



January 24, 2017

Ice Storm Weather Event Report



City of Miramichi January 24, 2017 Ice Storm Weather Event Report

Event Overview

During the overnight and morning hours of January 23rd /24th, 2017 the eastern and north-eastern portions of the Province, including the City of Miramichi, received prolonged amounts of freezing rain. The extreme weather event was responsible for downed trees and power lines that led to massive power outages. At its peak on January 24th more than 130,000 customers were affected by power outages. NB Power termed it as the worst winter event in the utility's history with more than 245 power crews from NB Power, other jurisdictions, and contracted crews working to restore power.

As a result of this weather event, senior personnel for the City of Miramichi met at Miramichi Police Headquarters shortly after 5:30 AM on January 24th and established an Emergency Operations Command Centre structure to begin the process of assessing the impact that the storm had on our City. In order to assist with this assessment, all of the Public Works staff, 10 Police vehicles and Fire Department apparatus were deployed for response to calls and were also tasked with calling in anything that they observed such as downed power lines, downed trees etc.

All emergency and non-emergency calls, including incidents observed by City staff, were channelled through the Police Communications Centre so that everything could be well-documented and all calls could be assigned based on priority. The 'Sentinel Emergency Management' program was also brought on-line with the assistance of IT, so that all significant events and tasks could be tracked in the Sentinel computer program.

Once daylight broke it became very evident that the 'Ice Storm Weather Event' was one of the worst to impact the City with widespread damage and power outages being noted throughout the City. Trees and tree branches were observed to be broken and laying across hydro-wires and roadways throughout the entire City which resulted in immediate high-call volumes for the Public Works, Fire and Police Departments. At one point during the afternoon of January 24th over 8,400 customers in the City were without power.

It should be noted that careful consideration and detailed discussions were held on whether to declare a local state of emergency for the City of Miramichi. If conditions had not

been manageable by City staff and the number of power outages had not continued to improve on day # 2 (January 25th) then in all likelihood the state of emergency would have been enacted.

The following priorities were identified and implemented as actionable items throughout the course of the event. All of these items played a major role in the success of how this event was managed by the City and these should all continue to be followed in the future:

- Communications coordinator to ensure the media and the public were well informed of all important and timely information (Mayor Lordon)
- Establishment of warming shelter at Golden Hawk Rec Centre
- Establishment of warming shelter at Goodie Shop which was relocated to the Lindon Rec Center (once power was restored)
- Supplying of food (including preparation) and water to the warming shelters
- Supplying of cots and blankets from the Red Cross for the warming shelters
- Obtaining large portable generators to maintain the operation of all City water wells and pumping stations
- Maintaining liaison with NB Power (The NB Power 'outages map' proved to be very beneficial in our planning and decision making process)
- Maintaining liaison with Ambulance NB, and Various Provincial Government Departments
- Removal of trees and debris from roadways by Public Works
- Regular briefing sessions between Council and Department Directors
- Free bus service offered to transport citizens to the warming shelters
- Regular fuelling of portable generators at well sites, Golden Hawk Rec Center, Station 1 Fire Department, and Police Headquarters
- Conservation of water until full power was restored to the well sites
- Closing of Recreational facilities while warming shelters were in full use
- Establishment of 2 dumpsters (north and south side of City) for disposal of spoiled food items
- Removal of trees and debris placed at curb side by homeowners

It is also worthy to note that there had been an outpouring of food donations for the warming shelters from various volunteer organizations, businesses and, citizens.

Recommendations on a 'Go-Forward' Basis

Based on recent weather events it is apparent that our Province, and in particular our region, will continue to be faced with weather events that are not considered the norm and therefore making these related emergencies more common place in the coming years.

Senior staff has identified some best practices and recommendations on a 'go-forward' basis that will enhance and better equip the City when we are faced with severe weather events or some other type of emergency that may result in widespread loss of power outages to the community.

❖ Back-up Power Supply

In order to maintain critical infrastructure during prolonged power outages it is imperative that the City maintain back-up power in order to keep services running at adequate levels. With this being said the following has been identified:

- 1) **Miratech Building:** Funding was approved in the 2017 Capital budget for the installation of a permanent generator transfer switch at the Miratech Building so that the large portable generator owned by the City can be used to supply power to the EMO City/Regional Emergency Operations Center located on the second floor as well as Station 2 Fire Department and Public Works. This connection will greatly enhance the operational level for all of these departments as the current generator only supplies limited lighting to them. The new generator set-up will also have the ability to provide heating throughout the building.

- 2) **Portable Generators for Water Systems and Well Sites:** The Department of Public Works maintains the operations for four (4) separate water wells along with water treatment systems in Chatham and Newcastle. During the ice storm event large generators were rented from the private sector and placed at each location in order to maintain services as a system failure at any of these sites would be critical.

The current 2017 budget includes a back-up power system for the Chatham water system. Plans have been made to move the current generator located at the Miratech Building to the Newcastle water system site once the larger generator is put in place at

the Miratech Building during this calendar year. This generator will have the ability to maintain the Newcastle water treatment plant at an adequate level.

In looking ahead the present generator at the police headquarters, if replaced, can be used by Public Works to provide power to one of the well locations and consideration should be given in a future capital budget to purchase a backup generator for a second well site. The recommendation for the remaining two wells would be to continue to rent them from the private sector as the wells require much larger generators which would be available when they are required.

