

HAMPSTEAD AREA

WATER COMPANY, INC

54 SAWYER AVENUE, ATKINSON, NH 03811

TEL: 603.362.4299 FAX: 603.362.4936
www.hampsteadwater.com

March 27, 2009

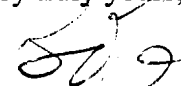
Lynn Fabrizio, Esq.
NH PUC
21 S. Fruit St. Suite 10
Concord, NH 03301-2429

RE: December 2008 Ice Storm Review
Responses to Staff Data Requests – Water Utilities Set 1

Dear Lynn,

Please find enclosed the above referenced Data Responses. An electronic file has also been sent via email to you this day. Thank you for your courtesy in extending the due date for the responses. Don't hesitate to contact me if you have any questions.

Very truly yours,



Robert C. Levine
General Counsel

RCL/ja
enclosures

cc: HAWC

DECEMBER 2008 ICE STORM REVIEW

STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1

The Commission is reviewing the efforts of New Hampshire utilities with respect to preparation, response, and restoration of service following the December 11-12, 2008 ice storm. Please read the questions carefully; some relate specifically to the December storm and some are related to general preparedness for future events. Please provide your responses to the questions below by March 20, 2009.

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

**Date request received: 02-27-09
Staff 1-1**

**Date of Response: 03-27-09
Witness: Charles Lanza**

1. Please describe impacts of the storm generally on your water system or systems.

RESPONSE:

The December ice storm brought trees and limbs down severing electric lines causing power outages to all of the Company's water systems. The trees and debris blocked many of the state, local, and pump station access roads.

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-2

Witness: Charles Lanza

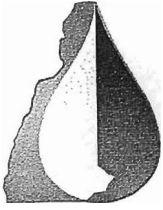
2. Please indicate the following for each facility that lost external power as a result of the storm (if a large number of facilities were involved, a detailed summary is acceptable):
- a) Name of system;
 - b) Name of facility;
 - c) Name of electric provider;
 - d) When power was lost;
 - e) Reason for power loss;
 - f) Resulting impacts to water system (loss of water to entire system, to portions of system, loss of pressure, etc.);
 - g) How you learned of the power loss;
 - h) The length of time from loss of power to when you first learned of it;
 - i) The extent of alarms or SCADA monitoring at the facility, including where output is directed;
 - j) When external power was restored.

RESPONSE:

- a) All of the Company's systems lost external power as a result of the storm. See Attachment A for a list of all facilities receiving external power.
- b) See Attachment A for a name of all company facilities affected by the storm.
- c) See Attachment A for a list of all electric providers.
- d) The power was lost early in the morning on Friday, December 12th. By 7:00 am power had been lost to all HAWC facilities.
- e) The reason for the power loss was due to tree limbs and entire trees coming down on power lines, severing connections and causing electrical outages to facilities.
- f) The Company experienced the following impacts to systems. The Atkinson core system lost water and pressure to all portions of the system when the electricity went out. The Hampstead system had sufficient supply with the .5 MG tank to provide water until Monday morning and had lower pressure until the power was restored. The satellite systems lost water and pressure to the entire systems when the power went down.

NHPUC December 2008 Ice Storm Review
Water Utilities – Set 1
February 27, 2009

- g) The Company learned of the power loss through customer notification and visual inspection of the systems.
- h) The loss of power to all facilities was between 12:00 am and 7:00 am on December 12th. The Company was aware of all facilities being without power by 12:00 pm on Friday December 12th.
- i) The Company's SCADA system monitors and reports 11 stations. Those stations are all setup to send any alarms directly to the operator on call via a dedicated land line. There are 15 stations that do not have SCADA monitoring have Pulsar alarms installed that are directed to the office and then routed to the operator on call. There are a few stations that have neither but are connected to the core systems.
- j) External power was restored to facilities at between 12/15/08 and 12/23/08.



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WATER COMPANY, INC

54 SAWYER AVENUE, ATKINSON, NH 03811

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www.hampsteadwater.com

April 6, 2009

Lynn Fabrizio, Esq.
NH PUC
21 S. Fruit St. Suite 10
Concord, NH 03301-2429

RE: December 2008 Ice Storm Review
Substitute Attachment 1-2 a,b,c

Dear Lynn,

Please find the enclosed substitute attachments for the above referenced Staff Information Response. The original attachment contained confidential account information that should not be posted for public viewing, i.e. the specific account numbers for each power company account for HAWC. Please substitute the redacted enclosed copy for the one currently posted on your website.

