



**Public Service  
of New Hampshire**

PSNH Energy Park  
780 North Commercial Street, Manchester, NH 03101

Public Service Company of New Hampshire  
P.O. Box 330  
Manchester, NH 03105-0330  
(603) 634-2236  
Fax (603) 634-2213  
macdojm@psnh.com

D28903

March 23, 2010  
File No. 04.0024931.03

The Northeast Utilities System

John M. MacDonald  
Vice President - Generation

Mr. Brian Pitt, Acting Chief  
NPDES Municipal Permits Branch  
Office of Ecosystem Protection  
EPA-New England, Region 1  
5 Post Office Square, Suite 100  
Boston, Massachusetts 02109-3912

Re: Notice of Intent  
General Permit for Hydroelectric Generating Facilities – NHG360000  
Gorham Hydro Station  
Public Service Company of New Hampshire

Dear Mr. Pitt,

In accordance with the extension letter issued by the Environmental Protection Agency (EPA) dated March 5, 2010, Public Service Company of New Hampshire (PSNH) is submitting the Notice of Intent (NOI) to request coverage for the Gorham Hydro Station in Gorham under the General Permit for Hydroelectric Generating Facilities (Permit) in the State of New Hampshire (NHG360000):

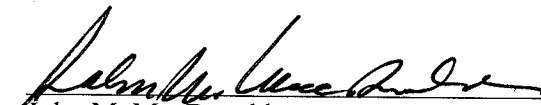
PSNH requests that the individual permit application submitted for this facility in 1983 be withdrawn.

As discussed during our February 9, 2010 meeting with George Papadopoulos and Robin Johnson of your office, PSNH is forwarding questions pertaining to site eligibility for the remaining PSNH hydroelectric facilities to the EPA in a separate letter. Following resolution of potential eligibility issues, PSNH will work with our consultant to complete the required Notice of Intent documentation or Individual Permit applications prior to July 8, 2010.

If you have any questions, please contact Sheila Burke, PSNH Generation at 603-634-2512.

Very truly yours,

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

  
\_\_\_\_\_  
John M. MacDonald  
Vice President – Generation

cc: George Papadopoulos/EPA  
Robin Johnson/EPA  
Daniel Dudley/NHDES

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NEW ENGLAND - REGION I  
5 POST OFFICE SQUARE, SUITE 100  
BOSTON, MASSACHUSETTS 02109-3912**

**Request for General Permit Authorization to Discharge Wastewater  
(Notice of Intent (NOI) to be covered by the General Permit)**

**Hydroelectric Generating Facilities (HYDROGP)  
NPDES General Permits No. MAG360000 and NHG360000**

**A. Facility Information**

1. Indicate applicable General Permit for discharge:
 

	MAG360000	____
	NHG360000	<u>  X  </u>
  
2. Facility Name, Location, and Data:
 

Name <u>Gorham Hydroelectric Station</u>	
Street/PO Box <u>1 Station Road</u>	City <u>Gorham</u>
State <u>New Hampshire</u>	Zip Code <u>03581</u>
Latitude <u>N44° 23' 19.5"</u>	Longitude <u>W71° 09' 51.7"</u>
Type of Business <u>Electric Power Generation</u>	
SIC Code(s) <u>4911</u>	
  
3. Facility Mailing Address (if different from Location Address):
 

Name <u>Public Service Company of NH</u>	
Street/PO Box <u>P.O. Box 330</u>	City <u>Manchester</u>
State <u>New Hampshire</u>	Zip Code <u>03105-0330</u>
  
4. Facility Owner:
 

Name <u>Public Service Company of NH</u>		e-mail (optional) <u>macdojm@nu.com</u>
Street/PO Box <u>P.O. Box 330</u>	City <u>Manchester</u>	
State <u>New Hampshire</u>	Zip Code <u>03105-0330</u>	
Contact Person <u>John M. MacDonald</u>	Telephone Number <u>603-634-2276</u>	
Owner is (check one): 1. Federal <input type="checkbox"/> 2. State <input type="checkbox"/> 3. Tribal <input type="checkbox"/> 4. Private <input checked="" type="checkbox"/>		
Other (Describe) _____		
  
5. Facility Operator (if different from above):
 

Legal Name <u>Public Service Company of NH</u>		e-mail (optional) <u>gunder@nu.com</u>
Street/PO Box <u>P.O. Box 330</u>	City <u>Manchester</u>	
State <u>New Hampshire</u>	Zip Code <u>03105-0330</u>	
Contact Person <u>Robert Gundersen</u>	Telephone Number <u>603-634-2616</u>	
  
