

Ex 43.3.1

MAPPING THE AFTERMATH

A FRONT-LINE WORKERS' REVIEW OF TORONTO HYDRO'S RESPONSE TO THE ICE STORM OF 2013

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EXECUTIVE SUMMARY

A major ice storm during the holiday season of December 2013 left around 1.7 million people in Toronto without power or heat. The damage was unprecedented for Toronto Hydro, and its front-line workers were called to meet a strenuous challenge. Many workers cancelled their holiday plans to take twelve hour shifts under sometimes dangerous conditions.

It took two days to bring 50% of the customers back online, and power wasn't fully restored until ten days after that. The hard work and determination of all involved has been widely recognized by the public and Toronto Hydro's sole shareholder, the City of Toronto.

However, the outage duration, the accuracy of information provided to consumers about restoration time, and the overall organization of the restoration effort have given rise to some concerns about Toronto Hydro's emergency planning and response systems.

In partnership with CUPE Local One, the union representing Toronto Hydro workers, Public Interest collected and analyzed feedback from front-line workers to gain an understanding of their firsthand knowledge of the restoration efforts. Overall, the workers understood that the utility was forced to confront one of the largest emergencies it had ever seen, and they were proud of the job they did. "It felt good to give people their power back, especially since it was the holidays," stated a Certified Crew Leader, reflecting a sentiment felt by many of those providing comment. There was also a significant amount of consensus about the challenges they faced and areas for improvement.

Main areas of concern for front-line Toronto Hydro workers are:

- **There was no preparation for the impending storm.** Despite advance storm warnings from Environment Canada, workers were given no information about the utility's emergency response preparations; field workers were sent home immediately before and during the early hours of the storm without any notice that they may have been called back to work. As the storm hit, only two trouble crews were on duty, the standard number during non-storm conditions.
- **The chain of command was not clear.** The Systems Operation Centre (SOC) and Local Incident Command Centres (LICCs), emergency response bodies staffed mostly by managers and supervisors, were added without a clear understanding of how they were integrated into the utility's regular response system. Workers struggled to obtain clear directives about their duties.
- **Coordination of restoration efforts was confusing and inefficient.** The decision to transfer mapping calls from Power Systems Controllers, who regularly manage outage situations, to the LICCs resulted in a lack of coordination in dispatching crews throughout the city. Crews waited several hours for direction, were dispatched to neighbourhoods where power had already been restored, or were dispatched to a new location while still in the process of restoring power.
- **Critical systems failed.** Systems that were created to support restoration efforts, such as the updated Outage Management System and the Smart Grid, either failed or were ineffective.

INTRODUCTION

On December 20th, 2013, a wave of freezing rain hit Toronto. A second wave followed in the early morning hours of December 22nd. Utility poles and lines came crashing down under the weight of the heavy ice, causing blackouts throughout the city. At the height of the outage, around 1.7 million people were without power.¹

During this time, Toronto Hydro deployed hundreds of employees, working around the clock, to restore power. Based on a City Manager's Staff report from March 7, 2014, the City's overall costs of the damage reached approximately \$106 million.²

In January 2014, Toronto Hydro established an Independent Review Panel to oversee Davies Consulting's review of Hydro's performance during the ice storm. This report has been developed to complement the Davies report and inform the corporation's review of their emergency preparedness and response systems.

OVERVIEW

CUPE Local One is a Labour organization that represents the nearly 935 field and operations employees of Toronto Hydro. Its members are responsible for the daily operations and maintenance of the systems that provide electric services to Toronto. In the immediate aftermath of the storm, Local One reached out to its members to obtain documentation from the workforce about the restoration experience.

Local One partnered with Public Interest to analyze the responses from the front-line workers who were directly involved in restoring service. Information presented in this report has been generalized to protect the identity of individual workers.

This report offers a detailed account of the extreme weather event in Toronto from the perspective of the front-line

¹ Haines, A. (2014, Jan. 9). "Ice Storm 2014: Technical Briefing." PowerPoint presented in City Hall.

http://www.torontohydro.com/sites/corporate/Newsroom/Documents/2013%20Ice%20Storm%20Technical%20Briefing%20-%20FINAL_3.pdf

² City of Toronto. (2013). "Extreme Winter Storm Event – Provincial Funding Request and Structure of Comprehensive Reviews." Staff Report.

