NH6-360004
3/5/10.
Received

TransCanada
In business to deliver

US Northeast Hydro Region
2 Killeen Street
N. Walpole, NH 03609

tel 603.445.6803
fax 603.445.6809
www.transcanada.com

February 26, 2010

US Environmental Protection Agency
Hydroelectric GP Processing
Municipal Assistance Unit (OEP06-3)
5 Post Office Square - Suite 100
Boston, MA 02109-3912

RE: Notices of Intent for Coverage under HYDROGP #NHG360000

Dear Sir or Madame,

Enclosed please find Notices of Intent (NOIs) and attachments for three (3) TransCanada Hydro Northeast Inc. hydroelectric generating facilities located in New Hampshire. TransCanada is seeking National Pollutant Discharge Elimination System (NPDES) permit coverage under the Hydroelectric Generating Facilities General Permit (HYDROGP) #NHG360000. These facilities do not currently operate under individual permit; however, administratively complete applications for individual coverage were submitted to EPA in 1993. Those individual permit applications were updated and re-submitted several times since their original submittal.

If you have any questions or need additional information please contact me at (603) 445-6803 or at davidpaul_murray@transcanada.com.

Sincerely,

David P Murray

David P. Murray
Environmental Specialist

Enclosures: Three (3) Notices of Intent for facilities to be covered under NHG360000.

cc: New Hampshire Department of Environmental Services Water Division, Wastewater Engineering Bureau

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 X

2. Facility Name, Location, and Data:
Name TransCanada - Moore Station
Street/POBox 2700 St. Johnsbury Road City Littleton
State New Hampshire Zip Code 03561
Latitude 44°20' 10.58 North Longitude 71°52'30.87" West
Type of Business Hydroelectric power generation
SIC Code(s) 4911

3. Facility Mailing Address (if different from Location Address):
Name TransCanada Hydro Northeast Inc
Street/PO Box 2 Killeen Street City N. Walpole
State New Hampshire Zip Code 03609

4. Facility Owner:
Name TransCanada Hydro Northeast Inc e-mail (optional) davidpaul_murray@transca
Street/PO Box c/o 2 Killeen Street City N. Walpole
State New Hampshire Zip Code 03609
Contact Person David P. Murray Telephone Number (603) 445-6803
Owner is (check one): 1. Federal____ 2. State ____ 3. Tribal____ 4. Private X
Other (Describe)____

5. Facility Operator (if different from above):
Legal Name____ e-mail (optional) ____
Street/PO Box____ City____
State____ Zip Code____
Contact Person____ Telephone Number____

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 X If Yes, Permit Number: ____
b. Is the facility covered by an individual NPDES permit? Yes____ No X
If Yes, Permit Number ____
c. Is there a pending NPDES application on file with EPA for this discharge? Yes X No ____ If Yes, date of submittal: January 22, 1993 and permit number if available: NH0022870

7. Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? Fig 1

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 18,000 and minimum output, cfs 320

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: Connecticut 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? Fig 2

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

001 - Unit #1 thrust and lower guide bearings
002 - Unit #2 thrust and lower guide bearings
003 - Unit #3 thrust and lower guide bearings
004 - Unit #4 thrust and lower guide bearings
005 - Station air compressor
006 - Bubbler air compressor

Equipment and floor drain water

007 - Station sump

Maintenance-related water

none

Facility maintenance-related water during flood/high water events

008 - Penstock inspection shafts-bypass pipe

Equipment-related backwash strainer water

none

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.

NH6-360004
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N. Walpole, NH 03609

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If you have any questions or need additional information please contact me at (603) 445-6803 or at davidpaul_murray@transcanada.com.

Sincerely,

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Environmental Specialist

Enclosures: Three (3) Notices of Intent for facilities to be covered under NHG360000.

cc: New Hampshire Department of Environmental Services Water Division, Wastewater Engineering Bureau

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

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NHG360000 X

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Name TransCanada Hydro Northeast Inc e-mail (optional) davidpaul_murray@transca
Street/PO Box c/o 2 Killeen Street City N. Walpole
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Contact Person David P. Murray Telephone Number (603) 445-6803
Owner is (check one): 1. Federal____ 2. State _____ 3. Tribal_____ 4. Private X
Other (Describe)_____

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Legal Name_____ e-mail (optional) _____
Street/PO Box_____ City_____
State_____ Zip Code_____
Contact Person_____ Telephone Number_____

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 X If Yes, Permit Number: _____
b. Is the facility covered by an individual NPDES permit? Yes_____ No X
If Yes, Permit Number _____
c. Is there a pending NPDES application on file with EPA for this discharge? Yes X No _____ If Yes, date of submittal: January 22, 1993 and permit number if available: NH0022870

7. Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached? Fig 1

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 18,000 and minimum output, cfs 320