Thank you in advance for your anticipated cooperation. Please don't hesitate to contact me if you have any questions or concerns.

Very truly yours,

Robert C. Levine
General Counsel

RCL/ja
enclosures

cc: HAWC

Electric Company Info

Provider: PSNH

Provider's Phone #: 800-662-7764

Bill To: Hampstead Area Water Co., Inc.
54 Sawyer Ave
Atkinson, NH 03811
Contact: Christine Lewis-Morse
Phone: 603-548-5150
603-362-8700

Water System Name:	Number of Active Cust:	HAWC Acct #:	Service Address from Electric Bill:	City:	Zip:	No. of Booster Pumps & H.P.	Phase / Amps	No. of Well Pumps & H.P.	Phase / Amps	Incoming Electrical Phase(s)
Bricketts Mill	29		Bricketts Mill Rd	Hampstead	03841	2-7.5	1/40	2-3	1/17	
Little Mill Woods	24		Christopher Dr	Sandown	03873	2-7.5		2-5	3/10	
Woodland Pond	103		Harper Ridge Rd Booster Sta. w pumps	East Hampstead	03826	2-15		N/A	N/A	200A 3 Phase
			Pilgrim Circle Lot 72-C Well 5			N/A	N/A	1	100A 1 Phase	
			Pilgrim Circle Well 6			N/A	N/A	1	100A 1 Phase	
Oakhill	50		Red Squirrel Ln	Chester	03036	2 - 7.5	1/40	1-1.5 - 1-5	1/9,2, 1/27	200A 1 Phase
Camelot Court	18		Camelot Court	Nottingham	03290	1-7.5 - 1-3	3/22, 3/10	1-1	1/16	200A 1 Phase
Kent Farm / Hampstead Core	253		Freedom Hill Rd (Tower/Tank)	Hampstead	03841	N/A	N/A	N/A	N/A	
			Page Ln (Kent farm)			2-15	3/42	2-5	1/25	
			Granite Circle (booster sta.)			2-7.5				100A 1 Phase
			Cardinal Ln (new well station not online)			N/A	N/A	N/A	N/A	
Hampstead Core	737		Littles Ln (Putnam Place)	Hampstead	03841					
			Norfolk St (Cranberry Meadows)			2-7.5		1-7.5	3/22	
			Village Green Rd			2-15	3/42	1-10 - 1-5	3/32, 3/17	
			Lewis Ln (Pit Hatch)							
			Forrest St (Eastwood Place)			2-7.5	3/22	1-7.5	3/22	
			Odd Fellows Rd (Angle Pond Woods)			2-7.5	3/22	2-7.5	3/22	
	Tanglewood Dr			1-3	1/17		200A 1 Phase			

