Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Blvd.
Warwick, RI 02888

June 6, 2007

Re: RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM
for PSNH's Schiller Unit 5

Dear Ms. Massaro:

Enclosed please find an original and three copies of Public Service Company of New Hampshire's (PSNH) Renewable Energy Resources Eligibility Form requesting qualification to produce renewable energy certificates consistent with the Rhode Island Rules and Regulations Governing the Implementation of a Renewable Energy Standard (RI RES rules).

Schiller Unit 5 is a New Renewable Energy Resource as defined in (RI RES rules) – Section 3.22(iii); that is, a Repowered Generation Unit, which uses eligible renewable energy resources and first entered commercial operation after December 31, 1997. As a repowered generation unit as defined in RI RES rules – Section 3.28, Schiller Unit 5 (i) completely replaced its Prime Mover pursuant to RI RES rules Section 3.26 with the replacement of its entire boiler, (ii) obtained a new air permit based upon BACT (best alternative control technology), and (iii) made capital expenditures after December 31, 1997 equal to 80% of its resulting tax basis.

In addition to the Renewable Energy Resources Eligibility Form including Appendix F, also find:

- Supplemental Responses to Appendix F
- Attachments to Appendix F Supplemental Responses. Specifically:
  1. Temporary Prevention of Significant Deterioration (PSD) Permit
  2. Wood Fuel Specification
  3. Wood Fuel Purchase and Sales Agreement
  4. Fuel Supply Agreement with New Hampshire Timberland Owners Association
  5. Wood Yard Management Plan
  6. Massachusetts Statement of Qualification pursuant to the Renewable Energy Portfolio Standard
  7. NWPP Wood Fuel Delivery and Payment Procedure FF 2.00
- A Certificate of Authority required by Sec. 6.1 of the Eligibility Form

Copies of all documents were sent electronically to the Service List appearing on the RI PUC's web page. We look forward to your review and acceptance of PSNH's eligibility request. If you have questions, please contact me or Elizabeth H. Tillotson or our Attorney Gerald M. Eaton at 603-634-2961.

Sincerely,

/s William H. Smagula

William H Smagula, P.E.
Director - Generation

RIPUC Use Only
Date Application Received: __ __ / __ __ / __ __
Date Review Completed: __ __ / __ __ / __ __
Date Commission Action: __ __ / __ __ / __ __
Date Commission Approved: __ __ / __ __ / __ __

GIS Certification #:
_____

RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM

The Standard Application Form
Required of all Applicants for Certification of Eligibility of Renewable Energy Resource
(Version 5 – January 5, 2007)

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
Pursuant to the Renewable Energy Act
Section 39-26-1 et seq. of the General Laws of Rhode Island

NOTICE:
When completing this Renewable Energy Resources Eligibility Form and any applicable Appendices, please refer to the State of Rhode Island and Providence Plantations Public Utilities Commission Rules and Regulations Governing the Implementation of a Renewable Energy Standard (RES Regulations, Effective Date: January 1, 2006), and the associated RES Certification Filing Methodology Guide. All applicable regulations, procedures and guidelines are available on the Commission's web site: www.ripuc.org/utilityinfo/res.html. Also, all filings must be in conformance with the Commission's Rules of Practice and Procedure, in particular, Rule 1.5, or its successor regulation, entitled "Formal Requirements as to Filings."

• Please complete the Renewable Energy Resources Eligibility Form and Appendices using a typewriter or black ink.

• Please submit one original and three copies of the completed Application Form, applicable Appendices and all supporting documentation to the Commission at the following address:

Rhode Island Public Utilities Commission
89 Jefferson Blvd
Warwick, RI 02888
Attn: Renewable Energy Resources Eligibility

In addition to the paper copies, electronic/email submittals are required under Commission regulations. Such electronic submittals should be sent to: Luly E. Massaro, Commission Clerk at lmassaro@puc.state.ri.us

• In addition to filing with the Commission, Applicants are required to send, electronically or electronically and in paper format, a copy of the completed Application including all attachments and supporting documentation, to the Division of Public Utilities and Carriers and to all interested parties. A list of interested parties can be obtained from the Commission's website at www.ripuc.org/utilityinfo/res.html.

• Keep a copy of the completed Application for your records.

• The Commission will notify the Authorized Representative if the Application is incomplete.

• Pursuant to Section 6.0 of the RES Regulations, the Commission shall provide a thirty (30) day period for public comment following posting of any administratively complete Application.

• Please note that all information submitted on or attached to the Application is considered to be a public record unless the Commission agrees to deem some portion of the application confidential after consideration under section 1.2(g) of the Commission's Rules of Practice and Procedure.

• In accordance with Section 6.2 of the RES Regulations, the Commission will provide prospective reviews for Applicants seeking a preliminary determination as to whether a facility would be eligible prior to the formal certification process described in Section 6.1 of the RES Regulations. Please note that space is provided on the Form for applicant to designate the type of review being requested.

• Questions related to this Renewable Energy Resources Eligibility Form should be submitted in writing, preferably via email and directed to: Luly E. Massaro, Commission Clerk at lmassaro@puc.state.ri.us

SECTION I: Identification Information

1.1 Name of Generation Unit (sufficient for full and unique identification):

Schiller Station Unit 5

1.2 Type of Certification being requested (check one):
X Standard Certification ☐ Prospective Certification (Declaratory Judgment)

1.3 This Application includes: (Check all that apply)[1]

- ❑ APPENDIX A: Authorized Representative Certification for Individual Owner or Operator
- ❑ APPENDIX B: Authorized Representative Certification for Non-Corporate Entities Other Than Individuals
- ❑ APPENDIX C: Existing Renewable Energy Resources
- ❑ APPENDIX D: Special Provisions for Aggregators of Customer-sited or Off-grid Generation Facilities
- ❑ APPENDIX E: Special Provisions for a Generation Unit Located in a Control Area Adjacent to NEPOOL
- x APPENDIX F: Fuel Source Plan for Eligible Biomass Fuels

1.4 Primary Contact Person name and title:

William H. Smagula, Director, PSNH Generation

1.5 Primary Contact Person address and contact information:
Address: **Public Service Company of New Hampshire, 780 North Commercial Street, P.O. Box 330, Manchester, New Hampshire 03105-0330**
Phone: **603 - 634 - 2851** Fax: **603 - 634 – 2703**

Email: **smaguwh@psnh.com**

1.6 Backup Contact Person name and title:

Elizabeth H. Tillotson, Technical Business Manager, PSNH Generation

1.7 Backup Contact Person address and contact information:
Address: **Public Service Company of New Hampshire, 780 North Commercial Street, P.O. Box 330, Manchester, New Hampshire 03105-03**30

Phone: **603-634-2440** Fax: **603-634-2703**

Email: **tilloeh@psnh.com**

[1] Please note that all Applicants are required to complete the Renewable Energy Resources Eligibility Standard Application Form and all of the Appendices that apply to the Generation Unit or Owner or Operator that is the subject of this Form. Please omit Appendices that do not apply.

1.8 Name and Title of Authorized Representative (*i.e.*, the individual responsible for certifying the accuracy of all information contained in this form and associated appendices, and whose signature will appear on the application):

John M. MacDonald, Vice President, Energy Delivery and Generation

Appendix A or B (as appropriate) completed and attached? . Yes X No . N/A

1.9 Authorized Representative address and contact information:
Address: **Public Service Company of New Hampshire, 780 North Commercial Street, P.O. Box 330, Manchester, New Hampshire 03105-03**30

Phone: **603 - 634 - 2236** Fax: **603 - 634 - 2213**
Email: **macdojw@psnh.com**

1.10 Owner name and title: **Public Service Company of New Hampshire**

1.11 Owner address and contact information:
Address: P.O. Box 330, Manchester, New Hampshire 03105-0330

Phone: **603-669-4000** Fax: **603-634-2213**
Email: _____

1.12 Owner business organization type (check one):
- ❑ Individual
- ❑ Partnership
- x Corporation
- ❑ Other: _____

1.13 Operator name and title: **Public Service Company of New Hampshire**

1.14 Operator address and contact information: **Same as Above**
Address:

_____
Phone: _____ Fax: _____
Email: _____

1.15 Operator business organization type (check one):
- ❑ Individual
- ❑ Partnership
- x Corporation
- ❑ Other: _____

SECTION II: Generation Unit Information, Fuels, Energy Resources and Technologies

2.1 ISO-NE Generation Unit Asset Identification Number or NEPOOL GIS Identification Number (either or both as applicable**): # 557**

2.2 Generation Unit Nameplate Capacity: **Fifty MW**

2.3 Maximum Demonstrated Capacity: **45 MW *summer audit to be performed in June**

2.4 Please indicate which of the following Eligible Renewable Energy Resources are used by the Generation Unit: (Check ALL that apply) – *per RES Regulations Section 5.0*

- ❑ Direct solar radiation
- ❑ The wind
- ❑ Movement of or the latent heat of the ocean
- ❑ The heat of the earth
- ❑ Small hydro facilities
- **X** Biomass facilities using Eligible Biomass Fuels and maintaining compliance with all aspects of current air permits; Eligible Biomass Fuels may be co-fired with fossil fuels, provided that only the renewable energy fraction of production from multi-fuel facilities shall be considered eligible.
- ❑ Biomass facilities using unlisted biomass fuel
- ❑ Biomass facilities, multi-fueled or using fossil fuel co-firing
- ❑ Fuel cells using a renewable resource referenced in this section

2.5 If the box checked in Section 2.4 above is "Small hydro facilities", please certify that the facility's aggregate capacity does not exceed 30 MW. – *per RES Regulations Section 3.31*

. ← check this box to certify that the above statement is true

X N/A or other (please explain) _____

_____

2.6 If the box checked in Section 2.4 above is "Small hydro facilities", please certify that the facility does not involve any new impoundment or diversion of water with an average salinity of twenty (20) parts per thousand or less. – *per RES Regulations Section 3.31*

. ← check this box to certify that the above statement is true

X N/A or other (please explain) _____

_____

2.7 If you checked one of the Biomass facilities boxes in Section 2.1 above, please respond to the following:

A. Please specify the fuel or fuels used or to be used in the Unit:
Primary Fuel: Wood defined as whole tree chips, stump grindings, ground pallets, untreated byproducts, residue from forest products, manufacturing or from construction.
Back-up Fuel: Bituminous coal with maximum sulfur content of 1.5 lb/mmbtu and a maximum sulfur content of 1.0 lb/mmbtu as averaged over any three month consecutive period

B. Please complete and attach Appendix F, Eligible Biomass Fuel Source Plan.
Appendix F completed and attached? **X** Yes . No . N/A

2.8 Has the Generation Unit been certified as a Renewable Energy Resource for eligibility in another state's renewable portfolio standard?
X Yes □ No If yes, please attach a copy of that state's certifying order.
Copy of State's certifying order attached? **X** Yes . No . N/A

SECTION III: Commercial Operation Date

Please provide documentation to support all claims and responses to the following questions:

3.1 Date Generation Unit first entered Commercial Operation**: 12 / 01/ 2006** at the site.

3.2 Is there an Existing Renewable Energy Resource located at the site of Generation Unit?

❑ Yes
X No

3.3 If the date entered in response to question 3.1 is earlier than December 31, 1997 or if you checked "Yes" in response to question 3.2 above, please complete Appendix C.
Appendix C completed and attached? . Yes . No **X** N/A

3.4 Was all or any part of the Generation Unit used on or before December 31, 1997 to generate electricity at any other site?

❑ Yes
X No

If you checked "Yes" to question 3.4 above, please specify the power production equipment used and the address where such power production equipment produced electricity (attach more detail if the space provided is not sufficient):

SECTION IV: Metering

4.1 Please indicate how the Generation Unit's electrical energy output is verified (check all that apply):
X ISO-NE Market Settlement System
X Self-reported to the NEPOOL GIS Administrator
❑ Other (please specify below and see Appendix D: Eligibility for Aggregations):

_____

Appendix D completed and attached? . Yes . No **X** N/A

SECTION V: Location

5.1 Please check one of the following that apply to the Generation Unit:

- **X** Grid Connected Generation
- ❑ Off-Grid Generation (not connected to a utility transmission or distribution system)
- ❑ Customer Sited Generation (interconnected on the end-use customer side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer)

5.2 Generation Unit address: **PSNH Schiller Station,**
400 Gosling Road,
Portsmouth, New Hampshire 03801

5.3 Please provide the Generation Unit's geographic location information:

A. Universal Transverse Mercator Coordinates: _____

B. Longitude/Latitude: **70º 47′ 3″ / 43º 5′ 52″**

5.4 The Generation Unit located: (please check the appropriate box)

- **X** In the NEPOOL control area
- ❑ In a control area adjacent to the NEPOOL control area
- ❑ In a control area other than NEPOOL which is not adjacent to the NEPOOL control area ← *if you checked this box, then the generator does not qualify for the RI RES – therefore, please do not complete/submit this form.*

5.5 If you checked "In a control area adjacent to the NEPOOL control area" in Section 5.4 above, please complete Appendix E.

Appendix E completed and attached? . Yes . No **X** N/A

SECTION VI: Certification

6.1 Please attach documentation, using one of the applicable forms below, demonstrating the authority of the Authorized Representative indicated in Section 1.8 to certify and submit this Application.

Corporations

If the Owner or Operator is a corporation, the Authorized Representative shall provide **either**:

(a) Evidence of a board of directors vote granting authority to the Authorized Representative to execute the Renewable Energy Resources Eligibility Form, **or**

(b) A certification from the Corporate Clerk or Secretary of the Corporation that the Authorized Representative is authorized to execute the Renewable Energy Resources Eligibility Form or is otherwise authorized to legally bind the corporation in like matters.

Evidence of Board Vote provided? . Yes . No **X** N/A

Corporate Certification provided? **X** Yes . No . N/A

Individuals

If the Owner or Operator is an individual, that individual shall complete and attach APPENDIX A, or a similar form of certification from the Owner or Operator, duly notarized, that certifies that the Authorized Representative has authority to execute the Renewable Energy Resources Eligibility Form.

Appendix A completed and attached? . Yes . No **X** N/A

Non-Corporate Entities

(Proprietorships, Partnerships, Cooperatives, etc.) If the Owner or Operator is not an individual or a corporation, it shall complete and attach APPENDIX B or execute a resolution indicating that the Authorized Representative named in Section 1.8 has authority to execute the Renewable Energy Resources Eligibility Form or to otherwise legally bind the non-corporate entity in like matters.

Appendix B completed and attached? . Yes . No **X** N/A

6.2 Authorized Representative Certification and Signature:

I hereby certify, under pains and penalties of perjury, that I have personally examined and am familiar with the information submitted herein and based upon my inquiry of those individuals immediately responsible for obtaining the information; I believe that the information is true, accurate and complete. I am aware that there are significant penalties, both civil and criminal, for submitting false information, including possible fines and punishment. My signature below certifies all information submitted on this Renewable Energy Resources Eligibility Form. The Renewable Energy Resources Eligibility Form includes the Standard Application Form and all required Appendices and attachments. I acknowledge that the Generation Unit is obligated to and will notify the Commission promptly in the event of a change in a generator's eligibility status (including, without limitation, the status of the air permits) and that when and if, in the Commission's opinion, after due consideration, there is a material change in the characteristics of a Generation Unit or its fuel stream that could alter its eligibility, such Generation Unit must be re-certified in accordance with Section 9.0 of the RES Regulations. I further acknowledge that the Generation Unit is obligated to and will file such quarterly or other reports as required by the Regulations and the Commission in its certification order. I understand that the Generation Unit will be immediately de-certified if it fails to file such reports.

Signature of Authorized Representative:

SIGNATURE: DATE:

_____ _____

John M. MacDonald
Vice President -Energy Delivery and Generation
(Title)

GIS Certification #:
— — — —

APPENDIX F
Eligible Biomass Fuel Source Plan
(Required of all Applicants Proposing to Use an Eligible Biomass Fuel)

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISION
Part of Application for Certificate of Eligibility
RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM
Pursuant to the Renewable Energy Act
Section 39-26-1 ET. Sq. of the General Laws of Rhode Island

Note to Applicants: Please refer to the RES Certification Filing Methodology Guide posted on the Commission's web site (www.ripuc.org/utilityinfo/res.html) for information, templates and suggestions regarding the types and levels of detail appropriate for responses to specific application items requested below. Also, please see Section 6.9 of the RES Regulations for additional details on specific

The phrase "Eligible Biomass Fuel" (per RES Regulations Section 3.6) means fuel sources including brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips, shavings, slash, yard trimmings, site clearing waste, wood packaging, and other clean wood that is not mixed with other unsorted solid wastes[2]; agricultural waste, food and vegetative material; energy crops; landfill methane[3] or biogas[4], provided that such gas is collected and conveyed directly to the Generation Unit without use of facilities used as common carriers of natural gas; or neat bio-diesel and other neat liquid fuels that are derived from such fuel sources.

In determining if an Eligible Biomass Generation Unit shall be certified, the Commission will consider if the fuel source plan can reasonably be expected to ensure that only Eligible Biomass Fuels will be used, and in the case of co-firing ensure that only that proportion of generation attributable to an Eligible Biomass Fuel be eligible. Certification will not be granted to those Generation Units with fuel source plans the Commission deems inadequate for these purposes.

This Appendix must be attached to the front of Applicant's Fuel Source Plan required for Generating Units proposing to use an Eligible Biomass Fuel (per Section 6.9 of RES Regulations).

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[2] Generation Units using wood sources other than those listed above may make application, as part of the required fuel source plan described in Section 6.9 of the RES Regulations, for the Commission to approve a particular wood source as "clean wood." The burden will be on the applicant to demonstrate that the wood source is at least as clean as those listed in the legislation. Wood sources containing resins, glues, laminates, paints, preservatives, or other treatments that would combust or off-gas, or mixed with any other material that would burn, melt, or create other residue aside from wood ash, will not be approved as clean wood.

[3] Landfill gas, which is an Eligible Biomass Fuel, means only that gas recovered from inside a landfill and resulting from the natural decomposition of waste, and that would otherwise be vented or flared as part of the landfill's normal operation if not used as a fuel source.

[4] Gas resulting from the anaerobic digestion of sewage or manure is considered to be a type of biogas, and therefore an Eligible Biomass Fuel that has been fully separated from the waste stream.

F.1 The attached Fuel Source Plan includes a detailed description of the type of Eligible Biomass Fuel to be used at the Generation Unit.

Detailed description attached? **X** Yes □ No □ N/A
Comments: See attached supplemental response

F.2 If the proposed fuel is "other clean wood," the Fuel Source Plan should include any further substantiation to demonstrate why the fuel source should be considered as clean as those clean wood sources listed in the legislation.

Further substantiation attached? □ Yes □ No **X** N/A
Comments: _____

F.3 In the case of co-firing with ineligible fuels, the Fuel Source Plan must include a description of (a) how such co-firing will occur; (b) how the relative amounts of Eligible Biomass Fuel and ineligible fuel will be measured; and (c) how the eligible portion of generation output will be calculated. Such calculations shall be based on the energy content of all of the proposed fuels used.

Description attached? **X** Yes □ No □ N/A
Comments: **See attached supplemental response**

F.4 The Fuel Source Plan must provide a description of what measures will be taken to ensure that only the Eligible Biomass Fuel are used, examples of which may include: standard operating protocols or procedures that will be implemented at the Generation Unit, contracts with fuel suppliers, testing or sampling regimes.

Description provided? **X** Yes □ No □ N/A
Comments: **See attached supplemental response**

F.5 Please include in the Fuel Source Plan an acknowledgement that the fuels stored at or brought to the Generation Unit will only be either Eligible Biomass Fuels or fossil fuels used for co-firing and that Biomass Fuels not deemed eligible will not be allowed at the premises of the certified Generation Unit. And please check the following box to certify that this statement is true.

. ← check this box to certify that the above statement is true
X N/A or other (please explain) **See attached supplemental response to Appendix F Statement F.5**

F.6 If the proposed fuel includes recycled wood waste, please submit documentation that such fuel meets the definition of Eligible Biomass Fuel and also meets material separation, storage, or handling standards acceptable to the Commission and furthermore consistent with the RES Regulations.

Documentation attached? ☐ Yes ☐ No **X** N/A
Comments:

_____

F.7 Please certify that you will file all reports and other information necessary to enable the Commission to verify the on-going eligibility of the renewable energy generators pursuant to Section 6.3 of the RES Regulations.

x ← check this box to certify that the above statement is true
. N/A or other (please explain) _____
_____

F.8 Please attach a copy of the Generation Unit's Valid Air Permit or equivalent authorization.

Valid Air Permit or equivalent attached? **X** Yes ☐ No ☐ N/A
Comments: See attached supplemental response_____
_____
_____

F.9 Effective date of Valid Air Permit or equivalent authorization:

10/25/04

F.10 State or jurisdiction issuing Valid Air Permit or equivalent authorization**:** **New Hampshire Department of Environmental Services - Air Resources Division**

Introduction- Schiller Unit 5 is a New Renewable Energy Resource as defined in the Rhode Island Rules and Regulations Governing the Implementation of a Renewable Energy Standard (RI RES rules) – Section 3.22(iii); that is, a Repowered Generation Unit, which uses eligible renewable energy resources and first entered commercial operation after December 31, 1997. As a repowered generation unit as defined in RI RES rules – Section 3.28, Schiller Unit 5 (i) completely replaced its Prime Mover pursuant to RI RES rules Section 3.26 with the replacement of its entire boiler, (ii) obtained a new air permit based upon BACT (best alternative control technology), and (iii) made capital expenditures after December 31, 1997 equal to 80% of its resulting tax basis.

Overview of the Schiller Unit 5 (NWPP) Fuel Source Plan

F.1 Fuel Description

Schiller Unit 5's boiler burns Eligible Biomass Fuel which will be primarily whole tree wood chips, untreated byproducts or residue from forest products, residue from forest products manufacturing operations or from construction, stump grindings and ground pallets consistent with RI RES rules – Section 3.6 which provides the definition of Eligible Biomass Fuel to mean fuel sources including brush, stumps, yard trimmings, site clearing waste, wood packaging and other clean wood that is not mixed with other unsorted solid wastes. A number of documents are included as attachments to this supplemental response to confirm there are permits, processes and procedures that must be satisfied as part of Schiller Unit 5's operation that insure compliance with the definition of eligible biomass fuel stated in the RI RES rules.
Attachments included:

1. Temporary Prevention of Significant Deterioration (PSD) Permit
2. Wood Fuel Specification
3. Wood Fuel Purchase and Sales Agreement
4. Fuel Supply Agreement with New Hampshire Timberland Owners Association
5. Wood Yard Management Plan
6. Massachusetts Statement of Qualification pursuant to the Renewable Energy Portfolio Standard
7. NWPP Wood Fuel Delivery and Payment Procedure FF 2.00

F.4 Permits, Processes and Procedures for Fuel Management

The following excerpts from the documents attached discuss measures taken to ensure that only the Eligible Biomass Fuel will be used at Schiller Unit 5 and a number of obligations undertaken by Schiller Unit 5 to use only eligible biomass fuel, satisfy the requirements outlined in the RI RES rules Taken together these requirements qualify Schiller Unit 5 to produce renewable energy certificates (RECs).

NHDES-ARD PSD Permit TP-B-501

PSNH Schiller Unit 5's Temporary Prevention of Significant Deterioration (PSD) Permit [TP-B-0501] issued by the New Hampshire Department of Environmental Services, Air Resourced Division states the fuel for the Schiller Unit 5 Boiler will be primarily whole

tree wood chips, untreated byproducts or residue from forest products, residue from forest products manufacturing operations or from construction, stump grindings and ground pallets. The permit further clarifies that for the purposes of the permit, "wood" is defined as whole tree chips, stump grindings, ground pallets, untreated byproducts or residue from forest products manufacturing operations or from construction. The permit confirms that wood does not include pressure treated wood products, wood from demolitions, or wood products containing glues or binders (including but not limited to plywood, particle board, oriented strand board, or similar products).

Note: The Schiller Unit 5 boiler is also capable of burning coal as a backup fuel in the event that PSNH's wood fuel becomes uneconomical or subject to a disruption in supply. Further discussion of this scenario is described below.

The permit also states that the Schiller Unit 5 boiler will be equipped with continuous emission monitors (CEMs) to continuously measure and record emissions of CO, NOx opacity, as well as specific operational parameters.

Fuel Specifications for Wood Fuel and Wood Fuel Purchase and Sales Agreement

Consistent with the PSD permit requirements, PSNH has a Fuel Specification which defines wood fuel as "Whole tree chips or chipped slabs and edging from sawmills produced using rotary chipper with knives". The specification further states that the fuel shall not contain any paints, surface treatments, glues or other adhesives, plastic laminates, preservatives including but not limited to creosote, pentachlorophenol (penta); or chromated copper arsenate (CCA), or hazardous materials. The Wood Fuel Purchase and Sales Agreement reiterates that the "wood" is described as: "WOOD CHIPS AND MIXED FUEL consisting of clean wood and whole tree chips produced in accordance with specification sheet". And it again reiterates that "Wood shall not contain any hazardous materials including those subject to regulation and is not mixed with other unsorted solid wastes. Wood sources containing resins, glues, laminates, paints, preservatives, or other treatments that would combust or off-gas, or mixed with any other material that would burn, melt, or create other residue other than wood ash, will not be approved as clean wood."

TOA Agreement

This description of the wood fuel quoted immediately above is consistent with initial presentations made in support of re-powering Schiller Unit 5's boiler. Specifically, discussions with the NH Timberland Owners Association resulted in a Schiller Station Unit 5 Fuel Supply Agreement between New Hampshire Timberland Owners Association and Public Service Company of New Hampshire (TOA Agreement). It states that the new wood-fired boiler is expected to be permitted to burn whole tree chips (forestry, non-forestry, and land-clearing), sawmill residues, and other Renewable Portfolio Standard eligible fuel. In the agreement PSNH agrees to purchase in the year 2007 a minimum of between 35-40% of the total quantity of its fuel from New Hampshire sources or suppliers. The parties also agreed that good forest management standards are essential to incorporate into an environmentally responsible wood fuel procurement program. PSNH

agreed to monitor five specific program criteria. Areas of focus included harvesting at a Certified Tree Farm, certified by the Sustainable Forestry Initiative or the Forest Stewardship Council, under the direction of a licensed forester, consistent with a cutting plan approved by the Massachusetts Department of Conservation and Recreation, and by a certified logger recognized by the Sustainable Forestry Initiative State Implementation Committee and meeting Best Management Practice with no change in land use.

Wood Yard Management Plan

As part of the City of Portsmouth site plan application and as required by stipulation for Site Review Approval, PSNH provided a Wood Yard Management Plan. This plan provides information on:

- Types and Sources of wood fuel
- Summary of known and expected on-site activities
- Equipment and structures
- Best practices for storage and handling of wood fuel
- Permitting, regulatory, and design considerations

Portsmouth approved this plan which identified the wood fuel to be primarily whole-tree chips. The plan confirmed that no demolition debris will be used as a fuel. The source was identified as primarily from timber harvesting operations. Finally, it was stated that in addition to whole-tree chips, sawmill residue (by-product of sawing logs into boards) and a limited amount of ground pallets will be purchased as a fuel source. This plan, too, referenced the TOA agreement.

Massachusetts Statement of Qualification pursuant to the Renewable Energy Portfolio Standard

Schiller Unit 5 has received a Statement of Qualification from the State of Massachusetts. Both the Statement of Qualification Application (SQA) and the resulting Statement of Qualification (SQ) (BM-1053-06) include a description of 100% eligible biomass fuel which is to be burned at Schiller Unit 5 as normal operation. This description defines wood as whole-tree chips, stump grindings, ground pallets, untreated by-products or residue from forest products manufacturing operation or from construction.

NWPP Wood Fuel Delivery and Payment Procedure FF 2.00

As stated in the procedure's Forward, "This procedure is intended to provide overall guidance for the delivery of wood fuel to the Northern Wood Power Project site, for the review of wood delivery information and for approval of payments for wood delivery by station management and Fuels Purchasing and Supply." This procedure addresses the inspection and documentation of compliant biomass deliveries as discussed in the Certification Filing Methodology Guide, Section 2.2 and 2.3. This procedure discusses wood procurement and wood delivery, site processes including weighing, dumping, and exiting, as well as accounting, payment and approval processes. This document references, as attachments, documents identified above including the Wood Fuel Specification and the Truck Management Plan.

The procedure specifically states that, "The Wood Yard Foreman and his yard staff will randomly inspect wood fuel prior to and/or during the dump process to ensure no contamination is intermingled with the wood fuel." Instructions are provided as to the remedy and disposition of any out-of-specification fuel.

Supplier information is recorded and retained including truck license plate, name, type of wood fuel, location where the fuel was harvested, name of land owner where harvested, and harvest activity method.

F.3 Co-Firing with Ineligible Fuels

It is the intention of PSNH that Schiller Unit 5 will burn 100% eligible biomass fuel now that the Schiller Unit 5 is fully converted and tested. However, the new Schiller Unit 5 boiler is capable of and permitted to burn bituminous coal, an ineligible fuel, as a back-up fuel in the event that wood fuel becomes uneconomical or subject to a disruption in supply.

PSNH is required by New Hampshire statute to use its owned generating assets to supply Default Energy Service to its retail energy service customers. PSNH designed and constructed the new Schiller Unit 5 boiler to have the capability of burning both wood and coal. Coal would only be used in the unlikely event that wood fuel supply is unavailable; however, PSNH's obligation to use its owned generating assets to supply Default Energy Service would obligate PSNH to continue to run Schiller Unit 5 on coal.

Normal Operation – Burning 100% Eligible Biomass Fuel

PSNH is planning as normal operation to burn an eligible fuel at Schiller Unit 5 and operate at a fuel ratio of 100% with no use of an ineligible fuel. As described in RI RES rules Section 5.0: Eligibility, 5.1 (f), during the use of 100% eligible biomass fuel 100% of the total electrical energy output will be eligible as a renewable energy resource. In support of this information, PSNH will maintain, and provide as necessary, the Schiller Unit 5 CEM data that includes fuel source data on a minute-by-minute basis while it averages and records the data on an hourly basis. This information is available, auditable, and submitted as part of the Federal Electronic Data Report (EDR) requirement.

Back-up Fuel – Burning 100% Ineligible Coal Fuel

In the unanticipated event that wood fuel becomes uneconomical or subject to a disruption in supply and Schiller Unit 5 is not able to burn an eligible fuel (i.e. Schiller Unit 5 is required to burn the back-up bituminous coal fuel), then Schiller Unit 5 will not be eligible for renewable energy certificates (RECs). If this unanticipated event occurs, PSNH will maintain, and provide as necessary, the Schiller Unit 5 CEM data specific to the period during which an ineligible fuel (coal) is burned, including duration and the associated megawatt hours produced during the given month. In support of this information, PSNH will maintain, and provide as necessary, the Schiller Unit 5 CEM data that includes fuel source data on a minute-by-minute basis while it averages and records

the data on an hourly basis. This information is available, auditable and submitted as part of the Federal EDR requirement.

Partial Month/Co-Firing Operation when transitioning between Wood and Coal
Consistent with the operation discussed above, if a month included both wood and coal burning, PSNH would provide documentation for the portion of the month that 100% wood was burned, provide the megawatt hours generated during the same period, and request 100% REC allocation for those megawatt hours. Conversely, for the portion of the month that 100% coal was burned, the associated megawatt hours generated during that period would qualify for 0% REC allocation. PSNH expects to only co-fire coal with wood when switching from one fuel to another.

If REC allocation is requested during a co-firing period, REC allocation would only be applicable to the portion of megawatt-hours attributable to wood fuel. Consistent with the discussion provided in the Rhode Island Renewable Energy Standard (RI RES), Renewable Energy Resources Eligibility Form, Certification Filing Methodology Guide, PSNH would provide the fraction of the total output attributable to wood, using the ratio of the total heat content for the wood consumed during the period (based on reasonable samplings of the species and moisture content for the period, fuel flow data, CEM data) to the calculated total heat content of all fuel consumed during the period. During co-firing the coal and wood fuels are introduced to the boiler through independent delivery systems each with belt scale measurements. Fuel samples are taken routinely during bunkering to establish the heat content of the fuels. The CEM and associated measurements are maintained and calibrated routinely consistent with permit requirements. Calculations consistent with the Certification Filing Methodology Guide, Section 2.1 would be completed and submitted. Supporting documentation would be available, and submitted as requested, to support the calculations.