6. Current permit status (please check Yes or No):
  - a. Has a prior NPDES permit (individual or general permit coverage) been granted for the discharge that is listed on the NOI? Yes  No  If Yes, Permit Number: NH0000388
  - b. Is the facility covered by an individual NPDES permit? Yes  No   
If Yes, Permit Number NH0000388
  - c. Is there a pending NPDES application on file with EPA for this discharge? Yes  No  If Yes, date of submittal: March 14, 1983 and permit number if available: NH0000388

7. Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached?  X

8. Provide the number of turbines and the combined turbine discharge (installed capacity) at maximum and minimum output, in cubic feet per second (cfs). Number of turbines  4  Combined turbine discharge (installed capacity): maximum output, cfs  2,000  and minimum output, cfs  400

9. Is the hydroelectric generating facility operated as a pump storage project? **No**

**B. Discharge Information** (attach additional sheets as needed).

1. Name of receiving water into which discharge will occur:  Androscoggin River   
Freshwater:  X  Marine Water: \_\_\_\_\_

2. Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing flow, treatment units, outfalls, and receiving waters(s). Line drawing or flow schematic attached?  X

3. List each outfall under the following categories and number sequentially: equipment-related cooling water; equipment and floor drain water; maintenance-related water; facility maintenance-related water during flood/high water events, and equipment-related backwash strainer water (see Parts I.A.1, 2, 3, and 4; or Parts I.B.1, 2, 3, and 4). Attach additional sheets to identify outfalls as needed.

Equipment-related cooling water

Equipment and floor drain water

See attached table.

Maintenance-related water

Facility maintenance-related water during flood/high water events

Equipment-related backwash strainer water

4. List each outfall discharging any combination of the following to identify the combined discharges: equipment-related cooling water, equipment and floor drain water, maintenance-related water, equipment-related backwash strainer water, and facility maintenance-related water during flood/high water events (see Parts I.A.5 and B.5) and continue the sequential numbering. Attach additional sheets to identify outfalls as needed.

5. Provide for each outfall the following:

- a. Latitude and longitude to the nearest second (see EPA's siting tool at: [http://www.epa.gov/tri/report/siting\\_tool/](http://www.epa.gov/tri/report/siting_tool/)) and the name(s) of the receiving water(s) into which the discharge will occur.
- b. The operations contributing flow and the treatment received by the discharge. Indicate the average flow from each operation.
- c. Indicate if the discharge can be sampled at least once per year or can be sampled using the representative outfall sampling provisions (see Parts I.A.6 or B.6 and III.E).
- d. Note if the outfall discharges intermittently or seasonally.

### **C. Chemical Additives**

Are any non-toxic neutralization chemicals used in the discharge(s)? Yes \_\_\_\_\_ No  \_\_\_\_\_ If so, include the chemical name and manufacturer; maximum and average daily quantity used on a monthly basis as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC<sub>50</sub> in percent for typically acceptable aquatic organism).

### **D. Endangered Species Act Eligibility Information**

A facility, with a previous ESA Section 7 consultation with the National Marine Fisheries Service (NMFS), seeking coverage under the Massachusetts general permit and discharging to the Connecticut River or Merrimack River should provide one of the following, if available.

1. A formal certification indicating consultation with the National Marine Fisheries Service (NMFS) resulted in either a no jeopardy opinion or a written concurrence on a finding that the discharges are not likely to adversely affect the shortnose sturgeon or critical habitat. Information should also be provided indicating the hydroelectric facility's previous ESA Section 7 consultation with NMFS covered the discharges to be authorized under this general permit and demonstrating no significant changes in the discharges have occurred since the previous consultation.
2. Another operator's certificate of the ESA eligibility for those discharges to be authorized under this general permit.

### **E. Supplemental Information**

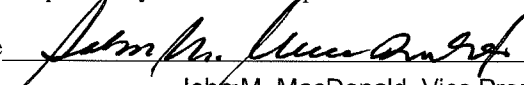
Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any certification(s) required by the general permit.

