



**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) 669-4000
www.psnh.com

June 11, 2003

The Northeast Utilities System

Mr. Craig Wright, Administrator
Stationary Source Management Bureau
Air Resources Division
Dept. of Environmental Services
6 Hazen Drive, PO Box 95
Concord, NH 03302-0095

RECEIVED
NEW HAMPSHIRE

JUN 13 2003

AIR RESOURCES DIVISION

Re: Supplemental Information for Title V Operating Permit for Merrimack Station

Dear Mr. Wright,

In response to your May 13, 2003 letter requesting supplemental information required for the issuance of Title V Operating Permit for Merrimack Station, Public Service of New Hampshire submits the following documentation:

1. An updated list of applicable requirements, based on a review of the New Hampshire Rules Governing the Control of Air Pollution in effect as of May 15, 2003;
2. Proposed monitoring, recordkeeping, and reporting requirements for all pollution control equipment, namely the Selective catalytic reduction system, main electrostatic precipitator, and supplemental electrostatic precipitator, on MK1 and MK2; and
3. Copies of permit applications (ARD-2 forms) for Merrimack Unit 2 supplemental electrostatic precipitator and Merrimack Unit 1 Selective Catalytic Reduction system.

Should you have any questions, please contact me at 634-2331.

Sincerely,

Laurel L. Brown
Senior Analyst
PSNH Generation

Enclosure

cc: Doug Laughton, DES ARD

Attached, please find an update to the applicable rules and regulations for the Title V facilities of PSNH. This list is a current list of all applicable State regulations based on a review of the New Hampshire Rules Governing the Control of Air Pollution as of May 15, 2003.

PSNH considered all Federal and State regulations in its Title V review. PSNH has cited applicable State regulations which are as stringent as or more stringent than the parallel Federal regulations. New Hampshire Env-A 611 adopts and incorporates the Federal Title IV Acid Rain Program. The original review of the State of New Hampshire Rules Governing the Control of Air Pollution and list of applicable regulations contained in PSNH's Title V permit application was performed using a copy of the rules effective December 13, 1995 obtained from the NHARD on May 6, 1996.

Following is the legend to be used for the Title V applicable rules table that is attached:

MK	The Merrimack Station Facility
NT	The Newington Station Facility
SCH	The Schiller Station Facility
MK1	The Merrimack Station Unit No. 1 Steam Boiler
MK2	The Merrimack Station Unit No. 2 Steam Boiler
MKCT1	The Merrimack Station Combustion Turbine No. 1
MKCT2	The Merrimack Station Combustion Turbine No. 2
MKEG	The Merrimack Station Emergency Generator
NT1	The Newington Station Unit No. 1 Steam Boiler
NTAB1	The Newington Station Auxiliary Boiler No. 1
NTAB2	The Newington Station Auxiliary Boiler No. 2
NTEG	The Newington Station Emergency Generator
SR4	The Schiller Station Unit No. 4 Steam Boiler
SR5	The Schiller Station Unit No. 5 Steam Boiler
SR6	The Schiller Station Unit No. 6 Steam Boiler
SRCT1	The Schiller Station Combustion Turbine No. 1
SREG	The Schiller Station Emergency Generator

