

OUTAGES.ENERGYPLUS.CA



**BOOKMARK THE
OUTAGE MAP
TO VIEW:**

- ✓ Current outages on your computer, smart phone or tablet
- ✓ Street location and cause of outage
- ✓ Number of customers impacted
- ✓ Estimated time power will be restored
- ✓ Ongoing updates



MAJOR EVENT RESPONSE

Report for the Ontario Energy Board

ABSTRACT

THIS REPORT CONTAINS INFORMATION FOR A MAJOR EVENT THAT IMPACTED RELIABILITY ON SUNDAY NOVEMBER 15, 2020 IN ENERGY+ INC.'S DISTRIBUTION SERVICE AREA. THE CONTENTS OF THE REPORT ARE CONSISTENT WITH REPORTING AND RECORD KEEPING REQUIREMENTS FOR SYSTEM RELIABILITY PER EB-2015-0182.

OEB FILING 2.1.4.2.10

Prepared By: Energy+ Inc.

Date: December 18, 2020



OEB Filing 2.1.4.2.10 – Major Event Response Report for Energy+ Inc.

Major Event Day: November 15, 2020 Severe Weather due to Windstorm

Prior to the Event

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

Yes.

The Weather Network, Environment Canada, and similar authorities had issued special weather statements and strong wind warning in advance of the major event. Environment Canada issued wind warnings across the province, with some areas seeing gusts measuring up to 110 kilometers per hour.

<https://www.cbc.ca/news/canada/kitchener-waterloo/wind-freezing-rain-warning-nov-20-1.5802770>

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.

Energy+ Inc. ensured appropriate staffing levels were in place to address the expected outages that would occur as a result of the heavy wind conditions.

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.

Energy+ did not issue media announcements to the public through its social media platforms (Facebook and Twitter). Wind conditions were being monitored, and their anticipated impact to the distribution system was unknown until the severe windstorm hit the Energy+ service territory. Energy+ immediately updated its social media platforms and website, as soon as the first outages were reported.

4. Did the distributor train its staff on the response plans for a Major Event?

Yes.

Energy+ has an emergency preparedness plan which specifies duties and responsibilities of team members. Energy+ did not need to invoke the plan as the magnitude of the outages did not meet the parameters defined in the plan to be quantified as an emergency.

Energy+ operations staff are on call, or on standby as part of their regular duties, and therefore are trained to respond to outages including major event days.

Energy+ communication staff are trained on updating website, social media platforms, liaising with local media and directing customers as necessary, during major event

situations.

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.

Adverse Weather-Wind (Cause Code 6) was the main contributing Cause for this Major Event.

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

Yes, the IEEE Standard 1366 (2012) was used to derive the threshold that would establish if November 15, 2020 would be a Major Event Day. Energy+ also performed a qualitative analysis based on the OEB's questions to determine if the event can be considered a major event.

The IEEE 1366-2012 Standard provides a statistical method of studying reliability events. A Major Event Day is a day which the daily system SAIDI (System Average Interruption Duration Index) exceeds a threshold value, designated as T-med. The SAIDI index is used as the basis of this definition since it leads to consistent results regardless of the utility size, because SAIDI is a good indicator of operational and design stress. Data used for SAIDI is based on five (5) sequential years and includes days that had an interruption, so a SAIDI/Day value can be used to calculate T-med.

Energy+ T-med value as calculated in accordance with the IEEE 1366-2012 standard is shown below in Table 1.0:

Table 1.0 – Energy+ T-med Calculation

Parameter	Value
α = Average [ln(Daily SAIDI)] 2015-2019	-3.28
β = Standard Deviation (α)	2.13
T_med = $e^{(\alpha+2.5\beta)}$	8.17

The T-med value of 8.17 indicates that anything beyond this figure would be deemed to be a Major Event. Table 2.0 below shows the Daily SAIDI values calculated for November 15th.

Table 2.0 – Calculation of Daily SAIDI Values

Day	Customer Outage (Minutes)	Total Customers	Daily SAIDI
Sunday November 15, 2020	914538	67588	13.53

The calculated value for November 15, 2020 is 13.53 and is greater than the T-med value calculated. Therefore, this specific day was deemed to be a Major Event.

