



Hudson New Hampshire
October 29, 2011 Snow Storm
After Action Report



Submitted by
Shawn Murray, Fire Chief
Emergency Management Director
Town of Hudson, New Hampshire
January 24, 2012

Introduction

On Saturday October 29, 2011, the Town of Hudson, New Hampshire experienced a fast moving high wind and snow damaging October snowstorm which equates as one of the most damaging weather related disasters in the Town's history. While local weather forecasts predicted rain changing to snow of up to 6 inches and above, starting in the south on Saturday afternoon, and wind gusts of up to 25 mph, what was not predicted was the effects the snow would have on trees that still held their fall foliage. The geographical size of the area receiving the precipitation was varied with forecasts predicting the major impact to the Lakes Region and South.

Unique to the October storm and New England was an early season snow storm. Typically, winter storms of significance in New Hampshire do not occur until well into November and December. Two weeks previous to this October storm, temperatures were recorded as record breaking as they climbed into the 80's for the Columbus Day weekend.

The snow fall totals for this October storm ranged from a high of 31.4 inches in Jaffery, 24.0 inches in Peterborough, to Hudson's official report of 9.6 inches of snow accumulation.



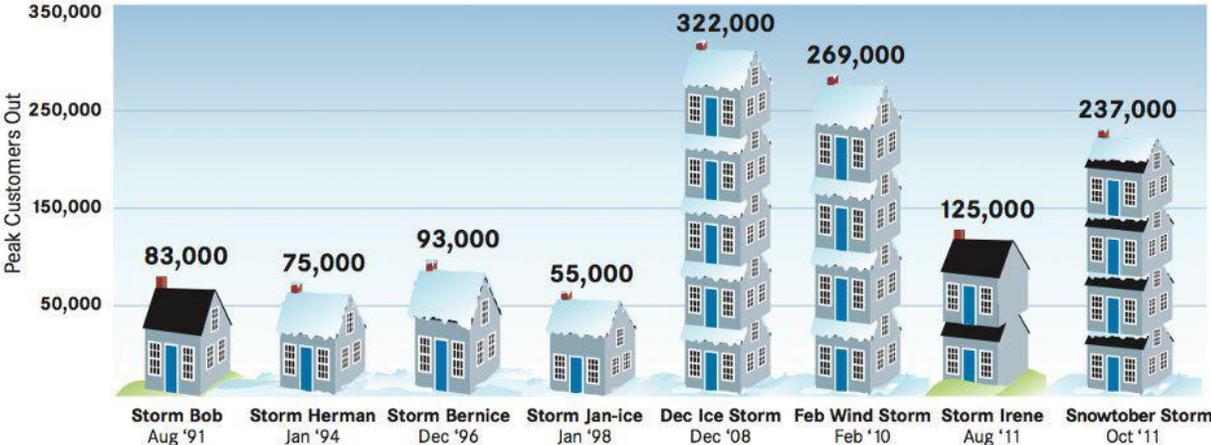
As snow quickly coated the Southern half of the state beginning at approximately 3:00 PM on Saturday October 29, 2011, branches and electrical equipment faltered under the weight of the snow; causing significant power outages in a very short period of time. The Town of Hudson and Merrimack were identified as two Towns that could be considered the two hardest hit Towns in terms of damage from this storm.

The marked difference between this October storm and the Ice Storm of 2008 was that this storm moved relatively quickly through the area but created more damage. Currently, PSNH serves 10,665 Hudson customers. The December 2008 Ice Storm left approximately 7,314 or 68.58% Hudson customers without power. The October 2011 storm left approximately 9,820 or 92.08% without power. In addition to the larger number of residents without power in this most recent storm, the larger electrical grid

suffered damage to over 70 circuits. In the Hudson/Nashua area alone, more than 13 major electrical circuits were damaged and required repair before the local restoration efforts could go into full force. Further complicating the power outage issue in the Town of Hudson was that for the first time in a number of years the Library Street, Derry Road, and Lowell Road businesses, School SAU, and Town Central Station/Town complexes were all left without power. The major circuit problems left the Town without access to local businesses that in the past were able to provide basic necessities such as gas, fast food, and groceries. The Hannaford store remained opened, but could not provide sale of any perishable items such as milk and refrigerated products. It took a minimum of two days to bring power back to these community businesses. It was not until mid-week of the event that power was restored to all business areas. In turn the Hudson schools were also without power during this time period requiring the cancellation of school until Thursday, November 3, 2011.

Overall in New England, more than 4 million people in at least five states were without power on Sunday as the storm moved offshore. Up to five deaths, some due to traffic accidents, were blamed on the storm.

This October snow storm was rated the third highest number of power outages than any other storm in NH history. Storm damage was significant and complicated by the high number of circuits that were damaged by the storm. More than 237,000 PSNH customers statewide were without power when outages peaked on Saturday evening. On Saturday, November 5, 2011, I was notified by PSNH that all of PSNH’s Hudson customers had power restored. By way of comparison, the worst storm in PSNH history prior to the December 2008 ice storm was Snowstorm Bernice in 1996 which left a total of 93,000 PSNH customers without power at its peak. During the past three years four major historic power outages has far exceeded the total number of major power outages from 1991 to 1998.



This after action report is compiled for use by all interested public safety and emergency management organizations and serves the following important functions:

- A source for documentation of response activities
- Identification of problems/successes during emergency operations
- Analysis of the effectiveness of the components of the Emergency Management Plan
- Describes and defines a plan of action for implementing improvements

The use of after action reports emphasizes the improvement of emergency management at all levels. The after action report provides a vehicle for not only documenting system improvements, but also can, if desired, provide a work plan noting how these improvements can be implemented.



Trigate Road – Energized Line and Tree Fire

Storm Preparedness Activities:

The following weather statement was released by the NH Homeland Security and Emergency Management Division on Friday October 28, 2011 at 12:55 PM:

Weather Update (change): 10/28/11 – 12:55 pm



A Winter Storm Watch has been issued for all of N.H. except Coos County. The major impact from this storm will be the Lakes Region and south.

Precipitation to start late Saturday afternoon as rain moving from the south to north. Entire area should see snow by 7 p.m. Sat.

Over 6" of heavy, wet snow is possible with amounts highest in line from Rochester to Concord to Keene. (Rockingham, Southern Strafford, Cheshire, Hillsborough Counties).

Winds expected to be in 15-25 mph range out of northeast to begin then shifting to northwest. There may be some power outage issues with tree limbs on power lines.

High tide at Hampton at 1:33 on Saturday afternoon could be an issue with some splash over.

Storm will move out by daybreak on Sunday.

NH HSEM Field Service

This initial weather briefing is typical of pre-storm warnings received from the State of NH Division of Homeland Security and Emergency Management. It is often a pre-cursor and alert to local public safety officials that a significant weather event may be approaching.

The New Hampshire Department of Safety – Homeland Security and Emergency Management Agency warned that severe weather expected could result in heavy wet snow and winds. Snow was expected to be heaviest from the Lakes Region South. The weather forecast was again updated with higher snow and wind amounts by Homeland Security on Saturday morning.

At 3:26 PM on Friday October 28, 2011 PSNH released the following information to local public safety agencies:

Dear Municipal Officials and Emergency Responders,

PSNH is monitoring the weather for this weekend and has made provisions to prepare of the winter storm watch in effect from Saturday into Sunday. The forecast supports the likelihood of power outages in PSNH's service territory, so you may be hearing from me over the weekend.