Title V Applicable Rules and Regulations

<u>State of NH Rules</u>	<u>Pertains To</u>	<u>Affected Devices</u>
303.01	ambient particulate	MK,NT,SCH
304.01	ambient SO2	MK,NT,SCH
305.01	ambient CO	MK,NT,SCH
306.01	ambient NO2	MK,NT,SCH
307.01	ambient ozone	MK,NT,SCH
308.01	ambient lead	MK,NT,SCH
403	acid deposition	MK,NT,SCH
405	acid deposition	MK,NT,SCH
406	acid deposition	MK,NT,SCH
611	Title IV Acid Rain	MK1,MK2,NT1,SR4,SR5,SR6
612.02	operational flexibility	MK,NT,SCH
704.04	emission based fees	MK1,MK2,MKCT1,MKCT2,MKEG,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6 SRCT1,SREG
802	stack testing	MK1,MK2,MKCT1,MKCT2,,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6 SRCT1,
803	NOx RACT testing	MK1,MK2,MKCT1,MKCT2,,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6 SRCT1,
806	sulfur content testing	MK1,MK2,MKCT1,MKCT2,MKEG,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6 SRCT1,SREG
807	testing for opacity	MK1,MK2,MKCT1,MKCT2,MKEG,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6 SRCT1,SREG
808	CEM	MK1,MK2,NT1,SR4,SR5,SR6
902.01	record retention	MK,NT,SCH
903.03	recordkeeping for comb. devices	MK1,MK2,MKCT1,MKCT2,MKEG,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6
903.04	recordkeeping for sources w/CEMs	MK1,MK2,NT1,SR4,SR5,SR6
905	recordkeeping for NOx generators	MK1,MK2,MKCT1,MKCT2,MKEG,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6
906	NOx emission statements recordkeeping	MK1,MK2,MKCT1,MKCT2,MKEG,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6
907	general reporting	MK,NT,SCH
909	NOx emission statements reporting	MK1,MK2,MKCT1,MKCT2,MKEG,NT1 NTAB1,NTAB2,NTEG,SR4,SR5,SR6
911	permit deviations	MK,NT,SCH
1205.04 - 1205.10	gasoline tanks (Phase I)	MK
1211.02	NOx RACT applicability	MK1,MK2,MKCT1,MKCT2,MKEG,NT1, NTAB1,NTAB2,NTEG,SR4,SR5,SR6, SRCT1,SREG
1211.03	NOx for utility boilers	MK1,MK2,NT1,SR4,SR5,SR6
1211.11	NOx for emergency gens	MKEG,NTEG,SREG
1211.12	NOx for aux boilers	NTAB1,NTAB2
1211.13	NOx for load shaving	MKCT1,MKCT2,SRCT1

Title V Applicable Rules and Regulations (cont.)

<u>State of NH Rules</u>	<u>Pertains To</u>	<u>Affected Devices</u>
1211.18	NOx bubble	MK1,MK2,MKCT1,MKCT2,NT1, NTAB1,NTAB2,SR4,SR5,SR6,SRCT1
1211.20	seasonal controls	MK1,MK2,MKCT1,MKCT2,NT1, NTAB1,NTAB2,SR4,SR5,SR6,SRCT1
1211.21	NOx testing	MK1,MK2,MKCT1,MKCT2,NT1, NTAB1,NTAB2,SR4,SR5,SR6,SRCT1
1211.22	NOx monitoring	MK1,MK2,NT1,SR4,SR5,SR6
1400	regulated toxic air pollutants	MK,NT,SCH
1604.01	sulfur in liquid fuel oil	MK1,MK2,MKCT1,MKCT2,MKEG,NT1, NTAB1,NTAB2,NTEG,SR4,SR5,SR6, SRCT1
1605.01	sulfur in gaseous fuel	NT1,SR4,SR5,SR6,SRCT1,SREG
1606.01	sulfur in coal	MK1,MK2,SR4,SR5,SR6
1702.01	application forms	MK1,MK2,MKCT1,MKCT2,MKEG,NT1, NTAB1,NTAB2,NTEG,SR4,SR5,SR6, SRCT1,SREG
1703.01	Form ARD-1	MK, NT, SCH
1704.01	Form ARD-2	MK1,MK2,MKCT1,MKCT2,MKEG,NT1, NTAB1,NTAB2,NTEG,SR4,SR5,SR6, SRCT1,SREG
1706.01	Form ARD-4	3 Oil Tanks at NT
1709.01	info for Title V sources	MK,NT,SCH
1800	asbestos	MK,NT,SCH
2003.01-2003.05	opacity	MK,MK2,MKCT1,MKCT2,MKEG,NT1, NTAB1,NTAB2,NTEG,SR4,SR5,SR6, SRCT1,SREG
2003.06-2003.08	particulate emissions	MK1,MK2,MKCT1,MKCT2,MKEG,NT1, NTAB1,NTAB2,NTEG,SR4,SR5,SR6, SRCT1,SREG
2004	other requirements	MK,NT,SCH
2900	multi pollutant budget	MK1,MK2,NT1,SR4,SR5,SR6
3100	DERs	MK1,MK2,MKCT1,MKCT2,MKEG,NT1, NTAB1,NTAB2,NTEG,SR4,SR5,SR6,
3200	NOx budget	MK1,MK2,NT1,SR4,SR5,SR6

Device	Parameter	Method of Compliance	Frequency
ESP (both)	Sections in service	ESP Control cabinet	Daily
SCR (both)	Ammonia consumption	Flow meter	Monthly

