

2.1.4.2.10 Major Event Response Reporting – February 22, 2023

Please note that, except Loss of Supply events, a Major Event shall meet all of the criteria listed under the first, second and fourth paragraph of the Major Event definition written under section 2.1.4.2 of the Electricity Reporting and Record Keeping Requirements (RRR).

Prior to the Major Event

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

🛛 Yes 🗌 No

Additional Comments:

Local media and Environment Canada had issued warnings and news coverage of the potential of a freezing rain event. A sample of an Environment Canada alert received is provided below.

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	Issued at 2023-02-21 6:03PM EST by Environment Canada: Freezing rain warning replaces winter storm watch for:		
	Windsor - Leamington - Essex County, Ont. (041420)		
	Current details:		
	Significant freezing rain expected Wednesday.		
	Hazards:		
	A prolonged period of freezing rain leading to significant ice build up in some areas. Ice accretion of 5 to 10 millimetres is possible,		
	especially on elevated surfaces.		
	Northeasterly winds gusting to near 50 km/h.		
Timing:			
	Wednesday afternoon to Wednesday night.		
	Discussion:		
Light snow and ice pellets Wednesday morning will change over to freezing rain Wednesday afternoon. Temperatures are expected to be just below the freezing mark, so the greatest ice accretion may be confined to elevated surfaces. Freezing rain is expected			
	change over to rain Wednesday night as temperatures rise above freezing. Gusty northeasterly winds will diminish early Thursday		
	morning.		
	Surfaces such as highways, roads, walkways and parking lots will become icy, slippery and hazardous. There may be a significant		
	impact on rush hour traffic in urban areas. Utility outages may occur.		
	Slow down driving in slippery conditions. Watch for taillights ahead and maintain a safe following distance. Beware of branches or		
	electrical wires that could break under the weight of ice. Public Safety Canada encourages everyone to make an emergency plan and get an emergency kit with drinking water, food, medicine, a first-aid kit and a flashlight. For information on emergency plans		
	and kits go to http://www.getprepared.gc.ca		
	Please continue to monitor alerts and forecasts issued by Environment Canada. To report severe weather, send an email to		
	<u>ONstorm@ec.gc.ca</u> or tweet reports using #ONStorm.		
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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?

⊠ Yes □ No □ Not Applicable

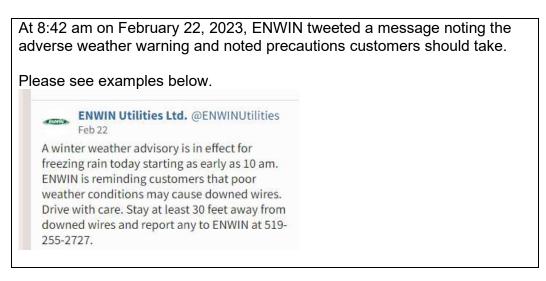
Brief description of arrangements, or explain why extra employees were not arranged:

The first outages caused by the freezing rain event started at approximately 2:00 pm during a regular weekday. Full staffing was working at the onset of the storm. There were several small outages at the onset of the storm, which were dealt with by staff that had arrived for their afternoon shift, and staff that had been carried over from their day shift. These outages were restored between 5:00 pm and 6:00 pm.

Between 6:00 pm and 7:00 pm, the storm began to create many widespread outages. Once the event was creating widespread power outages, more staff were called in and mobilized to provide power restoration. Management simultaneously made arrangements to have crews working shifts to enable 24-hour storm restoration efforts. Shifts of crews worked 24 hours per day beginning in the afternoon of February 22, 2023. All available line staff were engaged in power restoration until the last customer that could be re-connected, was re-connected.

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?

⊠ Yes □ No □ Not Applicable





ENW	Safety Reminder
	ENWIN is reminding customers that downed wires and transformer fires are emergencies. Poor weather conditions such as snow, heavy rain, and strong winds can cause downed wires. Drive with care. Remember to stay at least 30 feet away from downed wires and be sure to report any to ENWIN at 519-255-2727. If the power goes out, be sure to turn off all electrical appliances. Rest assured ENWIN is on the way. Please keep phone lines open for emergencies
	Your safety is our #1 priority.