The latest weather update:

- A light mix of rain and snow will develop vicinity 2pm to 5pm Concord southward and down through all of the Merrimack Valley. Should be all rain in the Seacoast Region. A mix of rain and snow will change to all wet snow vicinity 3-6 pm and by early evening accumulate to around 1 to 2 inches.
- Elsewhere, minor accumulations of a half inch or less are expected by dark Saturday. Heavy wet snow will fill in by mid evening as far north as Concord, develop through the Lakes Region vicinity 5-8pm, heavy at times from midnight on up through the Lakes Region with lighter snow further north.
- For the Seacoast Region, light rain will fill in by late afternoon and mix with and change to mostly all snow towards midnight, heavy and wet after midnight. Rain may still mix in at times along the immediate coast.
- Snow will taper off all areas after daybreak Sunday morning, ending around midday. Total snow accumulations will range from 8-12 inches as far north as the Southern Lakes Region and trail off northward to 1 to 2 inches up near the Canadian Border.
- Locally higher amounts are possible just about anywhere with the best chance through the higher elevations of the Monadnock Region. Snow accumulation confidence is lowest Seacoast Region and could go either way by several inches; all depend on the exact of the storm. At this point figuring 4 to 8 inch accumulations. The highest accumulations all areas will be over grassy areas, trees, and any colder/exposed surfaces.
- The snow will be wet and heavy for all areas, and is likely to cause major problems with tree limbs and power lines. Wind gusts for this storm may be as high as 40-45 mph through the Seacoast Region, possible a peak gust to 50 mph close to the coast. Further inland, wind gust in the 25-35 mph are expected for Saturday night into Sunday morning.
- Drier and calmer conditions are expected to develop Sunday afternoon and Sunday night.

Other Preparation activities:

- Fire Department personnel were directed to prepare facilities and equipment for a snow storm and to check all FD generators to assure they started and were fueled.
- Plows were put on fire department utility vehicles.
- Discussions with Deputy Fire Chief on staffing levels for weekend.
- State Emergency Operations Center upgraded to Level II staffing at 16:30 hours.
- New Hampshire Homeland Security and Emergency Management (HSEM) conducts a test email to all emergency management agencies
- National Grid sends out storm alert advising public safety officials of storm preparation events. National Grid is responsible for high pressure gas utilities in the Town of Hudson.
- NH HSEM sends out a winter storm warning update on Saturday 10/29 at 9:21 AM.
- NH HSEM upgrades Emergency Operations Center to Level II on Saturday 11/29 at 10:30 PM and further upgrade to Level III staffing on Sunday morning.



Fire Department Response:

Response statistics cover the time period from Saturday October 29, 2011, through Friday November 4, 2011. On Saturday morning, November 5, 2011, PSNH notified me that there were approximately 13 customers in Hudson who were scheduled to have their house service repaired and that all power would be restored by the end of the day.

The first “wires down” calls were received at approximately 6:04 PM (18:01 hrs) on Saturday, October 29, 2011. Over the next five (5) day period the fire department responded to 335 calls for service. This included all fire and EMS requests for service. The following listing is a sample of some of the various calls:

- 158 were for arching wires/wires down.
- 17 Fire Alarm Box activations
- 7 smoke/gas odors
- 3 calls for structure fire
- 23 Carbon Monoxide Alarm calls
- 4 Carbon Monoxide calls with symptoms
- 45 Assist Citizen calls
- 49 Emergency Medical Service (EMS) calls
- The remaining balance of calls to equal 335 were for various other response categories

At approximately 3 PM weather conditions began with steady rain and over the next two hours changed to a heavy white snow. Weather conditions quickly deteriorated from a freezing rain to snow. This rapid accumulation of snow quickly brought down trees and wires throughout the town. Roads were blocked from downed trees and wires – at one point approximately 30 to 40 streets/roads were impassable or had limited travel to one lane. Because of our experience with previous ice, wind, and snowstorms that resulted in wide scale power outages, the fire department had coordinated with Hudson Police Department

to track calls for wires and trees down and to report the wires down calls to PSNH through their municipal emergency reporting line. The Hudson Police Department was tasked with keeping the list and updating PSNH routinely. The single agency reporting process has eliminated both agencies calling in the same wires and electrical problems and has been successful. One after action we will be working towards is finding ways to not have our two agencies duplicate response to the same call. This will be covered in the action items section of this report. In preparation for the storm, an additional dispatcher was also put on duty in order to manage the number of phone calls received by the dispatch center. This allows the primary dispatcher to focus on dispatching fire equipment and coordinating the assignment of emergency vehicles to respond to calls.

In addition to the extra dispatcher, additional staffing was used to man the Robinson Road Fire Station and a second ambulance. Our experience has shown that in weather events involving downed trees and wires the North end of Town serviced by the Robinson Road Fire Station often experiences blocked roads and emergency access challenges. The staffing of this station during these weather events assures a faster response by emergency personnel when needed. The additional staffing of personnel included both fulltime and call personnel.

During a weather event involving electrical transformers, poles, wires, and trees on wires, a priority system is established to determine which calls for service will be responded to first. Typically this priority order includes transformer explosions, pole and trees on fire, arching wires, and wires down. During Hurricane Irene in August the Hudson Fire Department modified its apparatus response by utilizing personnel in the forestry units to respond to the aforementioned classification of calls in order to reduce the need to send a fire engine to every wires call therefore tying up resources for more serious emergencies. While fire engines will still be seen on these types of calls when the number of priority calls overtakes the number of forestry units, a reduction in the wear and tear on fire engines and fuel costs is realized.

The primary reason for a fire department response to the types of utility emergency calls detailed above is to assure that a transformer fire or explosion, wires arching, or wires down does not provide a safety hazard to the general public. Fire department crews do not extinguish, remove trees from arching wires, or relocate downed wires. The fire department evaluates the priority of the call and relays pole information and the issue to our dispatch center for notification of PSNH. When the fire department encounters wires that are downed and may still be energized and in contact with a vehicle or other object, the fire department assures that no one further endangers themselves by coming in contact with the wires. The fire department does have a tool called a "hot stick" which is a wand type device that will emit a warning sound when it detects electrical current. This is the extent of equipment used in detecting electrical current from downed wires. A downed wire should always be assumed to be energized until confirmed it is not by the power company.

Chief Murray and Deputy Chief Buxton signed on the air at 7:30 PM due to increasing calls for service. Kevin Burns, Highway Road Agent, contacted the Fire Chief at approximately 7 PM on Saturday informing me that he was out and had crews out since 5:30 PM for snow removal and other issues as they arose. Police Chief Jason Lavoie was contacted at approximately 10:00 PM and provided with an update on the changing conditions. At approximately 8 AM on Sunday, the Road Agent, Fire Chief, and Police Chief met at the Hudson Police Department to discuss the ongoing storm and to further develop response plans as needed. Coordination of identifying roads closed due to utility and trees downed was established. In addition, a contingency plan was developed to address the loss of power to traffic control lights at all major intersections in town.

The Road Agent took on the responsibility of communicating with the School Superintendent to inform him of conditions and plowing status of schools. By mid afternoon on Sunday the Road Agent

reported that he had opened up all roads that were blocked by trees and not involving utility equipment. Approximately 7 to 10 roads remained closed due to poles, transformers, and wires in the roadway. Updates to the Chairman of the Board of Selectman, Fire Department Liaison Selectman Coutu and other Selectmen occurred throughout the day on Sunday. The first indication of the magnitude of the power outage for the Town of Hudson was through an update from PSNH. PSNH was reporting that 91% of the Town of Hudson was without power. That equated to some 9,820 PSNH customers without power.

A conversation with Randy Bell, School Superintendant, took place on Sunday afternoon relative to the storm and its damage. There were a considerable amount of trees hanging off wires, low hanging wires, and streets that would be impassable for buses that played into the decision to cancel schools. I expressed my concern that the safety of school children could not be guaranteed due to the extensive damage to multiple areas in Town. I informed him that all schools were without power and that the Library and School Street area with the SAU and Town Hall Complex were also without power. Mr. Bell informed me that he would be cancelling school for Monday. A decision on school for the rest of the week would be ongoing.

Crews continued to respond to electrical safety issues throughout the day. The duty shift was on for their normal 24 hour shift and additional crew changes took place at 6 PM on Sunday for an overnight shift.

