

City of Markham Ice Storm 2013

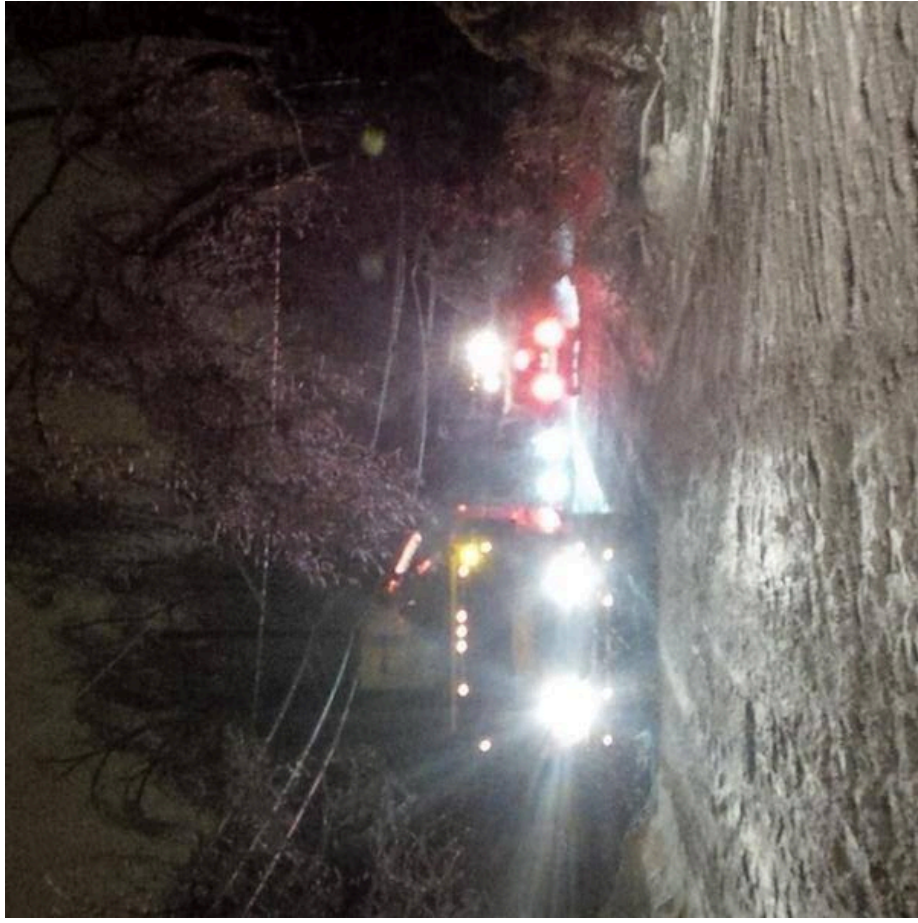
Presented by PowerStream Inc.

January 8, 2014



Agenda

- Overview
- Field Response
- Customer Communications
- Feedback
- Lessons Learned /Next Steps



Worst Storm in our service territory



- Worst storm seen in our service territory, level of tree destruction on overhead system and residential services was unprecedented and only tempered by the high concentration of underground services in our system.
- Over 35% of PowerStream customers (92,000 customers) in York Region were without electricity, compared to approximately 41% (300,000) of Toronto Hydro customers were without electricity.

Mobilize, Assess, Respond and Adapt



Operations

- Field restoration efforts



Technology

- IVR, call centre, OMS



Communications

- Customer service, corporate communications, social media



Overview of Ice Storm

Canadians in three provinces stay in dark five days after ice storm as efforts continue to restore power

NATIONAL POST

Ice storm: Half a million without power brace for a dark Christmas

» TORONTO STAR «

Ice storm deemed one of the largest in Toronto history

THE GLOBE AND MAIL 

Ontario residents cope with blackouts

 CBC Radio-Canada

Ice storm cleanup likely to take weeks; thousands still without power 

Overview of Ice Storm



On a normal day:

- 1,500-2,000 calls on the corporate phone system
- 10-4,000 calls on the Power Outage line
- Typical Tweets @PowerStreamNews by others for one day: 35
- Typical web hits on PowerStream.ca for one day: 8,000

During Storm:

- A combined total of 86,500 calls were received on PowerStream's corporate phone system and Power Outage line in one day – Sunday, December 22nd
- 185,919 total calls received during between the 20th and the 30th
- 7.5 million web hits over the same period – almost 100 times the normal volume
- 1.3 million different people exposed, at least once, to @PowerStreamNews over the same period
- # of Twitter followers increased from 3,261 to 9,652

Overview of Ice Storm



- Unlike previous major outages, the capacity of PowerStream's Corporate phone lines and website were severely strained and remedies were instituted within the first 24 hours.
- Unlike previous major outages, the volume of outage data calls generated from PowerStream's Advanced Metering Infrastructure (AMI) and Power Outage line resulted in the malfunction of the interactive Power Outage Map and contributed to information inaccuracies in communications.
- PowerStream responded with a Storm Centre landing page on the website, introduced customized messaging on customer facing telephone systems (general outage updates, guidance on system navigation, instruction on how to reach a live agent, etc.), expanded contact centre hours of operation and introduced a static map of major outage areas and crews activity updated regularly.

Overview of Ice Storm

Field staff worked around the clock (in extreme weather conditions) as well as with other support staff.



- Staffing resources for restoration efforts and to support customer service activity was initially hampered by the timing of the holiday season when many staff, contractors and vendors were away and had to be contacted.
- Ability to immediately engage external resources was limited by the scope of the storm affecting neighbouring utilities.
- Over 500 circuit breaker trips (equivalent to a year of normal operation) affecting large volumes of customers. Strength of system and support of staff and 3rd parties enabled over 75% of all customers to have service restored within 24 hours and 88% of Markham service area within 48 hours.

