



TransCanada

In business to deliver

US Northeast Hydro Region
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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
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 - Comerford Station ✓
Street/PO Box 450 Dam Road City Monroe
State New Hampshire Zip Code 03771
Latitude 44° 19' 29.31" North Longitude 72° 00' 01.13" 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@transcan
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: NH0022888

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 11,750 and minimum output, cfs 818

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 - Main compressor

002 - After cooler

003 - Unit #1 thrust bearing 007 - Unit #3 thrust bearing

004 - Unit #1 guide bearing 008 - Unit #3 guide bearing

005 - Unit #2 thrust bearing 009 - Unit #4 thrust bearing

006 - Unit #2 guide bearing 010 - Unit #4 guide bearing

Equipment and floor drain water

011 - Oil/water separator

Maintenance-related water

none

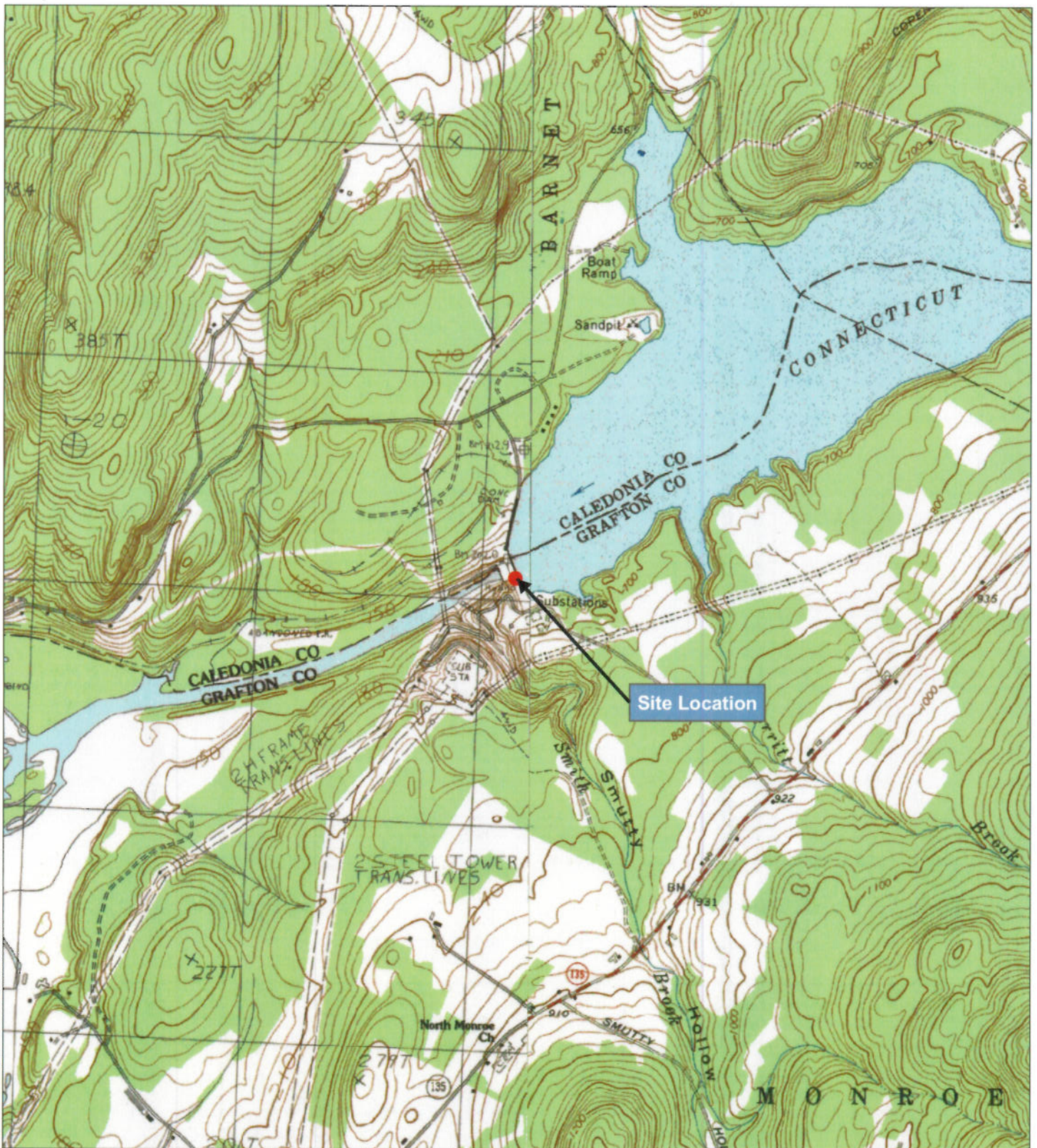
Facility maintenance-related water during flood/high water events