Front-line Workers at Toronto Hydro

Power Line Maintainer Journeypersons: work includes locating, troubleshooting and restoring power during power outages and disturbances, as well as constructing and maintaining both the overhead and underground power distribution systems

Certified Power Line Person: on-the-ground staff responsible for the construction and maintenance of Toronto Hydro's overhead and underground electrical distribution system

Power System Controller: monitor system conditions; develop, direct and dispatch system switching, work protection and trouble response for planned and emergency events

Dispatcher: receive calls, record outages on a trouble ticket, and forward information to the Control Centre

Forester: responsible for pruning and clearing vegetation (trees) in proximity to energized electrical equipment, structures and conductors.

workers engaged in restoration efforts. The goal is to present ‘on-the-ground’ insight into the state of readiness before the storm, the coordination of the restoration efforts, and future options for improvement.

APPROACH AND METHODOLOGY

Following the Ice Storm, Local One asked its members to provide written feedback on strengths and weakness that workers observed in the field and the utility’s response to the Ice Storm. The comments collected by Local One and summarized in this report represent the thoughts of around 200 Toronto Hydro workers involved in the ice storm clean up. Several of the written responses were presented on behalf of crews rather than individuals.

Central themes, based on an initial review of the comments, were used to categorize the responses. Areas requiring further response and clarification were explored through Key Informant Interviews. The interviews were conducted with a variety of workers, including Power System Controllers, Dispatch Workers, Certified Power Cable Persons, and Certified Power Line Personnel.

THE FIRST DAYS OF THE STORM

The following narrative was created through interviews with Crew Leaders and Power System Controllers, supplemented with information from media reports and Toronto Hydro internal storm bulletins.

Consultation with Local One members suggests that Toronto Hydro knew well before Friday, December 20th, 2013, that a major storm was coming. Environment Canada had issued freezing rain warnings for the GTA and other parts of Ontario, suggesting that the storm would be serious and would occur in two waves over two or three days.³ Toronto Hydro began alerting the public of the possibility of power outages due to the advancing storm on December 19th.⁴

Notwithstanding advance notice, workers left on Friday for their weekend and holidays without receiving any information from their employer about the company’s storm preparation efforts, whether they should be prepared to be available for work in the case of an emergency, or whether vacation plans might be impacted. A Power System Controller stated in an interview that his supervisor calmly left on Friday evening at 5 PM while he watched in disbelief. A Certified Power Line Person who was interviewed expressed his bewilderment at Toronto Hydro’s lack of action: “There was absolutely zero communication. We knew it was coming on the Saturday night, Sunday morning, because the news broadcast and the Weather Network told us that. Toronto Hydro did not relay any message whatsoever to us about it.”

As the storm struck on Saturday night, workers reported that only the two regularly scheduled crews were on duty for all of Toronto. These crews are called “System Response Representatives (SSRs)” and provide regular 24-hour coverage for emergency outages. Until 2004, Toronto Hydro had a minimum of five crews on duty to cover the different districts (1 in North York, 1 in Etobicoke, 2

³ <http://www.cbc.ca/news/canada/toronto/storm-brings-freezing-rain-on-busy-travel-day-1.2471359>. Viewed on May 5th, 2014.

⁴ <https://twitter.com/TorontoHydro>. Viewed on May 5th, 2014.

for the downtown core, and 1 in Scarborough). Despite their knowledge of the coming storm, it seems that Toronto Hydro made no calls for additional crews or extra support beforehand.

Toronto Hydro started calling workers late in the night on Saturday, December 21st and early in the morning on Sunday, December 22nd. They had trouble contacting people, since it was the weekend during a holiday season and people were not readily available.

Around 4am on Sunday, Toronto Hydro publicly declared the situation a level 3 emergency, its highest level. At this time, over a million people were without power.

One experienced Crew Leader said that by 7am on the morning of Sunday December 22nd, only three additional crews were dispatched out of the twenty-five to thirty crews that could and should have been available for work. Other Crew Leaders and line personnel reported that they arrived Sunday morning to find that little to no preparation had occurred prior to their arrival and that they spent 1 to 3 hours coordinating their crew and their equipment and finding a supervisor who could dispatch them appropriately.