Pre-storm Preparation



- System Control began tracking the storm through a contracted weather forecasting service five days prior to the storm's arrival.
- Additional field staff resources were placed on standby two days prior to the storm's arrival.
- News release distribution and related social media messaging on how to prepare for power outages initiated two days prior to storm's arrival.
- Customer Service staff were placed on standby to support system control.

NEWS RELEASE

CONTACT INFORMATION

Daloris Grohman, Digital & Customer Communications Specialist

Media Line (24/7): 905-532-4400

Email: News@PowerStream.ca

Website: www.PowerStream.ca



FOR IMMEDIATE RELEASE

PowerStream encourages customers to be prepared for power outages
Be safe – stay away from downed powerlines, follow fire safety rules for alternate lighting or heating

VAUGHAN, ON, December 19, 2013 – The latest weekend weather forecast for the PowerStream service area is indicating the possibility of significant freezing rain starting Saturday afternoon continuing through to Sunday evening. This prolonged event could yield significant ice accumulations. The company's System Control Centre is continuing to monitor weather forecasts and storm models. Mitigation strategies are being made to prepare line crews and additional field and communications staff to respond as the situation evolves.

The build-up of ice on overhead power lines and tree branches may cause power outages, some lengthy. PowerStream encourages its customers and others in southern Ontario to be prepared for power outages – before the power goes out. [Emergency Management Ontario](#) and local emergency responders recommend that residents prepare and plan to be self-sufficient for 72 hours in an emergency situation.

[Power Outage Preparation](#) – Know what to do before the power goes out, during a power outage and after power is restored, available on the PowerStream website, is an extensive list of do's, don'ts and instructions including *Do build a 72-hour emergency kit before the power goes out, Do follow the [Ontario Fire Marshal's fire safety rules if using candles or lanterns, Do stay away from downed powerlines and Don't ever use a charcoal or gas barbecue, camping heating equipment or portable generator indoors. They produce deadly carbon monoxide gas, during a power outage.](#)*

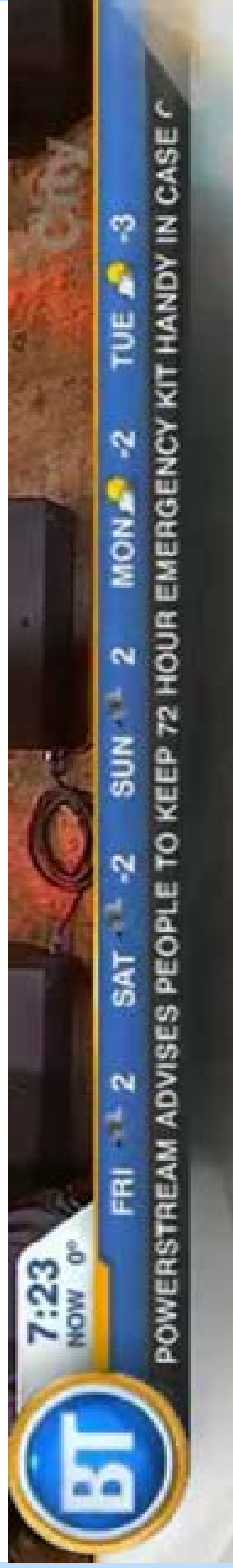
More emergency preparedness information and updates are available at [Emergency Management Ontario](#).

QUOTES

- "When responding to any power outage or electrical emergency, our first priority is safety; for the public and our employees. Once areas are made safe, an orderly process determines our restoration priorities," explained Brian Bentz, PowerStream President and CEO. "Our first efforts are directed to restore power to community critical locations such as hospitals, police, fire, and ambulance facilities, and other locations such as senior's homes, water pumping stations, sewage plants and communication centres. Our next priorities are dense neighbourhoods where PowerStream crews can restore power to the most customers in the least amount of time. Crews are then directed to smaller and individual outages."
- "The weight of the ice build-up on overhead power lines and tree branches can cause extensive damage to electricity distribution equipment, sometimes resulting in extended power outages. I encourage you to think about essential items you might need during the coming days, in addition to flashlights and batteries," said Linas Medelis, Vice President of Customer Service. "Prescription drugs, diapers, a full tank of gas. Our Power Outage Preparation Guide contains a list to get you started, but be sure to consider what else you might need."

Pre-storm Preparation

- The morning following the distribution of the news release, Breakfast Television's news anchor, Melanie Ng, referenced the content in the document and informed viewers:
- PowerStream's System Control Centre is continuing to monitor weather forecasts and storm models.
- Mitigation strategies are being made to prepare line crews and additional field and communications staff to respond as the situation evolves.
- The build-up of ice on overhead power lines and tree branches may cause power outages, some lengthy.



Website Power Outage Info



Home page on PowerStream website with banner directing visitors to Power Outage information and Resources page.

PowerStream

Search Here ... Advanced Search

LET'S CONNECT!

Links ▾ Safety ▾ TOU Status ▾

About Us ▾ Residential ▾ Business ▾ Energy Management ▾ Publications ▾

BE PREPARED
Storms can result in power outages
Click here for information & resources

Be prepared and be safe!
Know what to do and what not to do, before, during and after a power outage.
CLICK HERE for information & resources.

LATEST NEWS

- 2013-12-28 : PowerStream continues to restore power throughout its service territory – update
- 2013-12-28 : PowerStream continues to restore power throughout service territory
- 2013-12-27 : PowerStream continues to restore power throughout service territory
- 2013-12-26 : PowerStream's efforts to restore power become increasingly more difficult

POPULAR LINKS

- Conservation and Demand Management Programs
- Accessibility at PowerStream
- Career Connections
- Contact Us
- CDM Champions Program
- eBilling: Easy, Economical, Efficient
- **peaksaver PLUS** Control Centre
- Renewable Generation
- saveOnEnergy COUPONS
- Time-of-Use (TOU) Rates
- TOU Tool for Small Businesses

YOU ASKED US

- Who owns PowerStream?
- How do PowerStream's distribution rates compare with other utilities?
- Can you tell me how PowerStream gives back to the community?
- Get Answers ...