- 3) **Police Headquarters:** During the ice storm event the police station operated on the back-up generator for almost a 25 hour non-stop period. This has been the longest time frame that police headquarters has ever operated on back-up power. It was discovered that only 1 of the 2 heating boilers at police headquarters can operate on the present back-up generator due to its capacity. Although it was not extremely cold, the building cooled off overnight and it became uncomfortable for staff the following day due to the lack of heat. This certainly would have been very problematic had the power not been restored to the building when it was. Consideration should be given in a future Capital Budget to replace the current generator with a larger one in order to make the building, which also houses the Communication Centre as well as the EMO back-up Centre, capable of being self-sufficient for a longer period of time. The present generator, which is still in excellent condition, could be utilized by Public Works to run some of the critical infrastructure.
- 4) **Warming Shelters (East & West Sides):** A portable generator was installed at the Golden Hawk Recreation Center by Public Works. The generator had the ability to provide some lighting in the building but would not have been sufficient to provide heat if the power had been off for a prolonged period. The alternative to this issue would be increasing the capacity of the generator to be used at this facility to run heating units. The Golden Hawk Recreation Center did prove to be very beneficial as a warming shelter due to its location, shower facilities, and abundance of room.

The second warming shelter located at the Lindon Recreation Center does not have the ability to be connected to a generator, which resulted in the upstairs of the Goodie Shop being utilized on the first day. Given the logistics and costs that would be associated to making the Lindon Recreation Center generator-ready, it would be more realistic for the City to bus people from the Lindon Recreation Center to the Golden Hawk Recreation Center in the event of any power outage to the Lindon Recreation Center.

❖ **Warming Shelter Operations**

The two established warming shelters were very well received and utilized by a number of citizens from both our City and the outside neighbouring regions. The supplying of food, especially hot meals, at the shelters was certainly an added comfort for all citizens and was greatly appreciated.

The setting- up and managing of the two (2) separate warming centers for an event of this duration was something new for the City of Miramichi and the Recreation Department. Although things ran very smoothly, the Recreation staff has made suggestions that will assist in the future set up of warming shelters on a 'go-forward' basis:

- Develop a list of items required for Day 1, 2, 3 etc. and include suggested menu items for various scenarios that would include 50, 100, 150, 200 persons.
- Purchase some bottled water in advance if a severe weather warning is issued that could potentially call for the opening of a City shelter. The water could be used for other events if not required.
- Purchase of napkins, disposable cups, disposable plates, plastic cutlery, disposable gloves etc. that could be stored in plastic totes until required.
- Purchase of BBQ tools, slow cookers, toasters, electric frying pan, and power bars that could be stored in plastic totes until required.
- Develop prepared registration sheets for people entering the warming shelter in the event calls are received trying to locate someone.
- Identification cards for Recreation staff so that they are easily identifiable to people visiting a shelter.
- Temporary signage for the front of the designated warming shelters to make them easily identifiable (can be stored with other items).

- Coordination of the community groups wishing to donate food to assist in meal planning and management.
- Wifi at designated warming shelters.
- Pet issues to be visited, as not all were friendly.

❖ **Fuel Access**

During portions of the first day of the event only two gas stations had power and could supply fuel. For a brief time during the afternoon, both stations lost power, making fuel unavailable at any commercial station in the City. Arrangements were quickly made by the Director of Public Works to obtain diesel fuel from a private contractor for some of the City trucks.

During the course of the first several days, fuel was in very high demand at the service stations that had power. Citizens were concerned as to whether enough fuel would be available for their vehicles, as well as gas-powered generators, which were being utilized by a high number of citizens.

It has been confirmed that the Provincial Department of Transportation and Infrastructure will be maintaining a supply of fuel, both diesel and gasoline, at their Kelly Road garage location for use during emergencies.

In order to help alleviate the concerns, it is suggested that the City have a formal agreement with DTI to access some of the emergency fuel in the event of a situation where our regular fuel supply may not be available during an emergency. Consideration should also be given in having some type of provisions written into the next fuel tender that is issued by the City that would address fuel access during times of an emergency.

❖ **Enhancement of Sentinel Emergency Management Program**

Once activated, the Sentinel Emergency Management Program has the ability to log all significant events related to any emergency in a timely fashion. The log includes the time and date of the event as well as the description and ongoing status. This program proved very beneficial in the logging of events as they were reported by both the public and staff.

Sentinel has the ability to store all contact information and available asset management for both the City and the private sector in the event additional equipment resources are required.

Using the latest technical advancements in text messaging, bulk email, phone broadcasting and social media, Sentinel Alerts provides the capability to reach a large number of individuals within minutes. This program should be applied to all emergencies and is presently being underutilized. There is a clear need to maximize Sentinel for all emergencies.

To ensure the program is used to its fullest there is an immediate need to identify a City staff member to be trained so that they are able to populate the contact information and assets when required thus ensuring the information is current and accurate. The duties for this task should be assigned to a current employee who would be available to access the Sentinel program during an emergency situation. This staff member would work in conjunction with an IT staff member when an Emergency Operations Center is activated.

It is also recommended that a media blitz be jointly coordinated between the City IT Department and the Miramichi Police Force to have users sign up for Sentinel Emergency Alerts.

Conclusion

In closing, it is worthy to note that the City of Miramichi has never experienced a winter weather event emergency of this magnitude. The Mayor, Council and City staff responded in a very responsible and timely manner and worked diligently to ensure that the safety and well-being of its citizens were the number-one priority throughout the 7 day event, which officially concluded at 6:00 PM on January 31st. The incidents of neighbours-helping-neighbours was very evident during this ordeal and certainly showed the strength of our community.

It is also important to note that during the entire event the City did not have any loss of life or serious injuries that were attributed to the weather event. There is no doubt that the hands-on experience gained by City Council and City staff is highly valuable, and will only help to prepare everyone for any future emergency event.

Paul Fiander, Chief of Police/EMO Coordinator

***Information contained in this report was also supplied by the City Manager, Senior Management Directors/Staff and IT that were directly involved in this event**