The following statement from a Certified Crew Leader appears to have been typical of the experience of many workers:

“Saturday evening, I was out and got home late, and there was a message on the machine, think it came in around 10pm, called them back at 7am but I wasn’t able to get through so I packed up and went down to city at 10am. My boss called as I was on my way and he said ‘don’t come in, we don’t have a crew for you’, so I called my crew myself and they came in within a couple of hours.”

The first two days of restoration efforts were filled with confusion and frustration for many of the workers. Depending on where workers were located, it took until Monday or Tuesday for systems and supports to reach adequate levels so that crews could efficiently restore power. Tree crews from the City were brought in to remove fallen limbs, and personnel from other departments were brought in to help with simple activities, such as walking the lines or setting up ladders and grounding for line personnel. Crews were provided with “feeder maps,” which gave them a much clearer idea of the boundaries and varieties of the lines they were assigned to restore. Workers believe that had these supports been in place earlier, the overall restoration time could have been significantly reduced. The workers questioned why a plan wasn’t prepared and communicated to them once the utility knew that a significant ice storm was forecasted to hit Toronto.

KEY FINDINGS

This section presents the key findings of our coded data and Key Informant interviews, supplemented with complimentary information from reviews of storm restoration efforts in Toronto and other jurisdictions.

EMERGENCY PLANNING AND PREPAREDNESS

A common theme from the written survey and interviews with Local One workers is that workers had no advance knowledge of a formal emergency response plan.

If Toronto Hydro has an emergency response plan, it was not communicated to its front-line workers or developed with their feedback. Based on statements from the interviews, there are no regularly scheduled emergency power outage response drills, protocols, or training. The lack of planning is surprising to many workers, since the 2013 Ice Storm is not the first extreme weather event Toronto Hydro has recently faced. Other instances include a massive snowstorm in February 2007, Hurricane Sandy in 2012, and a sudden thunderstorm in July 2013. These events left thousands of residents without power during city-wide blackouts.⁵

Other emergency power restoration reviews undertaken by Davies Consulting, the group hired to review Toronto Hydro's recent performance, explicitly highlight the need for emergency training and drills. For example, in the 2012 review of Connecticut Light and Power's storm preparedness and response, Davies states that "establishing a robust training program and conducting a system-wide functional exercise is critical to being able to execute an effective restoration – actual response should not be a substitution for training and exercise."⁶

While workers were not aware of an emergency plan, there was a general understanding that Toronto Hydro rates the level of an emergency, and that the rating level triggers the authority to extend shift lengths and make other changes to work conditions. Workers also understood that the rating level is determined by the amount of customers without power, and some noted that the number of customers out of service can be a poor indicator of the complexity of the outage or the staff and resources that should be mobilized to address it. A Certified Crew Leader explained that if a single transformer stops functioning and over 200,000 customers lose power, Toronto Hydro can declare a level 3 emergency. However, since the problem is easily located in a single transformer, power can be restored in a few hours. A storm that leaves the same number of customers without power is also declared a level 3 emergency, even though a longer restoration period would be required.

The existing emergency rating system can have little relevance in identifying what is needed to restore power. The following comment from a Certified Power Line Person illustrates the issue:

"Feeders are high-voltage cables that supply power to customers. A single feeder can supply power to a few or several customers. If Windsor station, which has 3 feeders, were to malfunction, almost 75,000 people would be out of power downtown. Although the restoration process would be relatively swift and inexpensive, since