MY ACCOUNT LOGIN

Account Login Email Login

Account #

Remember my account # ☐

Password

Login

→ Forgot your password?

→ Create an online account login

Call 1-877-777-3810 to report a power outage

Click here for current power outage information

eStream PowerStream's Social Blog

PowerStream SOLAR

saveonenergy™

SmartGrid Technologies

SmartCommute 2013

GREATER TORONTO'S TOP 1000 EMPLOYERS

Achievers 2013

ENVIRONMENTAL ACHIEVEMENT AWARD

January 03, 2014

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Website Power Outage Info



Power Outage Information & Resources page includes information on:

- Power outage preparation
- Reporting a power outage
- How power is restored
- Portable generators
- Improving reliability
- Insurance claims
- Vegetation management
- Electric Emergency Plan
- Electrical outage terms
- Power Outage Map FAQs

Search Here ...

Advanced Search

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Print

POWER OUTAGE INFORMATION & RESOURCES

Open the interactive Power Outage Map by clicking the Current Power Outage Information icon located below My Account Login on the right side of the page. Search by municipality or postal code to find outage restoration details.

For additional power outage information and resources, click on the links below.

Power Outage Map FAQs Have a question or need help with the interactive map? Learn answers to frequently asked questions like, "What's Silverlight?"	Power Outage Preparation Be prepared and be safe. Before it happens, know what to do and what not to do, before, during and after a power outage.
Call 1-877-777-3810 To report a power outage or hear when power will be restored call 1-877-777-3810. Click the link above for FAQs about this service.	How Power is Restored PowerStream restores power as quickly and safely as possible. Learn about our restoration process and priority loads.
Improving System Reliability Learn about how we work to improve system reliability.	Portable Generators When used properly, portable generators can provide an alternative energy source until power is restored.
Ontario Electricity Emergency Plan Learn about the plan that is used in event of a large-scale electricity emergency affecting the province of Ontario.	Electrical Outage Terms A glossary of terms that may be used in outage and restoration communications.
Tree & Vegetation Management Safety guidelines for tree trimming around overhead wires and planting under and around electrical equipment.	Insurance Claim Submission Step-by-step information and FAQs to guide you through the claim submission process.

MY ACCOUNT LOGIN

Account Login Email Login

Account # Remember my account # ☐

Password: Login

→ Forgot your password?
→ Create an online account login

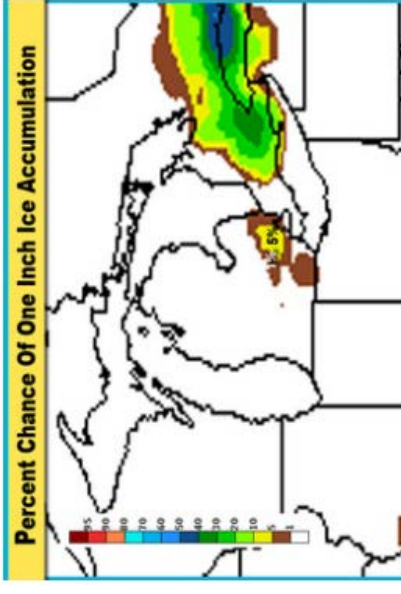
Call 1-877-777-3810 to report a power outage

Click here for current power outage information

Operations Readiness



*“This will be a tricky system for your area
this weekend.”* DTN Weather Service



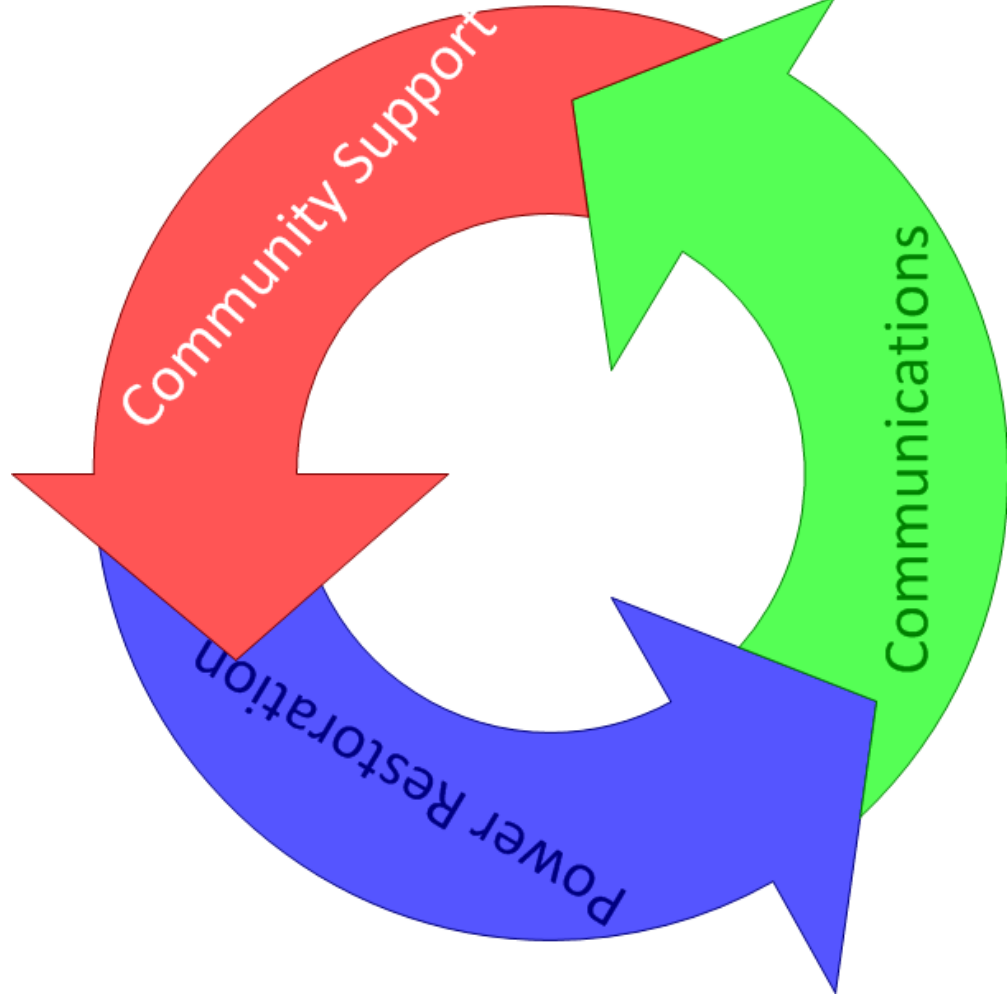
Commenced dialogue with our weather service provider on December 18th. At that time, while the forecast indicated precipitation, it was unclear if it would be rain, freezing rain, or snow.