On Monday October 31, 2011 at approximately 2:30 AM the standby generator that powers Central Fire Station, Fire Dispatch, and Town Hall stopped putting out electricity. The loss of power occurred Saturday evening and the generator had been running since then. Mason Electric responded and determined that a regulator had failed rendering the generator out of service. This left the dispatch center with limited administrative phone capability and radio capability. Hudson Police Department assisted with taking calls as needed. At no time did our 911 emergency line go down. The 911 emergency lines are separate from the administrative lines. Fortunately for the Town, Mason Electric had a small generator on a trailer that was brought in and restored partial power to the dispatch center, restoring phone, radio, and partial electrical power to the Central Fire Station.

A meeting with Town Administrator Steve Malizia and consultation with Selectman Jasper resulted in the decision to close Town Hall for the Day. At 9:00 AM Chief Murray requested a 150 kw generator through the State Emergency Operations Center. The generator would provide adequate power for both Central Fire Station and Town Hall. Southworth Milton of Contoocook, NH delivered the generator at approximately 12:30 PM. The generator was hooked up and power restored to the municipal complex. During the storm the central fire station, town hall, fire administration office, Robinson Road fire station, Burns Hill Road fire station, highway garage and police department all were without power for multiple days.

The Central Fire Station and Town Hall remained on generator power until November 10, 2011. While the repair to the standby generator was occurring, the opportunity to conduct other critical upgrades and maintenance to the generator were accomplished. These upgrades and maintenance items included installing a cut off switch to isolate street power from the generator and the replacement of the transfer switch and internal parts. The highway department provided assistance by use of the excavator and manpower to complete the work.



Hudson Central Fire Station – Town Hall Temporary Generators



PSNH Satellite Center:

On Monday, October 31st, I received a telephone call from PSNH informing me that PSNH was establishing two Satellite Operation Centers. One of the Centers would be in Hudson with utility trucks and utility transformers and equipment staged at Sam's Club and a Command Center established at Walmart. The satellite center in Hudson would be established for the Town of Hudson, Town of Litchfield, Town of Derry, and Town of Amherst. Crews would work out of this center to restore power to those communities. The need to establish this center clearly indicated the magnitude and damage the named Towns experienced from this storm. On Tuesday I went to the Satellite Center and introduced myself to Karl Douglas a Division Operations Manager from the Tilton NH area. Karl was assigned the Operations coordination responsibility for Hudson.

Assistant Town Administrator Mark Pearson provided the satellite center with a number of large maps for their planning purposes. In addition, a number of smaller maps were distributed to crews to assist them with locating Hudson streets. The opening of a satellite center on Tuesday provided an immediate influx of line crews, tree crews, pole digger crews, and other resources in order to begin the restoration efforts in Hudson. Until Tuesday the restoration effort in Hudson was strained and sporadic. I was assured that there were going to be up to 40 utility crews, 20 tree crews, and other resources focusing on Hudson during this day time period. By the end of the day on Tuesday a significant number of customers had been restored. Mr. Douglas was extremely cooperative and responsive to our "priorities" that we brought forth for restoring power. This continued throughout the week through Friday. The PSNH Satellite Center closed on Saturday morning. I would be remiss if I did not acknowledge the success and cooperation I received from Mr. Douglas. Mr. Douglas was given a list of priority issues and consistently placed resources on them as quickly as possible, on a number of occasions within an hour's time frame. The Lowell Road business district started to have power restored on Tuesday with complete restoration on Wednesday. The Derry Road business corridor continued to be without power through Tuesday and Wednesday. This was due to the larger circuit issue previously discussed in this report.

Prior to the opening of the satellite center, communication with PSNH for local public safety officials was through the assignment of a "local liaison". Throughout the storm a local liaison works with the designated local official to identify priority needs. The two liaisons assigned to Hudson consistently communicated with me and worked to resolve some of the critical areas including elderly housing, schools, and the business district. The liaisons deserve recognition for their work in resolving local issues. While this method is much slower than the satellite center scenario, the information on the status of certain areas is more accurate as they have the ability to communicate directly with line crew supervisors and work center management.

The decision to open a satellite center by PSNH in my opinion was a quantifiable and positive direction taken. Given the magnitude of the damage and confirmation from PSNH that the Town of Hudson and Merrimack appeared to be the epi-center, the ability to assign crews, obtain telephone poles and transformers quicker, and having the ability to talk face to face with the Operations Director significantly improved the power restoration process. Should a storm of this magnitude affect us again this would be the most appropriate plan to implement. Credit should also be given to Walmart and Sam's Club for their accommodation of PSNH Satellite Center Operations.



PSNH Satellite Operations Center – Walmart, Hudson New Hampshire
October 2011 Snowstorm



Tree crews awaiting assignment – Sam's Club Hudson NH

Other Storm Related Information:

Throughout the week the crews conducted well being checks at the larger elderly complexes. The Fairview Nursing Home did not have power during the early hours of the storm which left one wing of the nursing home without heat or power. Upon notification that the power outage would be of a long duration, a telephone call to the management company for Buttercup Hill Estates was made and it was requested that generators be provided for the various units in the complex. The management company had the generators installed within a few hours. Fire crews completed a number of door to door wellness checks for residents throughout the power outage. Buttercup Hill was one of the last complexes to receive power. The other elderly complexes that were monitored included Abbies Landing, West Chester Court, Berkeley Drive, Mission Point, Sparkling River Development, Lexington Court, and Village at Reeds Brook. Fire personnel also provided assistance to an elderly gentleman throughout the duration with refueling of his generator due to diminished sight. In addition, a number of other elderly residents were checked throughout the power outage to assure they were safe and warm. In a few cases elderly residents were taken to local hospitals because of their medical condition and need to stay safe and warm.

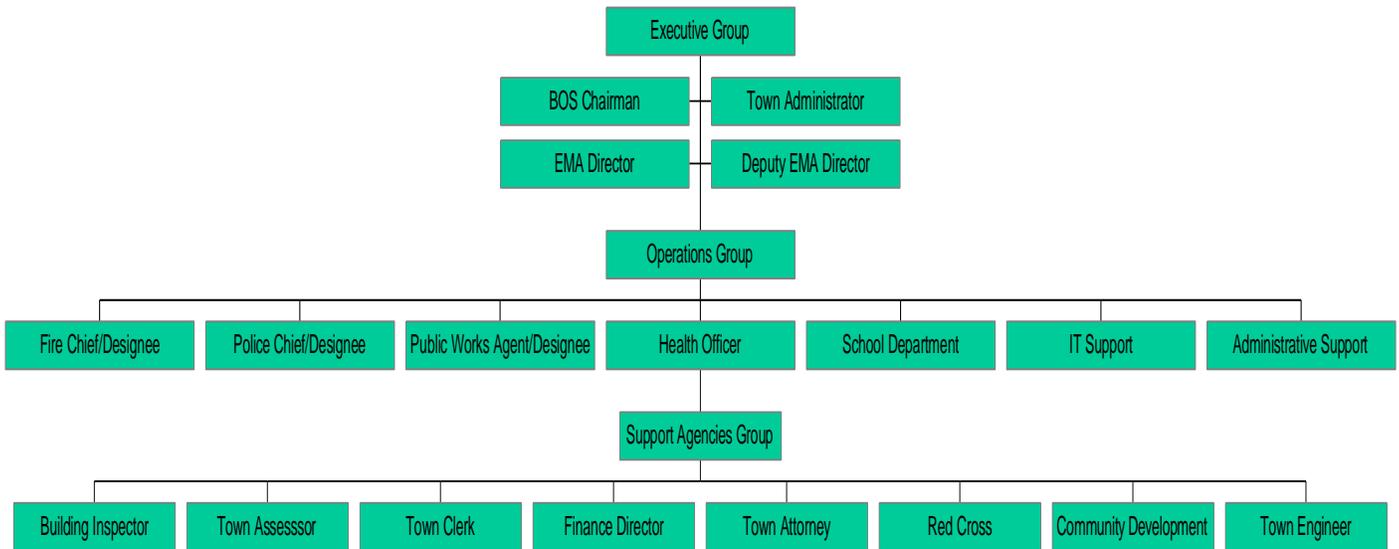
As the power outage extended into the work week, the Building Department and fire prevention personnel conducted roving patrols of town streets looking for generators running inside of enclosed spaces and garages. A number of generators were found in this condition. Homeowners were made aware of proper generator safety and were assisted in relocating them a safe distance away if needed. Flyers with generator safety was distributed throughout the community and given to local businesses to hand out. An increase in carbon monoxide calls was also noted as the week moved on.