A minimal amount of natural gas is used for igniting the wood fuel during startup operations of the boiler.

F.5 On-site storage of other Fossil Fuel
Schiller Unit 5 is located at an existing PSNH generating station. Schiller Station not only operates Unit 5, but also continues to operate Units 4 and 6. Units 4 and 6 have the capability of burning both coal and #6 residual fuel oil; however, coal has historically been the lower cost fuel for the dual fired units. Storage tanks for oil used at Schiller and at the nearby Newington Station are located on the premises. However, there is no fuel oil delivery system to the new boiler. Likewise, there is no fuel oil burner system in the boiler. As such, fuel oil cannot and will not be burned in the new boiler.

As noted above, Unit 5 has the capability to burn coal, which is stored on site for use in Units 4 and 6 if wood supply is interrupted; however, as stated above, no RECs would be allocated associated with megawatt hours generated burning coal.

STATE OF NEW HAMPSHIRE
Department of Environmental Services
Air Resources Division

Temporary Prevention of Significant Deterioration (PSD) Permit

Permit No: **TP-B-0501**
Date Issued: **October 25, 2004 reissued March 7, 2006**

This certifies that:
Northeast Utilities
Public Service Company of New Hampshire
780 North Commercial Street
Manchester, NH 03101

has been granted a Temporary PSD Permit for the following facility and location:
Public Service of New Hampshire
Schiller Station
400 Gosling Road
Portsmouth, NH
AFS Point Source Number – 3301500012

Public Service of New Hampshire has been granted a Joint **Federal Prevention of Significant Deterioration (PSD) Permit and a State of New Hampshire Temporary Permit** for a 50 MW Wood-Fired Boiler with coal firing capability.

New Hampshire has EPA-approved procedures to ensure new construction or modifications of stationary sources do not violate control strategies or interfere with attainment or maintenance standards. These procedures authorize the DES to regulate significant increases for all criteria and regulated pollutants.

The joint PSD/Temporary permit is for a facility which emits air pollutants into the ambient air as set forth in equipment registration forms (ARD 1-6), filed with this Division under the date of **January 30, 2004** in accordance with RSA 125-C of the New Hampshire Laws. The PSD provisions of this permit are effective indefinitely or until such time that the facility applies and receives a Title V Operating Permit or a PSD Permit that modifies the terms and conditions of this permit. The Temporary provisions of this permit are valid until **April 30, 2007**. Request for temporary permit provision renewal prior to the expiration of the Temporary provisions of this permit is subject to Division requirements and must be accompanied by the appropriate permit application forms.

SEE ATTACHED SHEETS FOR ADDITIONAL PERMIT CONDITIONS

The owner or operator of the devices covered by this permit shall submit a written request for a permit amendment to the Director at least 90 days prior to the implementation of any proposed change to the physical structure or operation of the devices covered by this permit which increases the amount of a specific air pollutant emitted by such devices or which results in the emission of any additional air pollutant. The change shall not take place until a new permit application is submitted and acted upon by the Director pursuant to Env-A 600.

Any permit deviation, which results in emissions greater than those stipulated in this permit, must be reported to the Division within 24 hours of the occurrence.

Robert R. Scott, Director
Air Resources Division

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Temporary Prevention of Significant
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ABBREVIATIONS

AAL	Ambient Air Limit
AP-42	Compilation of Air Pollutant Emission Factors
ARD	Air Resources Division
ASTM	American Society for Testing and Materials
ATS	Allowance Tracking System
BACT	Best Available Control Technology
BHP (or bhp)	Brake Horse Power
BTU	British Thermal Units
CAA	Clean Air Act, 42 U.S.C. § 7401, et seq.
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstracts Service
CEMS (or CMS)	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO_2	Carbon Dioxide
COMS	Continuous Opacity Monitoring System
DER	Discrete Emission Reduction
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
Env-Wm	New Hampshire Code of Administrative Rules – Waste Management Division
ECS	Emission Control System
ERC	Emission Reduction Credit
ETS	Emissions Tracking System
FR	Federal Register
HAP	Hazardous Air Pollutant
HHV	High Heat Value
HCl	Hydrochloric acid
Hr	Hour
kGal	1,000 gallons
kscfm	1,000 standard cubic feet per minute
KVDC	Kilovolt Direct Current
KW	Kilowatt
LAER	Lowest Achievable Emission Rate
Lb/hr	Pounds per hour
LNB	Low NO_x Burner
LNG	Liquid Natural Gas
LPG	Liquid Petroleum Gas (Propane)
MACT	Maximum Achievable Control Technology
mg/L	Milligrams per liter
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
MMCF	Million Cubic Feet
MW	Megawatt
NAAQS	National Ambient Air Quality Standard
NATS	NOx Allowance Tracking System

ABBREVIATIONS (cont.)

NESHAPs	National Emissions Standards for Hazardous Air Pollutants
NG	Natural Gas
NHDES (or DES)	New Hampshire Department of Environmental Services
NMOC	Nonmethane Organic Compound
NO_x	Oxides of Nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PCB	Polychlorinated biphenyls
PE	Potential Emission
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10 microns diameter
ppm	part per million
ppmv	part per million by volume
PSD	Prevention of Significant Deterioration
PSI	Pounds per Square Inch
PTE	Potential to Emit
PUC	Public Utilities Commission
RACT	Reasonably Available Control Technology
RTAP	Regulated Toxic Air Pollutant
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
T-12M	Tons during any consecutive 12-month period
TAP	Toxic Air Pollutant
TSP	Total Suspended Particulate Matter
TPY	Tons per Year
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

PSNH Schiller Station
Temporary Prevention of Significant
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Facility Specific Temporary/PSD Permit Conditions

I. Facility Description of Operations

Schiller Station (Schiller) is a 153 MW fossil fuel-fired electric generating facility located in Portsmouth, New Hampshire, owned and operated by Public Service of New Hampshire (PSNH), a subsidiary of Northeast Utilities. The facility is comprised of three utility boilers, one combustion turbine operating as a load shaving unit, an emergency generator, a primary coal crusher, and various insignificant or exempt activities.

II. Project Description

PSNH is proposing to replace/repower the existing Unit #5 50 MW coal-fired boiler at Schiller Station with a new, 50 MW wood-fired fluidized bed boiler (referred to herein as the NWPP Boiler). The existing electrical generating equipment (turbine and generator) on Unit #5 will be utilized on the NWPP Boiler.

The fuel for the NWPP Boiler will be primarily whole tree wood chips, untreated byproducts or residue from forest products, residue from forest products manufacturing operations or from construction, stump grindings and ground pallets. The NWPP Boiler will also be capable of burning coal as a backup fuel in the event that PSNH's wood fuel becomes uneconomical or subject to a disruption in supply.

Air pollution control equipment installed and operated on the NWPP Boiler will include a selective non-catalytic reduction (SNCR) system for NOx control, limestone injection system to control SO_2 and acid gases, and a fabric filter for the control of particulate matter. The NWPP Boiler will also be equipped with continuous emission monitors (CEMs) to continuously measure and record emissions of CO, NOx, opacity, as well as specific operational parameters.

Ancillary projects associated with the installation of the NWPP Boiler will include the construction of a wood fuel handling and storage yard and the installation of a new secondary coal crusher and conveyor system.

The replacement/repowering of the Unit #5 boiler with the NWPP Boiler will result in net emissions decreases of the criteria pollutants PM, PM10, NOx, and SO_2. However, the boiler replacement will result in increased net emissions of CO and VOCs. Table 1 below summarizes the net emissions increases/decreases resulting from the replacement/repowering of the Unit #5 boiler with the NWPP Boiler.

Table 1 - Prevention of Significant Deterioration (PSD) Applicability Thresholds (All Values in Tons Per Year)						
	TSP	**PM10**	**SO2**	**NOx**	**CO**	**VOC**
NWPP Boiler Emissions – Proposed Permit Limits	32	32	334	237	315	16
Existing Unit #5 Emissions – Baseline Annual Average[1]	113	75	1,951	595	181	5
Net Emissions Increase/(Decrease) from Unit #5 Replacement	(81)	(43)	(1,617)	(358)	135	11
PSD Significant Modification Threshold	25	15	40	25	100	40
PSD Significant Modification Threshold Triggered (Yes/No)?	No	No	No	No	**Yes**	No

III. Applicability of Federal Regulations

A. Federal Prevention of Significant Deterioration (PSD) Requirements

As shown in Table 1 above, the NWPP Boiler will emit CO in excess of major source PSD significant modification thresholds, and therefore is subject to PSD review and requires a PSD permit. The PSD regulations require that Best Available Control Technology (BACT) be used for this boiler to minimize CO emissions.

B. Federal Maximum Available Control Technology (MACT) Requirements

On February 26, 2004, the USEPA Administrator signed as final, a standard regulating the emissions of hazardous air pollutants from industrial, commercial, and institutional boilers. This standard, 40 CFR Part 63 Subpart DDDDD, *Industrial/Commercial/Institutional Boilers and Process Heaters*, has not yet been published in the Federal Register.

Because no published MACT standard currently exists for electric utility steam generating units, the NWPP Boiler is subject to a case-by-case MACT determination under Section 112(g) of the Clean Air Act. The MACT approval for the NWPP Boiler reflects the permit requirements of Subpart DDDDD in accordance with 40 CFR 63.44(a).

C. New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units

The proposed NWPP Boiler will be subject to the NSPS, 40 CFR 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978 ("Subpart Da"). Subpart Da affects electric steam generating units with a design capacity greater than 250 MMBTU/hr constructed after September 18, 1978. DES is delegated by EPA to enforce Subpart Da as it pertains to electric utility steam generating units.

[1] The "Baseline Annual Average" emission rate for the existing Unit #5 is the annual emission rate as averaged over the two-year period from September 2001 to August 2003. This value is used to calculate net emissions changes for purposes of determining applicability of PSD requirements. The net emissions change calculation also includes any emission increases or decreases from other devices at this facility. Since there were no other increases or decreases, all net emissions changes are calculated by comparing potential emission rates from the NWPP Boiler to the baseline annual average for the existing Unit #5.

D. NSPS Standards for Coal Preparation Plants

Coal for the NWPP Boiler will be processed and stored on-site. The secondary coal crusher is subject to the NSPS, 40 CFR 60 Subpart Y, *Standards of Performance for Coal Preparation Plants* ("Subpart Y"). Subpart Y requires an initial compliance test for opacity of coal dust emissions from the crusher. DES is delegated by EPA to enforce Subpart Y as it pertains to coal preparation plants.

IV. Air Quality Impact Analysis

As demonstrated by the air quality impact analysis and additional analyses required by state and federal regulations, including cavity analysis, toxic air pollutant impact assessment, and Class I impact analyses, the NWPP Boiler will not cause or contribute to violations of NAAQS, PSD increments, or AALs as regulated under Env-A 1400.

V. Permitted Activities

In accordance with all of the applicable requirements identified in this permit, PSNH is authorized to construct and operate the NWPP Boiler and all associated ancillary equipment and processes identified in Sections VI through IX within the terms and conditions specified in this Permit.

VI. Significant Activities Identification and Stack Criteria

A. Significant Activity Identification

The activities identified in Table 2 are subject to and regulated by this Temporary PSD Permit:

Table 2 – Significant Activity Identification

Emission Unit Number	Description of Emission Unit	Maximum Capacity	Maximum Operating Conditions
SR5	NWPP Boiler – Circulating Fluidized Bed Boiler with Overbed Feed	720 MMBTU/hr gross heat input while firing wood[2]; or 635 MMBTU/hr gross heat input while firing bituminous coal (with a maximum sulfur content of 1.5 lb/MMBTU, and a maximum sulfur content of 1.0 lb/MMBTU as averaged over any 3-month consecutive period). The Start-up Burner System shall consist of a duct burner and two overhead firing burners[3] with a	a. Maximum fuel consumption rate of wood shall be limited to 76.5 tons per hour, not to exceed 670,140 tons during any consecutive 12-month period[4]. b. Maximum fuel consumption rate of bituminous coal shall be limited to 23.3 tons per hour, not to exceed 204,108 tons during any consecutive 12-month period.[5] c. The combined combustion of wood and coal in the NWPP Boiler

[2] For the purposes of this permit, "wood" is defined as whole tree chips, stump grindings, ground pallets, untreated byproducts or residue from forest products manufacturing operations or from construction. Wood does not include pressure treated wood products, wood from demolitions, or wood products containing glues or binders (including but not limited to plywood, particle board, oriented strand board, or similar products).

[3] The final design of the Startup Burner System may differ slightly from that proposed in Permit Application FY04-0331. PSNH can

Table 2 – Significant Activity Identification			
Emission Unit Number	**Description of Emission Unit**	**Maximum Capacity**	**Maximum Operating Conditions**
		combined maximum gross input rating of 144 million British Thermal Units per hour (MMBTU/hr). Fuel firing in the Start-up Burner System shall be limited to the combustion of natural gas.	shall not exceed 6,307,200 MMBTU during any 12 consecutive month period. d. Maximum fuel consumption rate of natural gas for the Start-up Burner System shall not exceed 144,000 cubic feet per hour and 1,261 million cubic feet during any consecutive 12-month period.[6]
SRCC2	Secondary Coal Crusher	700,000 lb coal/hour	Maximum coal processing rate shall be limited to 350 tons per hour.

B. Stack Criteria

The stack for the NWPP Boiler shall discharge vertically without obstruction (including rain caps) and meet the following criteria:

Table 3 – Stack Criteria				
Stack Number	**Emission Unit Number**	**Emission Unit Description**	**Minimum Stack Height (Feet) Above Ground Level**	**Maximum Inside Stack Diameter (Feet)**
STSR5	SR5	NWPP Boiler	226	10.5

Changes to the state-only requirements pertaining to stack parameters (set forth in this permit), shall be permitted only when an air quality impact analysis which meets the criteria of Env-A 606 is performed either by the facility or the New Hampshire Department of Environmental Services, Air Resources Division (if requested by facility in writing) in accordance with the "DES-ARD Procedure for Air Quality Impact Modeling." All air modeling data shall be kept on file at the facility for review by the DES upon request.

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make changes to the design of the Startup Burner System provided that (1) the maximum heat input rate of the system does not increase, (2) emissions do not increase, and (3) PSNH notifies DES in writing in advance of any design changes.

[4] The heating value of wood is assumed to be 4,274 BTU/lb at 50% moisture. The maximum fuel consumption of the unit may vary based on the actual heat content and moisture content of the fuel burned.

[5] The heating value of bituminous coal is assumed to be 12,700 BTU/lb. The maximum fuel consumption of the unit may vary based on the actual heat content of the fuel burned.

[6] The heating value of natural gas is assumed to be 1000 BTU/ft^3. The maximum fuel consumption of the unit may vary based on the actual heat content of the fuel burned.

VII. Pollution Control Equipment/Method Identification

The devices and/or processes identified in Table 4 are considered pollution control equipment or techniques for each identified emissions unit:

Table 4 – Pollution Control Equipment/Method Identification

Pollution Control Equipment Number	Description of Equipment/Method	Emission Unit Number
SR5-PC1	Selective Non-Catalytic Reduction (SNCR) System	SR5
SR5-PC2	Limestone Injection System	SR5
SR5-PC3	Baghouse (Fabric Filter)	SR5
SR5-PC4	Good Combustion Practices	SR5
SRCC2-PC16	Best Management Practices for fugitive dust	SRCC2

VIII. Applicable Requirements

A. Operational and Emission Limitations

PSNH shall be subject to the operational and emission limitations identified in Table 5 below.

Table 5 –Operational and Emission Limitations

Item #	Applicable Emission Unit	Applicable Requirement	Regulatory Basis
1.	Facility-wide	PSNH shall prevent, abate, and control fugitive dust emissions, including fugitive emissions, including but not limited to wood dust and coal dust[7]. During coal handling, PSNH shall use best management practices, which may include the use of covers on the exposed, nonworking areas of the coal piles and the use of dust suppressants.	Env-A 1002.04 Fugitive Dust
2.	Facility-wide	All devices or processes, subject to RSA 125-I and Env-A 1400, shall comply with Env-A 1400 *(Regulated Toxic Air Pollutants).*	Env-A 1403
3.	Facility-wide	Documentation for the demonstration of compliance shall be retained at the facility and shall be made available to DES for inspection upon request.	Env-A 1404.01(d)
4.	Facility-wide	a. The owner of a new or modified device or process requiring a permit under this chapter shall submit an application for a temporary permit in accordance with Env-A 607.03. b. Pursuant to RSA 125-I:5,I, the owner shall not operate the device or process until a Temporary Permit is issued.	Env-A 1405.01
5.	Facility-wide	The owner of any device or process that emits an RTAP shall determine compliance with the AAL by using one of the methods provided in Env-A	Env-A 1406.01

[7] To comply with this provision, PSNH shall use Best Management Practices to manage and minimize fugitive coal dust. See the Best Management Practice policies established by PSNH in their standard operating procedures for the cold weather coal bunkering, dust suppression operation, duties of person on dock, and coal unloading operational checks.

Table 5 –Operational and Emission Limitations

Item #	Applicable Emission Unit	Applicable Requirement	Regulatory Basis
		1406.02, Env-A 1406.03, Env-A 1406.04, or Env-A 1406.05. Upon request, the owner of any device or process that emits an RTAP shall provide documentation of compliance with the AAL to DES.	
6.	SR5	The sulfur content of gaseous fuels shall not exceed 15 grains of sulfur per 100 cubic feet of gas at standard temperature and pressure.	Env-A 1605.01 Sulfur Content for Gaseous Fuels
7.	SR5	For a coal-burning devices placed in operation after April 15, 1970: a. The sulfur content of coal shall not exceed 1.5 lb/MMBTU gross heat content; and b. The sulfur content of coal shall not exceed 1.0 lb/MMBTU gross heat content, averaged over any consecutive 3-month period.	Env-A 1606.01(b) Maximum Sulfur Content Allowable in Coal
8.	SR5	PSNH shall not cause or allow average opacity in excess of 10 percent over a 1-hour block average as measured and recorded by the Continuous Opacity Monitoring System (COMS). The COMS shall be installed, calibrated, and maintained in accordance with the specifications in Table 5, Item 31, Table 6, Item 12 and Table 7, Items 63 and 69.	40 CFR 63 Subpart B (Case-by-Case MACT)
9.	SR5	No owner or operator shall cause or allow average opacity from fuel burning devices installed after May 13, 1970 in excess of 20 percent for any continuous 6-minute period in any 60-minute period.	Env-A 2003.02 Visible Emission Standard for Fuel Burning Devices
10.	SR5	For steam generating units subject to 40 CFR 60, no more than one of the following 2 exemptions shall be taken: a. During periods of startup, shutdown and malfunction, average opacity shall be allowed to be in excess of 20 percent for one period of 6 continuous minutes in any 60 minute period; or b. During periods of normal operation, soot blowing, grate cleaning, and cleaning of fires, average opacity shall be allowed to be in excess of 20 percent but not more than 27 percent for one period of 6 continuous minutes in any 60 minute period.	Env-A 2003.04(a) Activities Exempt from Visible Emission Standards 40 CFR 60.42a(b) NSPS for Opacity
11.	SR5	Exceedances of the opacity standard in Env-A 2003.02 shall not be considered violations if the source demonstrates to the division that such exceedances were the result of the adherence to good boiler operating practices which, in the long term, results in the most efficient or safe operation of the boiler. Examples of activities that may cause exceedances of the opacity standard that shall not be considered violations include the following: a. Continuous soot blowing of the entire boiler tube sections over regular time intervals as determined by the operator and in conformance with good boiler operating practice; and b. Cold startup of a boiler over a continuous period of time resulting in efficient heat-up and stabilization of its operation and the expeditious achievement of normal operation of the unit.	Env-A 2003.04(d) and Env-A 2003.04(e) Activities Exempt from Visible Emission Standards
12.	SR5	Exceedances of the opacity standard in Env-A 2003.02 shall not be considered violations of this part if the source demonstrates to the division	2003.04(f) Activities Exempt from Visible

Table 5 –Operational and Emission Limitations			
Item #	**Applicable Emission Unit**	**Applicable Requirement**	**Regulatory Basis**
		that such exceedances were the result of the occurrence of an unplanned incident in which the opacity exceedance was beyond the control of the operator and in response to such an incident, the operator took appropriate steps in conformance with good boiler operating practice to eliminate the excess opacity as quickly as possible.	Emission Standards
13.	SRCC2	On and after the date on which the performance test required to be conducted by 60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.	40 CFR 60.252(c) NSPS for Coal Preparation Plants
14.	SR5, SRCC2	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.	40 CFR 60.11(d)
15.	SR5	<u>Emission Standards for PM and PM10</u> PM and PM_{10} emissions shall be limited to (regardless of fuel type): a. 0.025 lb/MMBtu of heat input at all times[8]; b. 0.01 lb/MMBTU of heat input based on a 24-hour calendar day average; c. 7.2 lb/hr; and d. 31.5 tons per consecutive 12-month period. e. Pursuant to 40 CFR 60.46a (c), the emission standards in 40 CFR 60.42a (and contained in footnote 7, item a of this permit) apply at all times except during periods of startup, shutdown or malfunction.	40 CFR 63 Subpart B (Case-by-Case MACT) 40 CFR 60.42a (a)(1) and (2), 40 CFR 60.46a (a) and (c) Env-A 2003.08
16.	SR5	<u>Emission Standards for SO2:</u> SO_2 emissions shall be limited to: a. 0.12 lb/MMBTU of heat input while firing coal; b. 0.02 lb/MMBTU of heat input while firing wood; c. 76.2 lb/hr; and	40 CFR 60.43a (a) and (g) NSPS for SO_2 Permit Application

[8] This Condition has been streamlined to cover various state and federal air regulations. Compliance with the 0.025 lb/MMBTU PM emission limit will also ensure compliance with:

a. The 0.03 lb/MMBTU (and 1% of the potential combustion concentration) 30-day rolling average emission limits contained in 40 CFR 60, Subpart Da, *New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units for Which Construction, Modification, or Reconstruction is Commenced After September 18, 1978; and*
b. The 0.1 lb/MMBTU emission limit contained in Env-A 2003.08 *Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985*.

[9] This Condition has been streamlined to cover various state and federal air regulations. Compliance with the SO_2 emission limits of 0.12 lb/MMBTU during coal firing and 0.02 lb/MMBTU during wood firing will also ensure compliance with:

a. 40 CFR 60.43a (a) and (g) (NSPS Subpart Da) limits SO_2 emissions to 1.20 lb/MMBTU and 10 percent of the potential combustion concentration (90 percent reduction), <u>OR</u> 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/MMBtu heat input. Compliance to be determined on a 30-day rolling average basis.

Table 5 –Operational and Emission Limitations			
Item #	**Applicable Emission Unit**	**Applicable Requirement**	**Regulatory Basis**
		d. 333.8 tons per consecutive 12-month period. e. The limits in (a) and (b) are based on a 24-hour calendar day average[9]. f. Pursuant to 40 CFR 60.46a(c), the SO_2 emission standards in 40 CFR 60.43a(a) (and contained in footnote 8, item a of this permit) apply at all times except during periods of startup, shutdown or when both emergency conditions, as defined according to 40 CFR 60.41a, exist and the procedures of 40 CFR 60.46a (d) are implemented.	#FY04-0331
17.	SR5	Emission Standards for NOx NOx emissions shall be limited to (regardless of fuel type): a. 0.075 lb/MMBTU of heat input based on a 24-hour calendar day average[10]; b. 54.0 lb/hr; and c. 236.5 tons per consecutive 12-month period. d. Pursuant to 40 CFR 60.46a (c), the emission standards in 40 CFR 60.44a (a) and (d)(1) (and contained in footnote 9, item a of this permit) apply at all times except during periods of startup, shutdown, or malfunction.	Env-A 1211.15 NOx Emission Limitation 40 CFR 60.44a (a) (1) and (2) and (d)(1) and 40 CFR 60.46a (b) and (c) NSPS for NOx
18.	SR5	If this device has excess emissions[11] of SO_2 or NOx in any calendar year, then PSNH shall perform the following as required by 40 CFR 77: a. Submit a proposed offset plan; b. Pay without demand the penalty including interest on that penalty; and c. Comply with an approved offset plan.	40 CFR 72.9 (e) Excess Emission Requirements
19.	SR5	Emission Standards for CO CO emissions shall be limited to (regardless of fuel type): a. 0.10 lb/MMBTU of heat input[12] based on a 24-hour block average when operating at 50% load or greater; a. 72.0 lb/hr; and	40 CFR 52.21(j)(3)

[10] This Condition has been streamlined to cover various state and federal air regulations. Compliance with the 0.075 lb/MMBTU NOx emission limit will also ensure compliance with:
   a. 40 CFR 60.44a (a) (1) and (2) and (d)(1) (NSPS Subpart Da) limit NOx emissions to 0.6 lb/MMBTU and 1.6 lb/megawatt-hour gross energy output. Compliance to be determined on a 30-day rolling average basis.

[11] Pursuant to 40 CFR 72.2, "excess emissions" are defined as any tonnage of SO_2 emitted in a calendar year that exceeds the Federal Acid Rain emission limitation and as any tonnage of NOx emitted in a calendar year that exceeds the annual tonnage equivalent of the Federal NOx Acid Rain emission limitation taking into account the unit's heat input for the year.

[12] This Condition has been streamlined to cover various state and federal air regulations. The CO emission limit of 0.10 lb/MMBTU is based on achieving Best Available Control Technology (BACT) emission levels as required under the federal Prevention of Significant Deterioration (PSD) Program requirements contained in 40 CFR 52.21(j)(3). Compliance with the CO BACT emission limit will also ensure compliance with:
   a. 40 CFR 63.7500(a)(1) (MACT Subpart DDDDD) limits CO emissions to 400 parts per million by volume (ppm_v) on a dry basis corrected to 7% oxygen in any consecutive 30-day period. This is equivalent to 0.40 lb/MMBTU for wood firing and 0.42 lb/MMBTU for coal firing.

Table 5 –Operational and Emission Limitations			
Item #	**Applicable Emission Unit**	**Applicable Requirement**	**Regulatory Basis**
		b. 315.4 tons per consecutive 12-month period.	
20.	SR5	Emission Standards for VOCs VOC emissions shall be limited to (regardless of fuel type): a. 0.005 lb/MMBTU of heat input based on a 24-hour calendar day average; b. 3.6 lb/hr; and c. 15.8 tons per consecutive 12-month period.	Permit Application #FY04-0331
21.	SR5	Emission Standard for Hydrogen Chloride PSNH shall not cause or allow emissions of hydrogen chloride (HCl) in excess of 0.02 lb/MMBtu of heat input[13], regardless of fuel type.	40 CFR 63 Subpart B (Case-by-Case MACT)
22.	SR5	Emission Standard for Mercury PSNH shall not cause or allow emissions of mercury in excess of 0.000003 lb/MMBtu of heat input[14], regardless of fuel type.	40 CFR 63 Subpart B (Case-by-Case MACT)
23.	SR5	PSNH shall comply with the applicable Federal Acid Rain Program provisions.	40 CFR 72, 73, 76, and 77 Acid Rain Provisions
24.	SR5	a. The secondary coal crusher shall be fully enclosed in an aboveground building to reduce fugitive emissions. b. If PSNH observes visible emissions from the coal crusher enclosure or observes breaks in the structure of the enclosure that results in visible emissions, PSNH shall take appropriate actions to control fugitive emissions. c. PSNH shall use best management practices to control fugitive particulate emissions from the process equipment, unloading area, and the fuel storage areas.	Env-A 1002.04 Fugitive Dust
25.	SR5	Accidental Release Program Requirements The quantities of regulated chemicals stored at the facility are less than the applicable threshold quantities established in 40 CFR 68.130. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities: a. Identify potential hazards which result from such releases using appropriate hazard assessment techniques; b. Design and maintain a safe facility; c. Take steps necessary to prevent releases; and d. Minimize the consequences of accidental releases that do occur.	40 CFR 68 and 1990 CAAA Section 112(r)(1) Accidental Release Program Requirements
26.	SR5	PSNH shall comply with the asbestos requirements of Env-A 1800 and 40 CFR 61.145 during demolition and/or renovation.	40 CFR 61 Subpart M, Env-A 504.01(d) and Env-A 1800

[13] Compliance with these standards to be determined through performance stack testing.
[14] Compliance with these standards to be determined through performance stack testing.

Table 5 –Operational and Emission Limitations			
Item #	**Applicable Emission Unit**	**Applicable Requirement**	**Regulatory Basis**
			Asbestos Management and Control
27.	SR5-PC1	Operating Conditions for the SNCR System To achieve the NOx emission requirements specified in this permit, PSNH shall maintain and operate the SNCR as necessary. a. The CEMS shall be used to determine compliance with the NOx emissions rate at the stack outlet. b. The SNCR system uses a urea solution to reduce NOx emissions. c. Ammonia slip from the SNCR system shall not exceed 10 ppmvd @ 7% O_2. Ammonia slip shall be measured using a CEM. d. The normal injection rate of urea shall be established during the start-up period. PSNH may vary the injection rate of urea in a manner that is adequate to meet the NOx emission limitations. e. Within 180 days of initial startup of the SNCR system, PSNH shall submit for DES approval an alternate method for monitoring ammonia slip in the event that the ammonia CEM goes out of service.	
28.	SR5	General Compliance Requirements PSNH: a. Shall comply with the 40 CFR 63 Subpart DDDDD emission limits (including operating limits) and work practice standards at all times, except during periods of startup shutdown or malfunction; b. Must always operate and maintain the affected source, including air pollution control and monitoring equipment in a manner consistent with good air pollution control practices; c. May demonstrate compliance with applicable emissions rates for hydrogen chloride (HCl), and/or mercury using fuel analysis if the emission rates calculated according to Table 6 Item 11 are less than the applicable emission limit. Otherwise, PSNH shall demonstrate compliance using performance testing; d. Shall develop a site-specific testing plan according to Table 6, Item 7 if PSNH demonstrates compliance with any applicable emission limit through performance testing; e. Shall develop and implement a written Start-up, Shutdown, Malfunction Plan (SSMP) according to the specifications in Table 8, Item 4; f. Shall not operate the affected source above the applicable maximum operating limit or below the applicable minimum operating limits except during periods of start-up, shut down, or malfunction; g. Shall operate in accordance with the SSMP during periods of start-up, shut down, and malfunction; h. Shall not be subject to the operating limits of 40 CFR 63 Subpart DDDDD during performance tests; i. Shall consider any operation above established maximum or below minimum operating limits a deviation of established operating limits; and	40 CFR 63 Subpart B (Case-by-Case MACT)

Table 5 –Operational and Emission Limitations			
Item #	**Applicable Emission Unit**	**Applicable Requirement**	**Regulatory Basis**
		j. Shall demonstrate initial compliance with the emission limits and work practice standards no later than 180 days after startup of the affected source.	
29.	SR5	Operating Limits - Continuous Emission Monitoring System PSNH must install, calibrate, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide (CO) and diluent gas according to the following: a. PSNH shall install, calibrate, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures specified in Table 5, Item 29, Table 6, Item 12, and Table 7, Items 63 and 67. b. Each CEMS must be installed, calibrated, operated and maintained according to Performance Specification (PS) 4A of 40 CFR 60 Appendix B, and according to the site specific monitoring plan developed in accordance with Table 6, Item 12, and Table 8, Item 6; c. Install the sampling probe or other interface of the CEMS at a measurement location such that the measurement is representative of control of the exhaust emissions (e.g. downstream of the last control device); d. PSNH shall operate in accordance with the site-specific SSMP during periods of startup, shutdown, and malfunction; e. PSNH shall conduct a performance evaluation for each CEMS in accordance with the requirements in §63.8 and PS 4A of 40 CFR 60 Appendix B; f. Each CEMS must complete a minimum of one cycle of operation (sampling, analysis and data recording) for each successive 15-minute period; g. The CEMS data must be reduced in accordance with 40 CFR 63.8(g)(2); and h. PSNH shall develop and implement a written startup, shutdown, malfunction plan (SSMP) according to §63.6(e)(3) and Table 8, Item 4.	40 CFR 63 Subpart B (Case-by-Case MACT) 40 CFR 60.8
30.	SR5	Operating Limits - Solid Sorbent Injection System PSNH shall install, maintain, calibrate, and operate a solid sorbent injection system according to Table 7, Item 64. PSNH shall maintain the minimum sorbent injection rate at or above the operating levels established during the performance test according to Table 6, Item 13, and §63.7530(c). Minimum sorbent injection rate means 90% of the lowest test-run average sorbent flow rate measured according to Table 6, Item 13 during the most recent performance test demonstrating compliance with the applicable emissions limits for HCl and mercury. PSNH shall install, calibrate, operate, and maintain a device to measure the sorbent injection rate according to the following: a. Locate the device in a position that provides a representative measurement of the total sorbent injection rate; b. Install and calibrate the device in accordance with the manufacturer's	40 CFR 63 Subpart B (Case-by-Case MACT)

Table 5 –Operational and Emission Limitations			
Item #	**Applicable Emission Unit**	**Applicable Requirement**	**Regulatory Basis**
		procedures and specifications or other calibration methods as approved by DES; and c. During each planned outage, calibrate the device in accordance with the manufacturer's specifications or other calibration methods as approved by DES.	
31.	SR5	Operating Limits - Continuous Opacity Monitoring System To comply with the opacity emission limit specified in Table 5, Item 8, PSNH shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) according to the following: a. The COMS must be installed, operated, and maintained according to PS1 of 40 CFR part 60, Appendix B; b. Install the sampling probe or other interface of the CMS at a measurement location such that the measurement is representative of control of the exhaust emissions (e.g. downstream of the last control device); c. Shall operate in accordance with the site-specific SSMP during periods of startup, shutdown, and malfunction; d. Conduct a performance evaluation of each COMS according to the requirements on §63.8 and according to PS1 of 40 CFR part 60, Appendix B; e. Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period; f. The COMS data must be reduced as specified in §63.8(g)(2); g. Procedures and acceptance criteria for operating and maintaining the COMS must be included in the site-specific monitoring plan, as specified in Table 8, Item 10, and Table 6, Item 12; and h. Operate and maintain the COMS in accordance with the site-specific monitoring plan as specified in Table 8, Items 8 and 10.	40 CFR 60 appendix B 40 CFR 63 Subpart B (Case-by-Case MACT)
32.	SR5	Operating Limits - Fuel Type/Mixture If PSNH elects to demonstrate compliance with the HCl and/or mercury emissions limits through fuel analysis, PSNH shall: a. Conduct fuel analyses according to Table 6, Items 9 and 10; b. Determine the fuel mixture that would result in the maximum chlorine and mercury fuel input during the initial performance test according to the specifications in Table 6, Item 9; c. Maintain the fuel type and/or fuel type mixture such that the HCl and mercury emission rates calculated according to the specifications in Table 6, Items 9 and 10 are less than the applicable emission limits specified in Table 5.	40 CFR 63 Subpart B (Case-by-Case MACT)
33.	SR5	PSNH shall shutdown and render the existing Unit #5 boiler inoperable upon startup of the NWPP Boiler. Such actions shall include, but not be limited to, cutting the main steam line from the existing Unit #5 boiler to its associated the turbine/generator. Any future effort to activate the Unit #5 Boiler will make PSNH subject to nonattainment New Source Review	

Table 5 –Operational and Emission Limitations			
Item #	**Applicable Emission Unit**	**Applicable Requirement**	**Regulatory Basis**
		requirements.	