Continued follow-ups with our provider occurred twice daily. Models refused to “firm up” and where the “line” would be (of freezing rain).

Lines department surveyed all Lines staff to determine availability for the weekend on the 19th.

System Control readied enhanced staffing plans for the weekend on Friday the 20th.

PowerStream's Restoration Strategy

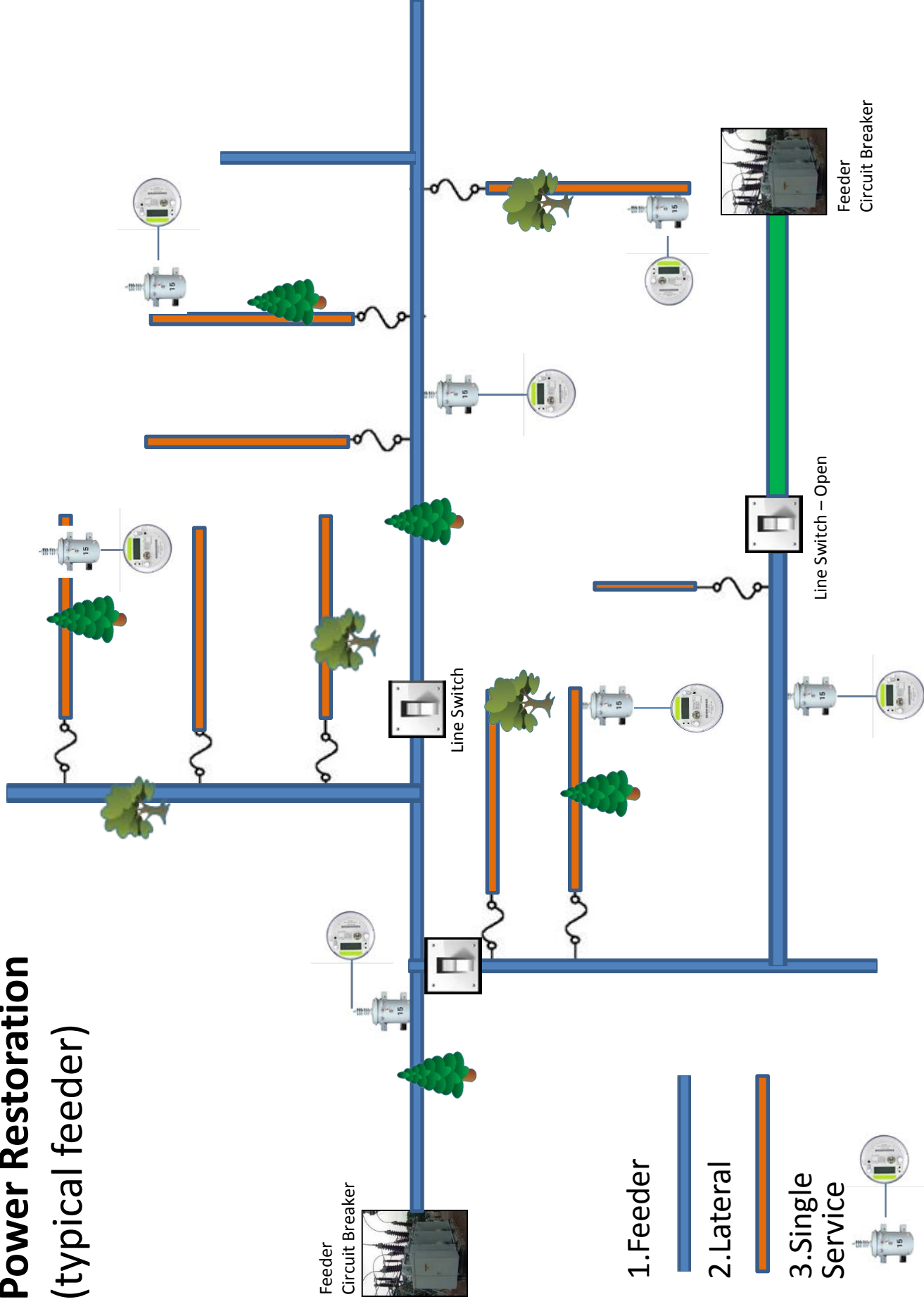


Interaction with City of Markham



- Lines of Communication were established early on in the incident with the Emergency Operations Centres (EOC) of Aurora, Richmond Hill, **Markham**, Vaughan, and the Region of York and maintained 24/7 throughout the duration.
- Very effective mechanism for PowerStream to react to municipal Health and Safety Requests, community priorities and provide for two-way transfer of information.
- The Markham EOC was a key partner in this event and excellent two way communication with PowerStream was maintained through the entire duration (Sonia Singh, Phil Alexander, Mike Bekking, Glenn Dick).
- Brian Bentz in regular communication with Mayor Scarpitti.
- Markham Forestry crews were deployed to assist PowerStream in clearing trees that were blocking road access (co-ordinated with Jeff McMann).
- Markham's Corporate Communications department, led by Dennis Flaherty, worked collaboratively with PowerStream's Corporate Communications team in sharing and disseminating information to the media and general public.