Note: Pump Phase & Amps refer to the VFD phase where VFD's are installed

REDACTED

Electric Company Info

Provider: Unifil

Provider's Phone #: 800-582-7276

Bill To: Hampstead Area Water Co., Inc.
54 Sawyer Ave
Atkinson, NH 03811

Contact: Christine Lewis-Morse
Phone: 603-548-5150
603-362-8700

Water System Name:	Number of Active Cust:	HAWC Acct #:	Service Address from Electric Bill:	City:	Zip:	No. of Booster Pumps & H.P.	Phase / Amps	Well Pump(s) & H.P.	Phase / Amps each	Incoming Electrical Phase(s)
Rainbow Ridge	15		Deer Hollow Rd	Plastow	03865	2-7.5		2-5	1/28	200A 1 Phase
Colby Pond	157		Boulder Dr	Danville	03819	2-15	3/42	2-5	3/17	
Bartlett Brook (Woodland Pond)	30		Patriot Drive	East Hampstead	03826	2-7.5	3/22	3 - 5	3/16	200A 1 Phase
Coopers Grove	0		Off Cotton Circle / New Boston Rd.	Kingston	03848	2-5, 1-1.5	1/25,	2		
Lampighter Estates	56		Lantern Ln	Kingston	03848	2-7.5, 1-3	3/22, 3/10	2 - 1.5	1/11.5	200A 1 Phase
Cricket Hill/Maplevale	121		Cricket Hill Rd	East Kingston	03826	2-7.5, 1-3	3/22, 3/10	1 - 7.5, 1 - 3	3/22, 3/10	200A 1 Phase
Dearborn Ridge	11		Dearborn Ridge Rd			2-5	1/25	2	1/12	200A 1 Phase
Walnut Ridge/Bryant Woods	1049		Meditation Ln	Atkinson	03811	1-30, 1-3		N/A	N/A	200A 1 Phase
		Village Dr	2-25			3/65	2-7.5	3/22		
		47 Main St (Pit Hatch)	N/A			N/A	N/A	N/A	200A 1 Phase	
		54 Sawyer Ave (Lower/Tank)	2-15			3/42	N/A	N/A	200A 3 Phase	
		1 Eidon Way (Midpoint)	2-15			3/42	3 - 7.5	3/22		
		Eidon Island (Midpoint Island)	N/A			N/A	N/A	N/A		
		Haydn Dr (Jesse Page)	2-7.5			3/22	1 - 7.5	3/22		
		Parish Square (Cogswell Farm)	2-7.5			3/22	2-7.5	3/22		
		Winslow Dr (Jameson Ridge)	2-7.5			3/23	1 - 3	3/10	200A 1 Phase	
		Bryant Woods Rd	2-15			3/42	1-7.5, 1-2, 1-3	3/22, 3/6.8, 3/16		

Electric Company Info										
Provider: NH Electric Co-Op Provider's Phone #: 800-343-6432 Bill To: Hemsstead Area Water Co., Inc. 54 Sawyer Ave Atkinson, NH 03811 Contact: Christine Lewis-Morse Phone: 603-548-5150 603-362-8700										
Water System Name:	Number of Active Cust:	HAWC Acct #:	Service Address from Electric Bill:	City:	Zip:	No. of Booster Pumps & H.P.	Phase / Amps	No. of Well Pumps & H.P.	Phase / Amps	Incoming Electrical Phase(s)
Autumn Hills Cornerstone Estates	3			Sandown	03873	2-5	3/16	1-5, 1-1	3/17, 1/8	200A 1 Phase
Oakhill	76			Sandown	03873	2-7.5, 1-3	3/22, 3/10	1-1.5, 1-1	3/5.2, 3/3.6	200A 1 Phase
Stoneland	50			Chester Sandown	03036 03873	2-7.5 2-5	1/40	1-1.5, 1-5 2-2	1/9.2, 1/27 1/24	200A 1 Phase 100A 1 Phase
Waterford Village Estates	4			Sandown	03873	2-7.5		1-7.5, 1-2	3/22, 3/7	200A 1 Phase

Electric Company Info

Provider: National Grid

Provider's Phone #: 800-465-1212

Bill To: Hampstead Area Water Co., Inc.
54 Sawyer Ave
Atkinson, NH 03811

Contact: Christine Lewis-Morse

Phone: 603-548-5150
603-362-8700

Water System Name:	Number of Active Cust:	HAWC Acct #:	Service Address from Electric Bill:	City:	Zip:	No. of Booster Pumps & H.P.	Phase / Amps	No. of Well Pumps & H.P.	Phase / Amps	Incoming Electrical Phase(s)
Lancaster Farms	83			Salem	03079	2-15		2-5	3/16	

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-3

Witness: Charles Lanza

3. Please indicate the following for each facility above regarding backup power capability, even if your systems did not lose power during the December ice storm:
- a) What provisions existed for backup power when the storm began, or exist now for any future events (permanent generator, wired for portable generation, etc.);
 - b) What efforts were made to provide alternate power during the event, or would be made in the event of future outages (purchase or rental of generator, use of company portable generator, installation of wiring or transfer switch, etc.);
 - c) What portion of the period of external power loss the facility was kept in power (or would be kept in power in the future) as a result of a) and b) above;
 - d) Any difficulties encountered in backup power performance or operation in the December storm (generator wouldn't start, ran out of fuel, etc.).

RESPONSE:

- a) The Company's office has a permanent stand-by generator installed and the Atkinson Sawyer Tank has a transfer switch installed. The Company has access to two standby generators which are available from Lewis Builders Development, Inc. (see below).
- b) On December 12th the Company contracted with Lewis Builders Development, Inc. (LBDI), renting two large portable generators. The first was wired to the transfer switch at the Atkinson Sawyer Tank and the second was installed at the Village Drive pump station in Atkinson. On December 13th and 14th efforts were made to secure additional generators. The Company obtained an additional five generators from three separate contractors. These generators were used in rotation to keep the most customers possible supplied with water throughout the outage.