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1. Name of receiving water into which discharge will occur: Connecticut River
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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? Fig 2

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

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002 - Unit #2 thrust and lower guide bearings
003 - Unit #3 thrust and lower guide bearings
004 - Unit #4 thrust and lower guide bearings
005 - Station air compressor
006 - Bubbler air compressor

Equipment and floor drain water

007 - Station sump

Maintenance-related water

none

Facility maintenance-related water during flood/high water events

008 - Penstock inspection shafts-bypass pipe

Equipment-related backwash strainer water

none

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.

none

5. Provide for each outfall the following: *See Attachment 1*

a. Latitude and longitude to the nearest second (see EPA's siting tool at: 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 X ____ 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_{50} 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 FEB 26, 2010

Printed Name and Title William C. Taylor - Senior Vice President Eastern US Power

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.

0 1,000 2,000 3,000 Feet

N

Base map: USGS Topographic Quadrangles Lower Waterford and Littleton

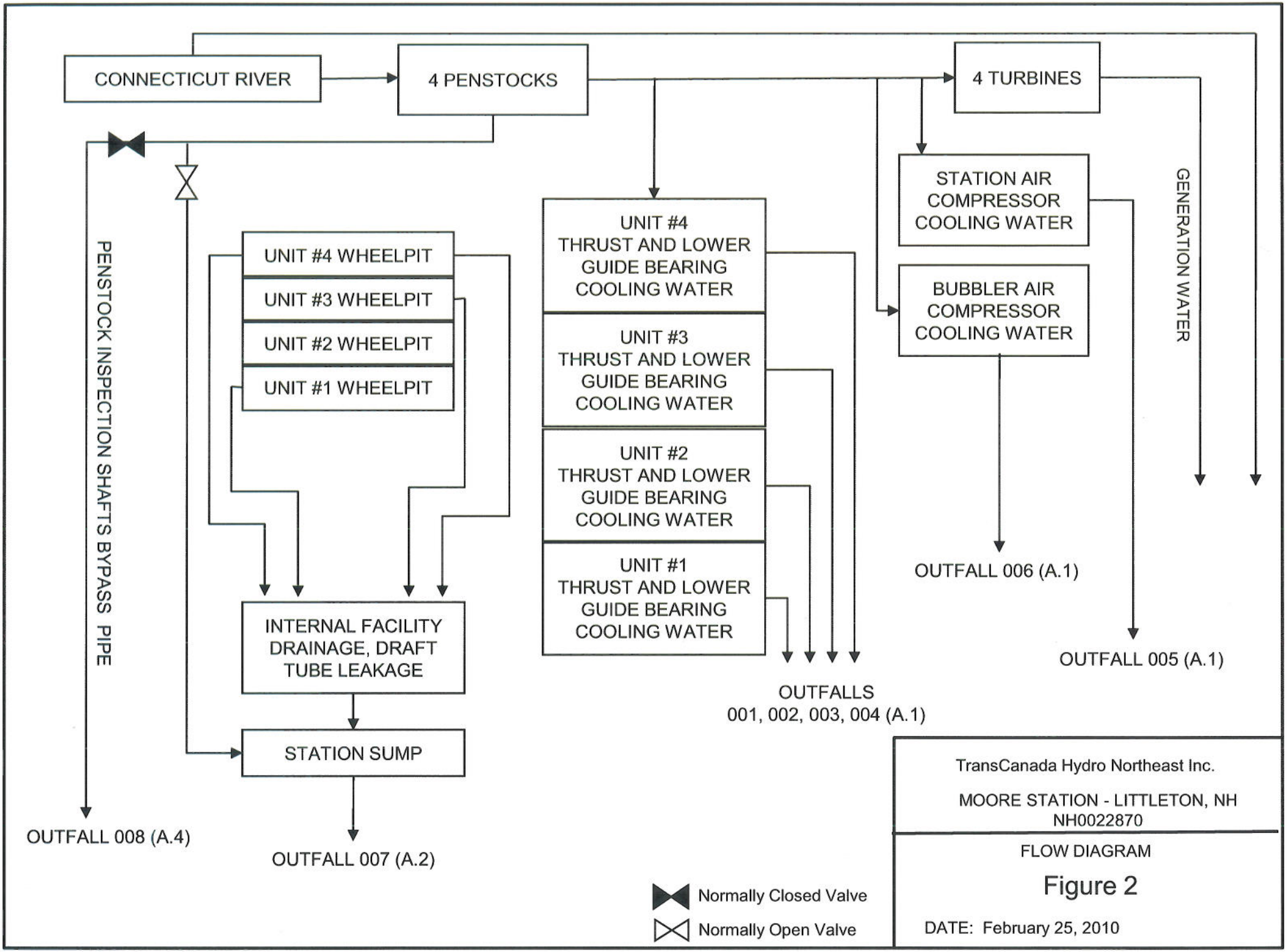
TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