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

Date: Sunday November 15, 2020

Time: 10:15 EST

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.

When known, the estimated times of restoration (ETRs) were issued throughout the Major Event through Energy+'s Outage Management System (OMS). The OMS includes a public-facing Outage Map on the Energy+ website which remained accessible throughout the Major Event.

Energy+ also sent notifications and status updates through its social media channels, specifically Facebook (11) and Twitter (11). The metrics on social media and website results for November 15-16, 2020 are attached in Appendix A.

The first ETR was issued immediately during the start of the first outage on November 15, 2020 at 10:15 EST through the Outage Management System. There were a total of 10 outages during the Major Event Day. For each outage, Energy+ updated the OMS system when the outage was first identified and provided updates depending on the scale of the outage.

Overall, there were a total of 27 updates made to the OMS system during the Major Event.

Outage #	1st Update	2nd Update	3rd Update	4th Update	5th Update
5419	11:02	11:25	12:59	13:33	15:00
5420	10:15	13:08			
5421	14:23	14:27	15:45		
5422	14:23	14:49	14:56		
5423	14:12	17:09	17:12		
5424	18:25	22:54			
5425	15:02	23:18			
5426	20:21	22:46			
5427	20:26	21:01	1:30		

5428	14:13	23:36			
	11/15/2020	11/16/2020			

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

There were a total of 10,317 unique customers that were impacted during the Major Event.

This represents 15% of Energy+ total customer base of 67,588 (as of November 15, 2020).

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

It took 6 hours and 57 minutes to restore power to 90% of customers impacted by the Major Event.

7. 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.

Yes.

There was one outage during the Major Event associated with Loss of Supply lasting 2 hours and 57 minutes.

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

Energy+ determined assistance through the third-party mutual assistance agreement was not required. Energy+ utilized third party contractors to support restoration efforts.

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

Energy+ did not run out of any needed equipment or materials during the Major Event.

After the Major Event

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

Energy+ holds a debrief meeting after each Major Event with key members involved to understand items that went well and things that could be improved in the future.

Energy+ determined that the response during the Major Event on Sunday November 15, 2020 went extremely well, as staff were adequately trained and the process ran smoothly.

Energy+ also determined that it is important to have access to third party contractors that are available to supplement the restoration efforts. Contacting third party contractors early on in this Major Event, assisted Energy+ in ensuring adequate resources for power restoration efforts.

Energy+ will follow-up with enhancements to their current process of opening the call centre and redirecting calls from the dedicated toll-free outage line during major events.

Energy+ learned customers rely on the online outage map to see “at a glance” the scope of the outage in their neighbourhood, by viewing a shaded polygon outlining the outage. The outage map also provides a summary of the streets that are currently without power.