In the future the Company is looking into providing a transfer switch to all satellite stations and key Hampstead & Atkinson stations. At some stations the Company is looking to install a transfer switch and permanent generator. The Company has applied for stimulus Drinking Water State Revolving Funds (DWSRF) for the installation of permanent standby generators at all key systems. The Company is also planning on applying for upcoming grant money to fund the labor costs for the installation of a generator or transfer switch at various systems.

- c) The Atkinson and Hampstead core systems and the Company's office received back up generation during the power outage until power was restored. The satellite systems received some back up generators during the outage. In regards to any future generator installations, the generators will be sized to power the pump stations indefinitely until the power has been restored. If the applications for permanent standby generators and transfer switches and their installation costs are approved, the core systems and satellite systems will all have backup generation.
- d) The Company did not encounter any difficulties in backup power performance during the December storm. The Company did have problems with the UPS devices at the pump stations for all systems. The Company corrected the problem to enable the backup power.

NHPUC December 2008 Ice Storm Review
Water Utilities – Set 1
February 27, 2009

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-4

Witness: Charles Lanza

4. Please describe your generator maintenance program, including nature and frequency.

RESPONSE:

The generator at the Company's office is setup to automatically run for 30 minutes once a week and the generator is serviced per the manufacturer's specifications.

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-5

Witness: Charles Lanza

5. For each company-owned generator that failed to start or run during the event, please indicate:
- a) When the generator was last inspected prior to the event;
 - b) When the generator was last serviced prior to the event;
 - c) When the generator was last operated prior to the event.

RESPONSE:

- a) Not applicable.
- b) Not applicable.
- c) Not applicable.

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-6

Witness: John Sullivan

6. Did you contact your electric provider during or immediately after loss of power in the December storm? If so, please indicate:
- a) When or how often;
 - b) Any difficulties in doing so;
 - c) The provider's response;
 - d) Whether you were you given priority as a water provider, and if so:
 - e) Whether it was because of a previous prioritization or in response to contacts during this event.

RESPONSE:

- a) Chris Lewis Morse, Vice President of HAWC, call the electric providers on 12/12/08. On Saturday, December 13, Bernard D. Lucey of NHDES contacted HAWC via emergency service line. He asked Chris Lewis Morse to fax him a list of all services locations and providers as DES was working with Power Utility companies to try and provide priority service. The Company kept in contact with the electric providers throughout the power loss.
- b) We only got through to a recorded message at the power companies during 12/12 and 12/ 13. On December 14th, the Company got through to PSNH and Unitil. On 12-14-08, John Sullivan, Controller of HAWC, contacted someone at PSNH and maintained a working relationship with him for several days. For National Grid it could only get through to an automated machine saying that the power should be back on by Sunday evening.
- c) PSNH said the Company would be put on a priority list. The contact at Unitil said they would speak to a supervisor about putting us on a priority list. However, this was never confirmed by Unitil.
- d) See response to (c).
- e) It was in response to the contact during this event.

**DECEMBER 2008 ICE STORM REVIEW
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HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-7

Witness: Charles Lanza

7. Did you lose any communications as a result of the storm? if so, please indicate:
- a) Type (landline, cell, mobile radio, pager, internet, alarms, SCADA, etc.);
 - b) Name of communications provider;
 - c) Length of time lost (when lost, when restored);
 - d) Extent of any contact with provider;
 - e) Provider's response;
 - f) Whether you were given priority as a water provider, and if so;
 - g) Whether it was because of a previous prioritization or in response to contacts during this event.

RESPONSE:

- a) SCADA, internet, and office telephone lines went down early Friday morning.
- b) SCADA is provided through a company owned system. Fairpoint provides the telephone lines.
- c) Internet came back within the hour. Telephone lines were restored before the end of the day on Friday December 12th. SCADA remained down due to electrical outages until 12/20.
- d) Fairpoint was contacted in the morning on 12/12 to report the outage.
- e) The provider stated they were working on addressing the problem.
- f) The Company is not aware that there was any priority as a water provider.
- g) Not applicable.