SITE LOCATION MAP

TRANSCANADA HYDRO NORTHEAST, INC.
MOORE STATION
LITTLETON, NH

FIGURE 1	FEBRUARY 2010

R:\Projects\GIS_2010\174360_TransCanada_Hydro_NEMXD\Fig1_Moore_STATION.mxd


CONNECTICUT RIVER
4 PENSTOCKS
4 TURBINES
PENSTOCK INSPECTION SHAFTS BYPASS PIPE
UNIT #4 WHEELPIT
UNIT #3 WHEELPIT
UNIT #2 WHEELPIT
UNIT #1 WHEELPIT
INTERNAL FACILITY DRAINAGE, DRAFT TUBE LEAKAGE
STATION SUMP
UNIT #4 THRUST AND LOWER GUIDE BEARING COOLING WATER
UNIT #3 THRUST AND LOWER GUIDE BEARING COOLING WATER
UNIT #2 THRUST AND LOWER GUIDE BEARING COOLING WATER
UNIT #1 THRUST AND LOWER GUIDE BEARING COOLING WATER
STATION AIR COMPRESSOR COOLING WATER
BUBBLER AIR COMPRESSOR COOLING WATER
GENERATION WATER
OUTFALL 008 (A.4)
OUTFALL 007 (A.2)
OUTFALLS 001, 002, 003, 004 (A.1)
OUTFALL 006 (A.1)
OUTFALL 005 (A.1)
Normally Closed Valve
Normally Open Valve
TransCanada Hydro Northeast Inc.
MOORE STATION - LITTLETON, NH
NH0022870
FLOW DIAGRAM
Figure 2
DATE: February 25, 2010

TRANSCANADA HYDRO NORTHEAST INC. – MOORE STATION – NH0022870

General Permit # NHG360000 Notice of Intent
Attachment 1

Outfall #	Latitude / Longitude	Discharge Type	Operations Contributing to Discharge	Average Daily Flow (GPD)	Flow Type	Treatment	Sample at least once per year?	Representative sampling location?
001	44°20' 10.58 North, 71°52'30.87" West	A.1 –Equipment related cooling water	Unit #1 Thrust and Lower Guide Bearing cooling water	Total = 208,800 Thrust = 57,600 Lower Guide = 151,200	On/off with unit generation – slightly before and after unit	None	Yes	Yes – Representative of 001, 002, 003, 004
002	44°20' 10.58 North, 71°52'30.87" West	A.1 –Equipment related cooling water	Unit #2 Thrust and Lower Guide Bearing cooling water	Total = 208,800 Thrust = 57,600 Lower Guide = 151,200	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 001 is the representative sampling location
003	44°20' 10.58 North, 71°52'30.87" West	A.1 –Equipment related cooling water	Unit #3 Thrust and Lower Guide Bearing cooling water	Total = 208,800 Thrust = 57,600 Lower Guide = 151,200	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 001 is the representative sampling location
004	44°20' 10.58 North, 71°52'30.87" West	A.1 –Equipment related cooling water	Unit #4 Thrust and Lower Guide Bearing cooling water	Total = 208,800 Thrust = 57,600 Lower Guide = 151,200	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 001 is the representative sampling location
005	44°20' 10.58 North, 71°52'30.87" West	A.1 – Equipment related cooling water	Station Air Compressor cooling water	21,600	Continuous	None	Yes	No- Representative only of 005
006	44°20' 10.58 North, 71°52'30.87" West	A.1 – Equipment related cooling water	Bubbler Air Compressor cooling water	43,200	Seasonal - Continuous in winter	None	Yes	No- Representative only of 006

* Outfall *can* be sampled at least once per year, but the representative outfall location is Outfall 001 which will be sampled at least once per year.

TRANSCANADA HYDRO NORTHEAST INC. – MOORE STATION – NH0022870

General Permit # NHG360000 Notice of Intent
Attachment 1

Outfall #	Latitude / Longitude	Discharge Type	Operations Contributing to Discharge	Average Daily Flow (GPD)	Flow Type	Treatment	Sample at least once per year?	Representative?
007	44°20' 10.58 North, 71°52'30.87" West	A.2 –Equipment and floor drain water	Station Sump Internal facility drainage (wheelpit drainage, penstock inspection shafts drainage, draft tube leakage)	Total up to 360,000 Contributing discharges unknown / fluctuate.	Intermittent on a daily basis	Oil Flotation	Yes	No- Representative only of 007
008	44°20' 10.58 North, 71°52'30.87" West	A.4 – Facility maintenance related water during flood/high water events	Penstock inspection shafts bypass pipe – flood/high water only.	n/a – flood conditions only.	Infrequent, flood only	None	Yes	No- Representative only of 008