B. Initial Compliance Demonstration Requirements

PSNH shall demonstrate initial compliance with the conditions specified in Table 5 no later than 180 days after startup of the new affected source. PSNH shall perform the monitoring and/or testing indicated in Table 6 below:

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
1.	SR5	SO_2 and NOx	a. Pursuant to 40 CFR 60.46a (e), after the initial performance test required under 40 CFR 60.8, PSNH shall determine compliance with the SO_2 emission limitations and percentage reduction requirements under 40 CFR 60.43a and NOx emission limitations under 40 CFR 60.44a based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both SO_2 and NOx and a new percentage reduction for SO_2 are calculated to show compliance with the standards. b. Pursuant to 40 CFR 60.46a (f), for the initial performance test required pursuant to 40 CFR 60.8, PSNH shall determine compliance with the SO_2 emission limitations and percent reduction requirements under 40 CFR 60.43a and NOx emission limitations under 40 CFR 60.44a based on the average emission rates for the first 30 successive boiler operating days. c. PSNH shall schedule the initial performance test so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup of the facility. d. Pursuant to 40 CFR 60.46a (g), PSNH shall determine compliance by calculating the arithmetic average of all hourly emission rates	For 30 successive boiler operating days and initial performance test within 60 days after achieving maximum production rate, but no later than 180 days after initial startup	40 CFR 60.46a (e), (f), (g), and (h) Subpart Da requirements

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			for SO_2 and NOx for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NOx only), or emergency conditions (SO2 only). Compliance with the percentage reduction requirement for SO2 is determined based on the average inlet and average outlet SO2 emission rates for the 30 successive boiler operating days. e. Pursuant to 40 CFR 60.46a (h), if PSNH has not obtained the minimum quantity of emissions data as required pursuant to 40 CFR 60.47a, EPA/DES may determine compliance with the emission requirement for 40 CFR 60.43a and 60.44a for the day on which the 30 day period ends by following the applicable procedures of 40 CFR 60 Appendix A Method 19, Section 7.		
2.	SR5	Performance tests for SO_2, NOx, Opacity	a. Pursuant to 40 CFR 60.8, PSNH shall conduct initial performance tests. b. In conducting the performance tests required by 40 CFR 60.8, PSNH shall use the reference methods and procedures in 40 CFR 60 Appendix A or the methods and procedures listed in 40 CFR 60.48a (e), except as provided in 40 CFR 60.8 (b), which states that the performance tests shall be conducted and data reduced in accordance with the test methods and procedures of each applicable subpart unless EPA: i) Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology; ii) Approves the use of an equivalent method; iii) Approves the use of an alternative method, the results of which has been determined to be adequate for indicating whether a specific source is in compliance; iv) Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to EPA's satisfaction that the facility is in compliance with the standard; or v) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.		40 CFR 60.48a (a) and 60.8 (a), (b), and (c)

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			vi) The requirements of 40 CFR 60.8 (b) shall not be construed to abrogate EPA's authority to require testing under Section 114 of the Clean Air Act. c. Pursuant to 40 CFR 60.48a (a), 40 CFR 60.8(f) does not apply to the performance tests for SO_2 and NOx. d. Pursuant to 40 CFR 60.8 (c), PSNH shall conduct the performance tests under such conditions as specified by EPA and/or DES based on representative performance of the facility.		
3.	SR5	Particulate Matter and Opacity	PSNH shall determine compliance with the particulate matter standard of 40 CFR 60.42a as follows: a. The dry basis F factor (O2) procedures of Method 19 shall be used to compute the PM emission rate; b. For the PM concentration, Method 5 shall be used at facilities without wet FGD systems and Method 5 B shall be used after wet FGD systems. c. The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 (dscm) (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160±14°C (320±25°F). d. For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points. e. PSNH shall use Method 9 and the procedures of 40 CFR 60.11 to determine opacity.		40 CFR 60.48a (b)

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
4.	SR5	SO_2	PSNH shall determine compliance with the SO2 standards of 40 CFR 60.43a as follows: a. The percent of potential SO_2 emissions (%Ps) to the atmosphere shall be computed using the following equation: $\%Ps = [(100 - \%Rf) * (100 - \%Rg)]/100$ where: %Ps = percent potential SO_2 emissions (%) %Rf = percent reduction from fuel pretreatment (%) %Rg = percent reduction by SO_2 control system (%). b. The procedures in Method 19 may be used to determine percent reduction (%Rf) of sulfur by such processes as fuel pretreatment (e.g., physical coal cleaning), coal pulverizers, and bottom and flyash interactions. This determination is optional. c. The procedures in Method 19 shall be used to determine the percent SO_2 reduction (%Rg) of any SO_2 control system. Alternatively, a combination of an "as-fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO_2 control device and the average SO_2 input rate from the "as-fired" fuel analysis for 30 successive boiler operating days. d. The appropriate procedures in Method 19 shall be used to determine the emission rate. e. The CEMs shall be used to determine the concentrations of SO_2 and CO_2 or O_2.		40 CFR 60.48a (c)
5.	SR5	NOx	PSNH shall determine compliance with the NOx standard in 40 CFR 60.44a as follows: a. The appropriate procedures in Method 19 shall be used to determine the emission rate. b. The CEMs shall be used to determine the concentrations of NOx and CO_2 or O_2.	Daily (for 30-day Rolling Average)	40 CFR 60.48a(d)

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
6.	SR5	Performance testing for HCl, Mercury, CO, and PM	General Performance Test Conditions PSNH shall demonstrate compliance with the emission limitations specified in Table 5, and establish operating limits based on the initial compliance demonstration performance tests. PSNH shall conduct the initial compliance performance test at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, and mercury. These requirements could result in the need to conduct more than one performance test. The performance test shall not be conducted during periods of startup, shutdown, or malfunction, and shall consist of three separate test runs for each performance test, with each run lasting at least 1 hour.		Env-A 802 40 CFR 63 Subpart B (Case-by-Case MACT)
7.	SR5		Site-Specific Test Plan - Performance Test Protocol a. PSNH shall submit to DES and EPA a site-specific test plan for approval at least 60 calendar days before the initial performance test is scheduled to begin. The following information shall be included in the site-specific test plan: i. Facility name, address, telephone number and contact name; ii. Name of the contractor testing company, company contact and telephone number; iii. A complete program description; iv. Test schedule; v. A description of the device to be tested; vi. A description of the planned operational mode of the device during the testing period; vii. A list of process data to be collected including dry sorbent injection rate, fuel type, fuel feed rate, pressure drop across the bag house, along with the frequency of data collection; viii. Test methods to be used; ix. Calibration methods and sample data sheets; x. Sample collection and analysis methods; xi. Description of the standard operating procedures (SOPs) for laboratory analysis of samples; and		Env-A 802 40 CFR 60.8(d), 40 CFR 63 Subpart B (Case-by-Case MACT)

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			xii. Quality assurance procedures specific to the testing. b. In the event PSNH is unable to conduct the performance test on the date specified in the notification requirement of this section, due to unforeseeable circumstances beyond his/her control, PSNH shall notify DES and/or EPA within 5 days prior to the scheduled performance test date and specify the date when the performance test is rescheduled. c. At least 15-days prior to commencement of testing, the Permittee, and any contractor that may be retained for the testing shall participate in a pretest conference with a DES and/or EPA representative. d. DES and/or EPA representatives shall observe the emission testing. Observation of the performance test by EPA is optional and at EPA's discretion. Upon commencement of any performance testing, the testing shall not be aborted without approval of the on-site DES and/or EPA representative. e. PSNH shall provide sampling ports, platforms, and access in accordance with 40 CFR Part 60.8(d).		

Table 6: Initial Compliance Demonstration Requirements

<table>
<tr><th>Item No.</th><th>Applicable Emission Unit</th><th>Parameter</th><th>Method of Compliance</th><th>Frequency of Method</th><th>Regulatory Cite</th></tr>
<tr><td>8.</td><td>SR5</td><td></td><td>a. <u>Performance Stack Testing</u>
PSNH shall demonstrate compliance with the emission limitations specified in Table 5 through performance testing. Stack sampling analysis shall be conducted according to the following:
<table>
<tr><th>Parameter</th><th>40 CFR 60 Appendix A Test Method</th></tr>
<tr><td>Sampling port location & number of traverse points</td><td>Method 1</td></tr>
<tr><td>Stack gas velocity and volumetric flow-rate</td><td>Method 2, 2F or 2G</td></tr>
<tr><td>Oxygen (O_2) and carbon dioxide (CO_2)</td><td>Method 3A or 3B or ASME PTC Part 10(1981)</td></tr>
<tr><td>Stack gas moisture content</td><td>Method 4</td></tr>
<tr><td>Particulate matter (PM) concentration</td><td>Method 5 or 17</td></tr>
<tr><td>Opacity</td><td>Method 9 AND COMS</td></tr>
<tr><td>Carbon monoxide (CO)</td><td>Method 10, 10A, or 10B</td></tr>
<tr><td>Hydrogen chloride (HCl) concentration</td><td>Method 26 or 26A</td></tr>
<tr><td>Mercury (Hg) concentration</td><td>Method 29, 101A, or ASTMD6784-02</td></tr>
<tr><td>Conversion of emission concentration to lb/MMBtu</td><td>Method 19 F-factor</td></tr>
</table>
b. PSNH must notify EPA and DES at least 60-days prior to testing, if alternative test methods will be used.</td><td></td><td>Env-A 802,
40 CFR 60, Appendix A
61 Appendix B,
40 CFR 63 Subpart B (Case-by-Case MACT)</td></tr>
<tr><td>9.</td><td>SR5</td><td></td><td><u>Fuel testing</u>
PSNH shall develop and submit a site-specific fuel analysis plan to DES for review and approval no later than 180 days before the date chosen to demonstrate compliance. The plan must include:
a. Identification of all fuel types anticipated to be burned in the unit that have the highest concentration of chlorine, and/or mercury;
b. For each fuel type, notification of whether PSNH or the fuel supplier will conduct the fuel analysis;
c. For each fuel type, a detailed description of</td><td></td><td>40 CFR 63 Subpart B (Case-by-Case MACT)</td></tr>
</table>

Table 6: Initial Compliance Demonstration Requirements

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			the sample location and specific procedures to be used for collecting and preparing the composite samples; d. Samples should be collected at locations that most accurately represents the fuel type at a point prior to the mixing of dissimilar fuel types; e. For each fuel type, the analytical methods, with the expected minimum detection limits to be used for the measurement of chloride and mercury; f. Detailed description of the methods and procedures of collection and analysis if alternative analytical methods will be used; g. If fuel analyses will be performed by the supplier, the fuel supplier must use the analytical methods specified below; h. Fuel sampling and analysis shall be conducted according to the following:		

Parameter	Test Method
Collect fuel	Table 6, Item 10, ASTM D2234M-03 or D6323-98
Composite fuel	Table 6, Item 10
Prepare composited fuel	SW846-3050B, ASTM D2013-01, or D5198-92
Determine heat content	ASTM D5865-03a or E711-87
Determine moisture content	ASTM D3173-02 or E871-82
Chlorine concentration	SW846-9250 or ASTM E776-87
Mercury (Hg) concentration	ASTM D3684-01 or SW846-7471A

Convert concentrations into units of pounds of pollutant per MMBtu (lb/MMBtu); and

Establish the maximum fuel pollutant input levels as follows:

$$P_{input} = \sum_{i=1}^{n} (X_i)(Q_i)$$

Where:

P_{input} = Maximum amount of pollutant, *i*, entering the boiler in lb/MMBtu;

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			X_i = Average concentration of pollutant in fuel type, *i*, in lb/MMBtu; Q_i = Fraction of the total heat input from fuel type, *i*, based on the fuel mixture that has the highest content of pollutant. If multiple fuel types are not burned, $Q_i = 1$. *n* = Number of different fuel types burned in the boiler for the mixture that has the highest content of pollutant.		
10.	SR5		Fuel Composite Sampling Requirements a. Collection of fuel samples must be conducted for each fuel type burned in the boiler during each performance test. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing other dissimilar fuel types. b. If sampling from a feed belt or conveyer, a minimum of 3 composite fuel samples for each fuel type shall be collected as follows: i. Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum of two pounds of sample. All the material (fines and course) in the full cross-section must be collected. Transfer the sample to a clean plastic bag. ii. Perform the sampling as specified in (i) above a minimum of twice more at approximately equal intervals during the testing period and continue on to d below; c. If sampling from a fuel pile or truck, select a minimum of 5 sampling locations uniformly spaced over the surface of the pile as follows: i. At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, ii. Transfer all samples to a clean plastic bag; d. At the completion of the 1-hour test run, thoroughly mix and pour the entire sample from each grab sample onto a clean plastic sheet; e. Break samples pieces larger than 3 inches into smaller sizes; f. Make a pie shape out of the entire composite		40 CFR 63 Subpart B (Case-by-Case MACT)

Table 6: Initial Compliance Demonstration Requirements

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
			sample and subdivide into 4 equal parts; g. Separate one of the quarter samples as the first subset. If this subset is too large for grinding, repeat (f) above with the quarter sample and obtain a one-quarter sub-sample for analysis. Place in a clean plastic bag, and send to the laboratory for the appropriate analysis.		
11.	SR5		Fuel Based Compliance Alternative If PSNH has chosen to demonstrate compliance with the emission limitations for mercury, and/or HCl specified in Table 5 using fuel analysis, analysis for each type of fuel burned in the boiler must be performed according to Table 6, Item 9. The 90th percentile confidence level fuel pollutant concentration of the solid fuels analyzed must be determined as follows: $$P_{i90} = x_i + [t_{n-1} * s]$$ Where: P_{i90} = 90th percentile confidence of pollutant i, lb/MMBtu; x_i = Average concentration of pollutant in fuel type, i, in lb/MMBtu; t_{n-1} = t-distribution at n-1 degrees of freedom obtained from a t-distribution table at 0.1 level of significance; s = standard deviation of the pollutant concentrations measured in the fuel samples in lb/MMBtu; n = the number of samples analyzed to produce the average concentration, x_i. The emission rate for HCl shall be calculated as follows: $$HCl = \sum_{i=1}^{n} (P_{i90} \times Q_i \times 1.028)$$ Where: HCl = HCl emission rate in lb/MMBtu; P_{i90} = 90th percentile confidence of pollutant i, (lb/MMBtu) as calculated above; Q_i = Fraction of total heat input from fuel type i, based on the fuel mixture that has the highest content of chlorine. If multiple fuel types are not burned, $Q_i = 1$; 1.028 = molecular weight ratio of HCl to chlorine; n = the number of samples analyzed.		40 CFR 63 Subpart B (Case-by-Case MACT)

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			The emission rate for mercury shall be calculated as follows: $$Hg = \sum_{i=1}^{n} \left(P_{i90} \times Q_i \right)$$ Where: Hg = Mercury emission rate in lb/MMBtu; P_{i90} = 90th percentile confidence of pollutant i, (lb/MMBtu) as calculated above; Qi = Fraction of total heat input from fuel type i, based on the fuel mixture that has the highest content of mercury. If multiple fuel types are not burned, $Qi = 1$; n = the number of different fuel types in the mixture.		
12.	SR5		<u>Site-Specific Monitoring Plan - Continuous Monitoring System</u> PSNH shall develop and submit a site-specific monitoring plan for the continuous monitoring system (CMS) for carbon monoxide, opacity, and diluent monitors. The site-specific monitoring plan shall: a. Be submitted to EPA and DES for review and approval at least 60-days before the initial performance evaluation of the CMS; b. Install sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (on or downstream of the last control device); c. Contain performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; d. Implement performance evaluation procedures and acceptance criteria for CEMS for ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(i), and PS 4A of 40 CFR part 60, Appendix A; e. Implement performance evaluation procedures and acceptance criteria for COMS for ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(ii), and PS 1 of 40 CFR part 60, Appendix A;	At least 60-days before the initial performance evaluation of the CMS	Env-A 808, 40 CFR 63.8, 60 App A 40 CFR 63 Subpart B (Case-by-Case MACT)

Table 6: Initial Compliance Demonstration Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			f. Implement ongoing recordkeeping and reporting procedures in accordance with the requirements in §63.10(c), (e)(1), and (e)(2)(i); g. Develop and implement quality assurance procedures in accordance with the general requirements of §63.8(d). At a minimum, the plan must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit; h. Conduct a performance evaluation of each CMS in accordance with the site specific monitoring plan; i. Must operate and maintain the CMS in continuous operation in accordance with the site-specific monitoring plan; and j. CMS data must be reduced according to §63.8(g)(2).		
13.	SR5		Solid Sorbent Injection PSNH shall establish a site-specific minimum sorbent injection rate operating limitation using data from the injection rate monitors and the HCl performance test as follows: a. Collect dry sorbent injection rate data every 15 minutes during the entire period of the initial performance test; b. Determine the average sorbent injection rate for each individual test run in the three-run performance test by computing the average of all 15-minute readings taken during each test run.		40 CFR 63 Subpart B (Case-by-Case MACT)
14.	SR8	Opacity from Coal Crusher	The owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.252 using Method 9 and the procedures in 40 CFR 60.11 to determine opacity.	During Performance Tests	§40 CFR 60.254(b)(2) and 40 CFR 60.8 NSPS for Coal Preparation Plants

C. Monitoring/Testing Requirements

PSNH is subject to the monitoring/testing requirements as contained in Table 7 below:

Table 7 – Monitoring and Testing Requirements

Item No.	Applicable Emission Unit	Parameter	Method of Compliance	Frequency of Method	Regulatory Cite
1.	SR5	lb NOx/ megawatt-hour gross heat output	PSNH shall calculate NOx emissions by multiplying the average hourly NOx output concentration, measured according to the provisions of 40 CFR 60.47a (c) using the CEMS, by the average hourly flow rate, measured according the provisions of 40 CFR 60.47a (l) using a continuous flow monitoring system, and divided by the average hourly gross energy output, measured according to the provisions of 40 CFR 60.47a (k) using a wattmeter.	Hourly	40 CFR 60.46a (), (i)
2.	SR5	Opacity	To measure opacity, PSNH shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system.	Continuously	40 CFR 60.47a (a), Env-A 808.03(b)
3.	SR5	SO_2	To measure SO_2 emissions, PSNH shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system as follows: a. SO_2 emissions are monitored at both the inlet and outlet of the SO_2 control device; and b. An "as-fired" fuel monitoring system meeting the requirements of US EPA Method 19 may be used to determine potential SO_2 emissions in place of the CEMS at the inlet to the SO_2 control device.	Continuously	40 CFR 60.47a (b)
4.	SR5	NOx	a. To measure NOx emissions, PSNH shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system; or b. If PSNH has installed a NOx CEMs to meet the requirements of 40 CFR 75 and is continuing to meet the ongoing requirements of 40 CFR 75, that CEMS may be used to meet the requirements of 40 CFR 60 Subpart Da, except that PSNH shall also meet the requirements of 40 CFR 60.49a (reporting requirements). Data reported to meet the requirements of 40 CFR 60.49a shall not include data substituted using the missing data procedures in 40 CFR 75 Subpart D, nor shall the data have been bias adjusted according to the procedures of 40 CFR 75.	Continuously	40 CFR 60.47a (c)
5.	SR5	O_2 or CO_2	To measure the O_2 or CO_2 content of the flue gas at each location where SO_2 or NOx emissions are monitored, PSNH shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system	Continuously	40 CFR 60.47a (d)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
6.	SR5	CEMS	The SO_2, NOx, O_2 or CO_2 continuous monitoring system shall be operated and data recorded during all periods of operation, including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.	Continuously except as specified by the regulation	40 CFR 60.47a (e)
7.	SR5	CEM Minimum Data Requirements	PSNH shall obtain emissions data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, PSNH shall supplement emission data with other monitoring systems approved by EPA and/or DES or the reference methods and procedures specified in 40 CFR 60.47a (h) or the alternatives listed in 40 CFR 60.47a (j).	At least 18 hours in at least 22 out of 30 consecutive boiler operating days and as specified by regulation	40 CFR 60.47a (f)
8.	SR5	CEM Minimum Data Requirements for 1-hour Averages	The 1-hour averages required under 40 CFR 60.13 (h) are expressed in ng/J (lb/MMBtu) heat input and used to calculate the average emission rates under 40 CFR 60.46a. The 1-hour averages are calculated using the data points required under 40 CFR 60.13 (b). At least two data points must be used to calculate the 1-hour averages.	As specified by regulation	40 CFR 60.47a (g)
9.	SR5	Methods to Supplement CEM Data Requirements	When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in 40 CFR 60.47a (f), the owner or operator shall use the reference methods and procedures as specified in 40 CFR 60.47a (h). Acceptable alternative methods and procedures are given in 60.47a (j).	As necessary to supplement CEM data	40 CFR 60.47a (h)
10.	SR5	Methods and Procedures for Performance Evaluations and Calibration Checks	PSNH shall use the methods and procedures of 40 CFR 60.47a (i) to conduct monitoring system performance evaluations pursuant 40 CFR 60.13 (c) and calibration checks pursuant to 40 CFR 60.13 (d). Acceptable alternative methods and procedures are listed in 40 CFR 60.47a (j).	During Performance Evaluations and Calibration Checks	40 CFR 60.47a (i)
11.	SR5	Gross Heat Output and Steam Flow	PSNH shall use the procedures specified below to determine gross output to demonstrate compliance with the output-based standard of 1.6 lb NOx/MW-hr pursuant to 40 CFR 60.44a (d)(1): a. PSNH shall install, calibrate, maintain, and operate a wattmeter. PSNH shall measure and record the gross electrical output in megawatt-hour on a continuous basis.	Continuously	40 CFR 60.47a (k)
12.	SR5	Exhaust Gas Flow	a. PSNH shall install, certify, operate and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B and Procedure 1	Continuously	40 CFR 60.47a (l) and (m)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			of Appendix F of 40 CFR 60 Subpart Da. PSNH shall record the output of the system for measuring the flow of exhaust gases discharged to the atmosphere or b. Alternatively, PSNH may use data from a continuous flow monitoring system certified according to the requirements of 40 CFR 75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR 75.21, and validated according to 40 CFR 75.23.		
13.	SR5	Particulate Matter	Pursuant to 40 CFR 60.48a (e), PSNH may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.48a: a. For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed an average temperature of 160 ºC (320 ºF). The procedures of Secs. 2.1 and 2.3 of Method 5B may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets. b. The F_c factor (CO_2) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of Sec. 60.46(d)(1). The CO_2 shall be determined in the same manner as the O_2 concentration.	As necessary	40 CFR 60.48a(e)
14.	SR5	NOx Emissions	PSNH shall install, certify, operate and maintain, a NOx-diluent continuous emission monitoring system (consisting of a NOx pollutant concentration monitor and an O_2 or CO_2 diluent gas monitor) with an automated data acquisition and handling system for measuring and recording NOx concentration (in ppm) averaged on an hourly and 24-hour calendar day basis, O_2 or CO_2 concentration (in percent O_2 or CO_2) and NOx mass emission rate (in lb/MMBTU) averaged on an hourly, 24-hour calendar day, and annual basis for each unit. PSNH shall account for total NOx emissions, both NO and NO_2, either by monitoring for both NO and NO_2 or by monitoring for NO only and adjusting the emissions data to account for NO_2. PSNH shall measure and record NOx emissions in lb/hr averaged for one-hour and a 24-hour calendar day, and tons/consecutive 12-month period. PSNH shall calculate hourly, quarterly, and annual NOx emission rates (in lb/MMBTU) by combining the NOx concentration (in ppm), diluent concentration (in percent CO_2), and	Continuously	Env-A 808.02 (a)(1) and 40 CFR 75.10(a)(2), 75.12, and Env-A 1211.21(a)(b)(c)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			percent moisture according to the procedures in 40 CFR 75 Appendix F.		
15.	SR5	NOx Mass Emissions	PSNH shall calculate hourly NOx mass emissions (in lbs) by multiplying the hourly NOx emission rate (in lbs/MMBTU) by the hourly heat input rate (in MMBTU/hr) and the unit or stack operating time. PSNH shall also calculate quarterly and cumulative year-to-date NOx mass emissions and (in tons) by summing the hourly NOx mass emissions according to the procedures in 40 CFR 75 Appendix F Section 8.	Hourly, quarterly, and cumulative year-to-date	40 CFR 75.71, and 75.72 and Env-A 3212
16.	SR5	Ozone Season NOx Emission Rate and NOx mass emissions	PSNH, when required, shall determine the ozone season NOx emission rate (in lb/MMBTU) by dividing ozone season NOx mass emissions (in lbs) by heat input. PSNH shall also calculate cumulative NOx mass emissions for the ozone season (in tons) by summing the hourly NOx mass emissions according to the procedures in 40 CFR 75 Appendix F Section 8.	During the ozone season	Env-A 3212.01 and 40 CFR 75.75(b) and 75.72
17.	SR5	Sulfur Content of Natural Gas	Documentation from fuel supplier or conduct testing to determine the sulfur content of gaseous fuels.	As requested by DES and/or EPA	Env-A 806.03
18.	SR5	Sulfur Content of Bituminous Coal	Documentation from the fuel supplier or testing (in accordance with Method ASTM D 4239-00) that certifies the weight-percent of sulfur for each delivery of bituminous coal. The sulfur content shall be expressed in pounds of sulfur per million BTU gross heat content.	Each delivery of fuel	Env-A 806.04
19.	SR5	Fuel Sampling	In order to determine compliance, the division shall sample or require sampling or re-sampling of any fuel. Such sampling, which shall include compositing, testing, and analyzing fuel samples, shall be conducted in accordance with the most recent ASTM methods or the methodology specified in Env-A 800 or EPA approved methods.	As requested by DES	Env-A 1610.01 Fuel Analysis for Compliance.
20.	SR5	SO_2 Emissions	PSNH shall install, certify, operate and maintain, an SO_2 CEMS automated data acquisition and handling system for measuring and recording SO_2 concentration (in ppm) averaged on an hourly and 24-hour calendar day basis, volumetric gas flow (in scfh), and SO_2 mass emissions (in lb/hr averaged over one hour and each 24-hour calendar day, and tons/consecutive 12-month period and tons/calendar year) for each unit. PSNH shall also measure and record the SO_2 emission rate (in lb/MMBTU) averaged over each 24-hour calendar day. PSNH shall demonstrate compliance with the State Acid	Continuously	Env-A 808.02 (a)(1) and 40 CFR 75.10 (a)(1)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			Rain Program emission caps by using the CEMS data.		
21.	SR5	CO_2 Emissions	PSNH shall install, certify, operate and maintain, a CO_2 CEMS automated data acquisition and handling system. PSNH shall measure and record CO_2 emissions in lb/hr over each 24-hour calendar day and CO_2 concentration in percent on an hourly average and over each 24-hour calendar day.	Continuously	40 CFR 75.10(a)(3), Env-A 808.02(a)(1)
22.	SR5	Stack volumetric flow rate	PSNH shall install, certify, operate and maintain, a CEMS automated data acquisition and handling system to measure and record stack volumetric flow rate (in kscfm) on an hourly average and over each 24-hour calendar day.	Continuously	40 CFR 75, Env-A 808.02(a)(1)
23.	SR5	Heat Input Rate	PSNH shall calculate the heat input rate (in MMBTU/hr) for every hour or part of an hour any fuel is combusted following the procedures in 40 CFR 75 Appendix F.	Hourly	40 CFR 75.10(c)
24.	SR5	Net Electrical Output	PSNH shall monitor net electrical output.	Annually	40 CFR 75
25.	SR5	Ozone Season Heat Input	PSNH shall calculate ozone season heat input for purposes of providing data needed for determining allocations by summing each unit's hourly heat input determined according to the procedures in 40 CFR 75 for all hours in which the unit operated during the ozone season	Hourly during ozone season	Env-A 3212.01 and 40 CFR 75.75(a)
26.	SR5	Operating Hours	PSNH shall maintain a log of the operating hours of the NWPP boiler.	Continuously	Env-A 903.03(b)
27.	SR5	Opacity	PSNH shall install, certify, operate and maintain, a continuous opacity monitoring system with the automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) for each 6-minute period for each unit. As necessary, PSNH shall also use US EPA Method 9 to estimate opacity.	Continuously	40 CFR 75.10(a)(4), Env-A 807.02, Env-A 808.02 (a)(1), and Env-A 808.03(b)
28.	SR5	TSP	PSNH shall conduct stack testing using US EPA Method 5, 17, or 201a or other method approved by DES to determine the TSP emissions. PSNH shall calculate and record the TSP emission rate in lb/MMBTU on a 24-hour calendar day average and tons/consecutive 12-month period using stack test results and operating hours. PSNH may use other EPA-approved emission calculating methods to calculate TSP emissions.	Testing at least every 5 years and upon request by DES and/or EPA	
29.	SR5	PM_{10}	PSNH shall conduct stack testing using US EPA Method 201a and 202, or other method approved by DES to determine PM_{10} emissions. PSNH shall calculate and record the PM_{10} emission rate in tons/consecutive 12-month period using stack test results and operating hours. PSNH may use other	Testing at least every 5 years and upon request by DES and/or EPA	

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			EPA-approved emission calculating methods to calculate PM_{10} emissions.		
30.	SR5	Differential pressure of baghouse	PSNH shall measure the differential pressure of the baghouse using pressure differential gauges in the control room or equivalent monitoring device and shall record the pressure reading indicated by each monitoring device.	Daily	Env-A 906.01
31.	SR5	TSP	PSNH shall calculate and record the TSP emission rate in lb/MMBTU averaged over 24-hour calendar day, lb/hr, tons/month, and tons/consecutive 12-month period using fuel consumption data and EPA-approved emission factors or stack test results.	Daily and Monthly	Env-A 906.01
32.	SR5	Fuel Consumption	PSNH shall measure and record the amount of fuel consumed using fuel flow meters and/or inventory purchase records.	Monthly	Env-A 903.03(a)
33.	SR8	Opacity	PSNH shall conduct the visible emission test using US EPA Method 9 and the procedures in § 60.11 only when the coal crusher is operating.	Monthly	§40 CFR 60.254(b)(2) and 40 CFR 60.8 NSPS for Coal Preparation Plants
34.	SR5	Fuel Flow Meters-Periodic Monitoring	PSNH shall calibrate the fuel flow metering devices during planned outages. Calibration procedures and records shall be kept on file and made available to DES and/or EPA upon request.	During planned outages	
35.	SR5	CEM Hourly Operating Requirements & Valid Hour of CEM Data	Pursuant to Env-A 40 CFR 75.10(d), PSNH shall ensure that the CEMS and components meet the following hourly operating requirements: a. PSNH shall ensure that each CEM is capable of completing a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute interval pursuant to Env-A 40 CFR 75.10(d) and pursuant to Env-A 808.03(c)(2) for each successive 5-minute period for gaseous emissions, unless a longer time period is approved in accordance with Env-A 809 b. PSNH shall reduce all SO_2 concentrations, volumetric flow, SO_2 mass emissions, CO_2 concentration, CO_2 mass emissions (if	Hourly	40 CFR 75.10(d) and Env-A 808.01(i) and 808.03

[15] The requirements of 40 CFR 75 are less stringent than Env-A 808. 40 CFR 75 requires hourly averages to be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. 40 CFR 75 allows an hourly average to be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the performance of calibration, quality assurance, or preventive maintenance activities pursuant to 40 CFR 75.21 and 40 CFR Appendix B or backups of data from the data acquisition and handling system, or recertification, pursuant to 40 CFR 75.20.

