

Algoma Power Inc (API) – Major Event Day Report (June 11, 2017)

Introduction

On June 11, 2017, severe thunderstorms moved through the API service territory. Initially the effects were felt north of Sault Ste Marie, with a few interruptions experienced in the Wawa and Batchawana/Goulais areas.

Later in the day, the most intense storms battered areas east of Sault Ste Marie, with the Desbarats, St. Joseph Island and Bruce Mines areas bearing the brunt of the impact.

Two cells moved through these regions – the first of which came through at approximately 4:30pm. Although the storm only lasted 45 minutes, it produced a large amount of damage from hundreds of falling trees hitting wires, poles and houses, and blocking roadways. Local observers reported wind speeds of 75-100 km/hr. A second cell swept through at approximately 1:00am the next morning.

The storm initially caused interruptions to transmission infrastructure, which cascaded to affect all API customers east of Sault Ste Marie – approximately 6000 in total. After that event was restored, the full impact of the storm on API's distribution network started to materialize as customers called in to report outages and damage.

Over the ensuing 3-4 days, over 115 power interruptions, and many more calls for service, were received and responded to by multiple API crews and engaged contractor services.

Prior to the Major Event

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

Environment and Climate Change Canada issued a Severe Thunderstorm Warning shortly before the first storm arrived (@ 4:08pm). Forecasts published earlier in the day predicted the possibility of thunderstorms, though there was no prior warning of the severe intensity of the storm and the number of fallen trees that would result.

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.

Not Applicable (N/A)

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

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.

API has a Business Continuity and Disaster Recovery Plan that is periodically updated and reviewed at the management level. This plan is designed to assist in the response to natural disasters, accidents, major outages, environmental disasters, municipal emergencies, and cyber-attacks. This plan is available to all staff both via API's corporate intranet, and hard copy. For major outages, this plan covers responsibilities and procedures for all outage restoration and communication efforts, and consolidates contact information for internal staff and key external agencies.

The scope of the outage described in this report did not invoke API's Business Continuity and Disaster Recovery Plan.

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)?

API has service agreements in place with its affiliates, Canadian Niagara Power and Cornwall Electric. These agreements would allow for mobilization of resources between LDC's when warranted by the impact of any particular event or series of events. The geographic diversity of the three LDC's mitigates the risk that any single weather event or natural disaster would simultaneously affect all three areas. API has also worked in the past with neighbouring utilities such as Sault PUC, as well as private utility-based contractors, to provide and receive support during unique events.

During the Major Event

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

API considered this a Major Event due the unforeseen and uncontrollable nature of the storm's intensity and the resulting substantial impact on API's network and customer base. The magnitude of the level of destruction, number of interruptions and significant response required confirmed API's perspective that this episode should be categorized as a Major Event.

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

Yes – the IEEE Standard 1366 was applied to determine the scope and ensuing categorization of the incident as a Major Event.

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

All interruptions associated with the event were coded as: Code 3 (Tree Contacts).

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 declarations published.

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

June 11, 2017 – approximately 4:30pm-5:00pm.

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

100% of the On-Call staff were available at the start, and utilized during the Major Event.

All available API Lines crews for the affected area – as well as all API Forestry crews – were deployed for the restoration effort, and other personnel were diverted to assist in various capacities, including outage location scouting by Metering, Forestry Contract Monitoring and Supervisory staff; and office resources from Management and the Engineering, Customer Service and Operations departments working with the Outage Management System (OMS) and related software, and assisting with Customer contacts.

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

One ETR was issued to the public during the Major Event, through a published media release on Tuesday June 13th @ 5:00pm. The release was distributed to a local news website, CTV Northern Ontario for their news website, and several radio stations – local to Sault Ste Marie area and CBC Radio. Due to the nature of the event as described above (over 115 interruptions overall) ETRs were not easily discernable for individual customers or groups of customers, other than the general statement issued in the media release.

API's Twitter feed and Facebook account had the same information published.

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

The one ETR release was distributed Tuesday June 13th @ 5:00pm.

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

No further updated ETRs were issued, due to the sheer volume of outages (more than 100) and the disparate areas and multiple crews involved. However as Supervision and office outage coordinators worked on the outage response, there were opportunities to engage with customers in some affected areas that had made contact to provide information for their specific interruption and had inquired about possible restoration times. Working with information provided from responding crews, ETR's were provided during these customer interactions where available and appropriate.

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.

No information regarding options for contacting the distributor to obtain further details about outage/restoration efforts was presented to API customers during the Major Event. Customers were reminded about the toll-free contact number to be used in order to report power outages/trouble through Twitter, Facebook and media releases.

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?

API issued 3 media releases during the Major Event, and engaged with customers through social media on multiple occasions as well. API issued a total of 18 Twitter messages during the Major Event, as well as 6 Facebook posts.

Content of these messages included safety warnings, acknowledgement of areas affected by interruptions, progress updates on restoration efforts and reminders of contact information to report further trouble/outages. A final message was published across all mediums to thank customers for their patience and crews for their safe and diligent efforts.

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

API does not employ an IVR system. All calls are handled by live representatives as they became available.

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?

API publishes its Twitter feed on the company website. The 18 published Twitter messages were also presented on the website.

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

The website was accessible for the entire duration of the Major Event.

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

Throughout the duration of the multi-day Major Event, a maximum of approximately 6000 customers were affected (through the initial Loss-of-Supply outage), which represents 50% of API's total customer base. For the initial day of the event (June 11th) approximately 3600 customers, representing 30% of API's total customer base, were affected. For the full multi-day impact, a total of approximately 4700 customers were affected, representing 39% of API's total customer base.

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

It took approximately 42 hours to restore 90% of the customers who were interrupted by this Major Event.

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

No distributed generation was employed during this Major Event.

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.

There was an initial outage at the beginning of the event that was a Loss of Supply, affecting @ 6000 API customers east of Sault Ste Marie, which lasted for 33 minutes. This interruption was part of a larger series of transmission-related outages in and beyond API's service territory, however this was the only Loss of Supply outage experienced by API during this Major Event.

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

API did not utilize assistance through a third party mutual assistance agreement, however several parties were leveraged to provide assistance throughout the multi-day restoration effort. This included multiple crews and equipment provided by the neighbouring Sault PUC utility; multiple crews and trucks (totalling a workforce of 19) provided by a Forestry contractor that is regularly contracted by API to assist with ongoing vegetation management activities; and a backhoe contractor assisting with the replacement of multiple damaged poles.

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

API did not run out of any needed equipment or materials throughout the Major Event.

After the Major Event

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)?

API conducted a round table discussion with contributors from all company departments, to review all facets of the Major Event, including the event itself, response and restoration efforts, resource allocation and technological assistance.

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

There were no specific lessons learned from the response to this Major Event, which would be applicable to a response to the next Major Event.

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 survey was conducted by API to gauge customer opinion regarding the response to this Major Event. Several unsolicited messages of positive feedback and support from appreciative customers were received through various sources.

Appendix – Radar Images