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-8

Witness: Charlie Lanza

8. For water systems that experienced loss of water or pressure as a result of the storm, please indicate:
- a) Nature of impact;
 - b) Duration of impact, including approximate start and end times;
 - c) Cause of impact (loss of power, loss of supply from neighboring system, etc.);
 - d) Number of customers affected;
 - e) How you first learned of the impact;
 - f) The amount of time from onset of impact to when you first learned of it;
 - g) Whether the impact to your system affected any neighboring or connected water systems.

RESPONSE:

- a) The Atkinson “Core” system lost water and pressure throughout the entire system as a result of the storm. The Hampstead “Core” system had reduced pressure for two hours on Sunday, 12/14 due to the .5 MG tank being emptied. All satellite systems lost water and pressure as a result of the storm.
- b) The Atkinson system was impacted for approximately 1-2 days before portable generators were rotated throughout the system to provide adequate water and pressure. The Hampstead “Core” system lost pressure for a few hours on Sunday, 12/14 due to the .5 MG tank being emptied. Portable generators were installed at various stations shortly thereafter, filling the tank, and providing service to the Hampstead system throughout the duration of the electric outage. The Satellite systems were impacted for 2-6 days depending on when a generator was available to run the system until electricity was restored.
- c) The cause of impact for all the Company’s systems was due to loss of power.
- d) All Company customers were affected by the storm. The Company has 2891 customers.
- e) The Company learned of the impact based on “windshield surveys”. Representatives of the Company surveyed the damage on the morning of 12/12.
- f) The Company was aware of the severity of the impact by the end of Friday 12/12.

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Water Utilities – Set 1
February 27, 2009

- g) The impact on our system did not affect any neighboring systems. There are no connected water systems.

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-9

Witness: Charles Lanza; Amy Doucette

9. Please indicate any other direct or corollary damages or impacts from the storm not described above (main breaks, frozen company or customer lines, inability to obtain or deliver material or equipment, etc.).

RESPONSE:

The impacts during the storm were minimal to all systems. In the Atkinson & Hampstead systems there were only a handful of frozen service lines; during the storm we received approximately a half-dozen phone calls with customers stating they had no water due to frozen pipes. These were from Atkinson/Hampstead customers where we had the water systems running. We informed them that we were currently providing water and they would need to contact a plumber-due to frozen pipes that were within their home.

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-10

Witness: Charles Lanza

10. Please describe the extent of your interactions with outside agencies (emergency officials, Department of Environmental Services (NHDES), municipal officials, fire departments or others) during the event.

RESPONSE:

During the storm the Company interacted with various agencies. On Saturday the 13th Harold Morse, President, spoke to Doug Brogan of the NHPUC regarding backup power. Mr Morse informed Mr. Brogan that two generators were already in use and the company was pursuing additional generators through various equipment rental companies.

Bernard D. Lucey of NHDES contacted Christine Lewis Morse, Vice President of HAWC on the 13th and requested a list of all company electrical services to help facilitate electrical repairs and notify providers of outages. Ms. Morse faxed Mr. Lucey the list.

Charlie Lanza, Planning Associate for HAWC called Rick Skarinka, of NHDES through the Emergency Management hotline to ensure two facilities in Atkinson providing fire suppression would be attended to as they were taking longer than expected to have power restored.

The Company was in contact with the Hampstead Selectmen and Fire Chief and with Atkinson Storm Coordinator, Lt. Baldwin, to help coordinate the electrical providers' efforts to clear debris and return power to key company systems. This proved to be very successful, restoring power to key stations by Monday 12/15/08 in the Hampstead system and restored power to Atkinson during the course of the week until December 17th when power was restored. (See attached letter from Town of Hampstead).



Incorporated 1749

T O W N O F H A M P S T E A D

OFFICE OF THE SELECTMEN
11 MAIN STREET • HAMPSTEAD, NEW HAMPSHIRE 03841

February 9, 2009

Mrs. Christine Lewis Morse
Lewis Builder's New England Contemporary Homes
54 Sawyer Ave.
Atkinson, NH 03811

Dear Mrs. Morse,

I would like to take this opportunity to thank you and many of your employees who provided assistance to the Town of Hampstead during the severe ice storm that occurred in December 2008. I would like to thank Mr. Harold Morse, Mr. Rick Dube, Mr. Bill Ashford, Jr. Mr. Paul Blinn, Mr. Dean Burke, Mr. Randy Leriche, Mr. Josh Manning and Mr. Cory True. The Town can't express how thankful we are that during a very difficult and challenging time, Lewis Builder's provided both its employees and equipment to clear 32 roads during a four and a half day period. This allowed safe passage for utility companies that were able to restore power more quickly to the residents of the Town.