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			applicable), NOx concentration, and NOx emission rate data collected by the monitors to hourly averages. c. PSNH shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. d. Failure of an SO_2 or CO_2 pollutant concentration monitor, NOx concentration monitor, flow monitor, or NOx-diluent CEMS to acquire the minimum number of data points for calculation of an hourly average shall result in the failure to obtain a valid hour of data and the loss of such component data for the entire hour. e. For a NOx-diluent monitoring system, an hourly average NOx emission rate in lb/MMBTU is valid only if the minimum number of data points is acquired by both the NOx pollutant concentration monitor and the diluent monitor (CO_2). f. If a valid hour of data is not obtained, PSNH shall estimate and record emissions, moisture, or flow data for the missing hour by means of the automated data acquisition and handling system, in accordance with the applicable procedure for missing data. g. Pursuant to Env-A 808.01(i), a valid hour of CEM emissions data means a minimum of 42 minutes of CEM readings taken in any calendar hour, during which the CEM is not in an out of control period and the facility is in operation.[15] h. Pursuant to Env-A 808.03(a), PSNH shall average and record the CEM data for gaseous emissions for each calendar hour. i. Pursuant to Env-A 808.03(c)(1), all CEM systems shall include a means to display instantaneous values of percent opacity and gaseous emission concentrations.		
36.	SR5	Stack Volumetric Flow Measuring Device	PSNH shall meet the following requirements for the stack volumetric flow measuring device: a. All differential pressure flow monitors shall have an automatic blow-back purge system installed and in wet conditions, shall have the capability for drainage of the sensing lines; and b. The stack flow monitoring system shall have the capability for manual calibration of the transducer while the system is on-line and for a zero check.	Continuously	Env-A 808.03(d)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
37.	SR5	Minimum Measurement Capability Requirements for CEMS	PSNH shall ensure that each CEMS is capable of accurately measuring, recording, and reporting data, and shall not incur an exceedance of the full scale range, except as provided in 40 CFR 75 Appendix A Sections 2.1.1.5, 2.1.2.5, and 2.1.4.3.	As specified by regulation	40 CFR 75.10(f)
38.	SR5	COMS Hourly Operating Requirements	Pursuant to 40 CFR 75.10(d), PSNH shall ensure that each COMS and components meet the following hourly operating requirements: a. PSNH shall ensure that each continuous opacity monitoring system is capable of completing a minimum of one cycle of sampling and analyzing (and recording pursuant to Env-A 808.03(c)(2) unless a longer time period is approved in accordance with Env-A 809) for each successive 10-second period and one cycle of data recording for each successive 6-minute period. b. PSNH shall reduce all opacity data to 6-minute averages calculated in accordance with the provisions of 40 CFR 51 Appendix M, except where the SIP or operating permit requires a different averaging period, in which case the State requirement shall satisfy this Acid Rain Program requirement as shown below. c. Pursuant to Env-A 808.03(b)(1), PSNH shall average the opacity data to result in consecutive, non-overlapping 6-minute averages; and d. Pursuant to Env-A 808.03(b)(2), for units subject to the Env-A 2003.04(b) exemption, the total number of minutes in any 8-hour period where the opacity, as averaged in non-overlapping 6-minute periods, exceeds the applicable opacity standard. e. Pursuant to Env-A 808.03(c)(1), all CEM systems shall include a means to display instantaneous values of percent opacity and gaseous emission concentrations.	Sampling for successive 10-second period and recording for successive 6-minute period	40 CFR 75.10(d) and Env-A 808.03(b) and (c)
39.	SR5	Specific Provisions for Monitoring SO_2 Emissions (SO_2 emissions and flow monitors)	Pursuant to 40 CFR 75.11, PSNH shall meet the specific provisions for SO_2 CEMS and flow monitoring systems: PSNH shall meet the general operating requirements in 40 CFR 75.10 for an SO_2 continuous emission monitoring system and a flow monitoring system.	As specified by regulations	40 CFR 75.11
40.	SR5	Specific Provisions	a. Pursuant to 40 CFR 75.12, 75.71, and 75.72 and Env-A 3212, PSNH shall meet the specific	Continuously	40 CFR 75.12, 75.71, and

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
		for Monitoring NOx Emissions	provisions for NOx-diluent CEMS, including the following: i) Meet general operating requirements in 40 CFR 75.10 for a NOx continuous emission monitoring system. The diluent gas monitor in the NOx CEMS may measure either O_2 or CO_2 concentration in the flue gases. ii) Comply with moisture correction procedures according to 40 CFR 75.12(b) iii) Comply with NOx emission rate procedures contained in 40 CFR 75.12(c). iv) PSNH shall meet the annual and ozone season monitoring requirements according to 40 CFR 75.74, as applicable.		75.72 and Env-A 3212
41.	SR5	NOx Mass Emissions - Specific Provisions for Monitoring NOx Emissions for Alternative Monitoring System	PSNH shall meet the requirements of 40 CFR 75.12 including using the procedures of 40 CFR 75 Appendix E for estimating hourly NOx emission rate, using the procedures of 40 CFR Appendix D for determining hourly heat input, except for the heat input apportionment provisions of 40 CFR 75 Appendix D Section 2.1.2 to meet the NOx mass reporting provisions. If in the years after certification of the monitoring system, a unit's operation exceed a capacity factor of 20 percent in any calendar year or exceed a capacity factor of 10.0 percent averaged over three years, or exceed a capacity factor of 20.0 percent in any ozone season or exceed an ozone season capacity factor of 10.0 percent averaged over three years, PSNH shall install, certify, and operate a NOx CEMS and also meet the requirements of 40 CFR 75.71(c) no later than December 31 of the following calendar year.	Hourly	40 CFR 75 Appendix E Section 1.1 and 40 CFR 75.12(d)(2) and 75.71(d)
42.	SR5	Specific Provisions for Monitoring CO_2 Emissions	Pursuant to 40 CFR 75.13, PSNH shall meet the specific provisions for CO_2 CEMS and flow monitoring systems.	Continously	40 CFR 75.13
43.	SR5	Specific Provisions for Monitoring Opacity	Pursuant to 40 CFR 75.14, the continuous opacity monitoring and recording system shall meet all the design, installation, equipment, and performance specifications of 40 CFR 60, Appendix B, Performance Specification 1, and all the operational and quality assurance requirements of Env-A 808 (new).	Continuously	40 CFR 75.14 and Env-A 808 (new)
44.	SR5	CEMS and COMS and Alternative Monitoring	Pursuant to 40 CFR 75.20 and 40 CFR 75.70(d) and Env-A 3212.07 and Env-A 3212.10, PSNH shall recertify the CEMS and COMS and alternative monitoring system whenever PSNH makes a	Whenever PSNH makes a replacement, modification,	40 CFR 75.20, 40 CFR 75.70(d), and 40 CFR 75

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
		Certification	replacement, modification, or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data. PSNH must submit an application for recertification of the monitoring system to EPA and DES	or change to the systems or to the facility that could significantly affect the ability of the systems to accurately measure and record the requisite data	Appendix E Section 1.2 and Env-A 3212.07, 3212.09, and 3212.10
45.	SR5	QA/QC Requirements	a. Pursuant to 40 CFR 75.21 (a)(1) and 40 CFR 75.70, PSNH shall operate, maintain, and calibrate each CEMS according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B. b. Pursuant to 40 CFR 75.21(b), PSNH shall operate, calibrate, and maintain each COMS according to the procedures specified in the SIP, pursuant to 40 CFR 51 Appendix M. c. Pursuant to 40 CFR 75.21(c), PSNH shall ensure that all calibration gases used to quality assure the operation of the instrumentation shall meet the definition in 40 CFR 72.2. d. Pursuant to 40 CFR 75.21(d) and (e), PSNH shall comply with the provisions concerning consequences of audits and audit decertification. e. Within and prior to the ozone season, PSNH shall meet the quality assurance requirements contained in 40 CFR 75.74, as applicable.	As specified by regulation	40 CFR 75.21 and 75.70 and 75.74
46.	SR5	QA/QC Requirements for Alternative Monitoring System	PSNH shall comply with the QA/QC procedures of 40 CFR 75 Appendix E and 40 CFR 75.74(c), as applicable. Pursuant to 40 CFR 75.74(b), PSNH may choose whether to meet the QA/QC requirements on an annual basis or an ozone season basis.	Annually or ozone season basis	40 CFR 75.70(e) and 40 CFR 75 Appendix E and 40 CFR 75.74(b) and (c)
47.	SR5	Reference Test Methods for Certification and Recertification of CEMS or COMS	PSNH shall use the reference test methods listed in 40 CFR 75.22 and included in Appendix A to 40 CFR 60 to conduct monitoring system tests for certification or recertification of CEMS and excepted monitoring systems under 40 CFR 75 Appendix E and quality assurance and quality control procedures.	During certification or recertification tests	40 CFR 75.22
48.	SR5	Out-of-Control Periods	a. Pursuant to 40 CFR 75.21(e)(2), whenever a CEMS or COMS fails a quality assurance audit or any other audit, the system is out-of-control,	As specified by regulation	40 CFR 75.21(e)(2) and 75.24 and

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			and PSNH shall follow the procedures for out-of-control periods in 40 CFR 75.24. b. Pursuant to Env-A 3212.10 and 2910.06, whenever any monitoring system fails to meet the quality assurance requirements of 40 CFR 75 Appendix B, PSNH shall substitute the data using the applicable procedures in 40 CFR 75, Subpart D, Appendix D or E. c. Pursuant to 75.24, if an out-of-control period occurs to a monitor or CEMS, the owner or operator shall take corrective action and repeat the tests applicable to the out of control parameter as described in 40 CFR 75 Appendix B. d. For daily calibration error tests, an out of control period occurs when the calibration error of a pollutant concentration monitor exceeds 5.0% based upon the span value, the calibration error of a diluent gas monitor exceeds 1.0% O_2 or CO_2, or the calibration error of a flow monitor exceeds 6.0% based upon the span value, which is twice the applicable specification in 40 CFR 75 Appendix A. e. For quarterly linearity checks, an out of control period occurs when the error in linearity at any of the three gas concentrations (low, mid-range, and high) exceeds the applicable specification in 40 CFR 75 Appendix A. f. For relative accuracy test audits (RATAs), cylinder gas audit (CGAs), and relative accuracy audits (RAAs), an out of control period occurs when the sampling is completed and the CEMS fails the accuracy criteria until successful completion of the same audit after corrective action has occurred. g. Pursuant to Env-A 3212.10, whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement pursuant to Env-A 800 or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the department shall issue a notice of disapproval of the certification status of such system or component. h. For the purposes of this section, an audit shall		Env-A 3212.10 and 808.01(g)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			be either a field audit or an audit of any information submitted to the department or the administrator. i. The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the disapproval of certification status until the date and time that the owner or operator completes subsequently approved initial certification or recertification tests in accordance with Env-A 3212.07(t). j. The owner or operator shall follow the initial certification or recertification procedures for each disapproved system.		
49.	SR5	Out of Control Periods for Opacity	Out of control period for a CEMS measuring opacity is as follows: a. The time period beginning with the completion of the daily calibration drift check where the CD exceeds 2% opacity for 5 consecutive days, and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; b. The time period beginning with the completion of a daily CD check preceding the daily CD check that results in the CD being greater than 5% opacity and ending with the CD check after corrective action has occurred that results in the performance specification drift limits being met; or c. The time period beginning with the completion of a quarterly opacity audit where the CEMS fails the calibration error test as specified in 40 CFR 60, Appendix B, Specification 1 and ending with successful completion of the same audit where the CEMS passes the calibration error test established after corrective action has occurred.	As specified by regulation	Env-A 808.01(g)(2)
50.	SR5	Data Availability and Missing Data Substitution Procedures	a. PSNH shall follow the procedures in 40 CFR 75.30 through 75.37, 75.70(f), 75.74, and 40 CFR 75 Appendix E when a valid, quality-assured hour of data is not measured or recorded. b. Pursuant to Env-A 808.02(c)(2), PSNH shall comply with the minimum percentage data availablity requirements pursuant to Env-A 808.10(a)-(d) to meet the requirements of Env-A 3200, *NOx Budget Program.* c. Pursuant to Env-A 808.10, if PSNH cannot meet the percentage data availability requirements,	As specified by regulation	40 CFR 75.30 through 75.37 and 75.50(f) and 75.24(e) and 75.74 and 40 CFR 75 Appendix E Section 2.5 and Env-A 808.10 and 808.02(c)(2)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			PSNH shall also follow the provisions of Env-A 808.10(e) – (g). d. Pursuant to 40 CFR 75.24(e), if COMS is out of control, PSNH shall follow the data availability requirements of Env-A 808.10.		
51.	SR5	General CEM Requirements	a. Pursuant to 40 CFR 75.5 (b), PSNH must operate SR4, SR6, and SR5 in compliance with the requirements of 40 CFR 75.2 through 75.75 and 40 CFR 75 Appendices A through G. b. Pursuant to 40 CFR 75.5 (d), PSNH shall account for all emissions of SO_2, NOx, and CO_2 in accordance with 40 CFR 75.10 through 75.19. c. Pursuant to 40 CFR 75.5 (e), PSNH shall not disrupt the continuous emission monitoring system or other approved emission monitoring method, and thereby not monitor or record SO_2, NOx, and CO_2, except for periods of recertification, or periods when calibration, quality assurance, or maintenance is performed pursuant to 40 CFR 75.21 and 40 CFR 75 Appendix B. d. The CEMS shall meet the most stringent requirements of 40 CFR 75 and Env-A 808.	Continuously	40 CFR 75.5 and Env-A 808 (new)
52.	SR5	CEMS Performance and Audit Requirements	PSNH shall ensure that each CEMS meets the following requirements: a. Each CEMS meets equipment, installation, and performance specifications in 40 CFR 75 Appendix A; b. Each CEMS is maintained according to the quality assurance and quality control procedures in 40 CFR 75 Appendix B; and c. Each CEMS shall record SO_2 and NOx emissions in the appropriate units of measurement. d. PSNH shall comply with the most stringent CEM audit requirements contained in 40 CFR 75 and Env-A 808.07, *General Audit Requirements*, Env-A 808.08, *Audit Requirements for Gaseous CEM Systems*, and Env-A 808.09, *Audit Requirements for Opacity CEM Systems*.	As specified by regulation	40 CFR 75.10(b) and Env-A 808.07, 808.08, and 808.09 and 40 CFR 75 Appendices A and B
53.	SR5	NOx Mass Emissions – General Provisions	a. Pursuant to Env-A 3200, *NOx Budget Program,* PSNH shall comply with the provisions of 40 CFR 75 Subparts A, C, D, E, F, and G and Appendices A through G applicable to NOx concentration, flow rate, NOx emission rate and heat input, as set forth and referenced in Subpart	As specified by regulation	Env-3212.01 and 40 CFR 75.70(a)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			H. b. The requirements of Subpart H for CO2, SO2, opacity monitoring, recordkeeping, and reporting do not apply to units that are subject to a State or federal NOx mass emission reduction program only and are not affected units with an Acid Rain Program emission limitation**.**		
54.	SR5	NOx Mass Emissions Provisions-Prohibitions	PSNH is prohibited from the following: a. Using alternative monitoring system, reference method, or any other alternative for the required CEMS without approval through petition process in 40 CFR 75.70(h). b. Discharging or allowing discharge of NOx emissions without accounting for all emissions in accordance with the provisions of Subpart H, except as provided in 40 CFR 75.74. c. Disrupting the CEMS or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions, except for periods of re-certification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the provisions of 40 CFR 75 Subpart H applicable to the monitoring systems under 40 CFR 75.71, except as provided in 40 CFR 75.74. d. Retiring or permanently discontinuing the use of the CEMS, or any other approved emission monitoring system except under one of the following circumstances: i) During a period that the unit is covered by a retired unit exemption that is in effect under the State or federal NOx mass emission reduction program that adopts the requirements of Subpart H; ii) The owner or operator is monitoring NOx emissions from the affected unit with another certified monitoring system approved, in accordance with the provisions of 40 CFR 75.70(d); or iii) The designated representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 40 CFR 75.61.	Continuously	40 CFR 75.70(c)
55.	SR5	NOx Mass Emissions-Alternative Monitoring System	PSNH shall comply with the provisions of 40 CFR 75 Appendix E and Env-A 3212.09 as an alternative to continuous emission monitoring system requirements.	During the ozone season	40 CFR 75 Appendix E and Env-A 3212.09

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
56.	SR5	NOx Mass Emissions – Annual Monitoring	PSNH shall meet the requirements of 40 CFR 75 Subpart H during the entire calendar year.	During the calendar year	40 CFR 75.74(a) and (b)
57.	SR5	Valid Averaging Periods for Gaseous and Opacity CEMS	The number of hours of valid CEM and COM data required for determining a valid averaging period for the different emission standard periods shall be: a. For a 3-hour emission standard period, 2 hours of valid data; b. For a 4-hour emission standard period, 3 hours of valid data; c. For an 8-hour emission standard period, 6 hours of valid data; d. For a 12-hour emission standard period, 9 hours of valid data, and e. For a 24-hour emission standard period, 18 hours of valid data.	As specified by regulation	Env-A 808.14
58.	Facility-Wide	Inventories of Regulated Substances	PSNH shall monitor the quantity of regulated substances to ensure that the inventories are maintained below the threshold quantities established by 40 CFR 68.130.	Continuously	40 CFR 68 and 1990 CAA Section 112(r)(1)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
59.	SR5	Compliance testing	General Requirements - Performance stack testing a. PSNH must conduct performance testing (or fuel analyses in lieu of performance testing where allowed) on an annual basis no later than 12 months after the previous performance test. A site-specific test plan shall be submitted to DES at least 60 calendar days before the performance test is scheduled to begin for review and approval. The information and conditions listed in Table 6, Items 6, 7, 8, and 9 shall be followed. b. Performance testing may be done less often for PM, HCl, or mercury if the performance tests for the pollutant for at least 3 consecutive years show compliance with the applicable emission limit specified in Table 5. c. If the boiler continues to meet the applicable emission limit for PM, HCl, and/or mercury, performance testing for that pollutant may be conducted every 3 years, but no more than 36 months after the previous performance test. d. If a performance test shows noncompliance with an emission limit for PM, HCl, or mercury, a performance test for that pollutant must be conducted annually until all performance tests over a consecutive 3-year period demonstrate compliance.	Annually & Any New Fuel Type	Env-A 802, 40 CFR 63 Subpart B (Case-by-Case MACT)
60.	SR5	Compliance testing	General Requirements - Fuel testing PSNH shall conduct fuel analyses according to the procedures specified in Table 6, Items 9 and 10: a. During each compliance performance stack test; and b. Fuel analysis must be conducted before burning any new fuel type in the boiler.	Every Compliance Performance Test and/or Every new fuel type	40 CFR 63 Subpart B (Case-by-Case MACT)
61.	SR5	Continuous Monitors	General Requirements – Continuous Stack Monitors a. PSNH shall develop and submit a site-specific monitoring plan to DES for review and approval at least 60-days before the performance test of the CMS, and shall contain the information and conditions listed in Table 6, Item 12. b. PSNH shall conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan. c. Except for monitor malfunctions, associated repairs, and required QA/QC (including	Annually	Env-A 808, 40 CFR 63.8, 40 CFR 63 Subpart B (Case-by-Case MACT)

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			calibration checks, required zero, and span adjustments), PSNH must continuously monitor (or collect data at all required intervals) at all times that the affected source is operating.		
62.	SR5	Sorbent Injection	<u>General Requirements – Solid Sorbent Injection</u> a. PSNH shall install, calibrate, operate, and maintain a device to measure the sorbent injection rate according to the specification listed in Table 6, Item 13. b. During each planned outage, calibrate the device in accordance with the manufacturer's procedures and specifications.	Every Compliance Test and Each Planned Outage	40 CFR 63 Subpart B (Case-by-Case MACT)
63.	SR5	HCl	<u>Demonstration of Compliance with HCl Emission Limitation – Fuel-based Alternative</u> a. PSNH may demonstrate compliance with the HCl emission limit specified in Table 5, Item 21 following the procedures set forth in Table 6, Item 11; b. If compliance with the HCl emission limit cannot be demonstrated through fuel testing, PSNH must demonstrate compliance through performance testing within 60-days of burning the new fuel type, or mixture, as specified in Table 6, Items 6, 7, 8, and 9. New solid sorbent injection operating limits must also be established according to the procedures specified in Table 6, Item 13.	Every 5 years, and any new fuel type	40 CFR 63 Subpart B (Case-by-Case MACT)
64.	SR5	Mercury	<u>Demonstration of Compliance with Mercury Emission Limit – Fuel Based Alternative</u> a. PSNH may demonstrate compliance with the mercury emission limit specified in Table 5, Item 22 following the procedures set forth in Table 6, Item 11; b. If compliance with the mercury emission limit cannot be demonstrated through fuel testing, PSNH must demonstrate compliance through performance testing within 60-days of burning the new fuel type, or mixture, as specified in Table 6, Items 6, 7, 8, and 9. New solid sorbent injection operating limits must also be established according to the procedures specified in Table 6, Item 13.	Every 5 years and any new fuel type	40 CFR 63 Subpart B (Case-by-Case MACT)
65.	SR5	Carbon Monoxide Monitoring	<u>Continuous Emission Monitoring System</u> PSNH shall: a. Certify, operate and maintain the CEM in accordance with the applicable requirements of 40 CFR 60 Appendix B, Appendix F, and Env-	Continuously	Env-A 808 40 CFR 60.8 40 CFR 63

Table 7 – Monitoring and Testing Requirements					
Item No.	**Applicable Emission Unit**	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Regulatory Cite**
			A 808; b. Perform quarterly gaseous monitoring audits (i.e. cylinder gas audits, and relative accuracy audits); c. Perform annual gaseous monitoring audits (i.e. relative accuracy test audits [RATA]); and d. Continuously operate the CEMS monitor(s) according to the site-specific monitoring plan as specified in Table 8, Item 6.		Subpart B (Case-by-Case MACT)
66.	SR5-PC2	Sorbent Injection Monitoring	<u>Continuous Monitoring of Sorbent Injection Rate</u> a. At least annually, PSNH shall calibrate the solid sorbent injection system and device monitor in accordance with the manufacturer's procedures and specifications. b. PSNH shall collect sorbent injection rate information according to the following: i) The data shall be reduced to 3-hour block averages; and ii) The 3-hour average sorbent injection rate shall be maintained at or above the operating limit established during the performance test.	Continuously	40 CFR 63 Subpart B (Case-by-Case MACT)
67.	SR5	Continuous Opacity Monitor	<u>Continuous Opacity Monitor</u> PSNH shall: a. Maintain and operate the COM in accordance with the site-specific monitoring plan submitted pursuant to the requirements in Table 8, Item 8, and the requirements of 40 CFR 60.13, Appendix B Performance Specification 1 and Env-A 808; b. Check the zero, span and calibration drift at least once daily according to the site-specific monitoring plan as specified in Table 6, Item 12; and c. Conduct annual performance testing in accordance with the requirements of 40 CFR 60.13, Appendix B Performance Specification 1, and Env-A 808.	Continuously	Env-A 808 40 CFR 60.13 40 CFR 63 Subpart B (Case-by-Case MACT)

D. Recordkeeping Requirements

PSNH is subject to the Recordkeeping requirements as contained in Table 8 below:

Table 8 – Applicable Recordkeeping Requirements

Item No.	Recordkeeping Requirement	Frequency of Recordkeeping	Applicable Emission Unit	Regulatory Cite
1.	NSPS Startup, Shutdown, Malfunction Records. PSNH shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a CEMs or monitoring device is inoperative.	For each startup, shutdown, or malfunction	SR5	40 CFR 60.7 (b)
2.	Retention of NSPS Records PSNH shall maintain all measurements, including continuous monitoring systems, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 Subpart Da and Subpart Y recorded in a permanent form suitable for inspection.	All NSPS records to be maintained for 5 years	SR5	40 CFR 60.7 (f)
3.	General Recordkeeping Requirements PSNH shall keep the following records: a. A copy of each notification and report submitted, including: i. Notification of Compliance Status; and ii. Semiannual compliance report; and b. Records of all performance tests, fuel analyses, and CMS performance evaluations and opacity and visible emissions observations	Records to be maintained for 5 years	SR5	40 CFR 63 Subpart B (Case-by-Case MACT)
4.	Startup Shutdown Malfunction Plan (SSMP) PSNH shall develop a written startup, shutdown malfunction plan which describes in detail the following: a. Procedures for operating and maintaining the source during periods of startup shutdown and malfunction; b. The program of corrective actions for malfunctioning processes and air pollution control and monitoring equipment used to comply with the operational and emission limitations specified in Table 5.	Prior to initial startup date	SR5	40 CFR 63 Subpart B (Case-by-Case MACT)
5.	Fuel Type and Use PSNH shall record: a. The quantity of each type of fuel used during the reporting period;	Maintain on a continuous basis[16]	SR5	Env-A 901.03 Env-A 903.03(a)(1) Env-A 903.03(a)(2)

[16] This condition has streamlined the recordkeeping requirements of Part Env-A 903.03 and 40 CFR 63 Subpart DDDDD. The records required under Env-A 903.03 (items 6(a)-(e) and 6(g)-(h) above) shall be maintained on a monthly and a 12-month rolling average basis. 40 CFR 63 Subpart DDDDD requires items 6(a),(b),(f),(g), and (h) to be maintained on a continuous basis.