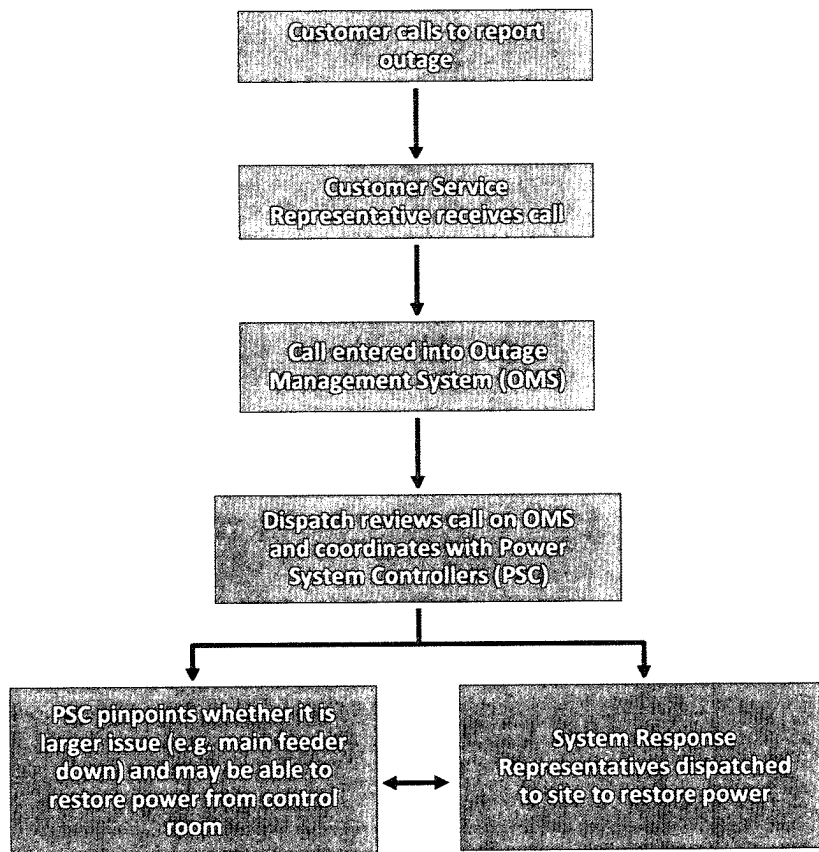
⁵ <http://globalnews.ca/news/708291/toronto-power-supply-vulnerable-2007-report-warned/>

⁶ Davies Consulting (2012). "Final Report: Connecticut Light and Power's Emergency Preparedness and Response to Storm Irene and the October Nor'easter." Pg. 37

crews would only have to repair 3 feeders, this would be declared a level 3 emergency. However, if the Islington sub-station were to malfunction, it would impact a smaller number of people (3,000-4,000), but nine separate utility poles would need to be examined and repaired. It would require a lot more time to fully restore.”

Declaring a level 3 emergency, as was done during the ice storm, does not provide line crews and other workers with useful information about the severity of the outages that the crew will face once they are dispatched to the field.

OUTAGE RESPONSE FLOW CHART



Under regular circumstances, outage restoration is managed through a centralized unit staffed by Power System Controllers. Similar to air traffic controllers, these highly specialized workers utilize an electronic monitoring system to determine which lines and feeders are not functioning correctly and work with Dispatch and line crews to resolve these issues. As an example of their responsibilities, Power System Controllers monitor service to hospitals and other important loads, allowing more efficient risk assessment.

When Toronto Hydro declares a level 2 emergency or higher, the System Operation Centre (SOC) and Local Incident Command Centres (LICCs) take over regular operations in order to manage the outage restoration.

As the main decision-making body in an emergency, the SOC oversees the restoration process and

directs line crews. Despite the SOC being located in the same building as the Power System Controllers, there was little to no coordination of information between them during the storm. The LICCS were located in four separate areas of the city and took over organizing and prioritizing calls and dispatching crews, since Dispatch and Power System Controllers were thought to be overwhelmed. Both the SOC and LICCs were staffed with directors and managers who are not regularly involved in direct coordination of power restoration.

Field crews had little understanding of the role and function of the LICCs during the storm, making it difficult for workers to decipher the new chain of command. Workers were often confused by the orders they received, which contradicted their own experience and knowledge of the power grid. Crews reported being sent to sites that were normally of lower priority or to sites where work was already completed. Many recall passing main lines that were down while being sent to small residential areas, especially within the first two days of the restoration efforts.

A Certified Crew Leader who has been with Toronto Hydro for over 15 years described the confusion:

“The LICC room was down the hall from us, 90% of the people there were management – from drafting department, workforce department; they didn’t understand the areas, the system, the problems... I think there should be a lineperson in there who knows the system and the area. They would send us to areas where single phase primary wires (residential lines) were down because they received 40 calls from that street, while we passed three phase primary wires (main feeder lines) that would energize a larger area and needed repair before the single phase primary. It just didn’t make sense.”