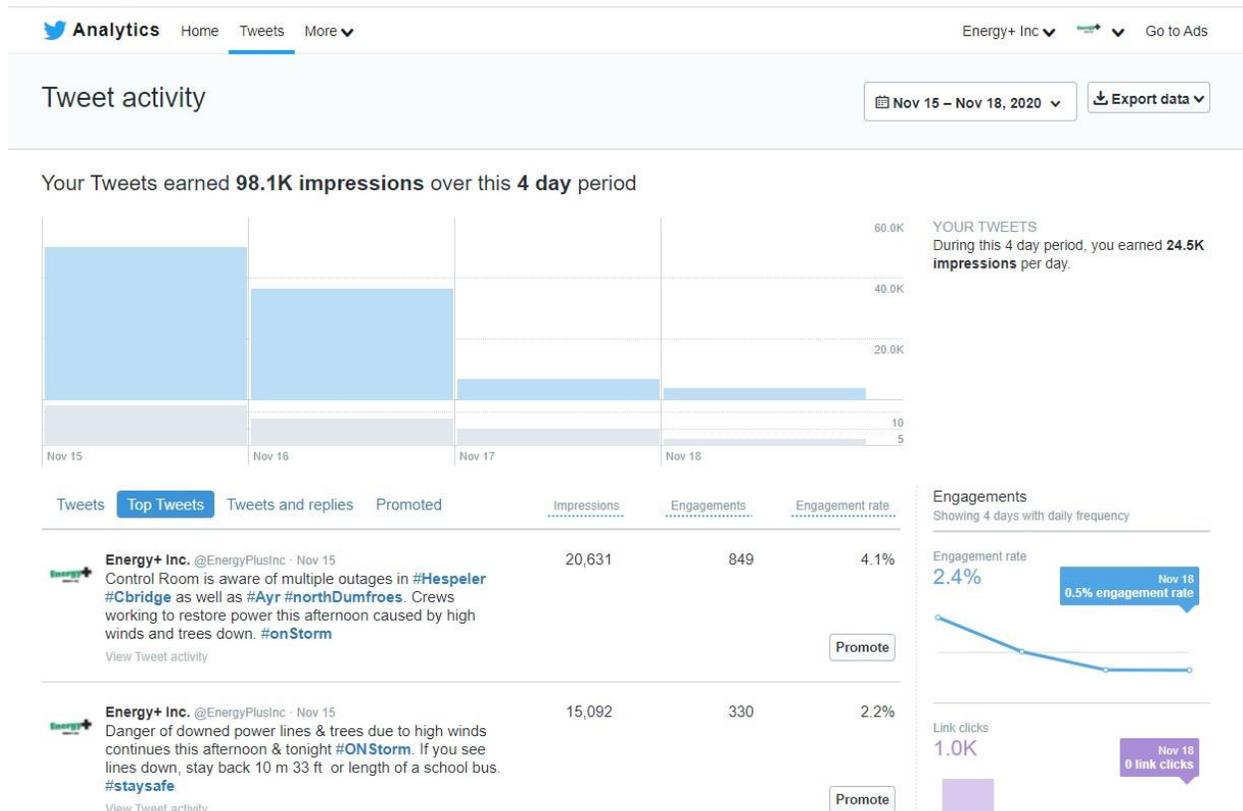
Energy+ learned that their inventory levels met their needs to assist with timely restoration efforts.

Energy+ learned that while they are operating with multiple temporary sites for Operations and the System Control Room and many staff are working remotely due to COVID, the team was able to act swiftly and efficiently to restore power to customers based on the priorities established.

APPENDIX A SOCIAL MEDIA ANALYTICS

Terminology	
Impressions	Number of times users saw the Tweets, Posts
Engagements	Total times users interacted with Tweets, Posts (clicks, retweet, replies, follows, likes).
Engagement Rate	Number of engagements divided by the total impressions.

Twitter Analytics – November 15-16, 2020



Facebook Analytics – November 15-16, 2020

Number of Posts: 11
 Post Reach: 8,202 impressions
 Post Engagements: 1,206
 New Page Followers: 63
 Page Views: 705

Energy+ Inc.
 Published by Hootsuite · November 15 at 4:44 PM · 🌐

⋮

Additional crews have been called in due to wide spread downed lines, trees on lines, damaging winds. Thank you for your patience as crews work hard to compete as quickly as safety allows. #ONStorm #Cbridge #NorthDumfries #BrantCounty #Ayr