Table 8 – Applicable Recordkeeping Requirements				
Item No.	**Recordkeeping Requirement**	**Frequency of Recordkeeping**	**Applicable Emission Unit**	**Regulatory Cite**
	b. The fuel type; c. For coal only, the ash content; d. For coal only, the sulfur content as percent sulfur by weight of fuel and pounds per million BTU gross heat content; e. For natural gas only, sulfur content as percent sulfur by weight of fuel or in grains per 100 cubic feet of fuel; f. For natural gas only, hours of operation of each fuel combustion device while operating with each type of gaseous fuel, so the distribution of fuel among each combustion device can be estimated. g. All calculations and supporting documentation of maximum chlorine and mercury fuel input, that were done to demonstrate continuous compliance with the HCl and mercury emissions limits; h. The calculated MMBtu/ton of fuel; and i. If more than one type of fuel is used, data on each fuel type shall be recorded separately.			Env-A 903.03(a)(4) & Env-A 903.03(b) 40 CFR 63 Subpart B (Case-by-Case MACT)
6.	<u>Continuous Emission Monitoring System – CO</u> PSNH shall: a. Develop a site-specific monitoring plan as specified in Table 5, Item 29 and Table 8, Item 10; b. Maintain records of all quarterly, and annual audits required pursuant to Table 7, Item 67 requirements; c. Previous versions of performance evaluation plans; d. Record each period during which the CMS malfunctioned or was inoperative, including out-of-control periods; e. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of start-up, shut down or malfunction, or during another period; f. Maintain records of calibration, maintenance and repair of the CEMS; g. The CEMS data must be reduced as specified in §63.8(g)(2); h. Calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days; i. Data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities or when the boiler is operating at less than 50% of its rated capacity cannot be included for calculation of the 30-day rolling average; Data collected during all other periods must be used in assessing compliance; and	Maintain on a continuous basis	SR5	40 CFR 63 Subpart B (Case-by-Case MACT)

Table 8 – Applicable Recordkeeping Requirements				
Item No.	**Recordkeeping Requirement**	**Frequency of Recordkeeping**	**Applicable Emission Unit**	**Regulatory Cite**
	j. Any period for which the monitoring system is out of control and data are not available for required calculations, constitutes a deviation from the monitoring requirements.			
7.	<u>Occurrences of Startup Shutdown or Malfunction</u> PSNH shall maintain/record: a. Actions taken during startup shutdown or malfunction which are consistent with the procedures specified in the SSMP to demonstrate that the procedures were followed; b. Actions taken during startup, shut down or malfunction which were not consistent with the procedures specified in the SSMP and an applicable emission limit specified in Table 5 was exceeded; c. The duration and occurrence of each startup shutdown and malfunction of operation and each malfunction of the air pollution control and monitoring equipment; d. Maintain a current copy of the SSMP and make the plan available upon request by DES or EPA; and e. All required maintenance performed on the air pollution control and monitoring equipment; f. Maintain previous versions of the SSMP for a period of 5 years after revision of the plan.	Maintain on a continuous basis	SR5	40 CFR 63 Subpart B (Case-by-Case MACT)
8.	<u>Continuous Emission Monitoring System - Continuous Opacity Monitoring System</u> PSNH shall: a. Develop a site-specific monitoring plan as specified in Table 5, Item 31, and Table 8, Item 10; b. Maintain records of all quarterly, and annual audits required pursuant to Table 7, Item 69 requirements; c. Maintain records of calibration, maintenance and repair of the COMS; d. Maintain monitoring data for COMS collected during performance evaluations; e. Previous versions of performance evaluation plans; f. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of start-up, shut down or malfunction, or during another period; g. Records of all monitoring data and calculated averages for applicable operating limits to show continuous compliance with the emission limit for opacity; h. The COMS data must be reduced as specified in §63.8(g)(2); i. Identify periods the COMS is out of control including periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an	Maintain on a continuous basis	SR5	40 CFR 63 Subpart B (Case-by-Case MACT)

Table 8 – Applicable Recordkeeping Requirements				
Item No.	**Recordkeeping Requirement**	**Frequency of Recordkeeping**	**Applicable Emission Unit**	**Regulatory Cite**
	annual zero alignment audit; and j. Determine and record all 6-minute averages, and 1-hour block averages, collected for periods during periods when the COMS is <u>not</u> out of control.			
9.	<u>Site-Specific Fuel Analysis Plan</u> PSNH shall develop and submit to DES and EPA a site-specific fuel analysis plan for review and approval according to the following procedures: a. The identification of all fuel types anticipated to be burned in the boiler; b. For each fuel type, the notification of whether PSNH or the fuel supplier will conduct the fuel analysis; c. For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the procedures are different from those specified in Table 7 Item 62; and d. Determine the concentrations of the pollutants in the fuel in units of pounds per million Btu of each composite sample for each fuel type according to the procedures specified in Table 6 Item 9.	180 days prior to testing		40 CFR 63 Subpart B (Case-by-Case MACT)
10.	<u>Site-Specific Monitoring Plan</u> PSNH shall develop and submit to DES and EPA a site-specific monitoring plan for the CEMS and COMS for review and approval and shall: a. Contain sufficient information to demonstrate that all unit CO emissions, and/or opacity are monitored and reported, including: i) Daily calibration drift assessment; ii) Quarterly performance audits; and iii) An annual zero alignment audit for each COMS. b. Update the monitoring plan whenever PSNH makes a replacement, modification or change that could affect the CEMS or COMS; c. Review the QA/QC plan and all data generated by its implementation at least one each year; d. Revise or update the QA/QC plan, as necessary, based on the results of the annual review by conducting the following: i) Documenting any changes made to the CEMS or COMS or changes to any information provided in the monitoring plan; ii) A schedule of, and description of, all maintenance activities that are required by the CEMS or COMS manufacturer, that might have an effect on the operation of the system; iii) Description of how the audits and testing required by	60 days prior to performance testing	SR5	Env-A 808 & 40 CFR 63 Subpart B (Case-by-Case MACT)

Table 8 – Applicable Recordkeeping Requirements				
Item No.	**Recordkeeping Requirement**	**Frequency of Recordkeeping**	**Applicable Emission Unit**	**Regulatory Cite**
	this permit will be performed; iv) Examples of the reports that will be used to document the audits and tests required by this permit; and v) Make the revised QA/QC plan available for on-site review by DES or EPA at any time.			
11.	Monitoring Plan and QA/QC Plan: a. PSNH shall prepare and maintain a monitoring plan for the CEMS and COMS, which contains sufficient information to demonstrate that all unit SO_2 emissions, NOx emissions, CO_2 emissions and opacity are monitored and reported. b. The Permitte shall prepare and maintain monitoring plans for other approved monitoring methods, which contain sufficient information to demonstrate that all unit NOx emissions are monitored and reported. c. PSNH shall update the monitoring plan whenever PSNH makes a replacement, modification or change that could affect the CEMS or COMS or other approved monitoring method. d. PSNH shall review the QA/QC plan and all data generated by its implementation at least once each year. e. PSNH shall revise or update the QA/QC plan, as necessary, based on the results of the annual review by conducting the following: i) Documenting any changes made to the CEM or the monitoring method or changes to any information provided in the monitoring plan; ii) Including a schedule of, and describing, all maintenance activities that are required by the CEM manufacturer or that might have an effect on the operation of the system; iii) Describing how the audits and testing required by this part will be performed; and iv) Including examples of the reports that will be used to document the audits and tests required by this part; v) Make the revised QA/QC plan available for on-site review by the division at any time; and vi) Within 30 days of completion of the annual QA/QC plan review, certify in writing that the owner or operator will continue to implement the source's existing QA/QC plan or submit in writing any changes to the plan and the reasons for each change. f. The QA/QC plan shall be considered an update to the CEM monitoring plan required by Env-A 808.04. g. Pursuant to Env-A 3212.13(a), the units subject to acid rain emission limitations (SR4, SR5, SR6) shall comply with the requirements of 40 CFR 75.62, except the	Whenever a change occurs that could affect monitoring method or annually, whichever is more frequent	SR5	40 CFR 75.53 (a), (b), (e), and (f) and 75.73(c) and Env-A 808.06 and 3212.13

Table 8 – Applicable Recordkeeping Requirements				
Item No.	**Recordkeeping Requirement**	**Frequency of Recordkeeping**	**Applicable Emission Unit**	**Regulatory Cite**
	monitoring plan shall also include all of the information required by 40 CFR 75, Subpart H.			
12.	CEM, COMS and Other Approved Monitoring Methods Recordkeeping Requirements: a. PSNH shall record and maintain the information required pursuant to 40 CFR 75.57, 75.58, 75.59, and 75.73(b), which includes the certification, quality assurance, and quality control records. b. PSNH shall record and maintain CEMS and COMS records according to the most stringent requirements of Env-A 808 and 40 CFR 75.	As specified by regulation	SR5	40 CFR 75.57, 75.58,75.59, and 75.73 and Env-A 3212 and Env-A 903.04 (a) and Env-A 800 and 40 CFR 75
13.	General NOx Recordkeeping Requirements: PSNH shall record and maintain the following information: a. Identification of each fuel burning device; b. Operating schedule for each fuel burning device identified in Condition a above, including: i) Hours of operation per calendar month; ii) Days of operation per calendar month; iii) Number of weeks of operation; iv) Heat input rate in million BTUs per hour; and v) The following NO_x emission data: A) Actual NOx emissions from each combustion device identified in (a) above for: 1. Each calendar year, in tons; and 2. A high ozone season day during that calendar year, in pounds per day; and B) The emission factors and the origin of the emission factors used to calculate the NOx emissions.	Annually and as applicable	SR5	Env-A 905.02
14.	Recordkeeping Requirements for Add-On NOx Control Equipment: PSNH 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: i) Destruction or removal efficiency, in percent; ii) Current primary and secondary equipment control information codes; iii) Date tested; and iv) Method of determining destruction or removal	Maintain at the facility at all times	SR5	Env-A 905.03

Table 8 – Applicable Recordkeeping Requirements				
Item No.	**Recordkeeping Requirement**	**Frequency of Recordkeeping**	**Applicable Emission Unit**	**Regulatory Cite**
	efficiency, if not tested.			
15.	Delivery Ticket and Sulfur Analysis Records for Coal: a. PSNH shall maintain delivery tickets from each coal supplier for each shipment of coal received. The delivery tickets shall be in a form suitable for inspection and available to the DES and/or EPA upon request. Each delivery ticket shall indicate the following: i) The name of the fuel supplier; ii) The address of the fuel supplier; iii) The telephone number of the fuel supplier; iv) The type of fuel delivered; v) The quantity of coal delivered; vi) The date of delivery; vii) The maximum percent sulfur by weight of the coal delivered or the lb sulfur/MMBTU of coal; viii) The weight percent ash content of the coal; and ix) The gross heat content of the coal (in Btus per pound). b. If the delivery tickets do not contain sulfur content of fuel delivered, PSNH shall provide other documentation from the fuel supplier with the above information or perform testing in accordance with appropriate ASTM test methods to determine compliance with the sulfur content limitation provisions in Env-A 1606 for solid fuels.	For each delivery of coal	SR5	Env-A 806.05
16.	Natural Gas Utilization Records: PSNH shall maintain billing tickets for each natural gas supplier. The billing tickets shall be in a form suitable for inspection and available to the DES and/or EPA upon request. Each billing ticket shall indicate the following: a. The name of the fuel supplier; b. The address of the fuel supplier; c. The telephone number of the fuel supplier; d. The type of fuel delivered; and e. The quantity of natural gas used.	Monthly	SR5	Env-A 903.03(a)(4)
17.	General Recordkeeping Requirements for Process Operations: PSNH shall maintain the following: a. Monthly records of raw material utilization (coal) for each of the crusher systems and for the coal fed to SR5. b. Monthly records of the amount of urea used in the SNCR system. c. Monthly records of the amount of sorbent injected into the boiler	Monthly and consecutive 12 month periods	SRCC2 SR5-PC1 SR5-PC2	Env-A 903.02
18.	Coal Crusher Records: PSNH shall maintain the following information, which may be included in the facility work management system: a. The monthly visible emission observation results; b. A log of repairs made to the coal crusher enclosure to control fugitive dust. The log shall include the following: i) The date a problem was observed;	As specified	SRCC2	Env-A 906.01

Table 8 – Applicable Recordkeeping Requirements				
Item No.	**Recordkeeping Requirement**	**Frequency of Recordkeeping**	**Applicable Emission Unit**	**Regulatory Cite**
	ii) The date of the repair; iii) A description of the problem; and iv) The corrective actions taken.			
19.	Certificate of Representation: PSNH shall complete and retain a certificate of representation for a designated representative or an alternate designated representative including the elements pursuant to 40 CFR 72.24, *Certificate of representation*.	Maintain at the facility at all times	SR5	40 CFR 72.24
20.	Record Retention: PSNH shall retain the records required by this permit on file for a minimum of 5 years except the certificate of representation for the designated representatives shall be kept beyond the 5-year period.	Retain for a minimum of 5 years or as specified	Facility wide	Env-A 902.01 (a)
21.	Regulated Toxic Air Pollutant Records: PSNH shall maintain records in accordance with the applicable method used to demonstrate compliance pursuant to Env-A 1406.	Maintain at facility at all times	All devices subject to RSA 125-I and Env-A 1400	Env-A 902.01 (c)

E. Reporting Requirements

PSNH is subject to the federally enforceable reporting requirements identified in Table 9 below:

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
1.	Notification of Initial Performance Test for NOx and SO_2. The initial performance test required under 40 CFR 60.8, is the only test in which PSNH shall provide at least a 30 days notice to EPA/DES, unless otherwise specified by EPA/DES.	30 days prior to initial performance test for NOx and SO_2	SR5	40 CFR 60.46a (f)
2.	NSPS Performance Test Results. For SO_2, NOx, and PM emissions, PSNH shall submit the performance test data from the initial performance test and from the performance evaluation of the continuous monitors (including the transmissometer) to EPA and DES.	Within 60 days of completing the performance tests	SR5	40 CFR 60.49a (a) and 60.8 (a)
3.	NSPS SO_2 and NOx Reports. a. For SO_2 and NOx, PSNH shall report the following information to EPA and DES for each 24-hour period: i) Calendar date. ii) The average SO2 and NOx emission rates (ng/J or lb/MMBtu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and a description of corrective actions taken. iii) Percent reduction of the potential combustion concentration of SO2 for each 30 successive boiler	Quarterly submitted no later than 30 days after the end of the calendar quarter	SR5	40 CFR 60.49a (b) and (j)

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and a description of corrective actions taken. iv) Identification of boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken. v) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NOx only), emergency conditions (SO2 only), or other reasons, and justifications for excluding data for reasons other than startup shutdown, malfunction, or emergency conditions. vi) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted. vii) Identification of times when hourly averages have been obtained based on manual sampling methods. viii) Identification of the times when the pollutant concentration exceeded full span of the CEMs. ix) Description of any modifications to the CEMs which could affect the ability of the CEMs to comply with the Performance Specifications 2 or 3 of 40 CFR 60. b. Pursuant to 40 CFR 60.49a (j), PSNH may submit the reports electronically instead of submitting the written reports. The format of the electronic reports must be approved by DES. Each electronic report must be accompanied by a certification statement from PSNH, indicating whether compliance with the applicable emission standards and minimum data requirements were achieved during the reporting period.			
4.	<u>NSPS Reports for Periods when Minimum Data Availability Requirements are not met.</u> When the minimum emissions data required pursuant to 40 CFR 60.47a is not obtained for any 30 successive boiler operating days, PSNH shall report to EPA and DES the following information obtained by following the applicable procedures of Section 7 of Method 19: a. The number of hourly averages available for outlet emission rates and inlet emission rates, as applicable. b. The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as applicable. c. The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as applicable.	Semi-Annually postmarked by the 30th day following the end of each 6-month period when minimum data availability requirements are not met	SR5	40 CFR 60.49a (c) and (i)

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	d. The applicable potential combustion concentration. e. The ratio of upper confidence limit for the mean outlet emission rate and the allowable emission rate, as applicable.			
5.	NSPS Reports for Emergency Conditions. If any standards pursuant to 40 CFR 60.43a are exceeded during an emergency condition because of control system malfunction, PSNH shall submit a signed statement with the following information: a. An indication if emergency conditions existed and requirements of 40 CFR 60.46a (d) were met during each period; b. The time periods when the emergency conditions exisited; c. Electrical output and demand on the PSNH's electric utility system and the affected facility; d. Amount of power purchased from interconnected neighboring utility companies during the emergency period; e. Percent reduction in emissions achieved; f. Atmospheric emission rate (ng/J and lb/MMBtu) and of the pollutant discharged; and g. Actions taken to correct control system malfunction.	Semi-Annually postmarked by the 30th day following the end of each 6-month period when any standards pursuant to 40 CFR 60.43a are exceeded during an emergency condition because of control system malfunction	SR5	40 CFR 60.49a (d) and (i)
6.	NSPS Report for Fuel Pretreatment Credit. If PSNH claims the fuel pretreatment credit toward the SO2 emission standard pursuant to 40 CFR 60.43a, PSNH shall submit a signed statement to EPA and DES with the following information: a. An indication of what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 40 CFR 60.48a and Method 19; and b. The quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; c. The name and location of the pretreatment facility; and d. The total quantity and total heat content of all fuels received at Schiller Station during the previous quarter.	Semi-Annually postmarked by the 30th day following the end of each 6-month period	SR5	40 CFR 60.49a (e) and (i)
7.	NSPS Reports for periods when opacity, SO_2, and NOx emissions data are not available. When opacity, SO_2, and NOx emissions data are not available, PSNH shall submit a signed statement indicating if any changes were made in the operation of the emission control system during the period of data unavailability. PSNH shall compare the operations of the control system and the affected facility during periods of data unavailability with the operations of the control system and the affected facility before and following the period of data unavailability.	Semi-Annually postmarked by the 30th day following the end of each 6-month period	SR5	40 CFR 60.49a (f) and (i)
8.	NSPS Reports. PSNH shall submit a signed statement indicating whether the following occurred: a. The required CEMs calibration, span, and drift checks or	Semi-Annually postmarked by the 30th day following	SR5	40 CFR 60.49a (g) and (i)

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	other periodic audits have been performed as specified. b. The data used to show compliance was obtained in accordance with the approved methods and procedures and is representative of plant performance. c. The minimum data requirements have been met; or the minimum data requirements have not been met for errors that were unavoidable; d. Compliance with the standards has been achieved during the reporting period.	the end of each 6-month period		
9.	NSPS Excess Opacity Reports. a. For the purposes of the reports required pursuant to 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standard pursuant to 40 CFR 60.42a (b). Opacity levels in excess of the applicable opacity standard and the date of such excesses shall be submitted to EPA and DES each calendar quarter. b. Pursuant to 40 CFR 60.49a (j), PSNH may submit the reports electronically instead of submitting the written reports. The format of the electronic reports must be approved by DES. Each electronic report must be accompanied by a certification statement from PSNH, indicating whether compliance with the applicable emission standards and minimum data requirements were achieved during the reporting period.	Quarterly submitted no later than 30 days after the end of the calendar quarter	SR5	40 CFR 60.49a (h) and (j)
10.	NSPS Notification Requirements. PSNH shall submit written notification or if acceptable by EPA/DES and PSNH, electronic notification as follows: a. Notification of the date construction is commenced, postmarked no later than 30 days after such date. b. Notification of the actual date of initial startup postmarked within 15 days of such date. c. Notification of the date upon which demonstration of the continuous monitoring systems performance commences in accordance with 40 CFR 60.13, postmarked not less than 30 days prior to such date. d. Notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11 (e)(1). This notification shall also include, if appropriate, a request for EPA/DES to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. e. A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 instead of Method 9 observation data as allowed by 40 CFR 60.11(e)(5). This notification shall be postmarked not less than 30 days	As specified by regulation	SR5	40 CFR 60.7 (a)

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	prior to the date of the performance test.			
11.	NSPS Excess Emission Reports. PSNH shall submit excess emissions and monitoring systems performance reports and/or summary reports forms to EPA and DES. The written excess emissions reports shall include the following information: a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13 (h), any conversion factor used, the date and time of commencement an completion of each time period of excess emissions, and the process operating time during the reporting period. b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the facility, the nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted. c. The date and time identifying each period during which the continuous monitoring systems was inoperative except for zero and span checks and the nature of the system repairs or adjustments. d. When no excess emissions have occurred or the continuous monitoring systems have not been operative, repaired, or adjusted, such information shall be stated in the report.	Semiannually postmarked by the 30th day following the end of each 6-month period, except quarterly for SO_2, NOx, and opacity or on a more frequent basis as determined by EPA and/or DES	SR5	40 CFR 60.7 (c)
12.	NSPS Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by EPA and/or DES. One summary report form shall be submitted for each pollutant monitored at the facility. a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and the continuous monitoring systems downtown for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emissions report specified in 40 CFR 60.7(c) need not be submitted unless requested by EPA and /or DES. b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period and or the total continuous monitoring system downtown for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emissions report specified in 40 CFR 60.7(c) shall both be submitted. c. The summary report form shall describe any changes since last quarter in the continuous monitoring systems, process, or controls, and shall contain a statement verifying the truth, accuracy, and completeness of the	Semiannually postmarked by the 30th day following the end of each 6-month period, except quarterly for SO_2, NOx, and opacity or on a more frequent basis as determined by EPA and/or DES	SR5	40 CFR 60.7 (d)

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	information.			
13.	NSPS Reduced Frequency of Reporting. For excess emissions and monitoring systems performance reports and summary reports required to be submitted on a quarterly or more frequent basis, PSNH may request a reduced frequency of reporting to semiannually, if the requirements of 40 CFR 60.7 (e) are met.	If reduced frequency of quarterly (or more frequent) reporting is desired	SR5	40 CFR 60.7 (e)
14.	Notification of Compliance Status PSNH shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii), before the close of business on the 60th day following completing the initial compliance demonstration. This reports shall include: a. All performance test results; b. All fuel analysis results; c. Identification of the affected source including the identification of which subcategory the source is in; d. The capacity of the source; e. A description of the add-on controls used on the source; f. A description of the fuels burned, along with a justification for the fuel(s) burned during the performance test; g. Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits; h. Identification of either the performance stack testing or the alternative fuel analysis method to demonstrate compliance with the emission limitations for mercury and/or HCl specified in Table 5; i. A signed certification that all applicable emission limits and work practice standards have been met; j. A summary of the CO emission monitoring data and the maximum CO emission levels recorded during the performance test to demonstrate compliance with the conditions specified in Table 5, Item 19; and k. A description of any deviation(s) from any emission limit specified in Table 5, the duration of the deviation and the corrective action taken.	Initial Compliance Performance Demonstration	SR5	Env-A 802, 40 CFR 63 Subpart B (Case-by-Case MACT)
15.	PSNH shall submit a Notification of Intent to conduct a performance test at least 30-days before the performance test is scheduled to begin.	For every performance test	SR5	40 CFR 63 Subpart B (Case-by-Case MACT)
16.	Performance Testing Reporting PSNH shall submit a report of the results of performance tests, fuel analyses and/or RATA testing within 60 days after completion of the performance tests, fuel analyses, and/or RATA. This reports shall include:	For every performance test & Every CMS QA Audit and RATA test	SR5	Env-A 802.11 & 40 CFR 63 Subpart B (Case-by-Case MACT)

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	a. All test data; b. All calibration data; c. Process data agreed upon by DES/EPA and PSNH ; d. All test results; e. A description of any discrepancies or problems that occurred during the testing and/or sample analysis; f. An explanation of how discrepancies and/or problems were treated and their effect on the final results; g. A list and description of all equations used in the test report, including sample calculations for each equation used; h. Verification of the operating limits for the boiler.			
17.	PSNH shall submit additional reports, as necessary, for the purpose of demonstrating compliance with all state and federal statues, rules, regulations, and permits.	Annually (no later than April 15th of the following year)	SR5	Env-A 910.01
18.	Semi-annual Compliance Report PSNH shall submit a semiannual compliance report which will contain: a. The company name and address; b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report; c. Date of report and beginning and ending dates of the reporting period; d. The total fuel used by the affected source for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure; e. A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable; f. A signed statement indicating that no new fuel types were burned. Or if a new fuel type was burned, you must submit: i) Calculations for chlorine, and mercury inputs (Table 6, Item 9) that demonstrate the source is still within the maximum chlorine and/or mercury level established during the pervious performance testing, if compliance with emission limits were demonstrated by stack testing; ii) Calculations for HCl and/or mercury emission rates (Table 6, Items 21 and 22), that demonstrate the source is still meet the emissions limits for HCL and/or mercury for the fuel analysis compliance option;	Semiannually (by July 31 and January 31 of each calendar year)	SR5	Env-A 900 & 40 CFR 63 Subpart B (Case-by-Case MACT)

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	g. If there was a startup, shutdown, or malfunction during the reporting period and the actions taken were consistent with the SSMP; h. Revisions to the SSMP and the reasons for each change; i. If there were no deviations from any emission limit, or operating limit specified in this permit, and there were not deviations from the CO limit specified in Table 5, a statement that there were no deviation from the emission limits, operating limits or CO limit standards during the reporting period; j. For each deviation from an emission limitation or operating limit: i) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period; ii) A description of the nature of the deviation and which emission limit, or operating limit from which PSNH deviated; and iii) Information on the number, duration, and cause of deviations, as applicable, and the corrective action taken; k. If there were not periods during which the Continuous Monitoring Systems (CEMS, or COMS) were out of control: i) A statement that there were no periods during which the CMSs were out of control during the reporting period; ii) Within 30-days of completion of the annual CMS QA/QC plan review, certify in writing that the owner or operator will continue to implement the source's existing QA/QC plan or submit in writing, any changes to the plan and the reasons for each change; l. For each CMS deviation: i) The date, and time that each malfunction of a CMS started and stopped, and a description of the nature of the deviation; ii) The date, time, and duration that each CMS was inoperative, except for zero (low level) and high level checks; iii) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8); iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period; v) A summary of the total duration of the deviation during the reporting period and the total duration as			

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	a percent of the total source operating time during that reporting period; vi) A breakdown of the total duration of deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes; vii) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during the reporting period; viii) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, CO, and operating parameters for control devices; ix) A brief description of each CMS for which there was a deviation; x) The date of the latest CMS certification or audit for the system for which there was a deviation; xi) A description of any changes in CMSs, processes or controls since the last reporting period; and xii) A copy of the annual test report if the annual performance test showed a deviation from the emission limit for PM, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.			
19.	Startup, Shutdown Malfunction Report PSNH shall submit a Startup, Shutdown, Malfunction report if there was a startup, shutdown, or malfunction during the reporting period that was not consistent with the SSMP. The report shall contain: a. The actions taken for the event; b. The name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy; c. The circumstances of the event; d. The reason for not following the SSMP; and e. Whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.	Within 2 working days of the occurrence by phone or fax, and a full written report within 7 working days after the end of the event	SR5	40 CFR 63 Subpart B (Case-by-Case MACT)
20.	NOx Reporting Requirements: PSNH shall submit reports of the NOx records kept pursuant to Table 8, Item 13.	Annually (no later than April 15th of the following year)	SR5	Env-A 909.03
21.	State Acid Deposition Control Program Reporting Requirements: PSNH shall submit an annual report of the fuel utilization information pursuant to Env-A 903.03 and Table 8, Item 5.	Annually (no later than April 15th of the following year)	SR5	Env-A 907.02
22.	CEMS Recertification Notifications and Reports: a. PSNH shall notify EPA and DES by telephone or in	7 days prior to partial	SR5	40 CFR 75.61 (a)(1), 75.70,

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	writing and not later than 21 days prior to the first scheduled day of full recertification testing and at least 7 calendar days prior to the first scheduled day of partial recertification testing (when all of the tests are not required). In emergency situations when equipment fails with lost data, PSNH may provide notice within 2 business days following the date when testing is scheduled. If the testing is rescheduled, PSNH may notify DES and EPA by telephone or other means within 2 business days prior to the scheduled test date or the revised test date, whichever is earlier. b. Within 45 calendar days after completing all recertification tests, PSNH shall submit to EPA and DES the electronic and hardcopy information contained in 40 CFR 75.63. c. Pursuant to Env-A 3212.14, PSNH shall submit an application to DES within 45 days after completing all initial certification or recertification tests including the information required under 40 CFR 75, Subpart H. d. PSNH shall also submit written notification required pursuant to 40 CFR 75.61 to the ATS administrator. e. Pursuant to Env-A 3212.09, PSNH shall comply with the notification requirements of Env-A 3212.07 for SRCT.	recertification, 21 days prior to full recertication, and 45 days after all recertification tests		75.63, and 75.73(d) and Env-A 3212
23.	<u>Relative Accuracy Test Audit (RATA) Notification and Reports:</u> a. PSNH shall submit written notice to EPA and DES no later than 21 calendar days prior to the first scheduled day of testing. If the testing is rescheduled, PSNH may notify DES and EPA by telephone or other means no later than 24-hours in advance of the new testing date. Pursuant to Env-A 808.07, PSNH shall notify DES at least 30 days prior to the performance of the RATA. DES shall require rescheduling of the RATA if staff necessary to observe the RATA are not available. b. If requested, PSNH shall submit the quality assurance RATA reports to EPA and DES by the later of 45 days after completing a quality assurance RATA or 15 days of receiving the request. c. Pursuant to Env-A 808.05, PSNH shall submit to DES a written report summarizing the performance specification testing within 30 days of the completion of the test. d. Pursuant to Env-A 3212.11, for SRCT, PSNH shall submit written notification to DES only. e. PSNH shall also submit written notification required pursuant to 40 CFR 75.61 to the ATS administrator.	21 calendar days prior to RATA	SR5	40 CFR 75.61 (a)(5) and 75.73(d) and Env-A 3212.11 and 808.05 and 808.07(c) and (d)
24.	<u>Performance Specification Testing Reports:</u> a. DES shall be notified of the date or dates of the performance specification testing at least 30 days prior to the scheduled dates.	30-day notice to DES prior to test; test report to DES 30 days after the	SR5	Env-A 808.05

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	b. PSNH shall submit to DES a written report summarizing the testing within 30 days of the completion of the test.	test		
25.	General Audit Notification Requirements: PSNH shall notify DES at least 2 weeks prior to any planned audit or test procedure except for RATAs, where PSNH shall provide at least 30 days notice prior to the performance of the RATA.	2 weeks prior to any planned audit or test procedure and at least 30 days prior to the RATA.	SR5	Env-A 808.07(c) and (e)
26.	Monitoring and QA/QC Plan Submittals: PSNH shall submit to EPA and DES a complete, electronic, up-to-date monitoring plan at the time of recertification application submission and in each electronic quarterly report, and whenever an update of the electronic monitoring plan information is required.	In the recertification application, in each electronic quarterly report, and whenever an update of the electronic monitoring plan information is required	SR5	40 CFR 75.62 and 75.73(d) and (e) and Env-A 808.04, Env-A 808.06, and Env-A 3212
27.	Quarterly Reports: PSNH shall submit to DES and EPA in electronic format or other format as approved by DES and/or EPA 30 calendar days after the end of the calendar quarter the information contained in 40 CFR 75.64(a), 40 CFR 75.73(f), 40 CFR 75.74, Env-A 3212, Env-A 3214, Env-A 808.11, and Env-A 808.13 and the following information: a. Written report of opacity, SO_2, NOx, and CO_2 emissions as calculated by the CEMS. b. The 24-hour averages of the following shall be reported, whether or not an excess emission has occurred: i) SO_2 lb/MMBTU, SO_2 ppm, and SO_2 lb/hr; ii) NOx lb/MMBTU, NOx ppm, and NOx lb/hr; iii) Percent CO_2 and CO_2 lb/hr as measured by continuous monitor/recorder; iv) Stack volumetric flowrate (in kscfm); v) Load (in MW); vi) Steam flow (in klbs/hr); vii) Heat input (MMBTU/hr); and viii) Opacity (in percent). c. Excess emission data recorded by the CEM system, including the following: i) The date and time of the beginning and ending of each of excess emissions; ii) The magnitude of each excess emission; iii) The specific cause of the excess emission; and iv) The corrective action taken. d. If no excess emissions have occurred, a statement to that effect; e. For gaseous emission monitoring systems, the daily averages of the measurements made and emissions rates calculated. f. A statement as to whether the CEM system was	30 calendar days after the end of the calendar quarter	SR5	40 CFR 75.64, 40 CFR 75.73(f), 40 CFR 75.57(f), 40 CFR 75.74, Env-A 3212, Env-A 3214, Env-A 808.11, Env-A 808.13

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	inoperative, repaired, or adjusted during the reporting period; g. If the CEM system was inoperative, repaired, or adjusted during the reporting period, the following information: h. The date and time of the beginning and ending of each period when the CEM was inoperative; i. The reason why the CEM was not operating; j. The corrective action taken; and k. The percent data availability calculated in accordance with Env-A 808.10 for each flow, diluent, or pollutant analyzer in the CEM system; l. The date and time beginning and ending each period when the source of emissions which the CEM system is monitoring was not operating; m. When calibration gas is used, the following information: i) The calibration gas concentration; n. If a gas bottle was changed during the quarter: i) The date of the calibration gas bottle change; ii) The gas bottle concentration before the change; and iii) The gas bottle concentration after the change; and iv) The expiration date for all calibration gas bottles used. o. Excess emissions of SO_2 shall be defined as an annual SO_2 emission, which exceeds the state acid rain emission limitation, as calculated from CEM data. p. The designated representative shall affirm that the component/system identification codes and formulas in the quarterly electronic reports represent current operating conditions. q. The designated representative shall submit a certification in support of each quarterly emissions monitoring report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. r. The certification shall indicate whether the monitoring data submitted were recorded in accordance with the applicable requirements of this part including the quality control and quality assurance procedures and specifications of 40 CFR 75, and any such requirements, procedures and specifications of an applicable excepted or approved alternative monitoring method. s. For a unit with add-on emission controls, the designated representative shall also include a certification, for all hours where data are substituted following the provisions of 40 CFR 75.34(a)(1), that the add-on emission controls were operating within the range of parameters listed in the monitoring plan and that the substitute values recorded during the quarter do not systematically underestimate SO_2 or NOx emissions, pursuant to 40			

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	CFR 75.34. t. For a unit that is reporting on a control period basis, the designated representative shall also include a certification that the NOx emission rate and NOx concentration values substituted for missing data under 40 CFR 75 Subpart D are calculated using only values from a control period and do not systematically underestimate NOx emissions. u. Pursuant to Env-A 3212.15(b), for SRCT, PSNH shall either meet all of the requirements of 40 CFR 75 related to monitoring and reporting NOx mass emissions during the entire year or submit quarterly reports only for the periods from the earlier of May 1 or the date and hour that PSNH successfully completes all of the recertification tests required in accordance with 40 CFR 75.74 through September 30 of each year in accordance with 40 CFR 75.74(b). v. Pursuant to Env-A 3212.15(e), the quarterly reports shall be submitted in the manner specified in 40 CFR 75, Subpart H and 40 CFR 75.64. w. Pursuant to Env-A 3212.15(f), the quarterly reports shall include all of the data and information required in 40 CFR Subpart H and 40 CFR Subpart G. x. Pursuant to Env-A 3214.01, PSNH shall also submit emissions and operations information in electronic format as part of the quarterly reports. y. Pursuant to Env-A 3214.02, PSNH shall also submit to the NETS administrator in the quarterly reports, NOx emissions in lb/hr for every hour during the control period and cumulative quarterly and seasonal NOx emission data in pounds. z. PSNH shall also submit to the ETS administrator in the quarterly reports, SO_2, NOx and CO_2 emissions in lb/hr for every hour during the year and cumulative quarterly and annual SO_2, NOx and CO_2 emissions data in pounds.			
28.	Offset Plans for Excess SO_2 Emissions: PSNH shall submit an offset plan no later than 60 days after the end of any calendar year during which a unit has excess SO_2 emissions. The offset plan shall contain the information pursuant to 40 CFR 77.3.	60 days after the end of any calendar year	SR5	40 CFR 77.3
29.	Quarterly Audit Reports: Pursuant to Env-A 808.07 (new), PSNH shall submit to DES, a written summary report of the results of all required audits that were performed in that quarter, in accordance with the following: a. For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1, Section 7; and b. For opacity CEM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, "Technical Assistance Document: Performance Audit	Quarterly, no later than 30 calendar days after the end of the quarter for which reporting is required	SR5	Env-A 808.07

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	Procedures for Opacity Monitors."			
30.	Quarterly Fuel Data Reports: PSNH shall submit quarterly reports of the fuel data listed in Table 8, item 5 summarized on a monthly basis. PSNH shall also submit quarterly reports containing the monthly fuel usage information by device fuel type and sulfur content.	Quarterly, no later than 30 calendar days after the end of the quarter for which reporting is required	SR5	Env-A 910.01
31.	Performance Test Reports: PSNH shall submit a report to DES documenting the results of the compliance stack emission test. The compliance stack emission test report shall contain the following information: a. All the information required for the pre-test protocol as described in Env-A 802.04; b. All test data; c. All calibration data; d. Process data agreed by DES and PSNH to be collected; e. All test results; f. A description of any discrepancies or problems that occurred during testing or sample analysis; g. An explanation of how discrepancies or problems were treated and their effect on the final results; and h. A list and description of all equations used in the test report, including sample calculations for each equation used.	No later than 60 days after a performance test	SR5	Env-A 802.11
32.	Regulated Toxic Air Pollutant Reports: PSNH shall report actual emissions speciated by individual regulated toxic air pollutants, including a breakdown of VOC emission compounds.	Annually (no later than April 15th of the following year)	SR5	Env-A 907.01
33.	Prompt Reporting of Permit Deviations: PSNH shall promptly report deviations from permit requirements by phone, fax or e-mail in accordance with Section XVIII of this permit and Env-A 911 (new).	Within 24 hours of discovery of occurrence	SR5	Env-A 911
34.	Certification by the Designated Representative or the Alternate Designated Representative: Any document submitted under the Acid Rain program shall be signed and certified by the designated representative or the alternate designated representative and include the statements pursuant to 40 CFR 72.21 (a)(1) and (2).	With each submittal	SR5	40 CFR 72.21
35.	Emissions Reporting and Emissions Fees: PSNH shall submit reports of actual emissions of all significant and insignificant activities and payment of emission-based fees in accordance with Env-A 700 and Section XVIII of this permit.	Quarterly	SR5	Env-907.01 and Env-A 704.03 and 704.04
36.	Annual Acid Rain Compliance Certification Report: PSNH shall submit an annual compliance certification report containing all the information required in 40 CFR 72.90(b)	60 days after the end of the calendar year	SR5	40 CFR 72.90
37.	NOx Budget Program Compliance Certification: For each control period, PSNH shall submit an annual compliance certification containing the information listed in Env-A 3216.	By November 30 of each year	SR5	Env-A 3216
38.	Reporting of Raw Material Usage for Air Pollution Control	Annually (no later	SR5-PC1	Env-A 910.01

Table 9: Applicable Reporting Requirements				
Item No.	**Reporting Requirement**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	Equipment: As part of the annual emissions report, PSNH shall report: a. Amount of urea used in the SNCR system on a monthly basis; and b. Amount of limestone injected into the boiler on a monthly basis.	than April 15th of the following year)	SR5-PC2	

General Temporary PSD Permit Conditions

IX. Temporary Permit Renewal Procedures

Pursuant to Env-A 607.02(b), for the reissuance of a temporary permit, an application shall be considered timely if it is received by the department at least 90 days prior to the designated expiration date of the temporary permit.