In comparison, Toronto Hydro workers who have supported restoration efforts for other disasters, such as Hurricane Sandy in New York City, describe a more organized process. One member recalled how the crew was briefed on the bus heading to New York City and arrived at a central location to find maps, tools, hotel and food vouchers, and other equipment already set up. He was able to quickly obtain a map and necessary equipment and was given clear instructions about the work that needed completion and the chain of command. By eliminating the guesswork about where he was going and with whom he was communicating, this worker was able to focus on restoration. Other crew members commented that when participating in restoration efforts for Hurricane Sandy, there was clarity about how they would be fed, what hours they would work, and what accommodations would be made available to them.

A few workers commented on Mayor Ford’s decision to not call a state of emergency. Some members felt that there would have been more on-ground support for crews, particularly the clearing of tree limbs off the roads, which would have made it easier for crews to restore power.

Overall, the front-line workers believe that the lack of a clearly communicated emergency plan created systemic inefficiencies that prolonged the restoration time.

EXTERNAL SUPPORT

An experienced Crew Leader who came with his crew to assist from another utility was interviewed for this report, and his comments bore a striking resemblance to those of Toronto Hydro’s front-line workers. Toronto Hydro did not provide him or his crew members, or any other external workers to whom he spoke, with any emergency response plans or protocols to help them better

understand how the utility was responding and what their role was in that response. He reported that there was a lack of logistical coordination; both he and his crew were unclear about where and when they would be fed.

During the storm, the decision was made to bring in contractors to support the Toronto Hydro crews. These contractors were given the same scope of work as the in-house employees and were dispatched to different areas of the city. Respondents noted that as contractors were put to work, not all available Toronto Hydro crews were called in, and willing workers were waiting to be utilized by their employer. Additionally, workers reported that the lack of proper coordination between contractors and in-house crews created instances of overlap and miscommunication.

Some of the members who were interviewed stated that working with contractors created safety and work protection issues. Contractors did not always communicate the extent of their work, leaving some line crews to guess what needed to be done. A Certified Crew Leader recalled being called to a site and realizing that the contractors had not cleared all the lines; there was a wire down in a school playground and it was unclear whether it was energized or not.

In the analyzed responses, workers did not feel that contractors provided additional value to their work; they were perceived as a cost-cutting effort at the price of safety and quality. The comment “poor work from contractors” was common in both the feedback forms and the interviews. Some claimed that work performed by contractors is still being repaired by Toronto Hydro crews.

CRISIS COMMUNICATION

Front-line workers often found that communication efforts throughout the restoration, both internally and with the public, were plagued with problems.

During the emergency, members of the general public had their calls directed through Optima, the contracted Call Centre. The Call Centre takes a report of an incident, creating a work order in their Outage Management System (OMS). Usually, this information would go straight to Dispatch, who would direct crews to the affected neighborhood. During the ice storm, this information was relayed to the LICCs instead, who sorted and prioritized the calls and then dispatched crews.

Many of the workers felt strongly that there was a general lack of communication and clarity from the managers and supervisors in the LICCs to crews on the ground. Crews reported not receiving information or updates from the LICCs in a timely way, being idle for an hour or more in the field awaiting direction, and not being able to inform customers of when the power would be restored.

The following comment from a Certified Crew Leader summarizes a commonly reported experience:

“Crews were dispatched to the field and told to wait to receive a call to attend to the efforts to restore power to our customers. These delays waiting for a call and for instructions from management could take anywhere from ½ to 4 hours or more before crews actually started to perform any work. This caused negative unnecessary aggravation to both customers and crews that were prepared to assist them.”

Faced with a lack of coordination between the Call Centre that dealt with the public, the internal Dispatch team, Power System Controllers, and LICCs, crews began proactively calling and demanding updates or supplying updates themselves:

“When I got here, there were two supervisors, but they were both underground supervisors. They gave me the name of another supervisor. He gave me the name of a Crew Leader that I was to report to. I got a hold of him and he told me what was going on... Two guys from my own crew, including my own Crew Leader and a journeyman, called and asked ‘what’s going on?’” – Certified Power Line Person

Front-line workers sympathized with customers and were often caught between doing their jobs and being the public face of the ice storm.