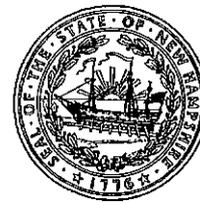
Recordkeeping Requirement	Frequency
<u>Recordkeeping Requirements for Main and Supplemental ESP:</u> The Permittee shall record and maintain records of sections in service and maintenance performed.	Maintain at the facility at all times.
<u>Recordkeeping Requirements for Add-On NOx Control Equipment:</u> The Permittee shall record and maintain the following information: A) Air pollution control device identification number, type, model number, and manufacturer; B) Installation date; C) Unit(s) controlled; D) Type and location of the capture system, capture efficiency percent, and method of determination; E) Information as to whether the air pollution control device is always in operation when the fuel burning device it is serving is in operation; F) Destruction or removal efficiency of the air pollution control equipment, including the following information: 1) Destruction or removal efficiency, in percent; 2) Current primary and secondary equipment control information codes; 3) Date tested; and 4) Method of determining destruction or removal efficiency, if not tested. G) Emission test results, including inlet NOx concentration (ppm), outlet NOx concentration (ppm), method of concentration determination, and date of determination; and H) Type and location of the capture system, capture efficiency percent and method of determination.	Maintain at the facility at all times.
<u>Monitoring Records:</u> The Permittee shall maintain records of monitoring results as specified in Table ___ of this Permit including the following: ... ammonia consumption	Maintain at the facility at all times.



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095

(603) 271-1370 FAX (603) 271-1381



May 13, 2003

Ms. Laurel Brown
Public Service Company of New Hampshire
P.O. Box 330
Manchester, NH 03105-0330

Re: Supplemental Information Required for Issuance of Title V Operating Permit for Merrimack Station

Dear Ms. Brown:

The New Hampshire Department of Environmental Services, Air Resources Division (DES) is currently processing the Title V permit application for the Public Service Company of New Hampshire (PSNH) Merrimack Station. At this time, it has been determined that the facility needs to supplement the original Title V permit application filed on July 1, 1996. As you are aware, the facility had two NO_x RACT Orders issued in 1997 and 1998 in addition to two Temporary Permits issued in 2000 for installation of a second ESP on MK2 and an SCR on MK1. Furthermore, new state regulations were promulgated for NO_x Budget Sources, codified in Env-A 3200 and recently a multi-pollutant bill was passed by the New Hampshire legislature which impacts the Merrimack Station.

Hence, in accordance with 40 CFR 70.5(b), DES is requesting PSNH to submit the following information within 30 days of receipt of this letter:

1. Updated list of applicable requirements focusing on federal acid rain program requirements, NO_x budget source requirements, multi-pollutant bill requirements, and NO_x RACT Orders from 1997 and 1998.
2. Proposed monitoring, recordkeeping, and reporting requirements for all pollution control equipment on MK1 and MK2.
3. Updated ARD-2 forms for MK1 and MK2 which list the SCR and second ESP on each unit.

If you have any questions, Doug Laughton can be reached at (603) 271-6893. Thank you for your time and consideration.

Sincerely,

Craig A. Wright
Administrator,
Stationary Source Management Bureau
Air Resources Division

FACSIMILE TRANSMITTAL



AIR RESOURCES DIVISION

6 Hazen Drive
PO Box 95
Concord, NH 03302-0095
Phone: 603-271-1370

TO:	LAUREL BROWN	FAX NUMBER:	634-3283
FROM:	DOUG LAUGHTON	DATE:	5-13-2003
RE:	TITLE V SUPPL. INFO REQUEST	PAGES TO FOLLOW:	1

See attached letter re: supplemental information
required for TITLE V permit application for
Merrimack Station.

Doug Laughton



Northeast
Utilities System

107 Selden Street, Berlin CT 06037

Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270
(860) 665-5315
Fax (860) 665-6263

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APR 28 1998

NH DES
AIR RESOURCES DIVISION

April 22, 1998

D12420

Ronald G. Chevalier
Vice President - Fossil/Hydro Engineering
and Operations

Mr. Craig Wright
Air Resources Division
Department of Environmental Services
64 North Main Street
P. O. Box 2033
Concord, NH 03302-2033

Dear Mr. Wright:

Merrimack Station
Phase II NOx Compliance

Public Service Company of New Hampshire, in accordance with 40 CFR 76, submits the Phase II NOx Compliance plan for its Merrimack Station. There are two coal fired cyclone units at the station which fall under the regulation. However, the plan applies only to Merrimack Unit 2 since it is rated above 155 MW. The boiler is limited to an annual average emission rate of 0.86 lb/MMBTU per 40 CFR 76. Merrimack Unit 1 is less than 155 MW and therefore is exempt from this regulation.