5,755
People Reached

777
Engagements

Boost Post

👍👤 16

17 Comments 14 Shares

👍 Like

💬 Comment

➦ Share

⋮

Post Content	Reach	Engagements	Engagement Rate	Analytics
<p>Energy+ Inc. @EnergyPlusInc · Nov 15 Crews continue to make progress in #BrantCounty #NorthDumfries #Cbridge responding to multiple broken hydro poles, trees on lines. We are aware of ALL outages & will work all night. Thank you for your patience. Stay back 10 m or 33 ft from downed lines #staysafe #ONStorm</p> <p><small>View Tweet activity</small></p>	14,913	399	2.7%	<p>On average, you earned 252 link clicks per day</p> <p>Retweets without comments: 54 (Nov 18: 3 Retweets without comments)</p> <p>On average, you earned 14 Retweets without comments per day</p>
<p>Energy+ Inc. @EnergyPlusInc · Nov 15 Additional crews have been called in due to wide spread downed lines, trees on lines, damaging winds. Thank you for your patience as crews work hard to compete as quickly as safety allows. #ONStorm #Cbridge #NorthDumfries #BrantCounty #Ayr</p> <p><small>View Tweet activity</small></p>	11,177	326	2.9%	<p>On average, you earned 25 likes per day</p> <p>Likes: 100 (Nov 18: 2 Likes)</p>
<p>Energy+ Inc. @EnergyPlusInc · Nov 15 Power #outage in #Cbridge affecting approx. 2800 customers. Crews have been dispatched. ETR 3:30 P.M. For more info please visit outages.energyplus.ca ^pa</p> <p><small>View Tweet activity</small></p>	8,104	762	9.4%	<p>On average, you earned 8 replies per day</p> <p>Replies: 31 (Nov 18: 0 replies)</p>
<p>Energy+ Inc. @EnergyPlusInc · Nov 15 Update power #outage in #Cbridge now affecting approx. 16 customers in the St Andrews/St Stanley area. Crews are working to replace a broken pole. ETR 10:45 P.M. For more info please visit outages.energyplus.ca ^pa</p> <p><small>View Tweet activity</small></p>	2,989	260	8.7%	

Facebook Comments Received /Replies/Conversations to **ONE Post (there were 11 Posts):**

Comment as Energy+ Inc.

Beckiie Thibert
Hi there, power outage on bawcutt crescent in Paris. I don't see it on the map and I've tried calling in. Could you please advise if this is being worked on/time of restoration thank you!!
[Like](#) · [Reply](#) · [Message](#) · 1w

Author Energy+ Inc.
Beckiie Thibert yes crews continue working tonight to restore power. The Outage Map is getting a workout that for sure and we are having some issues with it. Thanks for your patience!
[Like](#) · [Reply](#) · Commented on by Allison Millar-Cann · 1w

Reply as Energy+ Inc.

Kim Coldham
Thank you and be safe out there.
[Like](#) · [Reply](#) · [Message](#) · 1w

Glorianne Dekeers
No power on DeKeer Rd. Brant County since 2:00 ,no one picks up phone on hold for over an hour.any idea how long we will be out
[Like](#) · [Reply](#) · [Message](#) · 1w

Author Energy+ Inc.
Glorianne Dekeers crews are aware of outages in the area. Crews are dealing with multiple hydro poles down, trees on lines. No ETR for restoration due to conditions.
[Like](#) · [Reply](#) · Commented on by Allison Millar-Cann · 1w

Glorianne Dekeers
Energy+ Inc. thanks for your response 🙏 be safe guys
[Like](#) · [Reply](#) · [Message](#) · 1w

Reply as Energy+ Inc.

Marie Mclellan Muir
Stay safe linemen!
[Like](#) · [Reply](#) · [Message](#) · 1w

Heather Ruttan
Yes, thank you and be safe
[Like](#) · [Reply](#) · [Message](#) · 1w

Maria Santos
Stay safe guys.
[Like](#) · [Reply](#) · [Message](#) · 1w

Sherri Lynn
Thank you all! Stay safe!
[Like](#) · [Reply](#) · [Message](#) · 1w

Suzanne Harris
Be safe
[Like](#) · [Reply](#) · [Message](#) · 1w

Angela Grabham
Hi There. St George has just gone out. Can you advise timeframe. It has been going on and off since noon. But now we are out
[Like](#) · [Reply](#) · [Message](#) · 1w