I made the community aware of your generosity and kindness at a recent Board of Selectmen's meeting. Again, thank you very much and please let your staff know how deeply the Town of Hampstead appreciates their help.

Sincerely,

A handwritten signature in cursive script that reads "Rick Hartung".

Rick Hartung
Chairman, Board of Selectmen
Town of Hampstead.

NHPUC December 2008 Ice Storm Review
Water Utilities – Set 1
February 27, 2009

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-11

Witness: Harold Morse

11. Please describe any efforts to secure alternate water supplies (trucked or bottled water, opening of system interconnections, etc.) as a result of the storm.

RESPONSE:

Not applicable.

NHPUC December 2008 Ice Storm Review
Water Utilities – Set 1
February 27, 2009

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-12

Witness: Harold Morse

12. Were any water use restrictions or boil orders issued as a result of the storm?

RESPONSE:

No.

NHPUC December 2008 Ice Storm Review
Water Utilities – Set 1
February 27, 2009

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-13

Witness: Harold Morse

13. Please indicate any difficulties obtaining needed fuel for vehicles, generators or other equipment.

RESPONSE:

None.

**DECEMBER 2008 ICE STORM REVIEW
STAFF INFORMATION REQUESTS TO WATER UTILITIES – SET #1
HAMPSTEAD AREA WATER COMPANY, INC.
ANSWERS TO STAFF DATA REQUESTS – SET #1**

Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-14

Witness: John Sullivan

14. Please describe any difficulty in contacting or obtaining needed assistance from contractors, vendors or others.

RESPONSE:

The Company did not have enough generators to power all the pump houses that were without electricity. Several hours were spent on the weekend of 12/13/08 calling vendors from around New England trying to locate generators. Locally the Company found 2 vendors that had 2 generators available on Sunday (12/14). The only other options for generators were to have 1 delivered from a Connecticut vendor or drive to Revere, MA to pick up 2 generators. The Company opted to drive to Revere, MA to pick up 2 generators.

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Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-15

Witness: John Sullivan

15. Please indicate the extent to which you sought or obtained equipment, personnel or services from or through company affiliates or related entities, and any difficulties encountered.

RESPONSE:

The Company obtained equipment and personnel from an affiliate (Lewis Builders Development, Inc.). The main problem was that people could not get to work because many roads were closed or impassable.

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Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-16

Witness: John Sullivan

16. Please indicate the extent to which you sought or obtained equipment, personnel or services through formal or informal mutual aid agreements, and any difficulties encountered.

RESPONSE:

Not applicable.

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Staff 1-17

Date of Response: 03-27-09
Witness: John Sullivan

17. Please indicate the extent of competition for personnel, crews, equipment or services from affiliated or related entities during the event, including any impacts on the regulated utility(ies). Examples of such entities might include Pennichuck Water Service Corporation, Pennichuck Watertight program, Aquarion systems in Massachusetts, Aquarion Homeowner Safety Valve program, Lewis Builders, or unregulated systems owned or operated by LRW Water Service, Inc.

RESPONSE:

The Company was able to obtain sufficient personnel and equipment from its affiliate (Lewis Builders Development, Inc.).

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Staff 1-18

Witness: Charles Lanza

18. Please indicate the extent to which you used any internal prioritization in your restoration efforts, such as those based on known medical or other needs (individuals, hospitals, nursing homes, etc.).

RESPONSE:

The Company does not have any recorded customers requiring medical or other needs.

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Staff 1-19

Witness: Amy Doucette

19. Please provide the process used to disseminate information to utility call center staff and any other utility staff responsible for responding to customer inquiries during an outage. Please include the frequency of the information updates and the age of the information provided in the updates.

RESPONSE:

In general we contacted the HAWC Call Center by phone prior to leaving for the day to give them any necessary info/updates.