Fire Department facilities stayed operational throughout the storm period. Back-up generators at all three fire stations operated for varying lengths of time with the Robinson Road Fire Station operating for twenty-four hours per day for five days. At one point the generator at Robinson Road Fire Station shut down and would not restart. A bad battery was replaced and the generator was back on line. The propane fueled generators at Burns Hill and Robinson Road were installed a few years ago as part of the Assistance to Firefighters Grant Program. All generators have been serviced since the storm.

The Municipal Fire Alarm System had 3 of the 5 circuits go down because of downed fire alarm wires. All of the circuits were restored after the storm.

The radio communications system has four voting receiver sites: Central Fire Station, Alvrine High School, Robinson Road Fire Station, and the Groves Farm Water Tank. Due to a lack of back-up power at the Alvrine High School site and the Groves Farm Water Tank site, only two of the sites remained operational throughout the storm. All sites were restored to operational status upon return of power. Future recommendations will include the need to develop back up power plans for these radio sites.

Town of Hudson NH Emergency Management Team Organization



Emergency Management/Emergency Operations Center (EOC) Response:

Emergency situations vary markedly in speed of onset and in their potential for escalation to disaster proportions. The extent to which the Emergency Operations Plan (EOP) and the Emergency Operations Center (EOC) is activated depends upon the type of emergency situation, its potential for escalation, its geographical extent, and other factors. The Hudson EOP details four levels of plan activation. They are as follows:

- ***Level NO -Normal Operation*** - At this level, there are no reported hazards or emergency situations identified that require special monitoring or consideration. (Example - Normal day-to-day activities take place)
- ***Level IR -Increased Readiness*** – At this level, a potential hazard (Winter Storm, Hurricane) or an emergency situation has been identified that is being monitored, but does not require activation of personnel (Example – personnel monitor the track of Winter Storm). Equipment is readied and resources are checked for availability.
- ***Level PA -Partial Activation*** – At this level, a hazardous and/or emergency situation is active, which requires a partial activation of the EOP. The incident will dictate who and what actions need to be taken. (Example – Fire w/limited evacuation may require the opening of a shelter.)
- ***Level FA -Full Activation*** - At this level, a hazard and/or emergency situation is active, which requires the full activation of the EOP and all Emergency Management Organization personnel. The EOC is activated and fully staffed at this level. (Example – An event/incident which requires the coordination of all Departments and Organizations.)

The Town activated three of the four Emergency Operation Plan levels during the recent storm. The Emergency Management Staff made a conscious decision to ***not*** activate to the Full Activation level which would have included the staffing of the EOC. This decision was based on the following considerations:

- In the first 12 hours of the ice storm the Fire, Police, and Highway Departments were able to respond to all requests for service. While initially challenged by the number of arching wires and downed wires, response to emergencies were handled using local resources.
- The Town Government and its infrastructure (facilities and communications systems) were not physically damaged. The prevalent issue was the loss of power to these facilities. Standby generators at all of the main facilities were operational and providing computers necessary for daily operations. Significant progress in the clearing and opening of roads was accomplished within the first 24 hours. If any of the Town's critical infrastructures had suffered physical damage or been rendered inoperable, the EOC would have been activated. The restoration of power to the Central Fire Station Complex (including dispatch, fire station, and Town Hall) after the generator failed was accomplished in a 6 hour time period.
- The Fire Chief, Police Chief, and Road Agent were in communication with each other throughout the storm to coordinate their operations and discuss continued operations throughout the storm period. Department Heads were actively "in the field" directing operations throughout the event assuring continuity of operations. The Town Administrator and Board of Selectmen were updated on local progress throughout the storm. Two of the Community Development Staff were assigned to assist with monitoring home generator use and providing hand out information to citizens.
- Emergency Management Staff received twice daily Situational Reports from the New Hampshire Department of Safety Homeland Security and Emergency Management. A total of 12 Situation Reports were received. The final situation report was received on Friday November 4, 2011 when the State Emergency Operations Center returned to Level I.
- The Emergency Management Director participated in a daily telephone conference with State Emergency Management. Participants included the Governor and the Public Utilities Commission Representative in order to address specific power outage updates and issues.
- Chief Murray was in continual contact with PSNH representatives receiving information and submitting requests for priority power restoration efforts throughout the storm period.
- Activation and staffing of the EOC is a manpower intensive operation. By keeping the needed resources "in the field" and coordinating operations, the Town was allowed to move towards a recovery phase faster in this particular disaster.
- The Emergency Management Plan utilizes Emergency Support Functions (ESFs) that delineate primary and/or co-primary and support agencies and describes policies, situations, concept of operations, and responsibilities; necessary standard operating procedures/guides (SOPs/SOGs) to implement emergency management response functions. Of the 16 ESFs which detail local emergency operations, only 8 were utilized during the emergency. This was also a contributing factor which assisted in the decision not to fully activate the EOC.

- Direct communications with the Superintendent of Schools Randy Bell as well as conducting an assessment of road conditions throughout town, allowed Superintendent Bell to make critical timely decisions on the status of opening of schools as well as to keep them closed.

Shelter Operations:

The establishment of shelters for mass care is a responsibility of the local community. **ESF-6: Mass Care & Shelter** – Manages and coordinates sheltering, feeding, and first aid for disaster victims and provides for temporary housing, food, clothing, and special human needs in situations that do not warrant mass-care systems. In the event the local jurisdiction does not have an established Volunteers Active in Disasters (VOAD), this ESF can serve as the likely alternative for managing the receipt and distribution of donated goods and services and provide assistance in coordinating and managing volunteer resources.

The establishment of shelters for the sheltering and feeding of the public is coordinated with the Nashua Gateway Chapter of the American Red Cross. The Town of Hudson has the primary responsibility for sheltering.

The Town's primary Shelter is identified as the Hills Garrison Elementary School. The Hills Garrison School has the ability to shelter 247 disaster victims. The Hills Garrison School also has back up generator power. Memorial School is identified as a secondary shelter with the ability to accommodate 570 disaster victims. Both shelters have the ability to feed up to 450 victims. Memorial School does not have back up generator capability. The recent storm power outages affected both schools. Hills Garrison operated off the back-up generator for a number of days.

A well known disaster planning concept is that during a disaster such as a storm and widespread power outage the highest percentage of the local population will seek shelter on their own with friends or family. A small percentage of the local population will need the assistance of sheltering. Most often this is the elderly population, special needs population, single parent families, families with limited financial resources, and those individuals who do not have local family ties. These concepts proved true during this recent snow storm.

As a pre-planning item for the event, the consideration of opening a warming shelter at the Hudson Community Center was discussed; however, the community center was without power. There were no telephone calls received from citizens to the Emergency Management Director requesting a warming shelter be set up. The need to establish a warming shelter is typically based on public requests for one. The opening of a regional shelter in Nashua also contributed to the decision not to open a warming shelter. I did contact the Nashua Salvation Army Emergency Services Unit and spoke with the Recreation Director to inquire if they would be able to support a warming shelter if necessary. Both indicated they could if needed. The library did operate some modified hours on generator in order to allow citizens a place to warm up and obtain books for reading.

When the Red Cross establishes shelter(s) during a disaster they are established based on the following guidelines:

- The opening of a shelter is a joint decision between the Emergency Manager and the American Red Cross.
- The American Red Cross ability to operate shelters is limited.

- No attempt will be made to operate shelters in every community. “Regional” shelters will be our first priority.
- The hosting community’s ability to support that shelter and resident safety is a major consideration when selecting shelter sites.

A call was received on Sunday, October 30th, inquiring of our local shelter needs. At that time the Town had not received any requests for shelter from our residents. A subsequent telephone call from the Nashua Emergency Management team advised us that the Red Cross was establishing a “Regional” shelter at Nashua High School North. This was based on the widespread power outage in southern and western NH.