Lisa Buck
Thank you!!!
[Like](#) · [Reply](#) · [Message](#) · 1w

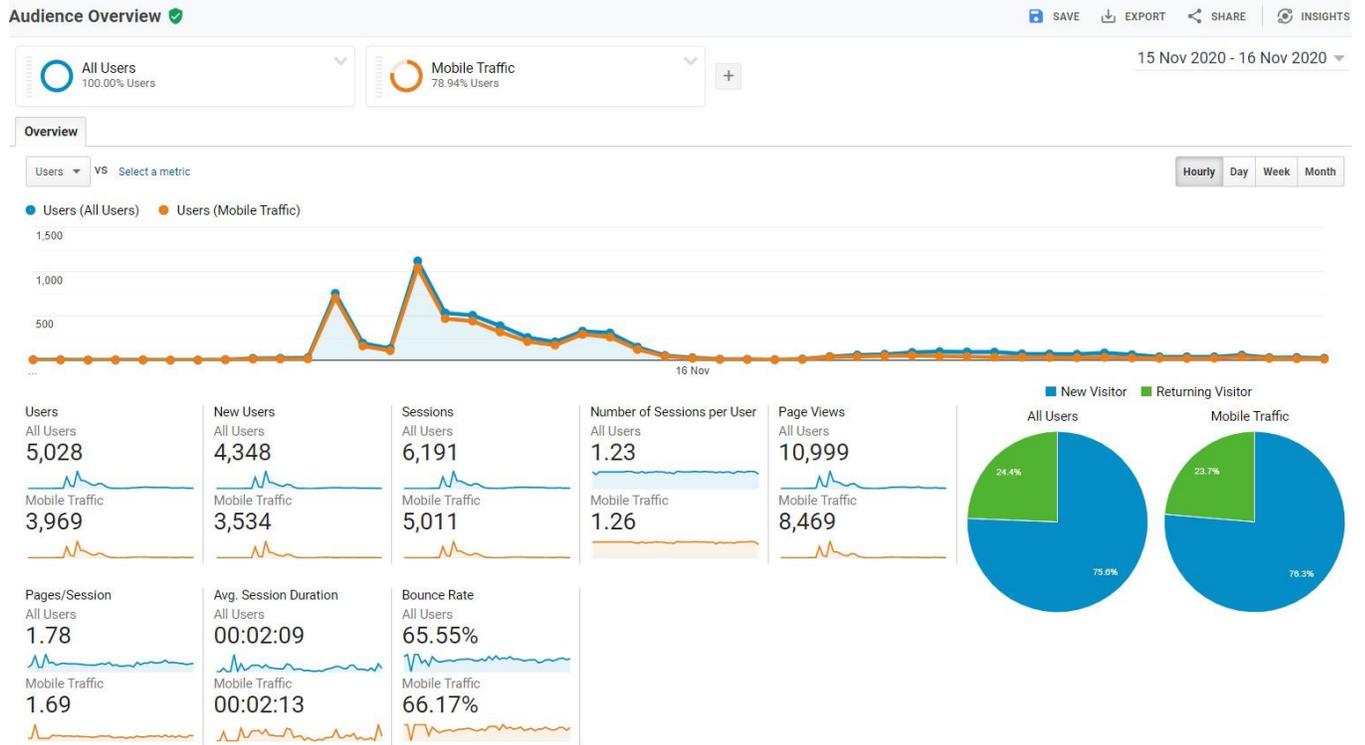
Donna Bell
Thank you, be safe out there!
[Like](#) · [Reply](#) · [Message](#) · 1w

Nerina Martorano
Any time frame for power restoration on Hartley Ave in Paris ont
[Like](#) · [Reply](#) · [Message](#) · 1w · Edited

Author Energy+ Inc.
Nerina Martorano no estimate restoration time. Crews are working on it.
[Like](#) · [Reply](#) · Commented on by Allison Millar-Cann · 1w

Nerina Martorano
Energy+ Inc. thank you 🙏
[Like](#) · [Reply](#) · [Message](#) · 1w

Website Analytics – November 15-16, 2020



Peak Hours: November 15 11:00 am 754 users; November 15 2:00 pm 1,119 users.

Pageviews: 10,999 (8,469 used mobile)

Users: 5,028 (3,969 used mobile)

Top Pages Visited: Power Outage (4,218); Homepage (2,663); Report a Problem (355); Power Outage Weather (317)

Top Search Terms: outage, power out