>nd</sup>, Environment Canada issued Freezing Rain Warning for Windsor-Essex region.

 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.

Yes, E.L.K. had the regular on-call staff that responded to the initial power outage calls. As a result of adverse weather warnings issued by Environment Canada, there were additional E.L.K. crews on standby and responded immediately after the first outage reports. Additional, E.L.K. had local pole line contractor on stand by and were deployed on February 23<sup>rd</sup>.

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?

Yes, E.L.K. posted on its Twitter page on February 22<sup>nd</sup> at 11:49AM informing the customers of potential for freezing rain and snow. The post also informed the customers that the staff was on call and suggested customers to call the office if they experience power outage.



3. Did the Distributor train its staff on the response plans to prepare for this type of major event?

There has been no formal training provide to prepare for this type of major event, however, E.L.K.'s operation staff has considerable experience responding to emergency outages.

## **During The Major Event**

 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. Please provide a brief description of the event.

There were two main contributing cause of the Major Event i.e., Adverse Weather – Tree Contact and Adverse Weather – Equipment Breakage. The storm caused the ice to be accumulated on the trees, power lines and equipment. As a result of the heavy ice accumulation, the trees and tree branches broke and fell on the power lines. The ice accumulation on power line caused equipment breakage that resulted in downed power lines.

2. Was the IEEE Standard 1366 used to identify the scope of the Major Event?

No, the outage commenced February 22, 2023, and accordingly, E.L.K. has used the Fixed Percentage approach (i.e., 10% of customers affected.

3. When did the Major Event begin?

The Major Event began on February 22<sup>nd</sup>, 2023 at 5:00PM.



4. Did the distributor issue any information about this Major Event, such as estimated times of restoration, to the public during the Major Event? If Yes, please provide a brief description of the information. If No, please explain.

Yes, E.L.K. continued posting on its Twitter account regarding estimated time of restoration, where known, as well as any areas that were being restored. E.L.K. also received information from its transmitter and shared their estimated time of restoration with the customers. E.L.K. also continuously reminded public to keep safe distance from downed power lines.

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

E.L.K. serves a total of approximately 12,600 customers. During the ice storm, there were a total of 3,077 customers without power (not due to Loss of Supply) caused by downed wires or tree contact within E.L.K.'s distribution system. This represents approximately 24% of E.L.K.'s customers. Additionally, every customer in E.L.K.'s service area experienced a power outage that exceeded 15 minutes due to Loss of Supply from transmitter.

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

It took E.L.K. approximately 27 hours to restore power to 90% of customers interrupted (not related to Loss of Supply)

It took a total of approximately 48 hours to restore power to 90% of customer interrupted (included Loss of Supply)

7. Were there any outages associated with Loss of Supply during the Major Event?

Yes, all of E.L.K.'s customers in the communities of Essex, Kingsville, Harrow, Cottam, and Comber experienced power outage due to Loss of Supply.



8. In responding to the Major Event, did the Distributor utilize assistance through a thirdparty mutual assistance agreement with other utilities?

E.L.K. was not part of any third-party mutual assistance agreement with other utilities, however, E.L.K. approached neighboring utilities and third-party contractors requesting assistance in restoration. Entegrus Powerline Inc and Essex Powerline Corporation were able to send crews to assist with the restoration.

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

E.L.K. had most of the material available in stock required for restoration, however, there were some items such as fuses that were purchased from neighboring utilities.

## **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)?

E.L.K. has had discussion internal and with its Board regarding the improvements and mitigation plans for future major events. These ongoing investments and discussions are as follows:

- Dedicated inventory supply available for Major Events
- Obtain membership with Ontario Mutual Assistance Program (OnMAG)
- Continued focus investment in vegetation control program as committed by
  E.L.K. in EB-2021-0016