none

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.



0 1,000 2,000 3,000 Feet



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

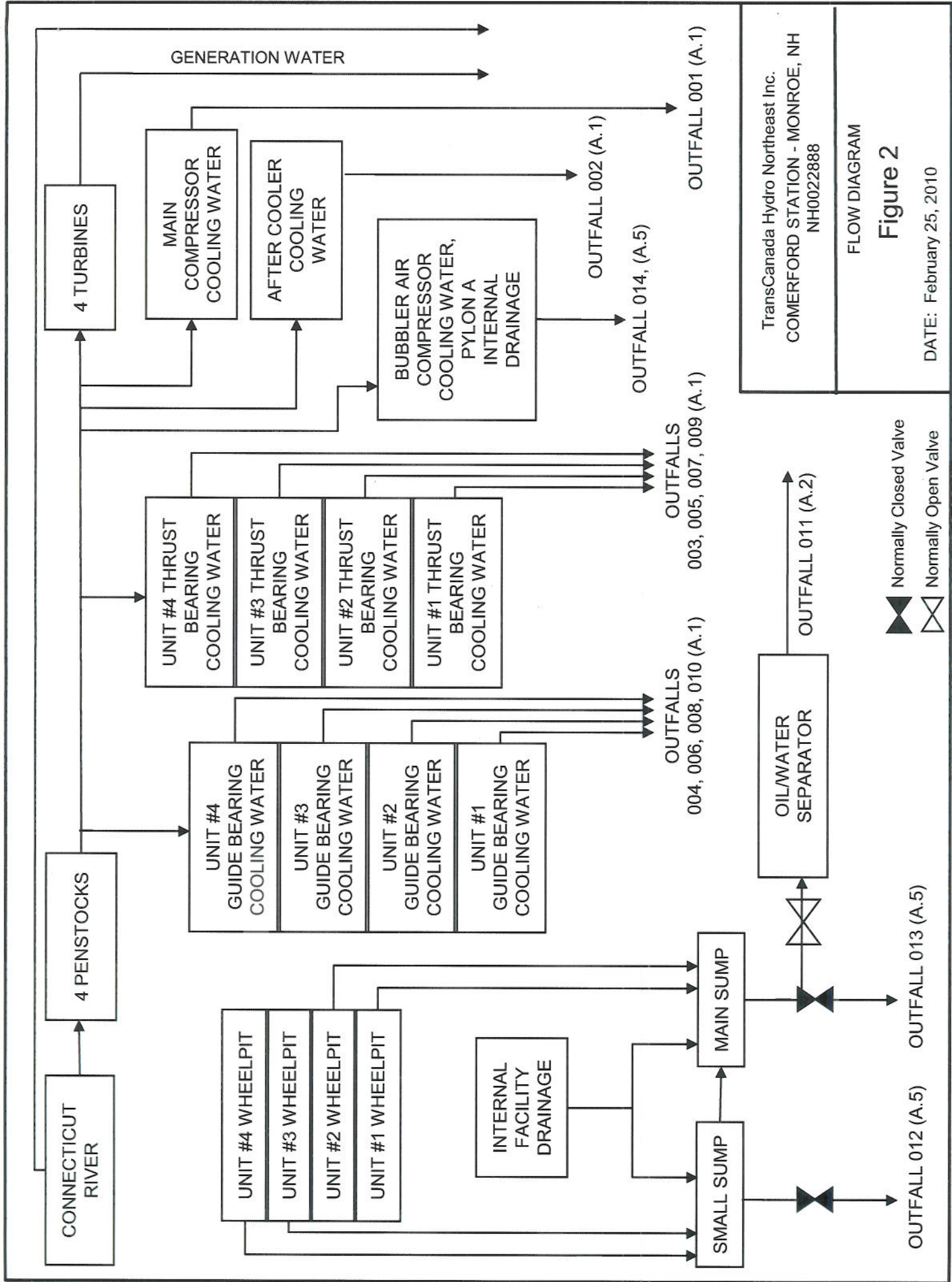
SITE LOCATION MAP

TRANSCANADA HYDRO NORTHEAST, INC.
COMERFORD STATION
MONROE NH

FIGURE 1

FEBRUARY 2010

Base map: USGS Topographic Quadrangles Lower Waterford and Barnett



**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° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	Main Compressor cooling water	1,900	Continuous	None	Yes	No- Representative only of 001
002	44° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	After Cooler cooling water	4,400	Continuous	None	Yes	No- Representative only of 002
003	44° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	Unit #1 Thrust Bearing cooling water	144,000	On/off with unit generation – slightly before and after unit	None	Yes	Yes – Representative of 003, 005, 007, 009
004	44° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	Unit #1 Guide Bearing cooling water	72,000	On/off with unit generation – slightly before and after unit	None	Yes	Yes – Representative of 004, 006, 008, 010
005	44° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	Unit #2 Thrust Bearing cooling water	144,000	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 003 is the representative sampling location
006	44° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	Unit #2 Guide Bearing cooling water	72,000	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 004 is the representative sampling location
007	44° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	Unit #3 Thrust Bearing cooling water	144,000	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 003 is the representative sampling location
008	44° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	#3 Unit Guide Bearing cooling water	72,000	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 004 is the representative sampling location
009	44° 19' 29.31" North, 72° 00'01.13" West	A.1 – Equipment related cooling water	Unit #4 Thrust Bearing cooling water	144,000	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 003 is the representative sampling location