**F. Signature Requirements**

The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that no chemical additives are used in the discharges to be authorized under this general permit except for those used for pH adjustment and (2) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature  Date 3/23/2010  
Printed Name and Title John M. MacDonald, Vice President, Generation

Federal regulations require this application to be signed as follows:

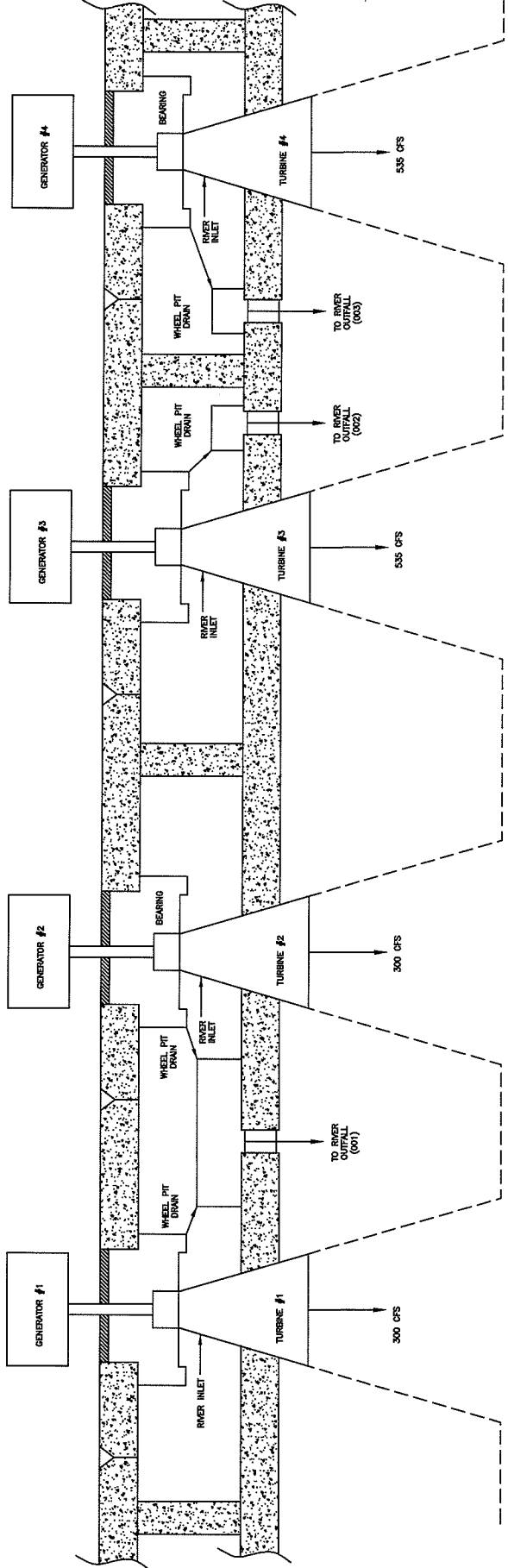
1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Public Service Company of New Hampshire  
Gorham Island Hydro Station

Maintenance - Related Water

Outfall	Description	Location	Contributing Operations	Average Flow	Total Average Flow	Occasional or Consistent Discharge	Discharging Water	Sample Location or Representative Outfall	Possible Annual Sampling
001 <sup>1</sup>	Wheel Pit Drain for Generator 1 and Generator 2	N 44° 23' 20.6" W 71° 09' 53.1"	Wheel Pit Drain	18,000 GPY	18,000 GPY	Intermittent	Androscoggin River	Grab sample from wheel pit prior to discharge	Yes
002	Wheel Pit Drain for Generator 3	N 44° 23' 19.9" W 71° 09' 52.2"	Wheel Pit Drain	9,000 GPY	9,000 GPY	Intermittent	Androscoggin River	Representative Outfall 001	Yes
003	Wheel Pit Drain for Generator 4	N 44° 23' 19.9" W 71° 09' 52.2"	Wheel Pit Drain	9,000 GPY	9,000 GPY	Intermittent	Androscoggin River	Representative Outfall 001	Yes

1. Outfalls 001-003 are substantially identical outfalls in the maintenance-related water category. Outfall 001 is the representative outfall that will be sampled annually.