If you have any questions, please call Ms. Cynthia Karlic-Smith, Production Operations Services, at (860) 665-5400.

Very truly yours,

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE



R.G. Chevalier

Enclosure

cc: w/Enclosure
Mr. Ian Cohen
U.S. Environmental Protection Agency
JFK Federal Building
Boston, MA 02203-2211

U.S. Environmental Protection Agency
Acid Rain Program (6204J)
Attn.: Phase II NOx
401 M Street., SW
Washington, DC 20460



Phase II NO_x Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

This submission is: New Revised

STEP 1

Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name Merrimack	NH State	2364 ORIS Code
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STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID#	ID#	ID#	ID#	ID#	ID#
2					
Type	Type	Type	Type	Type	Type
CY					

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)

(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)

(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)

(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)

(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)

(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)

(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)

(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)

(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)

(j) NO_x Averaging Plan (include NO_x Averaging form)

(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)

(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO_x Averaging (check the NO_x Averaging Plan box and include NO_x Averaging form)

Plant Name (from Step 1)
Merrimack

STEP 2, cont'd.

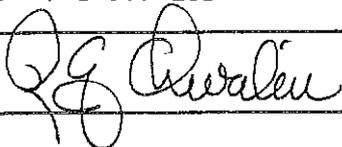
	ID#	ID#	ID#	ID#	ID#	ID#
	Type	Type	Type	Type	Type	Type
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 76.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	<input type="checkbox"/>					
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>					
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>					
(p) Repowering extension plan approved or under review	<input type="checkbox"/>					

STEP 3
Read the standard requirements and certification, enter the name of the designated representative, sign & date.

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

Name	R. G. Chevalier	
Signature		Date 4/22/98



**Northeast
Utilities System**

107 Selden Street, Berlin CT 06037

Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270
(860) 665-5315
Fax (860) 665-6263

August 29, 1996

D10251

Mr. Kenneth A. Colburn, Director
Air Resources Division
NH Department of Environmental Services
64 North Main Street
Concord, NH 03302-2033

Ronald G. Chevalier
Vice President - Fossil/Hydro Engineering
and Operations

Dear Mr. Colburn:

Merrimack, Newington, and Schiller Stations
Title V Operating Permit Application Amendment

Public Service Company of New Hampshire (PSNH) hereby submits an amendment to its Title V Operating Permit application forms submitted July 1, 1996 for Merrimack Station, Newington Station, and Schiller Station. This amendment was requested by the NHARD to meet the requirements of Env-A 1709.01(h)(8).

To satisfy the requirements of Env-A 1709.01(h)(8) one sentence was added to the Compliance Statement page of all three permit applications. This new sentence states that the compliance certification statement will be reviewed and submitted annually during the permit term. Please replace the original Compliance Statement pages dated June 28, 1996 in all three applications with the amended Compliance Statement pages dated August 29, 1996 which are attached.

If we can provide additional information or answer any questions, please contact Robert W. Pickering, PSNH, Fossil Hydro Engineering and Operations, at 634-2390.

Very truly yours,

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE



R. G. Chevalier

Attachments (3)

cc: Michele R. Andy, NHARD, with attachments

COMPLIANCE

After extensive review and inquiry, Public Service Company of New Hampshire (PSNH) has determined that Merrimack Station is in compliance with all applicable air pollution control rules and regulations.

It is the intent of PSNH to continue to operate Merrimack Station in compliance with all current applicable air pollution control requirements, and to bring Merrimack Station into compliance, in a timely manner, with all applicable air pollution control requirements that become effective during the permit term.

Furthermore, it is the intent of PSNH to bring Merrimack Station into compliance, working with the State, with the forthcoming Compliance Assurance Monitoring (CAM) program.

This compliance certification statement will be reviewed and submitted annually during the permit term.

CERTIFIED STATEMENT OF COMPLIANCE (Env-A 1709.01(h)(7); 40 CFR Part 70.5(d).

The undersigned certifies that, based on information and belief formed after a reasonable inquiry, I certify that the source is in compliance with all applicable regulations. To the best of my knowledge, the statements and information in this document are true, accurate, and complete.

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE

Date: amended August 29, 1996

By: _____



R. G. Chevalier
Vice President -- Fossil/Hydro
Engineering and Operations