X. Application Shield

A. Pursuant to Env-A 607.10(a), if an applicant submits a timely application that has been deemed complete by the department for the reissuance of a temporary permit or the issuance of an initial state permit to operate, the failure to have a current and valid temporary permit shall not be considered a violation of RSA 125-C:11,I or Env-A 607.01 unless and until the department takes final action on the application by denying the requested reissuance of a temporary permit or issuance of a state permit to operate.

B. Pursuant to Env-A 607.10(b), if the department deems an application complete, but requests additional information pursuant to Env-A 607.06(b), the protection granted in Env-A 607.10(a) shall cease to apply when the applicant fails to submit in writing such additional requested information by the deadline specified in the request.

XI. Permit Shield

Pursuant to Env-A 607.08(c), the expiration of a temporary permit shall terminate the owner or operator's right to construct or operate a new or modified source or device pursuant to the permit, unless a timely and complete application for a state permit to operate, title V operating permit, or an amendment thereto, has been received by the department. Upon the submittal of a timely and complete application for any of the foregoing permits, the right to construct shall continue, under the terms and conditions of the expired temporary permit, pending the department's decision on the application.

XII. Administrative Permit Amendments

A. Pursuant to Env-A 612.01, PSNH may implement the changes addressed in the request for an administrative permit amendment as defined in Part Env-A 100 immediately upon submittal of

the request.

B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

XIII. Minor Permit Amendments

A. Pursuant to Env-A 612.05 prior to implementing a minor permit modification, PSNH shall submit a written request to the Director in accordance with the requirements of Env-A 612.05(b).

B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.05(c) through (g).

C. Pursuant to Env-A 612.05(g), the permit shield specified in Env-A 609.09 shall not apply to minor permit amendments under Section XVII. of this Permit.

D. Pursuant to Env-A 612.05(a), PSNH shall be subject to the provisions of RSA 125-C:15 if the change is made prior to the filing with the Director a request for a minor permit amendment.

XIV. Significant Permit Amendments

A. Pursuant to Env-A 612.06, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.06(a)(1) through (5).

B. Prior to implementing the significant permit amendment, PSNH shall submit a written request to the Director which includes all the information as referenced in Env-A 612.06(b) and (c) and shall be issued an amended Temporary PSD Permit from the DES. PSNH shall be subject to the provisions of RSA 125-C:15 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Temporary PSD Permit.

C. The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.06(d), (e) and (f).

XV. Temporary PSD Permit Suspension, Revocation or Nullification

A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:

1. PSNH has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or

2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.

B. The Director shall nullify any Permit, if following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

XVI. Inspection and Entry

EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII, for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the NH Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

XVII. Reports

All reports submitted to DES (except those submitted as emission based fees as outlined in Section XVIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

Office of Environmental Stewardship
Director Air Compliance Program
United States Environmental Protection Agency
1 Congress Street
Suite 1100 (SEA)
Boston, MA 02114-2023
ATTN: Air Compliance Clerk

XVIII. Emission-Based Fee Requirements

A. PSNH shall pay an emission-based fee quarterly for this facility as calculated each calendar year pursuant to Env-A 705.03.

B. PSNH shall determine the total actual quarterly emissions from the facility to be included in the emission-based multiplier specified in Env-A 705.03(a) for each calendar quarter in accordance with the methods specified in Env-A 616.

C. PSNH shall calculate the quarterly emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.03 and the following equation:

*FEE = E * DPT * CPIm * ISF*

Where:

FEE =	The quarterly emission-based fee for each calendar quarter as specified in Env-A 704.
E =	The emission-based multiplier is based on the calculation of total quarterly emissions as specified in Env-A 705.02 and the provisions specified in Env-A 705.03(a).
DPT =	The dollar per ton fee the DES has specified in Env-A 705.03(b).
CPIm=	The Consumer Price Index Multiplier as calculated in Env-A 705.03(c).
ISF =	The Inventory Stabilization Factor as specified in Env-A 705.03(d).

D. PSNH shall contact the DES each calendar year for the value of the Inventory Stabilization Factor.

E. PSNH shall contact the DES each calendar year for the value of the Consumer Price Index Multiplier.

F. PSNH shall submit, to the DES, payment of the emission-based fee and a summary of the calculations referenced in Sections XVIII.B. and C of this Permit for each calendar quarter. The total emission-based fee shall be paid in four equal installments on a quarterly basis. The quarterly payments shall be made in accordance with Env-A 705.04 on the 15th day of the following months:

1. July of the year to which the fee applies (e.g., fees for emissions occurring during January, February, March 2002 are due July 15, 2003);

2. October of the year to which the fee applies (e.g., fees for emissions occurring during April, May, June 2002 are due on October 15, 2003);

3. January of the following year (e.g., fees for emissions occurring during July, August, September 2002 are due on January 15, 2004);

4. April of the following year (e.g., fees for emissions occurring during October, November, December 2002 are due on April 15, 2004).

G. PSNH shall pay any remaining balance of the total emission-based fee for the year no later than April 15th of the following year.

The emission-based fee and summary of the calculations shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
29 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN.: Emissions Inventory

H. The DES shall notify PSNH of any under payments or over payments of the annual emission-based fee in accordance with Env-A 705.05.

XIX. Permit Deviation

A. In the event of a permit deviation, PSNH shall:

1. Investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels; and

2. Record the following information:

   a. The permit deviation;
   b. The probable cause of the permit deviation;
   c. The date of the occurrence;
   d. The duration;
   e. The specific device that contributed to the permit deviation; and
   f. Any corrective or preventative measures taken.

3. If the permit deviation does not cause excess emissions, but continues for a period greater than 9 consecutive days, the source shall notify the division by telephone or fax on the tenth day of the permit deviation, unless it is a Saturday, Sunday, or state or federal legal holiday, in which event, the division shall be notified on the next day which is not a Saturday, Sunday, or state or federal legal holiday, of the subsequent corrective actions to be taken.

4. In the event of a permit deviation that causes excess emissions, the owner or operator of the affected device, process, or air pollution control equipment shall:

   a. Notify the division of the permit deviation and excess emissions by telephone or fax, within twenty-four (24) hours of discovery of the permit deviation, unless it is a Saturday, Sunday, or state or federal legal holiday, in which event, the division shall be notified on the next day which is not a Saturday, Sunday, or state or federal legal holiday; and

   b. Submit a written report, in accordance with (A)(6) below, to the division within ten (10) days of discovery of the permit deviation reported in (A)(4)(a), above.

5. In the event of a permit deviation caused by a failure to comply with the data availability requirements of Env-A 800, the owner or operator of the source shall:

   a. Notify the division of the permit deviation by telephone or fax, within 10 days of discovery of the permit deviation; and

   b. Report the permit deviation to the division, as part of the excess emissions report submitted in accordance with Env-A 800.

6. The written report, pursuant to (A)(4)(b) above, shall include the following information:

    a. Facility name;
    b. Facility address;
    c. Name of the responsible official employed at the facility;
    d. Facility telephone number;
    e. Date(s) of the occurrence;
    f. Time of the occurrence;
    g. Description of the permit deviation;
    h. The probable cause of the permit deviation;
    i. Corrective action taken to date;
    j. Preventative measures taken to prevent future occurrences; and
    k. Date and time that the device, process, or air pollution control equipment returned to operation in compliance with an enforceable emission limitation, or operating condition;
    l. The specific device, process or air pollution control equipment that contributed to the permit deviation;
    m. The type and quantity of excess emissions emitted to the atmosphere due to the permit deviation; and
    n. The calculation or estimation used to quantify the excess emissions.

B. In accordance with 40 CFR Part 70.6(a)(3)(iii)(A), sources subject to Env-A 609 that have been issued a title V permit, shall report to the division, at a reporting frequency no less stringent than semi-annually, the following information:

1. A summary of all permit deviations previously reported to the division pursuant to Env-A 911.04(a) and (b), for the reporting period;

2. A list of all permit deviations recorded pursuant to Env-A 911.03(b).

C. Sources subject to Env-A 607, Env-A 608, or Env-A 609 that have not been issued a title V permit, but have been issued a state permit to operate or a temporary permit, shall report to the division, at least annually by April 15, all information pursuant to (B) above.

XX. Ozone Season NOx Budget Trading Program (Env-A 3200)

Pursuant to Env-A 3202.01, if fossil fuel comprises 51% or greater of the annual heat input on a BTU basis, then the NWPP Boiler will be classified as a NOx Budget Source and will be subject to the requirements of Env-A 3200.

XXI. Discrete Emission Reduction Trading Program (Env-A 3100)

To date, PSNH did not file a notice of generation of Discrete Emissions Reductions (DERs) in accordance with Env-A 3100 nor a request for Emissions Reductions Credits (ERCs) in accordance with Env-A 3000. At this point, DES has not included any permit terms authorizing emissions trading in this permit. All emission reduction trading must be authorized under the applicable requirements of either Env-A 3000 *Emissions Reductions Credits Trading Program,*or Env-A 3100

Discrete Emissions Reductions Trading Program and 42 U.S.C § 7401 et seq. (The "Act"), and must be provided for in this permit.

NORTHERN WOOD POWER PROJECT

WOOD FUEL PURCHASE AND SALES AGREEMENT

BUYER: Public Service of New Hampshire **SELLER**: _____
780 N. Commercial Street _____
Manchester, NH 03101 _____

SELLER agrees to sell and **BUYER** agrees to purchase certain wood fiber (referred to herein as the "Wood"), described as follows:

WOOD CHIPS AND MIXED FUEL consisting of clean wood and whole tree chips produced in accordance with specification sheet attached hereto and incorporated herein by reference.

Wood shall not contain any hazardous materials including those subject to regulation and is not mixed with other unsorted solid wastes. Wood sources containing resins, glues, laminates, paints, preservatives, or other treatments that would combust or off-gas, or mixed with any other material that would burn, melt, or create other residue other than wood ash, will not be approved as clean wood.

SELLER understands and agrees to be bound by terms, conditions and specifications stated herein including the fuel specifications attached hereto.

TERMS AND CONDITIONS

1. Term: This agreement ("Agreement") covers a period beginning _____ and ending _____. The term of this Agreement will be automatically extended by mutual agreement of **BUYER** and **SELLER** as stated below unless terminated or superseded. After the date of expiration, delivery by **SELLER** and acceptance of wood by **BUYER** shall constitute an acceptance of the extension of both parties and shall constitute acknowledgement by the respective parties that all other terms and conditions of this Agreement remain in force. **BUYER** reserves the right to alter the quantity specified as its business and reasons dictate.

2. Quantity: SELLER shall deliver between _____ tons and _____tons per week to BUYER'S Northern Wood Power Project facility; with the specific number of tons to be delivered in each delivery week mutually agreed upon by the parties on a weekly basis. BUYER reserves the right to not take any quantity of Wood during periods of plant operational or inventory constraints.

3. Price: The price for the wood shall be $_____ per ton delivered to the **BUYER'S** Northern Wood Power Project facility at Portsmouth, NH during regular delivery hours. The price per ton may be adjusted as per mutual agreement between **BUYER'S** duly authorized wood procurement agent and the **SELLER** in order to account for upward and/or downward fluctuations in the price of diesel fuel. Such price adjustments shall be documented by **BUYER'S** procurement agent at the time of such price adjustment agreement.

4. Delivery: **SELLER** shall deliver whole tree chips or other acceptable wood fuel products during the Delivery Period between the hours of 7 a.m. and 9 p.m. Monday through Friday, and/or between 7 a.m. and noon on Saturdays. **SELLER** agrees to abide by **BUYER'S** Contractor Work Rules and the Truck Traffic Plan between **BUYER** and the City of Portsmouth.

4. Payment: Payment will be made by **BUYER** to **SELLER** on a weekly basis for wood delivered during the preceding week (for deliveries made in the preceding Monday through Saturday delivery window). Should **SELLER** desire payment in the form of electronic transfer or wiring of funds, **SELLER** shall provide **BUYER** with the necessary financial account information prior to the delivery of Wood.

5. Title & Failure to Satisfy Specifications: Title to the Wood shall pass from **SELLER** to **BUYER** upon delivery to, and **BUYER'S** acceptance at, its facility; provided however that the quality and quantity delivered shall be determined by the **BUYER** upon inspection after its arrival and that portion as determined by the **BUYER** that does not comply with specifications herein may be disposed of by **BUYER** in any manner determined by **BUYER** in its sole discretion. In the event of such disposition, **BUYER** shall not be held accountable to the **SELLER** in any manner thereof for that amount of Wood deemed unacceptable by **BUYER**.

6. Weighing: All wood delivered by **SELLER** to **BUYER** shall be weighed using truck scales provided by **BUYER**. **SELLER'S** delivery vehicle shall be so weighed immediately prior to and immediately after unloading and the net weight of Wood shall be the basis for billing and payment, subject to adjustment as provided herein. The truck scales shall be certified by a person or firm qualified by the New Hampshire Department of Agriculture, Bureau of Weights and Measures, as being accurate. The weigh scale receipts shall be used to determine the final weight.

7. Liens & Encumbrances: The **SELLER** warrants to **BUYER** that all Wood delivered under this Agreement shall be free and clear of all liens and encumbrances and that the **SELLER** has full right to sell and deliver same. In the event a lien is asserted, the **BUYER** may withhold payment until a final judicial determination has been made as to the proper party to pay.

8. Compliance with Applicable Laws and Permits: The **SELLER** warrants to **BUYER** that all wood delivered under this Agreement shall be produced and delivered in full compliance with all applicable laws, codes, regulations, rules and/or orders required to be observed as now in effect or as may be enacted or amended. **SELLER** agrees to indemnify, defend and hold harmless **BUYER** if **SELLER** fails to comply with the foregoing and in the event of such failure, **BUYER** may cancel this Agreement without prior notice to **SELLER**. Upon request, **SELLER** agrees to provide **BUYER** with evidence of compliance with said laws and permits. **SELLER** covenants to **BUYER** that the wood shall not contain any hazardous waste, hazardous substances, pollutants, contaminates or other materials not specified herein.

9. Indemnification: It is the intention of the parties that **BUYER**, its officers, agents and employees shall be held harmless from and against any claims that may arise out of **SELLER'S** operations. Accordingly, **SELLER** agrees to indemnify, defend and hold harmless the **BUYER**, its officers, agents and employees from and against all claims, suits, damages and expenses of every kind and description to which they or any of them may be subjected by reason of injury, death or property damage, including environmental damage, arising out of or any way connected with **SELLER'S** performance under this Agreement to the full extent permitted by applicable law irrespective of either party's negligence.

10. Termination: This Agreement may be terminated by **BUYER** upon thirty (30) days prior written notice to the **SELLER**.

11. Insurance: Vehicle liability coverage for all trucks or other vehicles, owned, non-owned or contracted, used in the business of procuring, producing or delivering fuel to **BUYER** Facilities with a combine single limit of $500,000. **SELLER** shall provide certificates of insurance to **BUYER** prior to delivery of any wood under this agreement.

12. Relationship of Parties: The relationship between the parties is that of **BUYER** and **SELLER** and nothing contained herein shall be deemed to create any other status.

13. Assignment: This Agreement may not be assigned by either party without the prior written approval of the other party provided, however, **BUYER** may assign the Agreement without **SELLER'S** consent to 1) any entity providing financing for the facility, or 2) any entity controlling, controlled by, or under common control of **BUYER**.

14. Taxes: The sale price hereunder shall include all federal, state and local taxes and any and all assessments and fees of whatever nature.

15. Consequential Damages: **BUYER** shall not be liable to **SELLER** for indirect, special or consequential damages, however occurring, whether arising in contract, tort or otherwise.

16. Entire Agreement: This Agreement constitutes the entire agreement between the parties and supersedes all prior representations, documents or statement made by the parties. **SELLER** agrees to comply with the specifications herein which are made a part of this Agreement and incorporated herein for all purposes.

BUYER:	**SELLER**:
_____	_____
_____	_____
Date	Date

FUEL SPECIFICATIONS FOR
NORTHERN WOOD POWER PROJECT
WOOD FUEL

Whole tree chips or chipped slabs and edging from sawmills produced using rotary chipper with knives. Does not include sawdust or planer shavings or material processed by hammer mill.

Specified Particle Size: Largest material not more than six inches (6") on any side. Smallest material not less than one eighth inch (1/8") any side.

Moisture Content: Averaging a maximum of fifty percent (50%) green weight basis over a delivery pay period (one week).

Allowance for Out-of-Size Specification Materials – Presence of Contaminants:
The fuel shall not contain any paints, surface treatments, glues or other adhesives, plastic laminates, preservatives including but not limited to creosote, pentachlorophenol (penta); or chromated copper arsenate (CCA), or hazardous materials. The term hazardous materials shall mean asbestos, polychlorinated byphenyls (PCBs), petroleum products and any pollutant contaminants, chemical or industrial, toxic, or hazardous substances or wastes, as these terms are defined by federal, state or local laws, rules, regulations, ordinances, codes, policies or rules of common law now or hereinafter in effect, and any judicial or administrative interpretation.

Oversize material not to exceed 1-1/2 cu. yd. per truck load. Fines (wood fuel passing 1/4" screen) not to exceed ten percent (10%) by weight. Presence of excessive unchipped twigs and intertwined sticks or wood blocks/logs which disrupt **BUYER'S** fuel handling system is unacceptable regardless of volume.

Noncombustibles, including rocks, metal, ice, etc. are unacceptable.

Out-of-Specification Remedies: Delivered loads not meeting the specifications for quality or with moisture content of fifty percent (50%) or higher may be subject to rejection or disposal at **BUYER'S** option. Should **SELLER** continually deliver out of specification wood fuel, **BUYER**, at its sole discretion, may disallow subsequent deliveries of wood fuel by **SELLER** until such time that **BUYER** is satisfied that **SELLER** will deliver wood fuel that meets the specifications herein. **SELLER** shall be responsible for all costs associated with the disposal of out-of-specification wood fuel

Clearcutting: Any clear-cut in New Hampshire exceeding 75 acres in size must be approved by a licensed New Hampshire forester before delivery of wood to **BUYER**. Any clear-cut in Maine exceeding 20 acres in size must be approved by a licensed professional Maine forester before delivery of wood to **BUYER**. Any clear-cut in Vermont exceeding 75 acres in size may be approved by a regulatory forester before delivery of wood to **BUYER**.

Sourcing: **SELLER** shall indicate with each truck delivery from which state the wood was harvested.

BUYER has an agreement with the New Hampshire Timberland Owners Association to report the origin of wood delivered, whether or not there was a licensed forester involved, if the wood came off of a certified tree farm, if the logger producing the wood is certified, if the wood lot harvested was third party SFI Certified or in Massachusetts, is harvested under a Chapter 132 cutting plan. Truckers will report this information to the scale person upon entering the scales.

Specifications may change. **BUYER** shall inform **SELLER**, in writing, of any specification changes.

SCHILLER STATION UNIT 5 FUEL SUPPLY AGREEMENT BETWEEN NEW HAMPSHIRE TIMBERLAND OWNERS ASSOCIATION AND PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

WHEREAS New Hampshire Timberland Owners Association ("NHTOA"), a New Hampshire-based nonprofit organization representing New Hampshire's timberland owners and forest products industry, and Public Service Company of New Hampshire ("PSNH"), an electric utility serving customers in New Hampshire, share a concern about the State's economy;

WHEREAS the New Hampshire legislature has found the New Hampshire forest products industry is an important part of the State's entire economy (RSA 227-G:1 and RSA 672:1, IIIc) and markets for low-grade wood are critical to the overall health of this industry as codified in Chapter 104 of the 2002 legislative session;

WHEREAS PSNH has proposed the replacement of a coal-fired boiler at Schiller Station in Portsmouth, New Hampshire, with a wood-fired boiler ("the Schiller project") which will burn approximately 400,000 tons of wood annually, beginning on or about December 2005;

WHEREAS the new wood-fired boiler is expected to be permitted to burn whole tree chips (forestry, non-forestry, and land-clearing), sawmill residues, and other Renewable Portfolio Standard eligible fuel;

WHEREAS NHTOA represents New Hampshire sources and suppliers of wood whose support is desired to ensure the long-term viability of the Schiller project;

WHEREAS PSNH and NHTOA (together, "the Parties") agree that the Schiller project has the potential to make a positive impact on the low-grade wood market in New Hampshire;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Parties hereby agree as follows:

1. Support for Project

As consideration for PSNH's performance under this Agreement, NHTOA fully supports the Schiller project as presently represented with this Agreement and New Hampshire Public Utilities filings submitted as of the date hereof. PSNH's performance hereunder is conditioned upon the New Hampshire Public Utilities Commission's approval of this Agreement.

2. Fuel Source

PSNH agrees to procure fuel for the Schiller project in accordance with the following procurement strategy, provided that such fuel is available on essential terms (price, quality, quantity, timeliness and consistency of delivery) equal to alternatives:

a. In the year 2005, prior to the boiler being placed in-service, PSNH agrees to purchase approximately 30% of the total quantity of wood for the new boiler from New Hampshire sources or suppliers;
b. In the year 2006, the first year the new boiler is in service, PSNH agrees to purchase a minimum of 35% of the total quantity of its wood fuel from New Hampshire sources or suppliers;
c. In the year 2007, PSNH agrees to purchase a minimum of between 35-40% of the total quantity of its wood fuel from New Hampshire sources or suppliers;
d. In the year 2008, PSNH agrees to purchase a minimum of 40% of the total quantity of its wood fuel from New Hampshire sources or suppliers.
e. In the year 2008, the Parties agree to use their best efforts to negotiate a successor agreement for the purpose of continuing the procurement priority provided to New Hampshire sources and suppliers established herein. Any such successor agreement must be provided to the NHPUC.

3. Long-term contracts

a. The Parties agree that it is in the best interests of PSNH customers, NHTOA members, and the economy of the State of New Hampshire, in order to provide certainty in the market and to ensure consistency of supply at fair prices, for a certain percentage of the Schiller project wood fuel requirements to be procured through long-term fuel supply contracts (defined as having a duration of 12 months or greater). PSNH agrees, subject to the provisions of subparagraph 3(b) below, that in the year 2006, a minimum of 10% of the wood fuel for the Unit 5 boiler will be procured through long-term contracts, and in the years 2007 and 2008, a minimum of 15% of the wood fuel for the Unit 5 boiler will be procured through long-term contracts. Furthermore, PSNH agrees to make a good-faith effort to increase the percentage of long-term contracts entered into for wood fuel procurement in 2008 so long as it remains economically feasible.
b. The Parties agree to address the issue of long-term contracts in negotiating the successor agreement in 2008, referred to in 2(e), and identify an annual minimum percentage of long-term wood fuel supply contracts to be entered into as part of PSNH's wood fuel procurement program.
c. Prior to entering long-term contracts, PSNH will seek the best price and assurances of both timeliness and consistency of delivery from fuel suppliers throughout the region; however, once all bids have been submitted, New Hampshire suppliers will be awarded the contract if all essential factors (price, quality, quantity, timeliness and consistency of delivery) are equal to other proposals received.

4. Good Forest Management Standards

a. The Parties agree that good forest management standards are essential to incorporate into an environmentally responsible wood fuel procurement program,

and for the years 2006 and 2007, PSNH agrees to track and annually report the percentage of wood purchased that meets one or more of the following criteria:

1. Is harvested from land that is a Certified Tree Farm; or
2. Is harvested on land third-party certified by the Sustainable Forestry Initiative or the Forest Stewardship Council; or
3. In New Hampshire and Maine, is harvested under the direction of a forester licensed by the State and harvested in a manner that the forester certifies is not a change in land use; or
4. In Massachusetts, is harvested following a cutting plan approved by the Department of Conservation and Recreation (also referred to as a Chapter 132 Forest Cutting Plan); or
5. Is harvested by a logger certified by a body recognized by the Sustainable Forestry Initiative State Implementation Committee in that State, and is harvested in a manner that the logger certifies both meets state Best Management Practices and is not a change in land use.

b. In order to track the percentage of wood that meets good forest management standards, PSNH shall request the appropriate certification from wood fuel sources or suppliers. At the end of 2006 and 2007, the Parties shall review the relevant records to assess PSNH's support of good forest management standards in order to identify achievable goals beginning in the year 2008.
c. The Parties agree that in 2008, based on information garnered primarily from experience with the new Unit 5 boiler's operations and wood fuel purchasing, but also including other relevant factors such as the costs of diverse low-grade wood fuel and the status of renewable energy legislation in the region, the Parties will determine a minimum annual percentage of wood fuel to be purchased by PSNH that shall meet the above-listed standards and can be enforced through a public accountability mechanism.

5. Reporting and Verification

a. No later than two months following the close of the calendar year, PSNH shall report to the NHTOA:
1. the volume of wood received from New Hampshire sources and suppliers,
2. the volume of wood procured using long-term contracts,
3. the volume of wood received from logging operations using good forest management standards (as defined in section 4), and
4. the total volume of wood received for use as fuel at Schiller Station.

b. As a mechanism to verify the reporting results, PSNH agrees to pay for a licensed forester to conduct an audit of a minimum of 3% of the reported wood fuel acquisitions from logging operations to confirm that those sources were accurately represented by the supplier.
c. It is understood by both NHTOA and PSNH that either or both parties may release the information in the annual report to other parties, including but not limited to members of the NHTOA, state agencies, conservation organizations, legislators and the media.
d. The NHTOA may, at its own expense, engage a third party to verify that:

1. the volume of wood procured from New Hampshire sources and suppliers meets with the terms of this Agreement, and
2. the volume of wood procured that meets "good forest management standards" meets the terms of this Agreement.

e. The third party will, subject to an agreement of confidentiality, have reasonable access to PSNH records for the purpose of confirming volumes from particular sources. The third party will be able to publicly report that PSNH is in compliance with the Agreement, or, in the event that PSNH has failed to procure the necessary volumes from the required sources, the volume that PSNH is deficient in procuring wood from the required sources.

6. Cooperation of the Parties

The Parties agree to undertake their obligations hereunder fairly and reasonably to achieve the purposes of this Agreement. The Parties shall cooperate with each other to effectuate the purposes of this Agreement, shall attempt to make decisions by consensus regarding any work to be undertaken under the terms of this Agreement, and shall attempt to reasonably resolve any disputes among them through good-faith negotiations.

7. Force Majeure

The Parties agree to perform in accordance with the provisions of this Agreement unless any act or occurrence beyond the reasonable control of a Party and which could not have been prevented, avoided or overcome by the exercise of due care, foresight, or due diligence on the part of the Party, prevents such performance. Such force majeure events may include, but are not limited to, acts of God, acts of terrorism or war, massive forest fires or floods, an order of court or regulatory body, a prohibition or inability arising under a federal, state or local statute, regulation, code, ordinance or by-law, or a catastrophic failure associated with Unit 5.

8. Governing Law and Venue

This Agreement shall be construed according to the laws of the State of New Hampshire, regardless of any conflict of law provisions which may apply.

9. Modification of this Agreement

Neither this Agreement nor any provisions hereof may be changed, waived, discharged or terminated orally, but only by instrument in writing signed by the other Party against whom enforcement of the change, waiver, discharge or termination is sought.

10. Notices

Notices effectuating the requirements of this Agreement shall be directed as follows:

To NHTOA: Jasen A. Stock

Executive Director
N.H. Timberland Owners Association
54 Portsmouth St.
Concord, NH 03301

To PSNH: Linda T. Landis
Senior Counsel
Public Service Company of New Hampshire
P.O. Box 330
Manchester, NH 03105

IN WITNESS WHEREOF, the undersigned Parties have executed this Agreement as designated on their respective signature pages. Each Party and the individual executing this Agreement represent and warrant that the individual executing this Agreement has been duly authorized to enter into this Agreement, and to bind the Party on whose behalf such individual is executing.

Public Service
of New Hampshire

Northern Wood
POWER PROJECT

Wood Yard Management Plan

May 21, 2004

Northern Wood Power Project

Wood Yard Management Plan

A. INTRODUCTION

The Northern Wood Power Project (Project) would substitute wood fuel for the current coal supply used for Schiller Unit 5. Low-grade wood chips, supplied in part by New Hampshire's wood industry, will be the primary wood fuel source for the new fluidized bed boiler. Fuel may also include untreated by-products or residue from forest products, manufacturing operations or from construction, stump grindings and ground pallets. The facility will not be permitted to burn demolition solid waste debris.

Should the cost of wood significantly increase, or in the event of a supply disruption, the facility has the capability to burn coal as its back-up fuel. It is, however, unlikely that burning coal will be more economical than burning wood, as renewable energy certificates ("RECs") are not generated when the unit is burning coal. PSNH will not receive the additional revenues associated with the sale of RECs to offset the investment cost of the Project when burning coal. To minimize customer impact, this Project is clearly predicated on burning wood and selling the associated RECs.

Since the coal and wood supplied cannot be commingled, a segregated fuel storage area must be provided. New wood delivery, conveyor and storage facilities will be incorporated within Schiller Station's currently developed 25 acre fuel storage facility. This facility contains both oil and coal storage for Schiller, Newington and Merrimack Stations. Within this site are two Newington Station oil tanks, each containing 11.7 million gallons, two Schiller Station oil tanks containing 3.4 million gallons and 5.2 million gallons, the main Schiller coal yard of approximately 6 acres, and the 5.25 acre auxiliary coal storage area. The coal in the existing auxiliary coal storage area, adjacent to the two 56' tall oil storage tanks, would be removed and the wood storage facility would be substituted in its place.

This "Wood Yard Management Plan" is presented for the new wood fuel storage area. This plan provides information on:

- Types and sources of wood fuel
- Summary of known and expected on-site activities
- Equipment and structures
- Best practices for storage and handling of wood fuel
- Permitting, regulatory, and design considerations

B. SOURCES OF WOOD FUEL

Wood fuel for the Northern Wood Power Project will be primarily whole-tree chips, with limited amounts of sawmill residue, ground pallets and other clean wood. No demolition debris will be used as fuel at the facility.