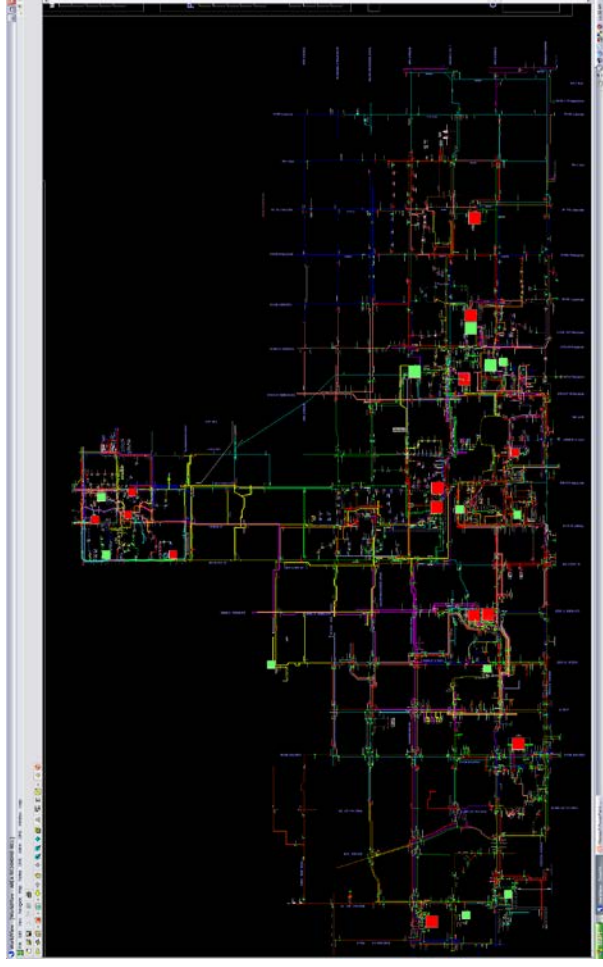
Power Restoration (typical feeder)



Many lateral fuses “froze” in the switch brackets making it difficult to determine which had operated.

System Impact

- More than 500 feeder circuit breaker trips, including Auto-Recloses (“Blinks”) and Lockouts – this is the equivalent of one full year’s number of breaker operations in only 3 days
- Greater than 1,000 incidents within the Outage Management System



- 900 line fuses replaced; multiple transformer fuses replaced
- 3 km of secondary service wire replaced
- 10 poles replaced
- 300 single location visits (individual services, primary and secondary)
- 200 visits to low wires, downed wires; most were Bell or Rogers cables

Field Resources - Internal/External



PowerStream Personnel

- 66 Lines Staff
- 12 Management

External Contractors/Utility Assistance

- City of Markham and City of Vaughan forestry crews
- Riggs Distler, Utility Contractor, Gormley, 15 Linepersons
- Wilderness Environmental, Line Clearing Contractor, Sault Ste. Marie, 13 foresters
- Tamarack Tree Care, Line Clearing Contractor, Brockville and Ottawa, 13 Foresters
- Fortis Algoma, Electrical Utility, Algoma, 5 Foresters
- Fortis Cornwall, Electrical Utility, Cornwall, 2 Linepersons
- Canadian Niagara Power (Fortis), Fort Erie, 2 Linepersons
- Collus PowerStream, Electrical Utility, Collingwood, 5 Linepersons
- Wasaga Beach Distribution, Electrical Utility, 4 Linepersons
- Newmarket-Tay Power, Electrical Utility, Newmarket, 2 Linepersons

PowerStream's Contractor Partners

- K-Line, Line Contactor, Stouffville, 30 Linepersons
- Utility Line Clearing, Line Clearing Contractor, Sutton, 11 Foresters
- McNamara Power Line Construction, Line Clearing Contractor, Wyevale, 5 Foresters

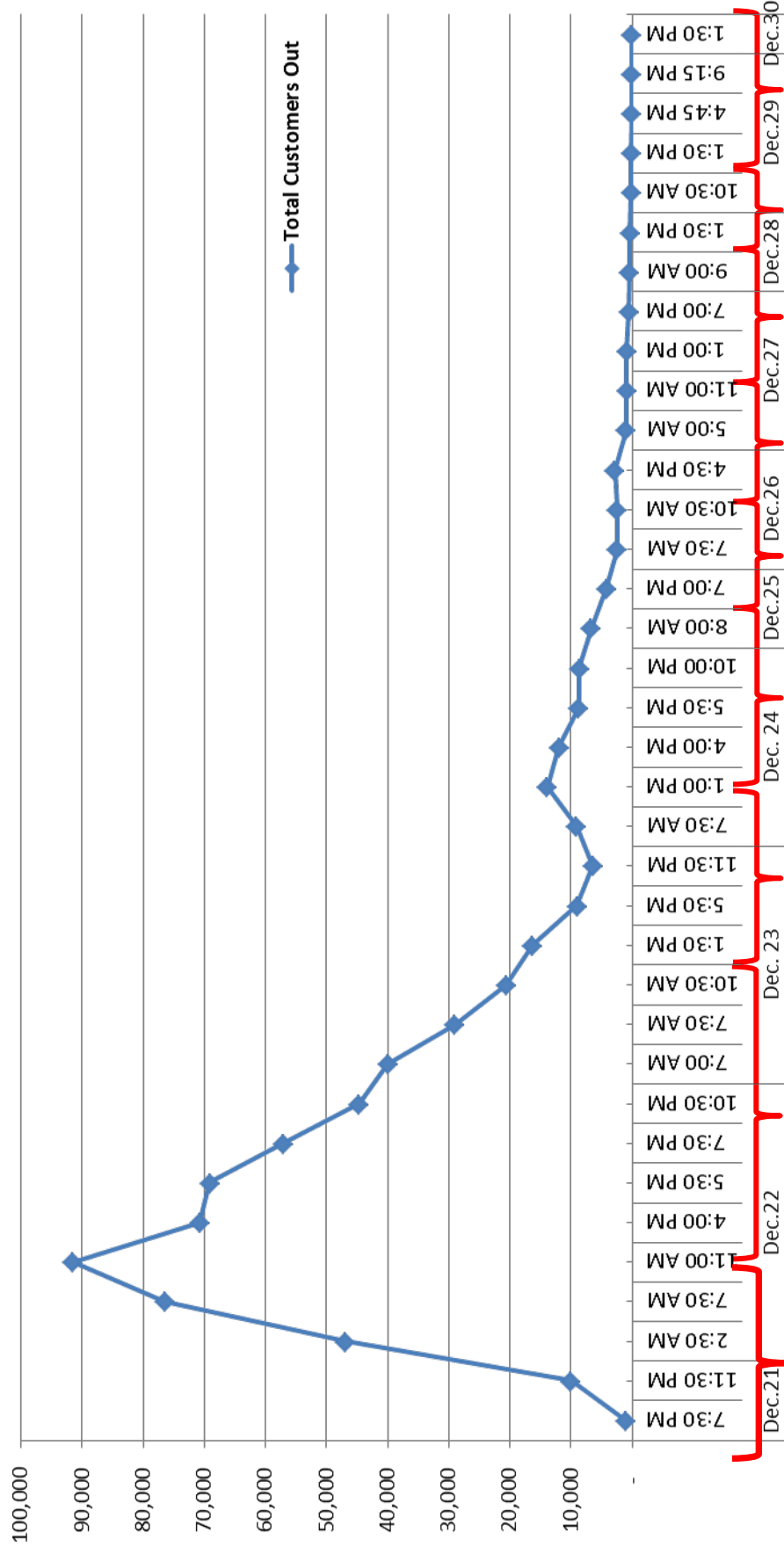
Total external assistance:

- Linepersons - **60**
- Foresters - **47**

Total Field Resources:

- Linespersons - **126**
- Foresters - **47**

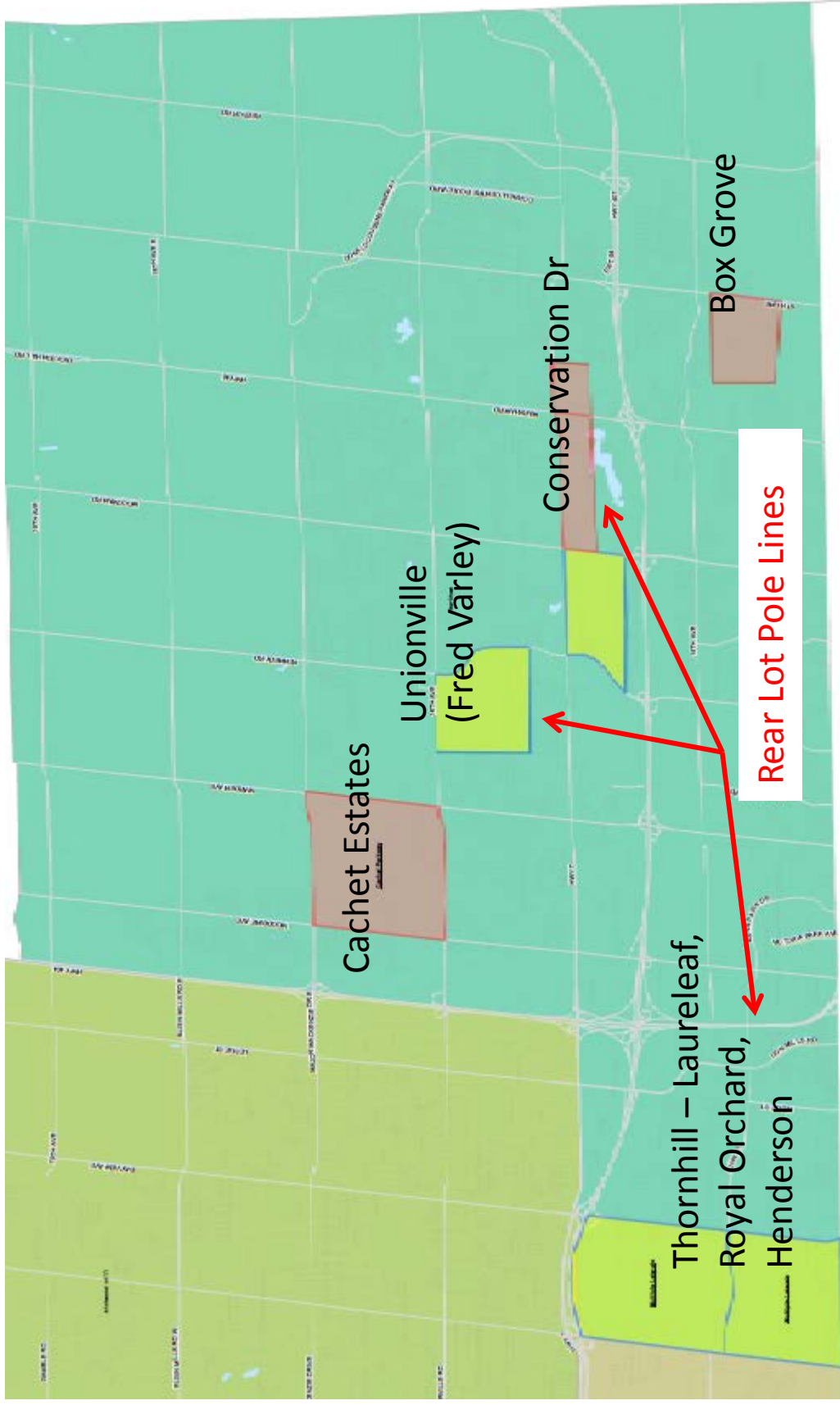
Ice Storm 2013 - Restoration Tracking



CUSTOMERS	Increasing number of customers impacted	On-call staff responded: 8 plus others called in.
	From peak, restored over 70,000 customers in 24 hours	Staff: 54 Day 6 Night
	Down 7,000 customers next 24 hour period; some setbacks	Staff: 80 Day 12 Night
	Down 7,900 next 24 hours	Staff: 120 Day 12 Night
STAFF	Down 4,200 next 24 hours	Staff: 116 Day 12 Night
	Down 1,500 next 24 hours	Staff: 138 Day 10 Night
	Down 780 customers next 24 hours	Staff: 138 Day 10 Night
	Down 770 customers	Staff: 115 Day 10 Night
< 70 remain		Staff: 94 Day 10 Night