Toronto Hydro’s message to the public that they should not talk to workers was viewed by some respondents as simply unrealistic and by others as mean-spirited. One of the challenges workers faced on the ground was that media reports of restoration times, based on Toronto Hydro Tweets, were often inaccurate. Many workers reported feeling that communicating with the public was sometimes unavoidable and at other times a matter of human decency.

While this messaging to the public was presented as if it was intended to promote public safety and keep worker distraction at a minimum, some thought that it created a divide between the public and the workers:

“TH and Haines request that the public not talk and stay away from hydro workers was done to prevent developing unity between hydro workers and the public. It did have some affect but ignored by some. Sounded like ‘don't feed the animals’. Took away our voice and humanity.”

– Line crew response

STAFF UTILIZATION

Davies’s review of Connecticut Light and Power’s response system highlighted the need to fully utilize staff during an emergency: “a key element of a best practice emergency planning and preparedness program is recognizing that in an emergency, all company staff may be needed to assist in the restoration effort. As such, every employee should be assigned a role, be clear on their responsibilities and expectations of their role, and should understand the assignment and evaluation process. Finally, each person should be trained to fulfill that role.”⁷

However, along with the lack of a coordinated response system, workers were frustrated by the sometimes poor utilization of staff during the ice storm.

While responses vary, workers report not being utilized within their capacities or being under-utilized despite being willing and able to provide support:

“This company does not make use of all available resources whenever storms cause widespread outages on the system. Employees like myself are not utilized to assist in triage, or feeder patrols, or any other manner. It would seem that when your job title is changed, past training and experience is no longer recognized.”

– Journeyman Power Lineman

Both the feedback forms and interviews support the sentiment that workers on the job felt over-

⁷ Davies Consulting (2012). “Final Report: Connecticut Light and Power’s Emergency Preparedness and Response to Storm Irene and the October Nor’easter”. Pg. 36

managed and under-coordinated. Line crews reported waiting for clear instructions about what they should be doing while their supervisors and managers tried to take over their tasks. Some were reassigned tasks that were not normally in their purview, while others were relegated to desk duties. In one instance, a Dispatcher reported management lingering by Dispatcher desks while they attempted to enter calls into OMS, only to be stopped and asked to re-enter certain minute details, despite the overwhelming number of calls and the lack of staff. Management's lack of knowledge of staff roles was echoed by other workers:

“Management walked around confused about what to do or what material was required – had to ask workers what basically was required as they did not know.”
– Warehouse Staff

“We felt very isolated from any kind of guidance as to where we could be best utilized or where our skills could be readily deployed.” – Overhead Journey person

Power Systems Controllers, in particular, were frustrated at not being able to fully utilize their expertise. As the people who are normally responsible for managing power outages, they are skilled at organizing calls and mapping the calls to feeder lines. They can also work with Dispatch to send out crews and can confirm work completion. Additionally, their map of Toronto indicates priority areas, such as hospitals, allowing them to rapidly prioritize the most vulnerable residents. They believe that the decision to reduce their role contributed to the prolonged restoration time, as the LICCs struggled to map calls and dispatch crews.

In addition, some Dispatchers felt that they were also not well utilized in their roles and were assigned “busy work”:

“The biggest issue was the lack of staffing to get the job done... Management kept getting involved, but they are not trained in dispatch. They kept the dispatchers from doing their jobs.” – Dispatcher

“Dispatchers were doing unnecessary duties really not related to dispatching, like scrubbing calls, pinging meters, entering ESA, reconnect.” – Dispatcher

Crews on the ground were not given the ability to prioritize their work based on their experience, and they received instructions that were often confusing or contradictory. Sometimes crews were not able to finish their work before being dispatched to another area of the city; at other times, multiple crews were dispatched to the same location:

“Multiple crews from all areas were dispatched to the same calls only to find they [other crews] were already dispatched and or [the call was] completed.” – Certified Crew Leader

Workers generally felt that the restoration time overall was lengthened by the lack of staff dedicated to triaging sites. Dispatchers reported being tasked with coordinating workers for triage without clarity about their skills or qualifications. As a result, some workers dispatched to triage sites were not qualified to do so; they could only verify that the wires were down and secure the area with caution tape.