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Staff 1-20

Witness: Amy Doucette

20. Please provide the trunking capacity of the call center or centers that handle customer calls. What level of staffing is normally maintained at those call centers and what level was maintained during the December 2008 ice storm? What call volume do these levels of staffing correspond to? What was the daily call volume for the period December 11 – December 31, 2008? How does that compare to normal call volumes?

RESPONSE:

There is no trunking at the HAWC Call Center. 1-2 people for nights/weekends (1 person from 3 a.m.-7 a.m.). Due to the overwhelming call volume, our Call Center was unable to adequately document the calls during the period from 12/11 to 12/14. Normally our call volume is 1-2 per night. Our daytime staff normally handles 20-25 calls per day.

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Staff 1-21

Witness: Amy Doucette

21. How is automation used in your call answering system to provide information to customers during an outage? What percentage of customers selected the menu option of speaking to a representative during the December 2008 ice storm? How does that percentage compare to the percentage of customers selecting the option of speaking to a representative under business as usual conditions?

RESPONSE:

During normal business hours, there is no automation handling calls. They are all answered by staff. After business hours, a caller chooses either to connect to the Call Center or to go to the Water Company. If the customer chooses the Water Company they hear a pre-recorded message with outage info. We do not have a tracking device to determine the percentages of what caller option they chose.

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Staff 1-22

Witness: John Sullivan

22. Please describe the process for identifying and prioritizing service restoration to medical emergency customers as defined in Puc 1202.12.

RESPONSE:

The Company has not been notified by any of its customers that they have medical needs as defined in PUC 1202.12.

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Staff 1-23

Witness: Amy Doucette

23. Please identify all customer outreach and customer communications utilized during an outage to provide timely and responsive information to customers regarding the outage and projected restoration times.

RESPONSE:

We were unable to do outreach to our customers because we had a limited number of phone lines, which were in constant use by incoming callers.

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Staff 1-24

Witness: Amy Doucette

24. Please describe generally the nature and extent of contacts initiated by customers, including:

- a) Number of event-related contacts each day;
- b) Any problems encountered (difficulties with phone lines, shortage of personnel to handle calls, etc.).

RESPONSE:

a) There were constant incoming phone calls. We would estimate approximately 1 call per minute. HAWC's field staff, Rich Bibeau, Larry Frost, and Don Gowans, were stopped by customers numerous times while in the water service areas/well houses for inquiries pertaining to water service restoration.

b) We were without phone service until Friday afternoon, 12/12/08. We had a limited amount of incoming lines when we did have phone service.

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Staff 1-25

Witness: Amy Doucette

25. Please describe the nature and extent of storm-related customer contacts initiated by you, including:

- a) Frequency;
- b) Any problems encountered;
- c) Copies of any emails, notices or correspondence sent to all or groups of customers.

RESPONSE:

We were unable to outreach to our customers for the following reasons:

- a. We were unable to call out due to the overwhelming number of incoming calls
- b. We have a limited number of phone lines, which were in constant use by incoming callers.
- c. None.

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Date of Response: 03-27-09

Staff 1-26

Witness: Harold Morse

26. Please indicate the extent of any contacts with the media, including:

- a) Nature, type and frequency;
- b) Whether initiated by the media or you;
- c) Copies of any press releases or other media communications issued by you.

RESPONSE:

None.

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Staff 1-27

Witness: Charles Lanza

27. Do you have an emergency plan as required by NHDES (rule Env-Ws 360.15)? If so:
- When and by whom had it last been reviewed prior to the storm?
 - When and by whom had it last been updated prior to the storm?
 - How many pages is it?

RESPONSE:

- Prior to the storm the Emergency Plans for the Atkinson and Hampstead “Core” Systems and the Satellite Systems were last reviewed by Charlie Lanza, Harold Morse, Christine Lewis Morse, and Rich Bibeau in March of 2008.
- Prior to the storm the Emergency Plans were last updated by Charlie Lanza in March of 2008.
- The Company maintains three separate plans. One for the Atkinson “Core”, one for the Hampstead “Core, and one for the Satellite Systems. The Atkinson Emergency Plan contains 25 pages. The Hampstead Emergency Plan contains 27 pages. The Satellite System Emergency Plan contains 25 pages.

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Staff 1-28

Witness: Charles Lanza

28. To what extent did the emergency plan benefit your response to the storm in areas such as:

- a) Securing equipment, supplies or resources;
- b) Communication with customers;
- c) Communication with outside agencies and personnel;
- d) Communication with the media;
- e) Other recovery efforts.