Approximate 24 hour periods

City of Markham - Prolonged Outage Areas (Primarily Rear Lot Pole Line Servicing)



Customer

Communications



- Power Outage Line
 - 24/7
 - Menu (General outage information by municipality, outage details for specific addresses or report outage, all other)
- Corporate Telephone System
 - Mon-Fri 8:00am – 4:30pm
 - Menu (Automated Account Info, Moving, Report Outage, Speak to Agent, Company Directory)
- Website
 - Account Information, CDM Initiatives, Interactive Power Outage Map, Power Outage Resources
- Social Media
 - 24/7
 - Twitter, Facebook, eStream Blog
- Mainstream Media
 - 24/7
 - News Releases
 - Media Engagement

1.877.777.3810

1.877.963.6900

powerstream.ca

[@PowerStreamNews](https://twitter.com/PowerStreamNews)

[Facebook.com/PowerStreamPage](https://facebook.com/PowerStreamPage)

blog.powerstream.ca

905.532.4400

Power Outage Line 1.877.777.3810

Capacity & Functionality

- 96 simultaneous calls incoming

DATE	CALLS	Voice Recordings
Fri, Dec 20	58	
Sat, Dec 21	5,408	
Sun, Dec 22	51,428	1,872
Mon, Dec 23	38,758	1,461
Tues, Dec 24	14,575	22
Wed, Dec 25	4,051	417
Thurs, Dec 26	2,949	1,028
Fri, Dec 27	1,506	180
Sat, Dec 28	517	72
Sun, Dec 29	238	37
Mon, Dec 30	2,667	29
	119,000	5,118



Power Outage Line 1.877.777.3810

Issues and Response:

- Resources scheduled to assist in managing voice recordings – input into Outage Management System and return calls if appropriate – extended to 24 hours by the 25th
- Net new customized messaging instituted on the 24th
- Continued to build on messaging – cause, response, priority, safety and instruction to reach agent if required
- Enabled agents on the corporate system to report outages in the OMS on behalf of customers

Corporate Telephone System

1.877.963.6900

Capacity & Functionality

- 70 simultaneous calls incoming/outgoing

DATE	AVAILABLE HOURS	CALLS	FLOW-OUT	EMAILS
Fri, Dec 20	Normal	555	240	
Sat, Dec 21	Closed	979	912	
Sun, Dec 22	Closed	35,323	12,709	
Mon, Dec 23	Extended 8am – 6pm	15,016	10,084	113
Tues, Dec 24	Extended 8am – 6pm	6,482	4,256	84
Wed, Dec 25	Extended 8am – 6pm	1,744	1,198	51
Thurs, Dec 26	Extended 24 hour	2,267	1,391	45
Fri, Dec 27	Extended 24 hour	2,771	1,011	20
Sat, Dec 28	Extended 24 hour	699	285	7
Sun, Dec 29	Extended 24 hour	730	133	2
Mon, Dec 30	Extended 8am – 6pm	353	133	0
		66,919	32,352	322

Corporate Telephone System

1.877.963.6900

Issues and Response:

- Introduced pre-menu on corporate telephone system to leverage full telephone system capacity (within 24 hours)
- Developed messaging for agents – priority, safety, warming stations, tips, recording specific customer information to input into OMS to create a “call”
- Enabled front-end emergency message advising customers on how to best reach an agent
- Extended business hours
- Introduced application to agents for capability to confirm power restoration

Website powerstream.ca

Capacity & Functionality

- 40 simultaneous client requests to access the website (threads)

DATE	TOTAL VISITORS	TOTAL PAGE VIEWS	TOTAL NUMBER OF HITS
Fri, Dec 20	3,131	28,521	329,151
Sat, Dec 21	8,299	66,886	408,629
Sun, Dec 22	59,380	288,036	1,212,701
Mon, Dec 23	46,350	276,929	2,572,061
Tues, Dec 24	22,301	116,280	1,072,484
Wed, Dec 25	13,235	51,432	399,393
Thurs, Dec 26	10,185	38,982	353,470
Fri, Dec 27	7,440	36,013	356,035
Sat, Dec 28	4,996	24,304	221,123
Sun, Dec 29	4,212	25,050	216,229
Mon, Dec 30	4,681	34,036	347,909
	184,210	986,469	7,489,185

Website powerstream.ca

Issues and Response:

- Introduced pre-menu on website to minimize navigation and reduce web hits (within 24 hours)
- Added almost 4X capacity to website to handle incoming volume of users (within 24 hours)
- Utilized the pre-menu as a landing page on PowerStream website to create a “Storm Centre” for information and updates
- Introduced static outage map (Dec 24th) capturing key areas of outages and crew activity

Social Media

Twitter/Facebook



Twitter and Facebook became a major 24/7 communications vehicle during the ice storm.

Statistics for @PowerStreamNews (December 20-30)

New 'Followers' added	6,391
Total Mentions/Replies/Retweets by others	18,049
Total Mention/Replies/Retweets by PowerStream Staff	2,549
Total Contributors	4,928
Total Reach	1,309,088
Total Impressions	21,749,202

Statistics for Facebook.com/PowerStreamPage (December 20-30)

New 'Likes' of Page	496
Daily Page Engaged Users (unique users)	6,711
Daily Reach of page posts (unique users)	30,551
Daily Reach Total (unique users)	39,658
Daily Viral Impressions (total count)	69,681
Daily Impressions (total count)	228,148



Feedback



Customer Appreciation

"On behalf of our entire family, thank you so much. The crew arrived about an hour ago. We're looking forward to a warm home tonight!