4. Did the distributor train its staff on the response plans to prepare for this type of Major Event?

🛛 Yes 🗌 No

During the Major Event

1. 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.

□ Loss of Supply

□ Lightning

- □ Adverse Weather-Wind
- □ Adverse Weather-Snow
- Adverse Weather-Freezing rain/Ice storm
- □ Adverse Environment-Fire
- □ Adverse Environment-Flooding
- □ Other

Please provide a brief description of the event (i.e. what happened?). If selected "Other", please explain:

A freezing rain event impacted the entirety of the City of Windsor beginning in the afternoon of Wednesday, February 22, 2023, and continuing into the mid-morning of Thursday, February 23, 2023.

The ice accumulation on lines, trees and structures caused numerous power outages from falling trees which downed powerlines.



2. Was the IEEE Standard 1366 used to derive the threshold for the Major Event?

Yes, used IEEE Standard 1366*

□ No, used IEEE Standard 1366 2-day rolling average

□ No, used fixed percentage (i.e., 10% of customers affected) *The OEB preferred option

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

Date	February 22, 2023
Time	2:15 PM

4. Did the distributor issue any information about this Major Event, such as estimated times of restoration, to the public during the Major Event?

🛛 Yes 🗆 No

If yes, please provide a brief description of the information. If no, please explain:

ENWIN engaged in a significant communications effort to keep its customers apprised of the status of ongoing restoration efforts.

A summary is provided below:

- Social media posts were made outlining areas affected by the storm, and once determined, an approximate restoration time. This included over 13 original posts and over 40 system-generated posts. Information included directions to visit the ENWIN website to view the outage map and to read information about power restoration, tips during prolonged power outages, and safety information.
- ENWIN worked closely with local media throughout the event, issuing six press releases between February 23rd and 24th.
- ENWIN team members also contributed to 12 interviews and media updates, with any update/media release being posted to the ENWIN website. Banners on the website were also made to direct visitors to ENWIN's online outage centre.
- Additional call centre staff were made available to handle increased customer call volume (e.g. reporting power out or lines down) during and after the storm.

5. How many customers were interrupted during the Major Event?



A peak of 25,595 customers were without power. The peak occurred at 11:18 pm on February 22, 2023, approximately 9 hours after onset of the first outage caused by the freezing rain.

What percentage of the distributor's total customer base did the interrupted customers represent?

27.4%

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

From the peak at 11:18 pm on February 22, 90% of that load was restored by 5:20 pm on February 23, 18 hours, 2 minutes after the peak outage occurred.

Additional Comments:

None.

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

🗆 Yes 🛛 No

If yes, please report on the duration and frequency of the Loss of Supply outages:

Not Applicable.

8. In responding to the Major Event, did the distributor utilize assistance through a third-party mutual assistance agreement with other utilities?

□ Yes

🛛 No

 \Box Do not have third party mutual assistance agreements with other utilities

If yes, please provide the name of the utilities who provided the assistance?

Not Applicable.

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



🗆 Yes 🛛 No

If yes, please describe the shortages

Not Applicable.

After the Major Event

1. What actions, if any, will be taken to be prepared for, or mitigate, such Major Events in the future?

□ No further action is required at this time

- □ Additional staff training
- Process improvements
- System upgrades
- Other

Additional Comments:

The Major Event was caused by a multiple hour freezing rain event. ENWIN has made significant investments in system automation and remote operation that allow for remote reconfiguration of the distribution feeders in the event of an upset. These system automation devices are in place to allow for the smallest area of feeder circuit to be automatically isolated due to the fault condition, while allowing for quick restoration of the remaining load.

This automation, in addition to ongoing staff training, proved beneficial during the storm, to reduce the duration of the outages to the extent possible.

ENWIN also continues to focus on continual improvement. It is currently working on upgrades to its outage management system, which will offer enhancements to its customer outage map, with more granularity of information provided to customers including confirmation of the outage area and estimated times of restorations for each outage. This will also assist with process improvements to further enhance outage response and reporting.