RESPONSE:

- a) The Emergency Plan did not provide a large benefit in securing equipment, supplies, or resources. This is mainly due to the excellent relationship between the Company and its affiliate, Lewis Builders Development, Inc. Most of the equipment, supplies, and resources were provided by Lewis Builders Development, Inc.
- b) The Emergency Plan did not provide assistance with communication with customers.
- c) The Emergency Plan provided contact information with outside agencies and personnel during the storm such as NHDES and local towns.
- d) The Company did not have any communication with the media during the storm.
- e) Not applicable.

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Staff 1-29

Witness: Charles Lanza

29. To what extent were any shortcomings of the plan a detriment to your response to the storm?

RESPONSE:

During the Ice Storm the company became aware the plan did not provide adequate planning regarding backup power and how to obtain generators, and electrical information for all systems. Otherwise the plan was useful.

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**Date request received: 02-27-09
Staff 1-30**

**Date of Response: 03-27-09
Witness: Charles Lanza**

30. Regarding SCADA (Supervisory Control and Data Acquisition) systems, please indicate:

- a) The extent of such systems in your facilities;
- b) Their impact on your response to the storm;
- c) The extent to which the performance of such systems was impacted by the storm;
- d) The extent to which additional SCADA monitoring would have assisted recovery efforts.

RESPONSE:

- a) The Company has SCADA monitoring setup at 11 stations. These stations are the Smith Mountain Tank, Waterford Village, Cranberry Meadows, Coopers Grove, Angle Pond, Autumn Hills, Granite Village, Jameson Ridge, Village Green, Midpoint, & Sargent Woods. All stations are setup to report flows, pressures, tank levels, and pump runtime hours. This data is all reported and stored to reference the systems operation. The stations are also setup to monitor and scan for alarms. When an alarm is triggered the system calls the Water Superintendent directly with the alarm message and emails sent to the water system personnel.
- b) Because the SCADA system was down the Company was unable to monitor the various stations during the storm.
- c) The storm caused all of the SCADA equipped facilities to go down rendering the SCADA system disabled.
- d) Assuming the existing SCADA monitoring did not lose electricity it would have assisted greatly.

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Staff 1-31

Witness: John Sullivan

31. Please describe any recovery efforts or activities still underway, including anticipated time frame for completion.

RESPONSE:

Clearing of trees and brush around well houses and access roads when the snow melts.
One flow convertor needs replacement.

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Staff 1-32

Witness: Charles Lanza

32. Please provide copies of any internal summaries or reports generated in relation to the storm and recovery efforts.

RESPONSE:

None.

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Staff 1-33

Witness: Harold Morse

33. Did you experience any significant safety-related mishaps during or as a result of the event?

RESPONSE:

None.

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Date request received: 02-27-09

Date of Response: 03-27-09

Staff 1-34

Witness: Charles Lanza

34. Please comment generally on the impacts of this storm in relation to other storms or events of the last ten years.

RESPONSE:

The December 2008 Ice Storm was the most devastating storm this Company has seen in the past 10 years. The regional impact was not comparable to any other recent storms.

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Staff 1-35

Witness: Charles Lanza

35. Please comment generally on your overall level of preparedness for an event of this size, including any lessons learned or areas for improvement being considered.

RESPONSE:

Overall the Company found itself well prepared for the December ice storm. The Company was very fortunate to have the full staff of Lewis Builders Development, Inc. to dispatch cleaning up roads, mobilizing equipment, taking phone calls, and performing other storm related tasks. The Company was also able to obtain an electrician and 7 generators from various equipment rental vendors very quickly. Although the Company found itself prepared for the storm, there were lessons learned and areas for improvement discovered. The most important improvement being considered is looking into the potential for installing transfer switches and generators at various systems.

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Staff 1-36

Witness: John Sullivan

36. Please provide an estimate of the overall cost impact of the storm to your company, to the extent one has been made.

RESPONSE:

The Company has incurred approximately \$23,000 in costs to date relating to the ice storm. Most of this cost was to rent generators for the pump houses. The Company expects to incur additional costs in the spring to clean up the tree damage around the pump houses and to repair the access roads to the pump houses. The Company has no current estimate what these costs will be.