Additionally, a Red Cross shelter was opened in Londonderry. The Hudson Fire Department transported two or three residents to the Nashua shelter.

The decision to not open and staff a Hudson Shelter was therefore based on the following factors:

- The disaster was regional in nature. Had the snow storm affected only the Town of Hudson a local shelter would have been established. In addition as stated earlier, while the snow storm was a disaster, it was not of the magnitude that prevented local government from functioning or isolated the citizens of Hudson from the ability to move around and seek shelter outside of the community. The infrastructure and transportation routes were not adversely affected and the general population essentially took care of their personal sheltering and feeding needs.
- That percentage of the population that needed sheltering readily made it known to response personnel. Efforts were made to communicate shelter information as well as conduct door to door welfare checks of residents in identified areas where power was not restored for four to five days and the overall lack of demand for sheltering also contributed to the decision to not open a local shelter.



<u>Nashua North HS Overnight Statistics From Oct 30 - Nov 4</u>		<u>Nashua North HS Day Visitor Statistics From Oct 30 - Nov 4</u>	
<u>Towns</u>	<u>Number of Residents</u>	<u>By Dates</u>	<u>Number of Day Visitors</u>
<u>Amherst</u>	<u>5</u>	<u>30-Oct</u>	<u>53</u>
<u>Burlington, VT</u>	<u>1</u>	<u>31-Oct</u>	<u>219</u>
<u>Hollis</u>	<u>4</u>	<u>1-Nov</u>	<u>207</u>
<u>Hudson</u>	<u>25</u>	<u>2-Nov</u>	<u>154</u>
<u>Litchfield</u>	<u>1</u>	<u>3-Nov</u>	<u>20</u>
<u>Merrimack</u>	<u>20</u>	<u>4-Nov</u>	<u>7</u>
<u>Milford</u>	<u>3</u>		
<u>Nashua</u>	<u>148</u>		
<u>New Ipswich</u>	<u>1</u>		
	<u>Total Residents</u>		<u>Total Visitors</u>
	<u>208</u>		<u>660</u>

The Town of Hudson had 25 of its residents stay at the Nashua North Shelter during the October Storm. The following statistics detail shelter activity in Nashua from October 4th through December 1, 2011:



Nashua High School - North

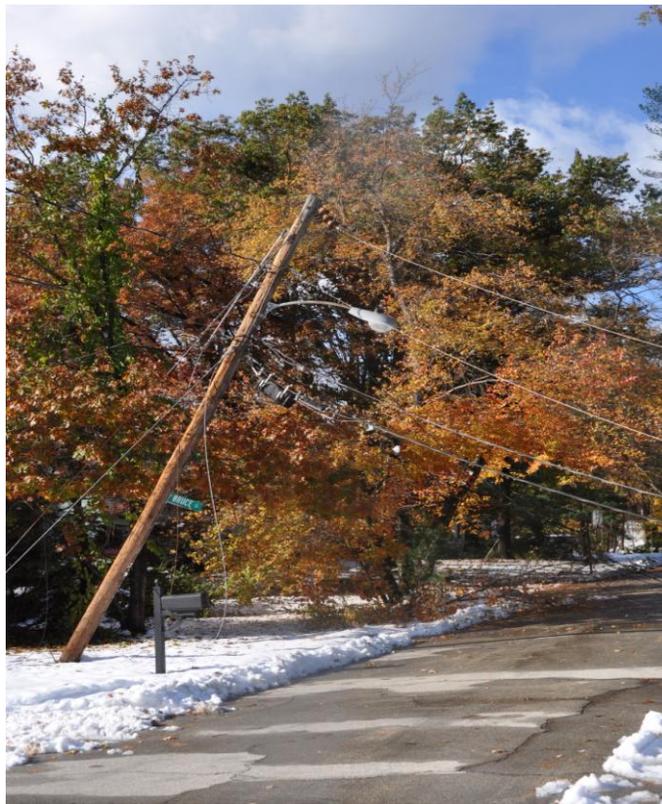
Public Information:

Keeping the public informed as to the status of the snow storm and most importantly power outage and restoration information was perhaps the greatest of all the challenges faced during the storm. When 91% of a local population is without power, the ability to effectively communicate information to the public is challenging at best.

Telephone and Cable wires are typically spared the main force of a snow or ice storm for the basic reasoning that the electrical wires at the top of the pole most often take the force of falling trees. If the wires can survive falling tree limbs then the phone and cable system for the most part remains operable.

It is the loss of power which renders phone and cable inoperable, or at the very least the ability of the citizen to obtain information through television. Most people resort to local print media or television news reports for updates on storm activities. At times we were only able to obtain updated power outage numbers using the PSNH web page.

The Town of Hudson did utilize its web page and posted storm updates on Hudson Community TV channels. In addition, hand outs for generator safety and press releases to local news media were conducted. The use of other communication and media sources as well as social media tools will be discussed further under recommendations.



Police Department Response:

The Police Department like the Fire Department responded to numerous snow storm related calls for service. Fortunately the storm occurred during evening hours and after the commute. Police resources were quickly tied up standing by on wires down calls. One of the future action items will be to look at this to determine the efficiency of tying up police resources on downed wires. The Town has started using barricades to place at wires down, therefore, freeing up valuable police resources. In addition, the Police Department participated in the following activities:

- Conducted town wide surveys to determine which areas of Town remained without power.
- Conducted town wide surveys to determine which streets and roads were impassable.
- Conducted wellness checks and provided information to citizens.
- Coordinated alternative traffic patterns for road blockages.
- Participated in disaster briefings and meetings.
- Conducted business security checks.
- Assisted with a number of animal control related issues.
- Provided traffic control at major intersections without street lights



Highway Department Operations:

The Hudson Highway Department plays a critical role in responding to weather related emergencies in which roads are blocked by downed trees and limbs. In addition to the downed trees the highway department had to deal with the clearing of roads of the snow and ice that fell quickly within the first few hours of the storm.

Crews worked throughout the night and into the next afternoon clearing debris from the roads. By Sunday afternoon all roads that could be safely cleared were opened. Any roads that remained closed was due to PSNH equipment that was down in the road and unable to be cleared by highway crews. Highway crews immediately on Monday began the arduous task of clearing debris from the roadway utilizing all available highway crews and outside contract chipper crews. Subsequently the clean up was ongoing for weeks and substantially completed by the end of November into early December. A lack of snowfall helped in getting this accomplished.

The sewer system experienced no problems as all of our stations have emergency power. The installation of a back up power supply at the municipal water pump station over the past few years has significantly reduced the amount of down time in our water supply system.

This weather event was part of a presidential emergency declaration which allows us to be reimbursed 75% of our storm related costs. Kevin Burns agreed to coordinate and file our application to FEMA. Through the coordinated work of Highway, Fire, and Police administrative staff we have submitted for reimbursement from FEMA. Costs for the response and recovery from the storm were estimated to be approximately \$250,000.00.

The town suffered no significant damage to any facilities other than some small trees and branches falling. There were some downed trees and branches in Benson Park which were cleaned up within a few days after the storm.

The landfill was opened for a number of weekends preceding the storm to allow residents to drop off trees, limbs, and other storm related debris.

Considering the storm's magnitude, the town fared reasonably well. The three operating departments worked extremely well together. Many residents and business people experienced tree and property damage as a result of this storm. The Highway Department did everything they could to lessen the impact and open the streets for PSNH crews as fast as possible.

The Highway Department has always worked well in concert with other Town Departments. I would be remiss if I did not express my appreciation to Kevin Burns and the highway crews who went above and beyond in assisting the fire department by providing equipment and paving during the repair of the fire station and town hall generator. Without their assistance the restoration and repair of the generator would not have been possible.

One significant improvement that saw benefits during this storm was that radios were placed in three of the highway supervisor vehicles. Highway crews were able to monitor and communicate with fire and police which reduced their response time to road blockages and road issues during the storm. This was a previously identified shortfall in our communications system during previous storms.



