

# STATE OF NEW HAMPSHIRE

## Inter-Department Communication

**DATE:** August 6, 2008

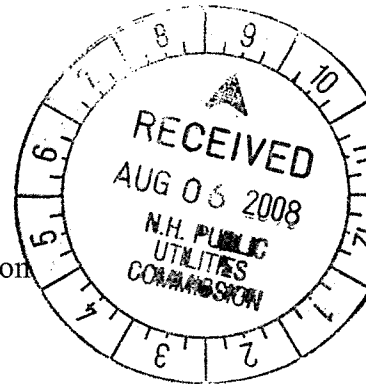
**AT (OFFICE):** NHPUC

**FROM:** *SEM*  
Henry J. Bergeron  
Utility Analyst III

**SUBJECT:** DE 08-044, Schiller Unit 5 Facility Application for Class I Eligibility Pursuant to RSA 362-F. Staff recommendation for approval of application.

**TO:** Chairman Thomas B. Getz  
Commissioner Graham J. Morrison  
Commissioner Clifton C. Below  
Debra A. Howland, Executive Director and Secretary

**CC:** Thomas C. Frantz, Director of the Electric Division  
Steven E. Mullen, Assistant Director of the Electric Division  
Suzanne Amidon, Staff Attorney



### *Summary*

On March 18, 2008, Public Service Company of New Hampshire (PSNH) submitted an application requesting the Commission grant approval of its Schiller Station Unit 5 biomass facility (Schiller Unit 5) to produce Class I Renewable Energy Certificates (RECs) pursuant to RSA 362-F, New Hampshire's Renewable Portfolio Standard law. Class I eligibility requires a facility to have begun the production of electricity after January 1, 2006 and to use certain sources to produce that electricity, one of which is eligible biomass technologies. RSA 362-F:2, II defines eligible biomass fuels as plant-derived fuel including clean and untreated wood such as brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips or pellets, shavings, sawdust and slash, agricultural crops, biogas, or liquid biofuels, but excludes any materials derived in whole or in part from construction and demolition debris.

Pursuant to RSA 362-F, the Commission, in a non-adjudicative process, shall issue a determination of whether a facility meets a particular classification within 45 days of a completed application. The Schiller Unit 5 application and responses to discovery were completed on June 27, 2008 with the exception of the Department of Environmental Services' (DES) approval of emission test results. On July 28, 2008, the Commission received notification from the DES that the unit meets the emissions requirements to be certified as a Class I renewable energy source, thereby completing the application.

Schiller Unit 5 meets the Class I eligibility requirements under RSA 362-F:4, I and PSNH has complied with the N.H. Code Admin. Rule Puc 2500 and provided all the necessary documents. Staff recommends that the Commission certify Schiller Unit 5 as a Class I renewable energy source.

### *Analysis*

Schiller Unit 5 is a power generating facility that uses biomass fuels as defined in RSA 362-F:2. Schiller Unit 5 is located at 400 Gosling Road Portsmouth, NH 03801 and has a gross nameplate capacity of 50 MW. After completion of performance testing during October and November of 2006, Schiller Unit 5 began commercial operation on December 1, 2006. The facility's ISO-New England asset identification number is 557 and its NEPOOL generation information system facility code is MSS557.

Pursuant to the N.H. Code Admin. Rule Puc 2500.02 (b) (7), the application shall include "[A]ll other necessary regulatory approvals, including any reviews, approvals or permits required" by DES. According to PSNH, a Temporary Prevention of Significant Deterioration (PSD) Permit [TP-B-0501], originally issued on October 25, 2004, was reissued March 6, 2006 by the DES Air Resources Division (ARD) for Schiller Unit 5. This permit was valid until April 30, 2007. DES ARD has not issued a new or revised Temporary PSD Permit. As required, PSNH filed an application with DES ARD on January 30, 2007, for significant modification of Schiller Station's Title V Operating Permit (TV-OP-053). Schiller Unit 5 presently operates under the corresponding application shield, as allowed by DES ARD.

RSA 362-F:2, VIII defines eligible biomass technologies as generating technologies that use biomass fuels as their primary fuel, provided that the generation unit has a quarterly average nitrogen oxide (NO<sub>x</sub>) emission rate of less than or equal to 0.075 pounds/million British thermal units (lbs/Mmbtu), and an average particulate emission rate of less than or equal to 0.02 lbs/Mmbtu as measured and verified under RSA 362-F:12.

Schiller Unit 5 uses selective non-catalytic reduction (SNCR) to control NO<sub>x</sub> emissions. Actual NO<sub>x</sub> emissions from Schiller Unit 5 are measured using a continuous emissions monitor (CEM). CEM data reported to DES indicates that the NO<sub>x</sub> emissions from Schiller Unit 5 can meet the Renewable Portfolio Standard (RPS) law NO<sub>x</sub> emission rate of 0.075 lbs/Mmbtu. For example, the quarterly average NO<sub>x</sub> emission rate for the first quarter of 2008 was 0.063 lbs/Mmbtu.

Schiller Unit 5 uses a fabric filter to control particulate emissions. The results of the most recent test performed on August 22, 2007 for total suspended particulate (TSP) indicated a TSP emission rate of 0.0011 lbs/Mmbtu. This meets the RPS law particulate emission rate of 0.02 lbs/Mmbtu.

In the case of both NO<sub>x</sub> emissions and particulate emissions, DES anticipates that Schiller Unit 5 will be able to continue to meet the applicable RPS law emissions rates.

Pursuant to the N.H. Code Admin. Rule Puc 2500.02 (b) (8), the application shall include “[P]roof that the applicant either has an approved interconnection study on file with the commission, is a party to a currently effective interconnection agreement, or is otherwise not required to undertake an interconnection study”. In response to discovery, the company responded that “[S]ince Schiller Station entered commercial service prior to passage of PURPA and was connected to PSNH-owned electrical transmission and distribution infrastructure, no interconnection studies were required for Schiller Station at the time of construction

Pursuant to the N.H. Code Admin. Rule Puc 2500.02 (b) (11), the application shall include “[A] statement as to whether the facility has been certified under another non-federal jurisdiction’s renewable portfolio standard and proof thereof.” The Schiller Unit 5 Facility was certified as a new renewable generation unit in accordance with Massachusetts requirements effective December 1, 2006 and has since maintained that status. According to the statement of qualification issued by the Massachusetts Department of Energy Resources, qualification as new renewable generation during all periods of wood firing or co-firing wood and coal is contingent on meeting a particulate matter emission rate of 0.012 lbs/MMBtu and a NO<sub>x</sub> emission rate of 0.075 lbs/MMBtu. On September 11, 2007, the Rhode Island Public Utilities Commission issued an order certifying the Schiller Unit 5 facility as a new renewable energy source.

***Recommendation***

PSNH’s Schiller Unit 5 application to produce Class I RECs is complete pursuant to Puc 2505.02. All necessary information and documentation demonstrating that PSNH’s Schiller Unit 5 meets the Class I eligibility requirements pursuant to RSA 362-F:4, I has been reviewed by Staff. Based on its review, Staff considers the eligibility requirements to have been met. Therefore, Staff recommends that the Commission grant Schiller Unit 5 Class I eligibility status within 10 days of the notification from DES that that facility has met the emission standards.