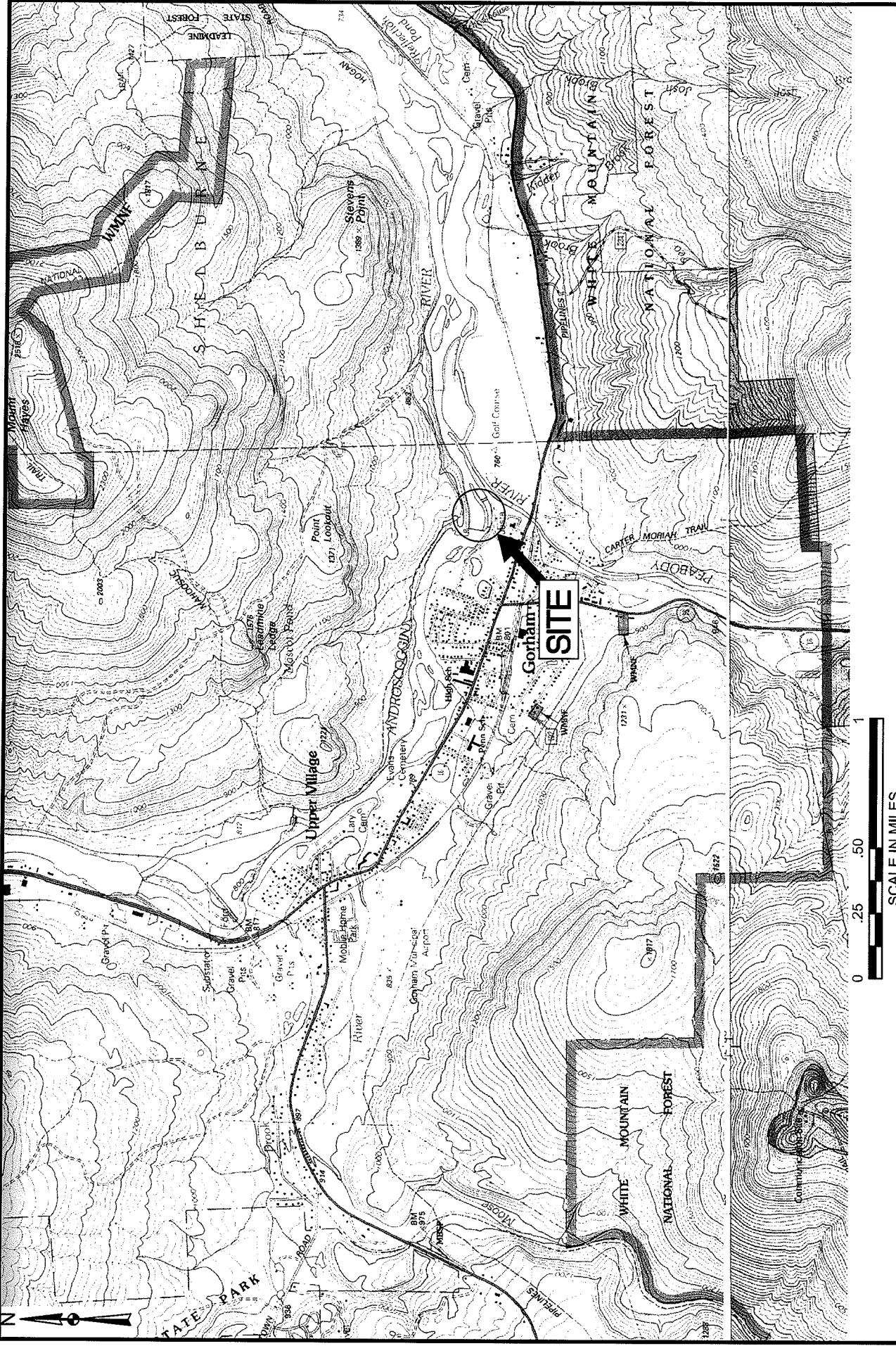


TAIL RACE TO ANDROSCOGGIN RIVER

<b>SCHMATIC OF WATER FLOW</b> <b>PUBLIC SERVICE OF NEW HAMPSHIRE</b> ROUTE 2, GORHAM NEW HAMPSHIRE 03581	
INTERIOR DRAINAGE PLAN	
PREPARED BY: GZA Geo-Environmental, Inc. 200 Water Street Portsmouth, NH 03801	PROJECT NO. 04-024831.00
CHECKED BY: M	SCALE NOT TO SCALE
DATE FEB 2010	REVISION NO. 2
PROJECT NO. 04-024831.00	SHEET NO. 2

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<b>PREPARED BY:</b> GZA GeoEnvironmental, Inc. Environmental Scientists 300 MARKET ROAD MANCHESTER, NEW HAMPSHIRE 03103 (603) 623-3500	<b>NPDES HYDROELECTRIC GENERATING FACILITIES GENERAL PERMIT GORHAM HYDROSTATION</b>		<b>SCALE IN MILES</b> 0 .25 .50 1	<b>LOCUS PLAN</b>	<b>FIGURE</b> 1
	<b>PREPARED FOR:</b> PUBLIC SERVICE OF NEW HAMPSHIRE	<b>ROUTE 2, GORHAM NEW HAMPSHIRE 03581</b>			<b>PROJECT NO.</b> 04.0024931.00