New Hampshire is the second most forested state in the country (Maine is the most heavily forested), with 84 percent of the state classified as forestland according to the USDA Forest Service. Over two-thirds of every county in New Hampshire is forestland. This provides a significant land base for on-going commercial forestry activity. Additionally, land-clearing activity (primarily for residential and commercial development) provides a significant volume of whole-tree chips to the marketplace. New Hampshire grows significantly more wood than is harvested annually, and PSNH will be purchasing fuel from timber harvesting operations that adhere to good forestry management standards.

The Northern Wood Power Project will source its wood primarily from timber harvesting operations in New Hampshire, Massachusetts and Maine, and may include limited amounts of wood from other New England states. New Hampshire sources will be utilized whenever possible, subject to competitive pricing.

In addition to whole-tree chips, the Northern Wood Power Project will use sawmill residue from mills in the region (by-product of sawing logs into boards), and will also purchase limited amounts of ground pallets as a fuel source. This provides an economic reuse option for these products, which might otherwise be landfilled.

In a written agreement with the New Hampshire Timberland Owners Association, PSNH has committed to derive *at least* 35 percent of its wood fuel from New Hampshire sources in 2006; growing to 40 percent in 2008. This agreement is contingent upon wood fuel being available from New Hampshire sources at necessary economic terms (i.e. price, quantity, timeliness of delivery, etc.).

Figure 1: Typical Whole Tree Chips

C. WOOD FUEL FACILITY

The wood yard will consist of (i) two truck scales and one scale house, for weighing trucks in and out, (ii) three back-in truck dumps, (iii) wood chip hopper and conveyor, which will collect and move the wood chips to the process building, (iv) a process building, including chip sizing screens and a hog or grinder, which will reduce any oversized wood to acceptable size, (v) a conveyor which will move the wood chips from the process building to the wood storage building, (vi) wood storage building, including interior conveyor and reclaim facilities and (vii) a conveyor which will move the wood from the wood storage building to the boiler.

The proposed wood storage area is located within the existing PSNH fuel storage facility and is adjacent to an existing on-site access road. Trucks delivering chips will turn right off of Gosling Road on to the wood storage yard access road.

The trucks are standard 18 wheelers. The back doors of the trailer are side opening, the same way as a standard box trailer. The trailer doors are typically made of metal mesh. The trucks will weigh-in at the scales, proceed around the wood storage building, discharge their wood chips at the truck dumper, then weigh out at the scales before leaving. In the existing auxiliary coal storage area, covered storage will be built to house a ten day supply of wood chips. Additional paved uncovered capacity will be available if needed during anticipated periods of seasonal supply interruptions. This outdoor area will accommodate up to seven days of fuel storage.

The active wood storage area will be housed in a three sided, roofed, metal building. The three sides facing adjacent commercial and residential areas will be closed. The open end of the structure will face north, towards Schiller Station. An additional paved uncovered storage area, adjacent to the wood storage building, will be available for supplemental or seasonal storage. The chip storage area will be fully paved, as is the case now, to allow for the continued full capture of water run-off to the Station's storm water and waste water treatment systems. The three sided, roofed building will prevent the wood from capturing precipitation and will contribute to the control sound and dust. The storage building is designed to present a similar profile to the adjacent oil tanks erected in the 1970's.

Fully automatic, unmanned truck scales will be located adjacent to an existing building on the site owned by Sprague. A small scale house, approximately 10 feet square and a maximum of 15 feet high will be located between or adjacent to the scales.

Trucks will weigh-in at the scales and proceed around the wood storage building to one of the three truck dumps. The truck dumps are fully hydraulic, with the hydraulics enclosed at the side of the truck dump. The truck dumps rise to a maximum angle of 63 degrees, and the dump angle and speed allow the wood chips to dump into the wood chip hopper. Each of the truck dumpers is capable of handling an average of four trucks per hour continuously.

Wood chips will dump into a hopper and will be transferred onto a conveyor for movement to the process building. The conveyor from the truck dumps to the process building will enter the process building at the top of the structure. The conveyors will be covered and will include belt cleaners and dust curtains in the skirt boards to minimize sound and dust. Ferrous metals will be removed from the conveyor material stream by a cross belt electromagnet. Any ferrous and/or non-ferrous metals that get past the magnet will be detected by a tramp metal detector and diverted to a rejects transfer chute before passing through the process building screening and hogging equipment.

The process building will house sizing screens to separate out any oversized wood pieces and a grinder or "hog" to reduce such pieces to an acceptable size. Wood chips will enter the building via conveyor and pass through the screens. Acceptable sized chips will exit to the conveyor, and oversized chips will pass through the hog and then exit to the conveyor. It is expected that approximately 90-95% of the delivered wood chips will be acceptably sized. Approximately 5-10% of the wood will need to be further processed to reduce the size to an acceptable level. This oversized wood will pass through the hog to reduce it to a nominal minus 2.5 inch size and then return it to the acceptable material stream.

The process building will be a multi-level, structural steel building with poured concrete floors as required at equipment levels. The roof panels and sidewalls will be metal, with interior insulation for sound attenuation. An electrical enclosure will be located at grade to contain the PLC, I/O rack, operator console, and plant communications equipment. The room will contain a small air conditioner/heater.

Wood chips will be moved from the process building to the wood storage building via another conveyor. It will exit the process building near the base of the building, and join the wood storage building at the roof. Like the conveyor from the truck dumps to the process building, the conveyor from the process building to the wood storage building will be covered and will include belt cleaners and dust curtains in the skirt boards to minimize sound and dust.

The covered pile storage capacity shall contain approximately 10 days of boiler fuel demand. This equipment in the building will also reclaim (i.e. deposit on the conveyor) the wood chips for movement to the boiler.

Stored wood chips will be reclaimed and delivered via conveyor to the two boiler surge bins (silos) located in the boiler building. The system will be designed to keep the boiler surge bin nearly full by modulating the feed of wood fuel to the conveyor based on a signal from the surge bin level controls. The conveyor will exit the wood storage building near ground level. A small tower between the wood storage building and the boiler will allow for belt slack take-up and access to the conveyor. Like the other conveyors, the conveyor from the wood storage building to the boiler will be covered and will include belt cleaners and dust curtains in the skirt boards to minimize sound and dust. It will also include a completely covered 90 foot section where the conveyor crosses the railroad track to prevent any wood chips from falling on the railroad tracks.

As discussed above, the new wood delivery, conveyor and storage facilities will be incorporated within Schiller Station's currently developed 25 acre fuel facility. The existing fully open auxiliary coal storage area will be replaced by an attractive, mostly enclosed, wood storage area. The proposed new facilities are an attractive improvement over the existing open coal storage in this already primarily industrial area.

D. DELIVERY AND STORAGE OF WOOD CHIPS

Anticipated Times of Operation

Currently, PSNH anticipates accepting wood fuel five days a week, Monday through Friday, with deliveries between 7:00 AM to 9:00 PM. On some occasions PSNH may accept fuel on Saturday mornings. There are no plans to receive fuel on Sundays.

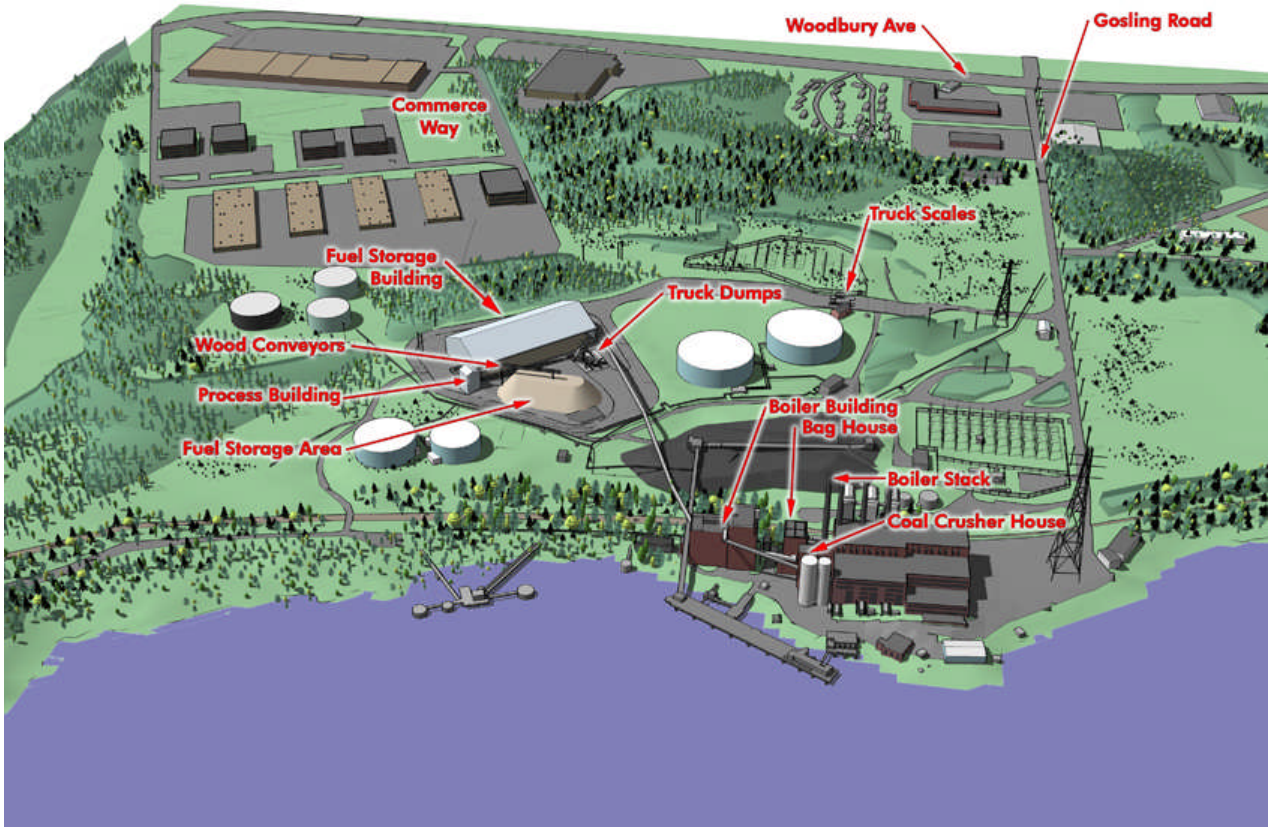

Figure 2: Wood Handling Overview, Northern Wood Power Project.

Truck Turnaround Time

The importance of unloading trucks quickly cannot be over-emphasized. When a truck is held up in the unloading process, it is not just the truck and its driver who are idled. The men and machinery at the logging/processing job are idled as well. The design of the hopper/conveyor system has placed a priority on reliability, speed, and the contingency of being able to handle multiple trucks under periods of high-traffic, or potential equipment problems. Two truck scales and three truck dumpers are integral to the facility design to minimize waiting time to discharge the wood chips.

On-site Traffic Pattern

When trucks deliver wood to the Northern Wood Power Project, they will turn right from Gosling Road into the Schiller Station fuel storage facility. The trucks will be weighed, proceed on a short loop road around the wood storage area (the current coal storage area), be dumped via hydraulic lift, and proceed back to the scales for weighing-out. By using this loop around the wood storage area, PSNH will be able to keep any truck backup from flowing onto Gosling Road.

Wood Fuel Inventory Control

Once delivered to the Northern Wood Power Project, unloaded and moved through the processing facility, wood will be stored on-site for later use. As is standard in the industry, PSNH will keep a sufficient supply of wood fuel on-hand to allow for short-term disruptions in fuel supply such as interruptions in harvesting or transport of wood during a period of heavy rains.

Wood will be coming into, and leaving, storage on a continual basis. The wood chips will not have an opportunity to reside in storage for very long since there is only enough covered storage space for 10 days of inventory. PSNH will use a "first-in, first-out" (FIFO) fuel management program that makes certain that wood is used in the order that it arrives. This assures that wood that has been on-site longer will be used first and that wood is not left in piles for long periods of time.

The purpose of utilizing this FIFO procedure is to: (i) utilize the wood chips when their heating value is the greatest; fresh chips are a "better fuel", (ii) prevent the opportunity for the chips to create a combustible situation; fresh chips can not spontaneously combust, and (iii) prevent the creation of possibly objectionable odors; fresh chips do not produce odors that otherwise occur from decomposition.

The single most important and effective design feature for handling wood chips is not a physical design but operational / pile management procedures. Preparing and implementing such procedures will avoid risk of dust, fire, and equipment operational difficulties. Some of the procedures include:

a) Operator training and awareness to risk issues. The PSNH woodyard will have roving operators trained in woodyard management procedures and maintenance.

b) Truck dumpers, conveyors, and equipment will be purged of material before shutting down.

c) Pile management during stacking and reclaiming. The practice of FIFO will be implemented and enforced. The system and equipment automation provided will enable Operations to stack and reclaim the pile in parcels. This is a practice utilized by many woodyards throughout Canada and the United States for managing their piles. This practice includes reclaiming a predetermined section of the pile to the bottom. Once the section is reclaimed the machine is positioned to the next section and the process repeated. As open areas in the pile are created behind the machine; material is stacked in these spaces. Once the machine reaches the end of a pile; it goes back to the beginning and begins its reclaim again.

d) Practicing FIFO operation lessens the time that the chips are in the pile for any extensive time; reducing the risk of combustion or odor.

e) Pile size is limited to the woodyard capacity. The wood chips will not have an opportunity to reside in storage for very long since there is only limited storage space.

f) Outdoor storage is to allow for short-term disruptions in fuel supply such as interruptions in harvesting or transport of wood during Spring mud season or projected bad weather. Outdoor storage utilization will also be minimized because it will require operational handling of the material for a second time via front end loading equipment.

Though dust and fugitive chips are not generally a problem in the industry, PSNH's use of covered storage and covered conveyers should virtually eliminate any loss of product. The covered storage and conveyers have the added benefit of providing sound reduction.

By using covered conveyers and managing fuel on a FIFO basis, PSNH can virtually eliminate any concerns regarding spontaneous combustion, dust, odor, and significantly lessen any sound impact the wood handling system may have.

Wood Fuel Facility Structures and Equipment

Figure 3: Typical Truck Scale

Fully automatic, unmanned truck scales will be located adjacent to an existing building on the site owned by Sprague. A small scale house, approximately 10 feet square and a maximum of 15 feet high will be located between or adjacent to the scales.

Figure 4: Typical Truck Dumpers

After a truck weighs in at the scales, it proceeds around the wood storage building to one of the three truck dumps. The truck dumps are fully hydraulic, with the hydraulics enclosed at the side of the truck dump. The truck dumps rise to a maximum angle of 63 degrees, and the dump angle and speed allow the wood chips to dump into the wood chip hopper. Each of the truck dumpers is capable of handling an average of four trucks per hour continuously. Wood chips will dump into a hopper and will be transferred to the process building.

Figure 5: Typical Process Building

Once wood chips are dumped, a covered conveyer will transport the wood to a processing facility, where chips are mechanically screened for size and consistency. It is expected that approximately 90-95% of the delivered wood will be acceptably sized and will proceed directly to the covered fuel storage building via a covered conveyer. Approximately 5-10% of the wood will need to be further processed to reduce the size to an acceptable level. This oversized wood will pass through the hog to reduce it to a nominal minus 2.5 inch size and then return it to the acceptable material stream conveyor and send it to the wood storage building. In the photo, the process building is on the left, the conveyor to the wood storage building running from lower left to upper right, and an elevated truck dumper can be viewed through the belts in the center.

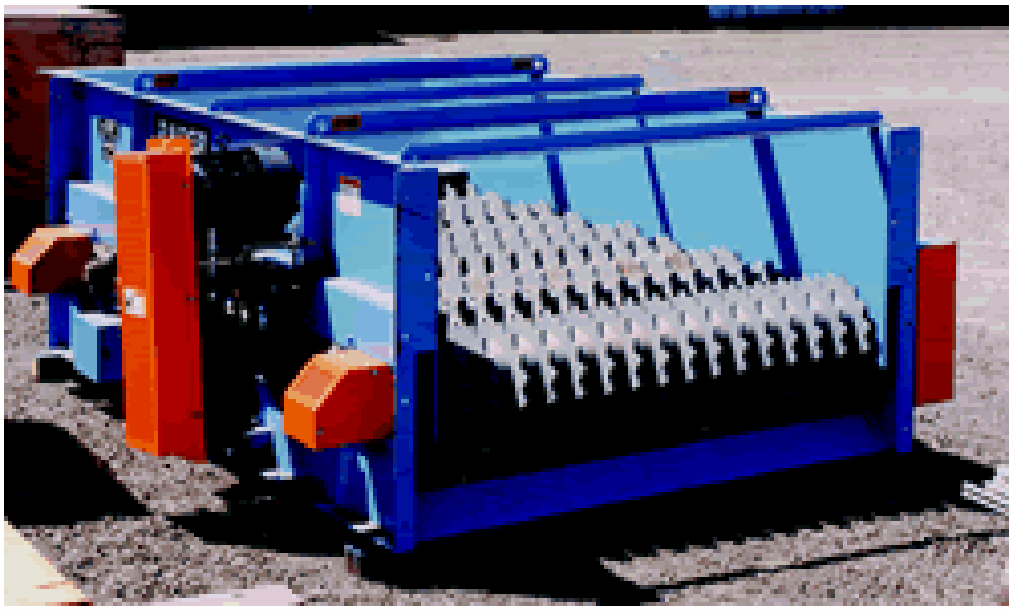

Figure 6: Typical Screen (Chip Sizing Device)

Figure 7: Typical Hog (Chip Grinding Device)

Figure 8: Typical Wood Storage Building and Reclaimer

The fuel storage building, measuring 360 feet by 175 feet, is designed to store approximately 10 days of fuel. The building will be closed on three sides to minimize dust, loose chips or sound. When necessary to increase inventory in advance of known supply interruptions, the adjacent outdoor fuel storage area will have the capacity to store roughly 7 days of fuel.

Figure 9: Typical Outdoor Wood Storage

E. PERMITTING AND DESIGN CONSIDERATIONS

Screening and Landscaping

The Schiller Station site is large and to the extent possible, areas of the site not currently in use are naturally landscaped by grass and trees, providing both attractive cover and screening. Switchyard, substation, transmission and distribution line areas, including areas abutting Gosling Road, the principal right of way, cannot practically be landscaped. These areas must remain clear of trees and brush to (i) facilitate access for required maintenance and prompt service restoration, (ii) prevent fire beneath utility lines and (iii) meet safety codes designed to protect utility workers and the general public. Similarly, for general access, maintenance, fire prevention, areas contiguous to coal and oil storage areas cannot be landscaped. PSNH endeavors to keep its Schiller Station site tidy and attractive and to preserve vegetation to the extent possible, and will continue to do so in the future.

PSNH has offered to meet with the City Arborist to discuss the existing landscaping and buffering of the site, and to install reasonable landscaping as recommended by the City Arborist, taking into account operating restrictions. Additionally, PSNH is currently working with a landscape architect firm to design a mutually acceptable screening buffer for the commercial and residential abutters. This buffer will add to the existing natural wooded buffer between the Commerce Way parking area, adjacent neighborhoods, and the proposed wood storage area. The Company is also willing to document current and proposed landscaping and maintain that baseline level of landscaping through regular maintenance, appropriate to the species that are ultimately selected.

Control of Sound

The conservative estimates of the Project-related sound comply with the most stringent nighttime limits of the City of Portsmouth Noise Regulation (50 dBA Commercial and 45 dBA Residential). In addition, sound impact at all residential properties is expected to be 2 dBA or less above typically lowest background sound levels that occur late at night (between 2 am and 4 am) and will not be perceived. PSNH's sound consultant has advised that this standard is achievable based on the site location, conceptual design and current sound control science and technology. An Environmental Sound Survey has been prepared by Cavanaugh-Tocci Associates, Inc., and submitted to the City. The study addresses existing and anticipated sound generation from the Project.

PSNH will establish vendor sound guarantees for the two main components of the Project to assure compliance with the sound levels imposed by the City of Portsmouth Sound Regulations (Section 10-505 of the Zoning Ordinance).

PSNH will require contractors to demonstrate compliance with contract sound specifications. PSNH is also willing to file the results of this compliance testing with the City to demonstrate compliance with sound standards. Additionally, the City of Portsmouth will require an independent evaluation of the anticipated Project sound levels.

Water, Sewerage System, and Utilities

The Project is not anticipated to substantially increase or decrease the municipal water demand or municipal sewer discharge. The new boiler and wood yard facilities are not expected to use any more water or generate any more sewage than the existing boiler and the auxiliary coal storage area. Water and sewer services for the new boiler will be connected to existing services already located on the site.

A revised Utility Plan has been provided to the City. The plans show existing and proposed utilities servicing the site. Existing utilities include fire protection, electrical service, sewer and water. Proposed utilities include fire protection, electrical service, sewer and water.

Fire Protection Systems

The Project will be constructed in accordance with local, state and federal fire protection codes. PSNH will work closely with the City of Portsmouth Water Division and the Fire Department on final fire protection system design and location and the final details of the fire protection system will be subject to the review and approval of the Fire Department and the Company's insurance underwriter.

In addition to complying with the above standards and codes, PSNH has incorporated the following features into the design of the facility in response to concerns raised in discussions with the City: (i) all conveyor belts will be fire resistive, (ii) a sprinkler system will be incorporated into the process building, (iii) fixed fire fighting monitors, sufficient to provide water streams on all areas of the pile, will be installed in the wood storage building, and (iv) the conveyor from the wood storage building to the boiler will be equipped with a deluge sprinkler system. Additional protection measures include utilization of metal detection on the conveyor from the truck dumpers to the process building, lower than industry standard conveyor belt speeds, and awareness of the roving operators.

The existing underground fire protection yard loop will be extended to provide hydrant coverage to areas of the Wood Storage Yard and wood handling systems. The proposed fire protection water main layout for the wood storage yard is a 10 inch main with 6 new hydrants located around the perimeter of the woodyard facility. There will also be a water deluge fire protection system located on the conveyor between the wood storage building and the boiler house. A sprinkler system will be installed in the process building.

The Wood Storage Building shall be protected by four riser pipes, one in each corner of the building and each line 4 inch nominal pipe size. Each riser shall be run to a point near the roof and be equipped with one or more directional spray nozzle(s) which will be selected later. These riser pipes shall be fed from the new underground fire loop and shall be equipped with a single post indicator valve for manual charging of the risers. Provisions shall be made for local Fire Department truck connection to each riser.

A water flow test of the fire protection yard loop will be conducted later this spring or summer, when the weather is warmer, the ground is not frozen, and flow measurements will not create frozen and potentially dangerous conditions on site, to assess the available flow and pressure at the site. Modifications to the proposed fire service layout may be required pending the results of the flow tests and any revisions to placement of on-site structures. PSNH will make any necessary modifications.

PSNH understands that there is a possibility for spontaneous combustion to occur if the inventory is not properly managed. PSNH will use a "first-in, first-out" (FIFO") fuel management program that makes certain that wood is used in the order that it arrives. This assures that wood that has been on-site longer will be used first and that wood is not left in piles for long periods of time. This procedure will prevent the opportunity for the chips to create a combustible situation; fresh chips can not spontaneously combust. Should outdoor storage be required for long periods, the pile will be segregated to continue FIFO operation. In addition, during dry periods the roving operators will note the condition of a pile. For outdoor storage greater than 30 days (during dry periods) a fire hose will be utilized to wet down the pile.

Drainage and Stormwater

Current Project conditions meet all federal and state law requirements. The site is bordered by the Piscataqua River on the northeasterly side and currently all stormwater eventually flows to the river. Drainage from the impervious areas around the existing station and outbuildings generally sheet flows in to the river. Stormwater generated from the coal pile area and the reserve coal pile area is collected and treated at the onsite wastewater treatment plant before being discharged to the river.

The wood storage yard will be constructed in and around the existing reserve coal pile area. The existing reserve coal pile is also currently paved. The wood storage yard and associated roadway expansion will result in about 145,000 square feet (3.3 acres) of new impervious surface. Based on preliminary conversations with NHDES, the preferred treatment methods will include a vegetated treatment swale in the boiler area and continuation of the existing treatment in the onsite wastewater treatment plant, or a combination of treatment plant and vegetated swale

Except for a small area near the entrance to the wood storage area that flows towards Gosling Road, the bulk of the runoff generated from the site flows across PSNH property before discharging to the Piscataqua River. There is no anticipated impact to abutting properties from runoff generated by this Project.

A revised stormwater study, prepared by Gorrill-Palmer Consulting Engineers, Inc., has been provided to the City. The conclusions of the stormwater study are similar to those stated in a previous report.

The proposed stormwater management and collection system has been designed to provide water quality treatment in accordance with NHDES requirements. Stormwater directed towards the natural drainage channel along the westerly property line will be managed to maintain predevelopment peak flow rates. Stormwater that is directed towards the Piscataqua River is not being managed to maintain predevelopment peak flow rates; however, since the stormwater discharges directly to a tidal source and the stormwater flow is conveyed across PSNH property, no additional detention is required to meet state stormwater standards.

Erosion & Sedimentation Control

A revised erosion control plan and narrative based on the latest layout and grading and has been provided to the City. The narrative describes the construction sequence and best management practices that will be used to minimize erosion and sedimentation of the surrounding areas and the Piscataqua River. The erosion control plan will also be submitted and reviewed by NDHES as part of the Site Specific permit application.

Control of Odors

PSNH is aware of the potential difficulties which were experienced at McNeill Station in Burlington, Vermont. The Company has taken steps in the design of the Schiller Wood Yard to avoid these issues: building criteria, storage criteria, conveying systems etc. The contracting for wood chips supplies will incorporate the "lessons learned" from McNeill Station. To achieve that goal, PSNH has hired a consultant, Natural Resource Solutions LLC, to assist in the planning of the wood yard management strategy.

Based on experience and observation at McNeill Station in Burlington, Vermont and other wood fired generating facilities, storage of wood at Schiller Station will not cause or create the emission of odorous matter or vapor in amounts or quantities that exceed the applicable levels at the various property lines, nor will it release materials capable of becoming odorous, either by bacterial decomposition or chemical reaction, that cause, or will cause odorous matter or vapor to be generated or occur at a point distant from the source of such materials in amounts or quantities that exceed the prescribed standards set forth in Article V, Section 10-507 (C).

The operation of utilizing a "first-in, first-out" (FIFO") fuel management program removes wood from the site before it has time to decay and create an odor. In addition, roving operators will alert if an odor were to be present; at which time steps would be taken to eliminate any unforeseen odor.

Control of Dust

The proposed Project will comply with all state and federal air regulations and standards as set forth by the New Hampshire Department of Environmental Services (NHDES), Air Resources Division ("ARD"). As wood chips are approximately 50% moisture, problems with dust are not anticipated.

The Project will comply with the fugitive dust requirements contained in the New Hampshire Code of Administrative Rules (Env-A 1002.04), which requires sources engaged in any construction or storage activities to "take precautions throughout the duration of the activity in order to prevent, abate, and control the emission of fugitive dust including but not limited to wetting, covering, shielding, or vacuuming." During the construction period, best management practices will be developed and implemented to prevent, abate, and control the emission of fugitive dust. During normal operations of the wood facility, the emission of fugitive dust will be prevented and controlled by shrouding all material handling conveyances and implementing best management practices to prevent and control the emission of fugitive dust from the fuel yard.

As discussed above, the new wood delivery, conveyor and storage facilities will be incorporated within Schiller Station's currently developed 25 acre fuel facility. The existing fully open coal storage area will be replaced by an attractive, mostly enclosed wood storage area. Any processing will occur in the fully enclosed process building; and conveyors have been designed to minimize sound and dust. In the event that additional sound or dust control is required, additional sound and dust controls options are available and PSNH is committed to incorporating them as necessary. The proposed new facilities are an attractive improvement over the existing open coal storage in this already primarily industrial area.

Storage of wood chips will conform to performance standards, including those relating to dust, odor and fire hazards. As wood chips are approximately 50% moisture, problems with dust are not anticipated. In the unlikely event that seasonal outdoor wood storage generates dust,

PSNH will control dust by spraying with water or by covering the wood pile with tarps. PSNH anticipates that this might occur very rarely. Experience at other wood facilities has demonstrated that with proper management, storage of wood does not create odors that extend beyond the property line. Finally, because the moisture content of the wood chips is approximately 50%, it is not a significant fire hazard if properly managed. The proposed wood yard has been designed and will be constructed to facilitate proper management.

Commonwealth of Massachusetts
Office of Consumer Affairs and Business Regulation
DIVISION OF ENERGY RESOURCES

Statement of Qualification

Pursuant to the Renewable Energy Portfolio Standard
225 CMR 14.00

This Statement of Qualification, provided by the Massachusetts Division of Energy Resources (DOER), signifies that the Generation Unit identified below meets the requirements for eligibility as a New Renewable Generation Unit, under a Co-Firing with Ineligible Fuel Waiver, pursuant to the Massachusetts Renewable Energy Portfolio Standard (RPS) at 225 CMR 14.05, as of the approval date of the Application for Statement of Qualification, this 1st day of December 2006.

Authorized Representative's Name and Address:	John M. MacDonald Vice President Energy Delivery and Generation Public Service Company of New Hampshire 780 North Commercial Street Manchester, NH 03101
Name of Generation Unit:	**Schiller Station Unit 5**

Qualification of this Generation Unit is subject to the following provisions:

General Provisions

1. Owner/Operator shall retrofit and operate the Unit as described in its Statement of Qualification Application dated April 14, 2006 (SQA) and shall comply with the provisions of the Massachusetts RPS Regulations at 225 CMR 14.00, including this Statement of Qualification (SQ).
2. Owner/Operator shall burn Eligible Biomass Fuels, specified (and hereinafter referred to) as wood, which is defined herein as whole tree chips, stump grindings, ground pallets, untreated by-products or residue from forest products manufacturing operations or from construction. Owner/Operator shall not burn, without the prior, written approval of DOER in the form of an amended SQ, pressure-treated wood products, wood from demolitions, or wood products containing glues or binders (including but not limited to plywood, particle board, oriented strand board, or similar products).
3. Each report to DOER on emission monitoring results or concerning other documentation required under this SQ shall include a cover letter that states the nature and purpose of the report, identifies any attachments, summarizes the emission and any other information detailed in any attachments, and provides the Certification required in the RPS Regulations at 225 CMR 14.10 (1).

Co-Firing with Coal, Use of Coal Alone, Month Divided between Wood and Coal Use

4. RPS-Ineligibility of Coal.
   Coal is not an Eligible New Renewable Fuel. Accordingly, electrical energy generated by the combustion of coal will not qualify as New Renewable Generation.

5. Simultaneous Co-Firing of Wood and Coal.
   Owner/Operator may co-fire wood and coal simultaneously, and a portion of the electrical energy output of such co-firing may qualify as New Renewable Generation as provided herein. RPS qualification of the electrical energy output of the Unit during any days (defined as midnight to midnight) in which co-firing occurs shall be contingent upon maintaining the air emission limits prescribed in the Emission Requirements table below (hereinafter, the Table) averaged over all of the days of co-firing in each month.

   If the Owner/Operator ascertains that the Unit maintained such air emission limits during the days of co-firing, then, in accordance with the Co-Firing with Ineligible Fuels Waiver at 225 CMR 14.05 (3), Owner/Operator shall provide to DOER a calculation and documentation of the quantity of its electrical energy output that qualifies as New Renewable Generation during the month in which such output occurred. That quantity is the fraction of the total output attributable to wood during the days of co-firing, using the ratio of the total heat content for the wood consumed during those days (based on reasonable samplings of the species and moisture content of the wood for the those days) to the calculated total heat content of all fuel consumed during those days. Such calculations and documentation shall be submitted to DOER with the report specified in this provision. The Owner/Operator shall report to DOER, no later than five business days after the end of the month in which such co-firing occurred, the duration, reason, and future plans for any period of simultaneous co-firing, as well as whether the Unit maintained the required air emission limits during the days of co-firing during the month. Owner/Operator also shall inform the NEPOOL GIS Administrator of the amounts of any such wood and coal usage in accordance with the GIS Operating Rules, and the electrical energy output attributed to each fuel as reported to the GIS Administrator shall match the values provided to DOER. DOER shall instruct the GIS Administrator as to the quantity of electrical energy output of the Unit, if any, that qualifies as New Renewable Generation during any month in which co-firing occurs.