Information Technology Report:

The following report was submitted by IT Director Lisa Nute:

October 29-30, 2011 Snow Storm Information Technology Department Response

The Information Technology (IT) Department monitored crucial systems as the snow fall progressed the evening of October 29th. Between October 29th and 30th, the majority of problems were minimal until the Fire Department generator failed and Fairpoint phone lines went out for the Police Department.

POLICE EMERGENCY SYSTEMS

During the early morning of October 30th, the Police Department temporarily lost Internet connection with Comcast. This was not a concern as backup connections (Worldpath/Bayring) were put in place by IT staff. The loss of phone and radio circuits, however, was a concern.

The primary phone system and radio circuits went off-line around 4 PM on October 30th due to a Fairpoint infrastructure issue. Even our backup copper phone system will not work when Fairpoint is the backbone for southern NH. The Police dispatchers utilized personal cell phones during the outage. Fire dispatch phones were still available for 9-1-1 call relays to and from Concord. Fairpoint did not restore phone lines for more than 24 hours.

The Police generator had temporary problems off and on for part of the day as well, but did not go down. Users bounced from portable battery backup back to generator and problem corrected itself by the time service personnel arrived.

FIRE EMERGENCY SYSTEMS

On October 31st at approximately 2:30 AM power went down at Town Hall due to a generator failure. This generator also runs the Lenny Smith Fire building which houses Fire Dispatch. Portable battery backup units within Dispatch and the Town Hall server room were exhausted within an hour or two and the following consequences occurred:

1. Fire Dispatch lost its connection to their Computer-Aided Dispatch and Records Management System, IMC Fire;
2. Police Dispatch lost its connection to IMC Police because they acquire their DHCP through Town Hall servers;
3. Anti-virus definitions were no longer being pushed to all systems Town-wide.

Manual Intervention upon Power Loss at Town Hall:

1. As a precaution, to ensure that at least one dispatch center was functioning with Internet and crucial computer applications, each workstation at the Police Department was manually reconfigured to stand on its own for addressing and the tie to Town Hall networking was severed;
2. Backup phones were put in use and directly connected to outside copper lines in Fire Dispatch;

3. Fire Deputy Buxton worked with Mason Electrical to restore the computer room generator power by segregating electrical breakers. Once restored, crucial systems were powered back up by IT on Sunday October 31st. Immediate affects:
 - a. Town Hall/Fire Phone: Returned to full service.
 - b. State Connection through Town Clerk's Office: No Connection. Required service call to State MV Dept IT upon business hours next day (Monday).
 - c. Router Connection for access by all users: Remained down -- Router lost its configuration.
 - d. Crucial Servers: All systems came back, some returned potential data error notices; but all applications remained inaccessible due to lost router configuration. This included Fire Dispatch. Networking was restored with IT intervention/reconfiguration within 4-6 hours.
 - e. Through Mason Electrical a temporary generator was put in place to ensure Town Hall would be open for regular business by Tuesday, November 1st.
 - f. On November 14, 2011 (Veteran's Day when Town Hall was closed for business), the Fire Department was ready to bring all systems back on PSNH power and the temporary generator was removed. IT Specialist Vin Guarino was on hand to properly make the switch.

FOLLOW UP AND IT ASSESSMENT OF EMERGENCY SYSTEM PLANS

An after-action meeting was held among IT Staff to discuss possible changes in the future. Most major problems of October 29th – November 14th, 2011 were out of the control of the IT Department in this scenario; however, plans for backup DHCP on the Police end of the network and regular snapshots over the fiber optic that connects both Police and Town Hall continues to be a goal that was in place before this storm.

Discussions between Fire Administration and the IT Director stemmed around obtaining a more dependable generator and backup power supply plan. More permanent fixes to the generator are being handled by the Fire Department.

Hudson School District SAU 81 Response:

During my tenure as Emergency Management Director and Fire Chief for the Town of Hudson I have had the pleasure to work closely with the Hudson School District and namely Randy Bell in the joint planning and response to community disasters. Inevitably the school system is impacted in most weather related events. During those seasonal “routine” weather events such as heat waves, spring and early summer storms and typical New England winter snowstorms, communication between the school district and town departments has always been conducted. The first telephone call made by the road agent on any given snowstorm is to Randy Bell or SAU staff in his absence. A briefing on current weather and road conditions as experienced by highway crews is given along with a overview of what progress the highway crews are making towards having the roadways safe for the morning school bus routes and pick up of students. Many people do not realize these conversations often take place at 3 AM in the morning.

During the October snowstorm, fortunately not only for town response agencies but also for the school district, the storm came in on Saturday evening where traffic was not a factor. The snowstorm moved quickly through the area and therefore the fast cleanup of snow alleviated a concern for safety related to school buses driving on Monday.

On Sunday afternoon I spoke with Randy Bell and discussed the magnitude of the damage caused by the storm and listed streets and roads that would not be opened in time for the school bus routes on Monday morning. Further, I expressed my concerns that there was significant electrical lines down in the streets and in some cases on the side of the road that were difficult to see. Many of these electrical lines had not been declared safe or de-energized by the utility company. The critical unknown for us was that we could not determine when the full response of utility crews would begin because of the extensive damage that had occurred to the larger power grid system. The significant damage quickly led to the decision to cancel school on Monday due to the uncertainty that your child’s safety could be guaranteed.

On Monday afternoon it was obvious to the emergency management staff and school district that the restoration of power had not progressed to a level that would again provide for the safety of children walking to school or their bus stops. There were still a number of streets on bus routes that were blocked and the lack of power at the SAU, Library Street School and Memorial School prompted the cancellation of classes for Tuesday also.

A similar scenario held true for most of Wednesday and again the school district and emergency management officials concurred with the need to cancel school for another day. On a positive note, there were signs of progress that the school power issues would be resolved by Thursday. On Thursday a 90 minute school delay was instituted and schools reopened without incident.

The SAU and Town Emergency Management staff will be meeting in the future to review and revise shelter plans to identify and add school facilities as potential warming and evacuation shelters to the current shelter locations. Long term planning will look at having generators installed at all schools. At the current time Hills Garrison is the only school with a backup generator system.



Power Restoration Crews await Hudson assignments – October 2011 Storm

Public Service Company of NH Response:

In the aftermath of the storm, PSNH was asked by Governor Lynch and the Public Utilities Commission to review its response to the October snowstorm. The key element that must be taken into consideration and provides the basis in evaluating their response is the fact that this particular storm was a regional storm, caused significant damage to the larger “grid” infrastructure not normally seen in weather related storms, and the amount of time needed to bring in additional resources. The Town of Hudson was in the direct path of the storm center and sustained some of the most significant storm damage statewide. Complicating the issue was the Town’s core municipal complex, SAU, and business district being without street power for a number of days. The repair to the “grid” infrastructure was complicated, time consuming, and made the priority before crews could begin to address the local service issues.

Each day at Noon a briefing was conducted by State Emergency Management Officials. Every day a representative of the Public Utilities Commission actively participated in the briefings. They were able to receive direct information from communities on their status and they also would follow up on issues related to the power companies. In the coming months, the Public Utilities Commission will be conducting post incident analysis to the response of the utility companies to this snow storm.

Given the magnitude of the disaster and the need to bring in crews from across the United States, it is my opinion that the grade for the response of PSNH crews to the Town of Hudson was satisfactory. One of the common criticisms I have heard from other communities towards the utility companies is that the utility companies did not do a good job of communicating the status of the power outages or restoration in local communities. Over the past four years with the number of weather related storms, I have seen improvements in the communications of PSNH with the local community. PSNH is assigning local liaisons for each community and provides direct contact information to them. Each time I called the local representative from Hudson I was able to speak with them direct, state the priority issues, and would receive a follow up within a reasonable time.

I believe that there are two areas that PSNH needs to improve upon. The first being the updating of their database relative to identifying power circuits and areas affected by power outages. Their current system identifies only a general area served by various circuits. With today's technology having the ability to use the grid information and have it merged with various GPS and GIS software systems would allow greater information to local emergency management officials.