* Outfall can be sampled at least once per year but Outfall 003 and Outfall 004 are the representative outfalls which will be sampled at least once per year.

**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?
010	44° 19' 29.31" North, 72° 00' 01.13" West	A.1 – Equipment related cooling water	Unit #4 Guide Bearing cooling water	72,000	On/off with unit generation – slightly before and after unit	None	No*	Yes – Outfall 004 is the representative sampling location
011	44° 19' 30.44" North, 72° 00' 04.24" West	A.2 – Equipment and floor drain water	Oil/Water Separator (wheelpits, internal facility drainage, station sumps)	160,000	Intermittent on a daily basis	Oil flotation	Yes	No- Representative only of 011
012	44° 19' 29.31" North, 72° 00' 01.13" West	A.5 – combined discharge - equipment and floor drain water; maintenance related water; and facility maintenance water during flood/high water events.	Small Sump Used when OWS is out of service and for flood/high water.	n/a Backup only. Up to 216,000	Intermittent, back up only – normally flows to station sump and OWS	None – manual operation only	Yes	No- Representative only of 012
013	44° 19' 29.31" North, 72° 00' 01.13" West	A.5 – combined discharge - equipment and floor drain water; maintenance related water; and facility maintenance water during flood/high water events.	Main Sump Used when OWS is out of service and for flood/high water.	388,800	Intermittent, back up only – normally flows to OWS	None – manual operation only	Yes	No- Representative only of 013
014	44° 19' 32.98" North, 72° 00' 03.83" West	A.5 – combined discharge – equip related cooling water; and equip and floor drain water	Combined discharge– Pylon A – Bubbler air compressor and internal drainage	Total = 43,200 with bubbler. Internal drainage up to 34,560 without bubbler. Bubbler = 8,640.	Continuous in winter with bubbler on, intermittent limited flow when bubbler is turned off.	None	Yes	No- Representative only of 014

* Outfall can be sampled at least once per year but Outfall 003 and Outfall 004 are the representative outfalls which will be sampled at least once per year.