   If the Owner/Operator does not ascertain that the Unit maintained such air emission limits, then, none of the electrical energy output of the Unit during any days of co-firing in that month shall qualify as New Renewable Generation.

6. Burning of Coal Alone.
   If and when Owner/Operator finds it necessary or prudent to burn only coal, Owner/Operator shall notify DOER of the coal use start date, the reasons for such change, and the actual, anticipated, or planned duration of such use of coal no later than five business days after the end of the month in which it commenced. If DOER determines that Owner/Operator has used or plans to use coal without co-firing with wood during a period exceeding 240 continuous hours, it may suspend this Statement of Qualification, and notice of such suspension will be sent to the GIS Administrator and posted at DOER's RPS webpage. In such case of suspension, DOER shall reinstate the Unit's Statement of Qualification upon

receiving and accepting notice and documentation satisfactory to DOER that the Generation Unit has returned to the sole use of wood and has a reasonable expectation of continuing such usage indefinitely in the future; notice of such reinstatement likewise will be sent to the GIS Administrator and posted at DOER's RPS webpage. If such notice and documentation regarding return to wood use accompanies the notice of coal use, then DOER may deem it unnecessary to institute a suspension.

7. Partial Month Burning of Wood Alone.
   If and when the Unit burns wood during part of a month and coal during the other part of the same month, then the RPS qualification procedure shall be as follows. The averaging of emissions for RPS qualification purposes (as provided below) shall consider only the days during which wood alone was burned and not the entire month. Provision 5 of this SQ notwithstanding, none of the electrical energy output during any day (defined as midnight to midnight) when the Unit switches from wood to coal or from coal to wood shall qualify as New Renewable Generation.

Emission Limits, Monitoring, and Reporting

8. Permit Revisions.
   Owner/Operator shall submit to DOER and to the Massachusetts Department of Environmental Protection (MassDEP) any revisions to the Prevention of Significant Deterioration (PSD) Permit/Temporary Permit (PSD Permit) or to the Title V Operating Permit issued by the New Hampshire Department of Environmental Services (NH DES) within 30 days of receipt of such revision.

9. Emission Requirements and Onset of RPS Qualification.
   Qualification of the electrical energy output of the Unit as New Renewable Generation shall commence on the day after the date on which Owner/Operator first demonstrates to DOER's satisfaction, in consultation with the MassDEP, that the Unit meets all of the emission limits specified in the Table below using only wood. Such demonstration of compliance shall include the following:

   - certification of the Continuous Emissions Monitoring (CEM) systems;
   - documentation that emissions data were obtained from the CEM systems and recorded for at least 90% of the time that the Unit was using wood, except for periods of calibration checks, zero span adjustment, preventive maintenance, and any other exceptions provided in the Unit's PSD Permit or Title V Operating Permit;
   - documentation that the emissions of nitrogen oxides (NOx), sulfur dioxide (SO2), carbon monoxide (CO), and (if applicable) ammonia slip (NH3) recorded by CEM systems met the limits specified in the Table, averaged over the days when wood alone was fired during the month;
   - documentation that the required stack test for particulate matter (PM) and the emission calculations for volatile organic compounds (VOC) also met those limits; and
   - the Certification required at 225 CMR 14.10 (1).

DOER will notify the NEPOOL GIS Administrator of the date as of which the electrical energy output of the Unit first qualifies as New Renewable Generation under the RPS Regulations at 225 CMR 14.00.

Qualification as New Renewable Generation during all periods of wood firing or co-firing wood and coal after such initial qualification shall be contingent on meeting the requirements of the Table and all other provisions of this SQ and the RPS Regulations at 225 CMR 14.00.

EMISSION REQUIREMENTS TABLE

Pollutant	Emission Limit	Method of Determination
PM	0.012 lbs/MMBtu	Stack test at outset and as required by the NH DES
NOx	0.075 pounds/MMBtu	CEM – monthly average*
SO2	0.02 lbs/MMBtu	CEM – monthly average*
CO	0.1 lbs/MMBtu	CEM – monthly average*
VOC	0.005 lbs/MMBtu	Calculated
NH3	10 ppm @ 7% O2	CEM – monthly average. Reports required only if and when SNCR is used with wood or if wood is co-fired with coal.
Reporting	Quarterly and annually, no later than 30 days after the end of each reporting period	

* Emissions data from CEM systems must be obtained for at least 90% of the time that the Unit was using wood, except for periods of calibration checks, zero span adjustment, preventive maintenance, and any other exceptions provided in the Unit's PSD Permit or Title V Operating Permit.

10. Monitoring and Testing Methods.
Owner/Operator shall use the CEM requirements and the stack test methods contained in its PSD Permit or Title V Operating Permit to determine compliance with the emission limits in the Table, except that they must use more frequent or continuous monitoring if so specified in the Table. In the absence of CEM requirements or stack test methods in the PSD Permit or Title V Operating Permit to determine compliance with the emission limits in the Table, the requirements or methods shall be specified by the MassDEP. For test methods specified by the MassDEP, test protocols shall be submitted for approval to the MassDEP at least 30 days before the scheduled tests.

11. RPS Quarterly Low-Emissions Reports and Other Emission Reporting.
Owner/Operator shall submit (in electronic format) copies to DOER and to the MassDEP of quarterly reports required for this Unit by Condition VIII.E, Item No. 27 in Table 9, of the PSD Permit for Schiller Station, reissued March 7, 2006, (or the equivalent thereto in its Title V Operating Permit or in any successor permit) at the same time they submit those reports to the NH DES. In addition, a *summary page* of the results of any compliance stack testing conducted for the NH DES shall be submitted to DOER and the MassDEP no later than 30 days after the end of the calendar quarter in which such testing occurred or at the same time the report is submitted to the NH DES in the event that the test was conducted within 30 days of the end of the calendar quarter. Such report shall accompany the RPS Quarterly Low-Emissions Report for that quarter.

Each RPS Quarterly Low-Emissions Report shall include a summary that shows the calculation of the monthly average emissions of those pollutants that are monitored by CEM systems (NOx, SO2, CO, and, if applicable, NH3) or by calculation (VOC). If the quarter includes a month during which simultaneous co-firing of wood and coal occurred or during which wood was used for less than the entire month, then the emission averaging shall be reported only for those days of co-firing and/or wood usage, rather than for the entire month, pursuant to Provisions 5 and/or 7 of this SQ. The format of such quarterly reports shall be proposed by Owner/Operator and approved by DOER.

When stack testing is performed to satisfy the requirements of this Statement of Qualification and is not otherwise required by the NH DES, a copy of the stack test results shall be submitted to the MassDEP and DOER within 45 days of the date the test is performed. For any calendar month in which the CEM data for NOx, SO2, or CO (or NH3 if applicable) demonstrate an exceedance of the monthly average limits contained in the Table, the Owner/Operator shall notify DOER and the MassDEP in the Unit's RPS Quarterly Low-Emissions Report.

If the Owner/Operator receives any Notice of Violation pertaining to violations of any of the air emission limits for this Unit contained in its PSD Permit or Title V Operating Permit, the Owner/Operator shall include such Notice with the Unit's RPS Quarterly Low-Emissions Report.

12. Emission Exceedances.
If DOER finds that the Generation Unit did exceed the emission limit for NOx, SO2, or CO (or NH3 if applicable) contained in the Table averaged over a calendar month (or during any period of co-firing or of partial-month wood use, as defined in Provision 5 or 7), or if sufficient data to satisfy the requirements of the PSD Permit or Title V Operating Permit is not collected, or if a PM stack test demonstrates exceedance of the limit for PM, DOER shall notify the NEPOOL GIS Administrator to void the Massachusetts New Renewable Generation Attribute for all certificates produced by the Generation Unit during that calendar month (or portion of a month under Provision 5 or 7). Qualification of the Unit's output will resume when compliance with the limits in the Table are again demonstrated in the manner detailed in Provision 9.

13. Emission Retesting.
If the Generation Unit must be retested as a result of exceeding an emission limit contained in the Table that is more stringent than an emission limit contained in the PSD Permit or Title V Operating Permit (without exceeding the NH limit), the Owner/Operator shall retest the Generation Unit using the test protocol approved by the NH DES or specified in Provision 10.

14. Copies of RPS Reports.
Owner/Operator shall send to the NH DES copies of all reports, protocols, etc., required under the above provisions.

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This Unit's ISO-NE Generation Unit Asset Identification Number or NEPOOL-GIS Identification Number is the following:

MSS-557

This New Renewable Generation Unit is assigned a unique Massachusetts RPS Identification Number (MA RPS ID #), listed below. Please include MA RPS ID #s on all correspondence with DOER.

BM-1053-06

Pursuant to 225 CMR 14.06, the Owner or Operator of the New Renewable Generation Unit is responsible for notifying DOER of any changes in the characteristics of the Generation Unit that could affect its eligibility status. The Owner or Operator of the Generation Unit is also responsible for notifying DOER of any changes in the Unit's ownership, generation capacity, or contact information. DOER may suspend or revoke this Statement of Qualification if the Owner or Operator of a New Renewable Generation Unit fails to comply with the Massachusetts RPS Regulations at 225 CMR 14.00, including the provisions of this Statement of Qualification.

_____ Date: _____

David L. O'Connor
Commissioner
Division of Energy Resources

NORTHERN WOOD POWER PROJECT

WOOD FUEL DELIVERY AND PAYMENT

PROCEDURE

FF 2.00

Approval (signature): _____

Name (typed): John M. MacDonald

Title: V.P. – Energy Delivery and Generation (PSNH)

Effective Date: October 11, 2006

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Foreword

This procedure is intended to provide overall guidance for the delivery of wood fuel to the Northern Wood Power Project site, for the review of wood delivery information and for approval of payments for wood delivery by station management and Fuels Purchasing and Supply.

The overall intent is to provide the Company with a procedure that will accrue to the best interests of the Company and its customers with regard to delivery of and payment for wood fuel for the Northern Wood Power Project while at the same time providing for a comprehensive and rational system of internal controls and audit.

This procedure has been designed to take advantage of a scale data management system and its integration with the Company's Materials Information Management Systems (MIMS) for wood delivery data review, approval and payment to suppliers. The financial reporting aspects of wood fuel purchasing activities shall be documented and tracked in accordance with the Company's Sarbanes-Oxley processes.

A. Wood Procurement Process

1.) The procurement process commences with an estimation of the fuel requirements of the Northern Wood Power Project (NWPP) on an annual, weekly and daily basis. Contracts for ten to fifteen percent more volume than the anticipated need are then entered into with various suppliers; with the surplus volume required in order to offset delivery disruptions due to inclement weather, mechanical breakdowns, etc. Wood shall be procured in accordance with PSNH's agreement made with the Timberline Owners Association, and such wood shall meet the NWPP boiler specifications and permit obligations. Wood specifications are outlined in Attachment 1, "Wood Fuel Specifications for Northern Wood Power Project."

2.) All wood suppliers will enter into a purchase and sales contract with PSNH for the delivery of wood. A corresponding purchase order will be generated for each supplier. Every supplier will be given a copy of the City of Portsmouth Truck Management Plan (see Attachment 2, "Truck Management Plan for NWPP") and a copy of the PSNH Random Vehicle Search Procedure, detailed on Attachment 3.

B. Wood Fuel Delivery Process

1) Trucks delivering wood fuel to Schiller Station must follow the designated truck route as outlined in the aforementioned Truck Management Plan, and deliver wood to the station between the designated delivery hours of 7 a.m. to 9 p.m., Monday through Friday, and 7 a.m. to 12:30 p.m., Saturday.

2) Trucks must stop at the wood yard security gate prior to proceeding to the scale area. The guard shall give the trucker (and passenger(s) if there are

any) safety glasses, which shall be worn by the trucker (and passenger(s)) until returning to the security gate on the outbound leg of delivery.

3) If chosen for a vehicle search (randomly determined), the truck driver must comply with the search procedure as outlined in the PSNH Random Vehicle Search Procedure document (Attachment 3). Any trucker who does not willingly cooperate with PSNH's security representatives will not be allowed on site.

4) Once cleared by security, the truck will proceed directly to the inbound scale to be weighed by a trained scale operator.

C. Ingress Weigh Process

(Refer to the Scale Management System ("SMS") User Manual for specific instructions on using the SMS. Also refer to Attachment 4 – "Scale House Contingency Plans" should difficulties occur with the scale house electronic equipment and/or its use.)

1.) The scale operator should 'zero' the scales at the beginning of each shift, and during the course of the day should snow, ice, debris or other elements cause possible inaccuracies to occur. The scales should also be calibrated annually, at a minimum, in accordance with the manufacturer's specifications.

2.) After positioning all truck wheels on the inbound scale, the driver shall exit the vehicle and enter the scale house and provide the scale operator with the following information, which will be entered into the Scale Management System:

a.) The license plate number of the truck.
b.) The name of the supplier.

c.) The type of wood fuel being delivered (whole tree chips, processed pallets, or hogged wood)

d.) The location where the fuel was harvested.

e.) The name of the land owner where the fuel was harvested.

f.) The harvest activity method under which the fuel was produced, if applicable:

i.) Certified Logger

ii.) A licensed forester was involved with the harvest.

iii.) From a Certified Tree Farm.

iv.) In Massachusetts, the fuel was harvested under a Chapter 132 Cutting Plan

3.) The inbound weight should be recorded by the scale operator while the truck driver is in the scale house. Should there be any disagreement by a trucker concerning the scale readings on ingress and/or egress, the weigh slips shall be used as the official record of the wood fuel delivery, and the trucker should have the respective supplier contact the Wood Buyer for resolution.

D. Dump Process

1.) Truck then proceeds to the truck dump area.

2.) The driver backs the truck on to the dump, and decides whether to disengage the tractor from the trailer or leave the tractor and trailer attached. If the tractor is disengaged, it is to be moved off the dump ramp prior to lifting the dump.

3.) Once parked on the dumper, the driver, wearing safety glasses, enters the dump control shack and dumps the load when prompted to do so by an electronic monitor which illuminates a green light when ready to begin lifting the dump.

4.) The Wood Yard Foremen and his yard staff will randomly inspect wood fuel prior to and/or during the dump process to ensure no contamination is intermingled with the wood fuel. Should contamination be detected, dumping will not be allowed or, if in the process of dumping, dumping shall cease. The

driver identification and truck information (license plate number, state, etc.) shall be taken and given to the Wood Buyer who will follow the remedies detailed in Attachment 1 – Wood Fuel Specifications. Additionally, the Wood Yard Foreman will determine if the contaminated wood fuel should be reloaded onto the truck which brought the material to site for disposal or disposition off-site at the supplier's cost and risk.

5.) When the truck is empty, the driver exits the wood yard and returns to the outbound scale where the truck is weighed prior to exiting the property.

E. Egress Weigh Process

1.) The empty truck is positioned on the outbound scale where all truck wheels must be placed on the scale.

2.) Driver must exit vehicle and provide scale operator with license plate number of the truck. The outbound weight should be recorded by the scale operator while the truck driver is in the scale house.

3.) Driver reviews the weigh ticket data on the scale house computer screen and verifies that it is correct and then signs the electronic signature pad.

4.) Scale operator prints ticket(s) and gives two copies to the truck driver and the driver exits off the outbound scale and out of the wood yard using the designated truck route. (The driver will retain one ticket and will forward the other copy to the wood fuel supplier.) One copy of the weigh ticket shall be forwarded to the Wood Buyer, who shall retain it for recordkeeping purposes for at least seven (7) years.

E. Site Exit

Truck drivers shall return their site-provided safety glasses at the security gate prior to leaving the site.

F. The Transaction Review Process

1.) Once a scale ticket is signed by the truck driver and is printed, the transaction is considered closed and available for review. The delivery review process may be done at any time by those individuals with review authority (controlled by SMS administrator). Trained personnel authorized to act as reviewers are the Wood Yard Foreman, the Wood Buyer and one or more Schiller Station Shift Supervisors and/or Working Foremen. Reviewers shall check the number of tons/truck per delivery, the number of trips per day by specific suppliers and truckers, completeness of entries, etc. for accuracy. Additionally, SMS is designed to highlight possible types of fraudulent uses of the system by allowing the reviewers to run reports on the frequency of truck deliveries, overweight indicators and other items. These reports can be generated by a reviewer before commencing the review process or at any time during the review process.

2.) The review process is performed using the Scale Management System (refer to SMS user manual) by clicking on the review button and entering search parameters which may include dates, times, or contractors.

3.) SMS will show all tickets that fall within the search parameters.

4.) Once the information has been viewed by the reviewer, he/she has the option to cancel the review process, or he/she may choose to mark the tickets shown on the report as "Reviewed." The reviewer has the option of denoting "Hold" on any delivery records that require further investigation prior to processing for payment. (Once a record that has been placed on 'Hold," and any questions have been resolved or addressed regarding the transaction, it must be removed from "Hold" before it can be "Reviewed" and forwarded for approval.)

5.) Transactions must be marked as "Reviewed" before they can be "Approved".

G. The Approval and Payment Process

1.) All wood fuel delivered to Schiller Station between 7:00 a.m. Monday and 12:30 p.m. Saturday will be approved and paid the following week.

2.) All transactions completed before the close of business (12:30 p.m.) Saturday will be reviewed as described above by the following Monday morning.

3.) Once those transactions are marked as "Reviewed" in the SMS system (refer to SMS user manual), they are available to be "Approved" by a Level 1 Approver (controlled by SMS administrator). The trained Level 1 approvers are the Schiller Station Operations Manager and the Station and Maintenance Managers acting as backup.

4.) The approval process is done in SMS by clicking on the Maintenance Menu, then clicking Custom > Approve, and entering search parameters which may include dates, times, or contractors.

5.) SMS will show all tickets that fall within the search parameters.

6.) Once the Level 1 Approver is satisfied that the data is correct, he/she marks all of the transactions as "Approved".

7.) Once the Level 1 approval process is complete, the transactions are available for Level 2 approval.

8.) A Level 2 Approver (controlled by SMS administrator) must then "approve" the transactions using the same process as the Level 1 Approver, but using the Level 2 Approval button. The Level 2 Approver enters search parameters which may include dates, times, or suppliers. The trained Level 2 Approvers are the PSNH Fuel manager and the Schiller Station Manager (note that the Schiller Station Managers and the Fuel Manager can act as only the Level 1 or Level 2 approver for any set of transactions being approved). Once this process is completed, which should be done prior to the close of business (5 p.m.) every Monday, the transactions are transmitted directly into the MIMS system. No additional financial approvals are necessary after the data has been electronically sent to MIMS. [The transactions are then uploaded into MIMS Monday night as a part of the nightly batch cycle. The individual checks are cut Tuesday night and are sent out Wednesday morning (or if electronic transfer has been set up for the respective supplier, then the payment will be made electronically on Wednesday).] Wood fuel purchase orders are to be established as 'auto approve" orders, which require initial approval by both Fuels Purchasing and Corporate Purchasing, in order to allow this methodology to operate in the intended manner.

H. Fuel Accounting and Recovery – Inventory Tracking

In order to maintain a running account of inventory amounts and values for reporting purposes, a calendar month-end summary of the total number of tons of wood fuel delivered to Northern Wood Power shall be generated by Schiller Station staff and forwarded to the Company's Fuel Accounting and Recovery department by the first business day of the immediately subsequent month. Additionally, Fuels Purchasing and Supply shall inform the Fuel Accounting and Recovery department of any and all contract price changes to facilitate monthly fuel cost determinations.

Physical wood inventory amounts should be reconciled with the book amounts periodically as necessary to avoid large corrections that may occur over time due to water content variation in the wood, inaccuracies in measuring volumes while handling the wood and other reasons. These reconciliations should occur at least several times per year when wood volume in the yard is at a low point.

Attachment 1 - Wood Fuel Specifications for NWPP

Whole tree chips or chipped slabs and edging from sawmills produced using rotary chipper with knives. Does not include sawdust or planer shavings or material processed by hammer mill.

Specified Particle Size: Largest material not more than six inches (6") on any side. Smallest material not less than one eighth inch (1/8") any side.

Moisture Content: Averaging a maximum of fifty percent (50%) green weight basis over a delivery pay period (one week).

Allowance for Out-of-Size Specification Materials – Presence of Contaminants:
The fuel shall not contain any paints, surface treatments, glues or other adhesives, plastic laminates, preservatives including but not limited to creosote, pentachlorophenol (penta); or chromated copper arsenate (CCA), or hazardous materials. The term hazardous materials shall mean asbestos, polychlorinated biphenyls (PCBs), petroleum products and any pollutant contaminants, chemical or industrial, toxic, or hazardous substances or wastes, as these terms are defined by federal, state or local laws, rules, regulations, ordinances, codes, policies or rules of common law now or hereinafter in effect, and any judicial or administrative interpretation.

Oversize material not to exceed 1-1/2 cu. yd. per truck load. Fines (wood fuel passing 1/4" screen) not to exceed ten percent (10%) by weight. Presence of excessive unchipped twigs and intertwined sticks or wood blocks/logs which disrupt **BUYER'S** fuel handling system is unacceptable regardless of volume.

Noncombustibles, including rocks, metal, ice, etc. are unacceptable.

Out-of-Specification Remedies: Delivered loads not meeting the specifications for quality or with moisture content of fifty percent (50%) or higher may be subject to rejection or disposal at **BUYER'S** option. Should **SELLER** continually deliver out of specification wood fuel, **BUYER**, at its sole discretion, may disallow subsequent deliveries of wood fuel by **SELLER** until such time that **BUYER** is satisfied that **SELLER** will deliver wood fuel that meets the specifications herein. **SELLER** shall be responsible for all costs associated with the disposal of out-of-specification wood fuel

Clearcutting: Any clear-cut in New Hampshire exceeding 75 acres in size must be approved by a licensed New Hampshire forester before delivery of wood to **BUYER**. Any clear-cut in Maine exceeding 20 acres in size must be approved by a licensed professional Maine forester before delivery of wood to **BUYER**. Any clear-cut in Vermont exceeding 75 acres in size may be approved by a regulatory forester before delivery of wood to **BUYER**.

Sourcing: **SELLER** shall indicate with each truck delivery from which state the wood was harvested.

BUYER has an agreement with the New Hampshire Timberland Owners Association to report the origin of wood delivered, whether or not there was a licensed forester involved, if the wood came off of a certified tree farm, if the logger producing the wood is certified, if the wood lot harvested was third party SFI Certified or in Massachusetts, is harvested under a Chapter 132 cutting plan. Truckers will report this information to the scale person upon entering the scales.

Specifications may change. **BUYER** shall inform **SELLER**, in writing, of any specification changes.

Attachment 2 - Truck Management Plan for NWPP

1. Definitions

1.1 Contract. The collective term used to describe the documents comprising each agreement for (i) the supply of wood fuel to the Project and/or the delivery of such wood fuel, or (ii) the disposal or other transport of ash generated by the Project under authority of PSNH's Purchase Order.

1.2 Contractor. The entity issued a Purchase Order by PSNH.

1.3 Designated Truck Routes. Those routes designated by PSNH as authorized for use by the City of Portsmouth by Truckers in connection with the delivery of wood fuel to the Project or transport of ash related to the Project.

1.4 Project. The Northern Wood Power Project at PSNH's Schiller Station.

1.5 Site. The location of the Northern Wood Power Project at Gosling Road in Portsmouth, New Hampshire.

1.6 Subcontractor. Any subcontractor, agent or other party of any tier who furnishes wood fuel delivery, ash transport or other service related to the Contract under the Contract, or at the direction and control of Contractor.

1.7 Traffic Manager. Contractor's employee designated pursuant to Section 4.

1.8 Trucker. Any entity delivering wood fuel to the Project or transporting ash related to the Project pursuant to a Contract or otherwise.

1.9 Truck Management Plan. The plan for management of trucks delivering wood fuel to the Project and transporting ash related to the Project, submitted to and approved by the City of Portsmouth Planning Board.

2. Use of Designated Truck Routes

2.1 Truckers transporting wood to Schiller Station will be required to use Designated Truck Routes only. Truckers transporting Project ash will be required to use Designated Truck Routes only. It is currently anticipated that trucks will access PSNH's facility from the Spaulding Turnpike (Route 16) via Gosling Road. Trucks will exit Route 16 / Spaulding Turnpike at Exit 1 (the Pease / Gosling Road exit), travel directly down Gosling Road, across Woodbury Avenue, and deliver fuel to Schiller Station. Trucks will exit the same way.

3. Hours of Operation

3.1 Northern Wood Power Project will accept wood chip fuel six days a week during the following hours: Monday through Friday, from 7:00 AM to 9:00 PM, and Saturday 7:00 AM to 12:30 PM.

4. Designation of Traffic Manager

4.1 All Contractors shall designate one employee as Traffic Manager responsible for implementation of Truck Management Plan requirements and the liaison with PSNH regarding truck management issues.

4.2 The Traffic Manager shall be required to complete truck management orientation within a reasonable period of time after designation.

4.3 The Traffic Manager shall be responsible for communication of truck management plan requirements and distribution of truck management plan brochures, reminder cards and other communications to truckers employed or otherwise under the direction and control of the Contractor.

4.4 The Traffic Manager shall be responsible for coordination of trucker safety training.

4.5 The Traffic Manager shall be responsible for periodic compliance monitoring.

4.6 The Traffic Manager shall be responsible for ensuring that all Subcontractors and Truckers are aware of the penalties for failure to comply with the Truck Management Plan and shall be responsible for issuing warnings and suspensions.

4.7 Traffic Managers will also be responsible for periodic review of Truck Management Plan requirements with all Subcontractors and Truckers to reinforce the importance of the plan.

4.8 The Traffic Manager will be responsible for conducting unannounced periodic spot checks for compliance with Truck Management Plan requirements. Such spot checks may consist of monitoring critical intersections for traffic not in compliance with the plan, following trucks, truck driver interviews and complaint investigation and follow-up as requested by PSNH.

4.9 The Traffic Manager shall provide an annual report of the Truck Management Plan activities performed during the year, identification of and the results of any spot checks or other periodic compliance reviews and results of complaint investigations.

5. Safety

5.1 PSNH is committed to the protection and safety of its employees, contractors and the public. All persons employed by any Contractor and all Subcontractors and Truckers shall be instructed in and familiar with safety rules and regulations applicable to the work being performed.

5.2 While performing Contract work, all Contractor employees and Subcontractors and Truckers shall fully comply with all applicable federal, state and local safety rules and regulations.

6. Enforcement

6.1 Not adhering to applicable requirements of the Truck Management Plan will be grounds for warning, suspension and/or termination of any Subcontractor or Trucker violating the requirement, and repeated contract violations by a Contractor shall be grounds for termination of a Supply Contract.

6.2 The first offense for failure of a Subcontractor or Trucker to comply with Truck Management Plan requirements will result in a verbal warning.

6.3 The second offense for failure of a Subcontractor or Trucker to comply with Truck Management Plan requirements will result in a written reprimand and Traffic Manager meeting.

6.4 The third offense for failure of a Subcontractor or Trucker to comply with Truck Management Plan requirements will result in a written warning, Traffic Manager meeting and suspension.

6.5 PSNH may bar a Subcontractor or Trucker from further deliveries to Schiller Station following a fourth failure to comply with the Truck Management Plan.

6.6. The first offense for failure of a Contractor to comply with Truck Management Plan contract requirements will result in a verbal warning;

6.7 The second offense for failure of a Contractor to comply with Truck Management Plan contract requirements will result in a written notice of non-compliance.

6.8 The third offense for failure of a Contractor to comply with Truck Management Plan contract requirements will result in a written warning.

6.9 In the unlikely event of continued and flagrant violations of the Truck Management Plan requirements PSNH may terminate a Contractor.

Attachment 3 – PSNH Random Search Procedure

1) **Driver will be required to park in the designated search area.**

2) **Driver will be required to open the hood, glove box, trunk and compartments for inspection.**

3) **The driver will be asked to exit the vehicle.**

4) **The officer will then inspect the vehicle / truck. Including the under carriage.**

5) **The driver may be required to place contents of pockets into a basket to be inspected by the officer.**

6) **Driver will allow the officer to use the wand (garret) over his or her person.**

If there is one or more passengers in the vehicle, all persons within the vehicle are subject to be search before entry.

Attachment 4 – NWPP Scale House Contingency Plans

Scenario #1: System up and running in production and there is a 'short-term' network outage (evaluated to be less than 3 days).

Contingency Plan: **Manual Tickets, queue for data entry**. If the Scale Management System itself is not available but is expected to be available in hours or less than 3 days the Scalers will manually fill out pre-printed 3-part forms (Rich Roy has designed and will be getting stock printed). Once the system becomes available the scaling process will return to using the system and those tickets taken manually will be keyed into the system for processing.

Scenario #2: System up and running in production and there is a 'long-term' network outage (evaluated to be greater than 3 days).

Contingency Plan: **Manual Tickets, evaluate use of SMS system and need for manual invoice processing**. If the Scale Management System itself is not available and is expected to be unavailable for greater than 3 days the Scalers will manually fill out pre-printed 3-part forms (Rich Roy has designed and will be getting stock printed) and an evaluation of the extent of the network outage would need to be conducted to determine if data can be entered/reviewed/approved in SMS from another location or if the entire system/network is down and we have to allocate resources to key the tickets into MIMS as individual invoices and apply normal MIMS review/approval guidelines.

Scenario #3: Scale House is vandalized and all Sebago Scale indicators and PC's and printers are missing or damaged beyond use.

Contingency Plan: **Install Backup PC, Printer, and Sebago Scale Indicator.** If the hardware at the Scale House is inoperable we would first have to redirect truck

scaling to another scale location and then we would contact Sebago for an emergency installation of one or more scale indicators and we would move the NU PC and printer in the MCC1 building into the Scale House and follow documented configuration instructions to set up the scale indicators and Scale Management application on it. Sebago Scales provides 24 Emergency support and PSNH has all of the Sebago recommended parts in-stock to support Sebago rebuilding a scale indicator which would be used for both inbound and outbound transactions. Once the backup equipment is operable in the Scale House truck traffic would be redirected to Schiller

Scenario #4: Contracted Scalers are Unavailable.

Contingency Plan: **PSNH employees are certified Weigh Masters.** In the event that the contracted scaler resources strike, quit, or are not available in the necessary quantify to support the scaling needs there will be 6 PSNH employees who will attend training and get certified as Certified Weigh Masters in NH. These resources would be called upon to perform the scaling work in the absence of contracted resources. Caleb Bryant, Rich Roy, Bruce Overton, Rodney Donaldson, and Susan Ouellette are already Certified Weigh Masters. Caleb Bryant will be responsible for ensuring that adequate additional resources are available.

CERTIFICATE

I, the undersigned, Robert A. Bersak, am the duly elected Assistant Secretary of PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE and I HEREBY CERTIFY that pursuant to action taken by unanimous written consent of the Board of Directors of PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, dated as of June 18, 2003, the following resolutions were duly adopted:

RESOLVED, that this Board hereby confirms that the officers of the Company have the authority, by virtue of their offices and within the scope of their respective responsibilities, to sign for and on behalf of this Company contracts, bills, notes, receipts, acceptances, endorsements, releases and other papers and documents and that each officer shall have the powers and perform the duties which by law and general usage appertain to his/her particular office.

RESOLVED, that this Board hereby confirms that the Chairman, the Chief Executive Officer, the President and any Vice President have the authority to delegate to Division Managers, Division Directors, Department Heads and other employees, agents and representatives of the Company authority to sign for and on behalf of this Company documents necessary and incidental to the routine conduct of the Company's business.

RESOLVED that this Board hereby confirms that pursuant to the provisions of the Service Agreement between the Company and Northeast Utilities Service Company (NUSCO), the officers of NUSCO have the authority, by virtue of their offices and within the scope of their respective responsibilities, to sign contracts and other papers, documents and certificates for and on behalf of this Company, as agents of this Company.

I DO FURTHER CERTIFY that the foregoing resolutions are still in full force and effect as of this date.

I DO FURTHER CERTIFY that John M. MacDonald has been duly elected Vice President-Energy Delivery and Generation for PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE and now holds that office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of said Company on this fifth day of June 2007.

(Seal)

Robert A. Bersak
Assistant Secretary
Public Service Co. of New Hampshire