For example, an underground crew was dispatched to Eglinton and Chaplin, where they were unable to identify the feeders in people's backyards because they were not provided with the necessary maps indicating feeder sites. If they had been a regular line crew, they would have known that they

needed the maps and proactively sought them out before going to the site. The needs and expertise of an underground crew servicing above-ground wires should have been better recognized, so that they could be given the coordination and support to do the job at hand.

SAFETY CONCERNS

The issue of safety was a significant concern for both workers and the general public. In the rush to expedite restoration, a Certified Power Line Person commented that there were some shortcuts taken to work protection in order to get the job done.

One Power Systems Controller spoke about directing a crew to South Etobicoke, where 27,000 V primary lines were downed. It was unclear if these lines were live or not. The crew was attempting to clear these lines when they received the instruction to work in Scarborough and were told to leave the site without clearing the lines. A lineperson refused out of safety concerns and was reportedly told that disciplinary action would be taken if he did not comply.

In another instance narrated by a Crew Leader, contractors and in-house workers were working on the same line when a contractor ordered that a particular circuit be re-energized while the Toronto Hydro crew was still working. The surge of power traveled through the still-damaged line and blew transformers on the tops of poles for two or three blocks before it came to where the Toronto Hydro crew was working. Fortunately, the crew had installed extra breakers in the area as an added safety precaution; if they had not, the effects would have been devastating.

Crews were tasked with extremely long shifts, sometimes without adequate breaks. Some felt that this impacted their capacity to apply standard work protection codes.

INFORMATION SYSTEM AND TECHNOLOGY

In 2011, Toronto Hydro replaced its old Outage and Distribution Management System (OMS/DMS), which was used to prioritize and systemize outage calls for Dispatch, with a new system that incorporated Smart Meter data. The idea was simple: the meters would quickly communicate a loss of power or large surges of power, allowing for rapid response times. Despite a considerable investment, respondents reported that the system failed during the ice storm, leaving crew members frustrated and customers in the dark.

Customers were asked to keep their lights on and to call in if they went out. One worker commented:

“What happened to our ‘smart grid’? Why were we asking the public during the last few days to call in if their power was still off? We should be able to tell when a meter loses power and is no longer transmitting data. If this information were accessed, they could tell how many locations were still without power, and crews could be dispatched. Duplication of calls could be eliminated.”

The new OMS also does not allow Dispatchers to group calls geographically, making the process of coordinating calls more difficult. Additionally, when the system is overwhelmed and fails, calls have to be manually tracked, which lengthens the restoration process.

Usually, a GPS system tracks trucks in the field and a mapping program is used to display this

information, allowing Dispatch to direct crews where they were needed. This system was also reported to have failed, leaving workers to navigate the outages on their own and increasing the sense of frustration and isolation.

CALL CENTRE PERFORMANCE

The performance of the Call Centre was a major concern for consumers. Over 374,000 calls were received in ten days⁸, many of which were inadequately answered or left completely unanswered. According to some workers, the phone system collapsed during the first night.

Difficulties between the Call Centre and the Dispatch function were identified in several reports from workers.

As the Call Centre and other phone lines were overwhelmed with calls from the public, police, and emergency services, a communications bottleneck developed between field crews and the Dispatch functions. Crews could not call in with information regarding the location or status of their work or with updates on required resources. More specifically, it was highlighted that the lack of a dedicated phone line for crews limited their ability to convey the need for additional equipment and staff to the LICCs. As a result, LICCs sometimes sent crews to areas that did not require aid, resulting in multiple crews being dispatched to the same location:

“We were the fourth crew to show up at a no power call.” – Certified Crew Leader

The supervisors in the LICCs did not keep Dispatch consistently informed of where crews were being sent and did not consult with Dispatch as to whether crews had already been sent to specific locations. Crews also reported that the calls were not prioritized; they would sometimes be sent to restore power to individual houses while entire streets were dark.