The other area that I feel they can improve upon is their ability to update local officials as to where crews will be focusing their restoration efforts. I spent many hours following crews around Town in an attempt to determine where they would be working at. The ability of local officials to have this information can, in a broader perspective, assist PSNH in deflecting the constant criticism from customers about not having power. For example, if the ability to notify our residents that a crew would be working in the area of south Hudson, a resident could at least make decisions as to whether they should leave their home for shelter or wait it out until power is restored. One often heard counterpoint from PSNH is that they do not like to give too much information as to where crews are working because problems may arise that may result in delays in power restoration. During the storm I did receive periodic reports of where crews would be working in some of the larger impacted areas. I was able to communicate this when I received inquiries or was out on the road speaking with residents.

Communications between PSNH is the key to successfully working towards your power restoration. I want to remind our citizens of the importance of contacting PSNH to let them know you are without power. One of the primary assessment tools PSNH uses is receiving telephone calls from their customers informing them of power outages. As we in public safety stress to citizens, "Never assume someone else has called" to notify someone of a problem. If after a day or two your power has not been restored, a quick telephone call or even email notification on the PSNH website reminds them you are still without power. Towards the end of the storm I came upon some isolated residences who still did not have power. Power was restored all around them. In a couple of cases when I asked the residents if they had called PSNH they told me they had not. They had assumed that they were aware of their power outage. There are occasions when the power outage is related to the specific building itself which may not readily be apparent. PSNH does attempt to survey the area upon power restoration and has a call back system to notify customers when their power is back on but this system does not always reach everyone.

One other public education subject I would like to discuss is the use of generators. Given the increase in weather related events over the last few years more and more people are investing in fixed and portable generators for their homes. Generators provide the needed electricity to keep our homes warm, power for well pumps, lighting, refrigerators, and other daily day to day necessities for us to remain comfortable. Some generators can power all of the above listed appliances and equipment while others are limited by the size and output of the generator itself. Some generators are "fixed" or permanently installed, while others are portable on wheels that can be wheeled in and out. During the storm, the Hudson Fire Department and Community Development Department made a concerted effort to go out and look for portable generators to assure they were being used safely and connected properly. There were a number of generators that were found running inside garages, next to windows and doors, or near combustible materials. We responded to a number of calls for carbon monoxide incidents related to generators. The exhausts were pointed towards windows and doors resulting in carbon monoxide entering the home. The investment of a generator will make the long hours of a power outage a little easier on you and your family. The use of a proper transfer switch and connection to your main power is critical for your safety. Please use a licensed electrician to install your generator! **Improperly installed generators can back feed and injure utility workers and cause significant damage to your home and electrical components.** We have experienced a number of structure fires related to the improper installation and use of generators! Please call us with any questions on the proper installation of generators.



For Immediate Release
November 1, 2011

Press Release

Contact: Steve Dube, Fire Prevention Officer
Hudson NH Fire Department
39 Ferry Street
Hudson, NH 03051
603-886-6021
603-594-1164 FAX

Portable Generators

Portable generators should be placed 10 feet from any structure, with the exhaust facing away from the building openings. Deadly exhaust fumes can enter the building through any opening resulting in severe injury or death to unsuspecting occupants.

Never place portable generators on or near combustible surfaces such as decks, porches, or tool sheds. Heat generated by the motor, or improper refueling methods can start a fire.

Never run portable generators inside any building, including basement areas and garages. Deadly levels of carbon monoxide can build up in minutes injuring occupants with little to no warning.

Allow plenty of time to cool the generator before refueling. Gasoline vapors can easily ignite from hot surfaces causing a flash fire and severe injuries.

Always store approved gasoline containers a safe distance from generators while in use. Always store gasoline in an approved container placed in a well ventilated storage area. Never store gasoline products in basements or enclosed areas of your dwelling.

Never modify or construct any power cord so a generator can be connected to a receptacle, dryer or range outlet.

Never connect a generator directly to panel board without a means to prevent inadvertent connection to the normal supply system wiring. Connecting a generator directly to an electrical outlet or to a panel board without a transfer switch or an interlocking device could result in a situation where power from the generator could energize the utility's wiring (back feeds into the utility system). Electrical power from a generator back fed through your meter into the utility system can cause fires, serious injury or death to utility workers trying to repair the lines in the street, or electricians working on nearby property's electrical systems.

Unless you are the owner of, and are occupying, a single family residence or meet one of the exceptions in RSA 319-C, a license is required to perform the electrical installation for connection of a generator to premises wiring. Therefore, a properly licensed master electrician must perform the electrical installation. In all cases the electrical installation must meet the minimum requirements of the National Electrical Code (NFPA 70-2008).

Although the generator is portable, an electrical permit and inspection may be required by the local jurisdiction for the installation of electrical wiring and equipment for connecting the generator to the premises wiring. Therefore it would be prudent to contact the local jurisdiction to ascertain whether an electrical permit is required.

For more information, all contacts shall be made through the Hudson Fire Department. Fire Prevention Officer Steve Dube at 886-6021.

FEMA Damage Assessment/Cost Recovery:

On Wednesday, January 4th, 2012, Kevin Burns, Road Agent and I met with the FEMA Representative assigned to work with the Town of Hudson regarding our reimbursement costs. A review of all authorized expenses was presented with back up documents for our request to receive reimbursement of up to 75% of the costs of response and recovery for public safety during the storm. The reimbursement costs include costs from Fire, Highway, Police, and Information Technology operations directly related to the storm.

A preliminary estimate of costs for the Town of Hudson was established to be approximately \$279,180.98. The cost is further broken down by Police: \$7,982.38, Fire: \$33,912.84 and Highway: \$237,285.76. These costs included items such as debris clearance, barricades, police and fire overtime for traffic control, manning equipment, sanding/salting of roads, rental of the generator for backup power to the municipal complex, and other storm related expenses. FEMA also allows for the reimbursement of costs for fire apparatus response.

FEMA provides a 75% reimbursement rate. Therefore the initial potential reimbursement of expended funds based on the \$279,180.98 figure would be **\$209,385.73**. The final reimbursement figure may vary dependent on specific FEMA allowed reimbursement items. This reimbursement will assist the Town of Hudson in reducing the impact of costs associated with the response to the disaster.



**Town of Hudson
October 2011 Snowstorm
After Action Report**

Action Item #	Description Analysis	Suggestions Recommendations	Responsible Party	Estimated Completion Date	Current Status	2008 Action Item	2011 Action Item
1	Review FD response guidelines for continued improvement to weather disasters	General order and standard operating guideline review to maximize efficient response of resources	Fire Department Staff	Ongoing after each event and at least annually	Review in progress	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Review and revise response guidelines with Police and Highway Department to reduce duplication of calls checking on downed wires, poles, transformers and trees	Assign tracking of street closures to PD and wires down calls to fire department. Develop a alphabetical listing of reported downed wires and street closings to identify a process for both agencies to see the list at the same time	Fire Department Police Department Highway Department IT Department	March 30, 2012	In Progress	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Review and revise current staffing level processes which require long term staffing of all three fire stations during severe weather events and storms	Since August of 2011 have instituted a different staffing model for response and manning. Consider altering shift schedules. Continue to evaluate process	Fire Department Staff	Ongoing after each event and at least annually	In Progress	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Obtain Cost estimates for back up generators for Laverne and Trigate Rd radio sites	During a power outage the digital radio signal voters do not operate	Emergency Management	March 30, 2012	In Progress	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	Develop a written plan for maintenance and checking of pump houses and sewer station mechanical and monitoring equipment. Include plan to install SCADA type monitoring systems	A fire system pump house was found to be low on fuel and oil during the storm. There was no established assignment of responsibility or monitoring system	Engineering Department	February 29, 2012	In Progress		<input checked="" type="checkbox"/>
6	Review and Revise Town Hall and Department Notification Listing	Provide calling trees on laminated cards for all employees to contact during emergencies requiring departments / facilities to close	All Departments	February 29, 2012	In Progress		<input checked="" type="checkbox"/>
7	Central Fire Station Town Hall Complex emergency generator	Obtain estimates and plan for replacement of Central Fire Station / Town Hall Generator. Current generator is 25 years old. Generator failed during storm and cost approximately \$15,000 to repair	Fire Department	March 31, 2012	In Progress		<input checked="" type="checkbox"/>