Markham Customer

"Your guys and the other crews, met Algoma guys a couple of times were incredible"

Dave Barrow, Mayor, Town of Richmond Hill



ACampingGuy

Dec 25, 10:34pm via Twitter for BlackBerry

@PowerStreamNews Stay safe out there! As frustrated as some seem to be, I think I speak the truth when I say we all appreciate the hard work!



SinaFallah

Dec 25, 11:18pm via Web

Dear @PowerStreamNews and @TorontoHydro, thank you so much for your tireless and heroic efforts to restore power.

"I can only imagine how stressful the last number of days have been for you and the PowerStream team. I just wanted to pass along my thanks to you and everyone else there on the outstanding job you've done since the ice storm hit the region. Your crews have been phenomenal and your presence on social media has been exceedingly helpful throughout the crisis. I know that there is still lots left to do, but I wanted to let you know how grateful our community is for what's already been accomplished." **Steven Del Duca, MPP**



Your people should be commended on not only great social media communication, but also hard work in cold tough conditions away from their families! I don't even live in your service area but was impressed.

Customer from another Service Area

Customer Concerns



Ranieri @Malandrino74

@fanglyfish @PowerStreamNews still no power at 11151

Weston. Everyone around us has power but we are too insignificant for powerstream to fix

5d

Feedback



"Brian, I'm sure it's been a busy holiday season. I just wanted to drop you a quick note as, from the outside, it was very impressive to see how your team used social media to get their message out, day and night to the public and customers. It's a best practice and something I would like to have our communications team at Bruce Power talk to your team about (once they are rested and settled down) to see how this could be integrated into our own crisis communication planning. Let me know if this would be something you would be open to at a later date..."

James Scongack, Vice-President of Corporate Affairs, Bruce Power.

"During this ice storm, thank you and your Team for being there for us"

Aurora Resident

"Thanks is such a small word to convey the intense sensitivity of my thoughts and, in this regard, I trust that you will perceive the broad scope of my most sincere gratitude that it represents"

A thankful customer – anonymous

"Thanks for working so long and hard to restore our power!"

Markham Family

"On behalf of the residents of Aurora, I wish to extend our sincere thanks for the outstanding efforts that your entire operations team expended during the recent ice storm. It is challenges like this that test the mettle of an organization, and in my opinion, your crews performed admirably."

His Worship Geoffrey Dawe, Mayor Aurora

"I spent a lot of hours in the call centre and in the field and I can tell you that our staff had nothing but praise for the interactions with the entire PowerStream organization. Crisis situations like this bring out the best leaders. Well Done.

Please pass on my personal compliments to your executive team and staff.

David Collie, President of Electrical Safety Authority

PowerStream Inc.
You were mentioned in a conversation!



Metro Morning @metromorning



GTAA spokesperson "doesn't have an answer" on how the communications breakdown happened around the current @TorontoPearson chaos. #yyz -07 Jan



Rick Bagshaw @RickBagshaw



@metromorning GTAA needs a lesson from @PowerStreamNews in getting information out to people.

Mainstream Media 905.532.4400

- The outage preparation news release was followed by 11 outage update news releases
- Corporate Communications staff handled 198 calls from the media during December 20-30.
- The Chair, CEO, and other staff were interviewed by several major media outlets including CTV Toronto, CP24, NewsTalk1010, Omni TV, 680 News, Talk Radio AM640, 105.9FM The Region and Metroland Media.
- Corporate Communications staff was interviewed and/or contacted for information by representatives on several occasions from numerous media outlets including:

- CP 24
- CTV Toronto
- CTV Barrie
- Omni TV
- 680 News
- NewsTalk1010
- The Jewel Radio
- A1 Chinese Radio



- The Globe and Mail
- Toronto Star
- Vaughan Citizen
- Markham Economist & Sun
- Richmond Hill Liberal
- Aurora Banner
- Barrie Examiner
- Barrie Advance



THOUSANDS REMAIN IN THE DARK
POWER STILL OUT IN HOMES ACROSS ONTARIO



ON THE LINE

BRIAN BENTZ
PRESIDENT AND CEO, POWERSTREAM INC.

CTVNEWS

CTVNEWS

Local Newspaper Coverage



Electricity back by Monday night: PowerStream
MARKHAM
ECONOMIST & SUN

PowerStream works to get power back on for 8,000
MARKHAM
ECONOMIST & SUN

PowerStream to Richmond Hill residents: you have not been forgotten
THE LIBERAL

Markham hardest hit by power outages
MARKHAM
ECONOMIST & SUN

York residents still coping with power outages
THE LIBERAL

PowerStream to assess communications in storm's aftermath
MARKHAM
ECONOMIST & SUN

Barrie faces ice and snow
BARRIE
Advance

PowerStream works to restore full power in Vaughan after ice storm
VAUGHAN CITIZEN

Lessons Learned & Next Steps



Strength of PowerStream's system allowed us to reconnect most of our customers within 24-48 hours.

Unlike previous major outages, the capacity of various systems and applications reached their limits, including; the corporate phone lines & website as well as the interactive Power Outage Map. The following initiatives are currently being planned or implemented:

- One Number solution (Q1) – expandable with reserved capacity, customizable up-front billboard messaging, flexibility with where calls are routed (emergency contact centre, internal or external, etc.).
- Outage Notification Service (Q1) – new outbound automated email service for registered users providing (if known); customers affected, cause, crew status, ETR.
- OMS/Outage Map Infrastructure Upgrade (Q1) – upgrade from 600 to 4000 data calls per hour.
- Option to connect to live agent from the Power Outage line (being assessed).

Lessons Learned & Next Steps



There is always a trade-off with the ability of our systems and people to respond quickly and accurately, and the cost to building that capability. We are reviewing our systems, processes and capabilities to see what cost effective measures can be taken to more effectively respond to a similar situation in the future.

We will continue to evaluate rear-yard services in each neighbourhood on a case-by-case basis.

PowerStream needs to continue co-ordinating restoration with municipalities in future as PowerStream is reliant on them for emergency information, and prioritization of customer restoration.