Another Certified Crew Leader reflects this chaos: “during the full duration of the ice storm there was the issue of the SOC and LICC centres within Toronto Hydro and their inability and failure to properly dispatch and track trouble calls and their completion.”

VEGETATION MANAGEMENT

Although there are only a few responses that speak to vegetation management, this was an important component of the restoration process. Part of the challenge is the historic lack of vegetation management. For a tree canopy as large as Toronto’s, the resources dedicated to surveying and trimming damaged or rotting trees is inadequate. As a result, Toronto’s forest canopy is more vulnerable to being damaged, and poses a greater threat of causing damage, during a storm.⁹

During the restoration, respondents reported that there were not enough forestry crews, even with the contracted tree trimmers, to handle the full extent of damage to the lines. Workers that could have been utilized to clear branches and limbs, including Plant Mechanics and office workers,

⁸ Haines, A. (2014, Jan. 9). “Ice Storm 2014: Technical Briefing.” PowerPoint presented in City Hall. http://www.torontohydro.com/sites/corporate/Newsroom/Documents/2013%20Ice%20Storm%20Technical%20Briefing%20-%20FINAL_3.pdf

⁹ City of Toronto (2013). “Sustaining & Expanding the Urban Forest: Toronto’s Strategic Forest Management Plan.” Toronto, Ontario. City of Toronto, Parks, Forestry and Recreation, Urban Forestry.

reported that they were not initially called in to do this work. This often elongated wait times for customers, since line crews took valuable time to clear the vegetation before they could do any work.

Interviews with a Crew Leader and a Line Person highlighted that the addition of tree crews through the City of Toronto's Forestry department a few days into the restoration made a significant difference. Line crews and City tree crews coordinated directly with each other, which sped up the line crews' restoration efforts.

COMPARISON BETWEEN 2007 AND 2013 STORM RESPONSE

In 2007, CUPE Local One submitted a report to Toronto Hydro reviewing the utility's response to a significant storm event that year. There are several points in this "Report on the March 2, 2007 Storm" that echo workers' experiences during the 2013 ice storm. The lack of clear communication about the chain of command, the problems with utilizing the OMS, chaos from conflicting directions given to crews, and under-utilization of workers skills have all been thoroughly documented in the 2007 report. While there are stories of triumph and genuine effort to help customers during both storms, there is an undercurrent of workers who are overwhelmed, over-managed, and under-resourced to provide their expertise. These similarities indicate that there has been little progress made in addressing the concerns that front-line workers have regarding emergency response planning. This sentiment was expressed through the interviews and feedback forms; employees have little trust that their input can actually change their work environment.¹⁰

¹⁰ Canadian Union of Public Employees (2007). "Report on the March 2, 2007 Storm." Toronto, Ontario. Local One.

KEY ISSUES FOR CONSIDERATION

There was a fair amount of consistency in workers' suggestions for improvements, which are detailed below:

- Revisit and revise the levels of emergency planning. Ensure that this information, along with the expected protocol, is known to all staff.
- Start staging crews the moment there is information about an impending emergency.
- During emergencies, appropriately assign and utilize all available staff.
- Develop a better and more consistent public communications plan, which takes into consideration that crews on the ground will need to deal with frustrated customers and may benefit from basic public relations training.
- LICCs, SOCs, and Power System Controllers need to work with each other to better direct crews. Staff the LICCs with more knowledgeable personnel or remove LICCs from the process.
- Allow Power Systems Controllers to prioritize restoration work and coordinate with ground crews to include their observations and assessments. These personnel have the expertise to understand what would be required to restore power systematically and efficiently.
- There is an urgent need for better, more open communication about the chain of command and manager's expectations during emergencies.
- The City should provide more staging areas for triage operations, such as waste and transportation yards.
- Feeder restoration needs to be better prioritized. Main feeders need to be restored first; feeders that supply electricity to a home or a few homes should not be the primary focus.
- Toronto Hydro is chronically understaffed; the overall workforce of Toronto Hydro has decreased by approximately forty percent since 1998. Investing in hiring and training staff would shorten emergency response times.
- Have appropriate sleeping, eating, and/or catering establishments made part of the Emergency Preparedness Plan.