**Town of Hudson
October 2011 Snowstorm
After Action Report**

Action Item #	Description Analysis	Suggestions Recommendations	Responsible Party	Estimated Completion Date	Current Status	2008 Action Item	2011 Action Item
8	Elderly complex generators	Encourage and work with local elderly housing complexes to install small generators in their "clubhouses" as small warming centers	Emergency Management	March 31, 2012	In Progress		<input checked="" type="checkbox"/>
9	Establish Town of Hudson Emergency Management Page on Town Website	Provide Central Source of Information for emergency preparedness, response and mitigation including disaster tips for citizens on Town web site	IT Emergency Management	March 31, 2012	Planning Stage		<input checked="" type="checkbox"/>
10	Conduct generator and heating safety public safety announcements and public training sessions on maintaining portable generators to include proper safe installation and use of such equipment	Conduct a number of sessions throughout the year for the public and program for local cable TV access. Develop door hang tags with CO Safety Info (Bright yellow or orange)	Emergency Management Fire Department Hudson Cable TV	April 30, 2012	Planning Stage		<input checked="" type="checkbox"/>
11	Develop use of social media accounts for the dissemination of information related to ongoing storm operations.	Obtain permission from governing body to establish accounts and provide public information campaign to educate citizens on various programs. Programs include Nixel, Tweeter, Face book	Emergency Management IT Department	February 29, 2012	Planning Stage		<input checked="" type="checkbox"/>
12	Communicate need to PSNH to develop a Power Restoration Notification System for local emergency officials	Notification of power restoration to areas is not currently communicated.	Emergency Management	March 30, 2012	Pending		<input checked="" type="checkbox"/>
13	Develop a Public Information Bulletin for use on HCTV and other media to remind Citizens to call in power outages	Most citizens call PSNH when power is out. Some citizens assume others have called. Calling to report power outage is critical to identifying outage areas	Emergency Management	February 29, 2012	In Progress		<input checked="" type="checkbox"/>
14	Meet with Rec Department and School Department to develop dedicated warming centers geographically located around the Town of Hudson.	A dedicated list of warming centers geographically located around Town will facilitate the ability to open at least one during wide scale power outages	Emergency Management Rec Department School District	Tuesday, January 31, 2012	Planning Stage		<input checked="" type="checkbox"/>
15	Develop and distribute a community emergency management information sheet with disaster information and contact numbers of key Town Departments	A listing of Town of Hudson Departments and contact numbers for citizens to obtain disaster information. Establish a dedicated phone number for citizens to obtain disaster related information.	Emergency Management	January 31, 2012	Planning Stage		<input checked="" type="checkbox"/>

**Town of Hudson
October 2011 Snowstorm
After Action Report**

Action Item #	Description Analysis	Suggestions	Recommendations	Responsible Party	Estimated Completion Date	Current Status	2008 Action Item	2011 Action Item
16	Hudson Community Television	Identify and train a group of Town Staff to access and post messages on Hudson Cable TV Access Channels		Emergency Management	February 29, 2011	Planning Stage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
17	Use of Hudson School District Emergency Notification System	Develop a guideline and partnership with Hudson School District in the use of their emergency notification system to add safety messages for parents when the school district cancels school		Emergency Management	February 29, 2011	Planning Stage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
18	PSNH Input	Participate in Public Utilities and PSNH Ice Storm critiques and disaster planning meetings to better enhance the Town of Hudson emergency response		Emergency Management	February 29, 2011	Planning Stage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
19	Back Up Server	Obtain back up DNS Server		Information Technology	As funding allows	Planning Stage		<input checked="" type="checkbox"/>
20	Redundant back up information	Snapshots of backup over fiber optic system		Information Technology	February 29, 2011	In Progress		<input checked="" type="checkbox"/>

Conclusion:

The Town of Hudson's Emergency Operations Plan (EOP) and Emergency Management Staff establishes a framework for the Town of Hudson to provide assistance in an expeditious manner to save lives and to protect property in the event of a disaster. The plan outlines the planning assumptions, policies, concept of operations, organizational structures and specific assignments of responsibility to the Town's departments and agencies involved in coordinating the local response activities. The only real quantifiable way to determine the effectiveness of the plan is through the unfortunate experience of a disaster.

During the October 2011 Snow Storm many elements of the Emergency Operations Plan were put to a full test. The October 2011 Snow Storm power outages and damage to electrical infrastructure surpassed any previous damage we have received from weather related storms in the past. In the Town of Hudson, 92% or 9,820 Hudson PSNH customers were without power for up to five days. The most significant and successful element of the plan was that of the response of our personnel and staff who worked tirelessly throughout the six (6) days toward recovery and power restoration to the citizens of Hudson. I am proud to be part of the public safety and service network for the Town of Hudson. To the employees who worked countless hours while knowing their own families and relatives were without power, my deep and sincere gratitude. I am confident that the all hazards approach to emergency management planning is effective and does work during disaster situations such as this snow storm.

Hudson Emergency Management appreciates the continuing cooperation and support from all departments and agencies and to the volunteer and private organizations, which contributed to the mitigation, response, and recovery of the October 2011 Snow Storm. Once again the true spirit of neighbor helping neighbor was demonstrated many times throughout the snow storm. One resident would have power restored and would share their generator with another that did not. Many citizens checked in on our elderly population to assure they were safe and not in any danger. I received many notes and telephone calls of appreciation for the acts of kindness and compassion above and beyond the call of duty.

The response to disaster related emergencies provides challenges not seen in day to day emergencies. In a single emergency, crews respond, identify the problem, resolve it, and then return to the fire station. Your highway department will deal with a snow storm that for the most part will be over from beginning to end having all roads plowed and made safe in a 24 hour period depending on the severity of a storm. In a disaster, the emergency may encompass multiple days, require a larger number of resources, coordination with regional and state agencies, and includes the implementation of long term planning. Because these disasters are complex and dynamic there is no perfect response to these disasters. Each disaster becomes a learning experience and an opportunity to improve our response to them. I am proud to say that the staff and personnel in the Town of Hudson continue to develop and improve upon our response to emergencies. The three pages of recommendations demonstrate those areas that we have identified as areas that would assist us in responding more efficiently in serving you the citizens. One of the primary objectives and result of this after action report is to continue to seek ways of keeping you informed as the disaster enters multiple days. I encourage all of you to feel free to contact us to provide further input and suggestions geared to our emergency management and response to disasters.

I would like to thank the Hudson Board of Selectmen and Town Administrator Steve Malizia for their ongoing support during the snow storm. The BOS and Selectman Liaison Roger Coutu provided support yet also allowed Department Heads to manage the emergency response and recovery efforts in order to provide for the safety of our Citizens. The cooperation between departments was paramount to the rapid opening of the Town's critical transportation corridor(s) and openings of our local schools. Under the leadership of Superintendent Randy Bell, the school district worked hand in hand with our emergency management team in making the difficult decision whether to hold school or cancel it.

The Town's infrastructure did not sustain any major damage as a result of the snow storm. The response and recovery from this disaster was successful due to the cooperation and commitment of all Town departments and its Citizens. Continued improvement of the Town's Emergency Management Plan will be conducted by implementing the suggestions and recommendations identified in this after action report.

Respectfully Submitted,

Shawn Murray, Emergency Management Director

Received by Buttercup Hill Residents:

To: FIRE CHIEF, SHAWN MURRAY, Page 1 of 1

THANK YOU

All the residences of Buttercup Hill on Webster Street in Hudson want to Thank All of our Hudson Fire Fighters. Our Fire Fighters came to us Every Day to make sure we (the elderly) were alright without power and heat and was there anything they could do for us. It was such a good feeling to know they were watching out for us.

We have the best Fire Fighters of any state of these United States

Thank You Hudson Fire Fighters, you are the best. God Bless you All and Keep you Safe.

from: All the Buttercup Hill Residences

Monday, November 07, 2011 AOL