



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

DE08-044

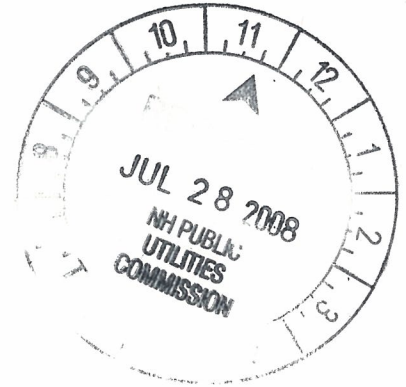


Thomas S. Burack, Commissioner

July 23, 2008

Debra A. Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

**Re: Certification as a Class I Renewable Energy Source
Public Service Company of New Hampshire
Schiller Unit #5
Portsmouth, NH**



Dear Ms. Howland:

On June 26, 2008, the New Hampshire Department of Environmental Services (DES) received an application from Public Service of New Hampshire (PSNH) for their wood-fired power plant designated as Schiller Unit #5 located in Portsmouth, NH to be certified as a Class I renewable energy source. DES has reviewed the application and recommends that the Public Utilities Commission (PUC) approve PSNH's Schiller Unit #5 as a Class I renewable energy source eligible to generate renewable energy certificates. A summary of the facility description, DES's review of particulate and NOx emission rates and monitoring requirements, and basis of the recommended approval are presented below.

Facility Description

Facility Name: PSNH Schiller Station - Unit #5
Facility Location: 400 Gosling Road
Portsmouth, NH 03801

Gross Generation Capacity: 50 MW
Began operation: December 1, 2006
Primary Fuel: Biomass fuels as defined by New Hampshire Code of Administrative Rules, Puc 2502.04.

Particulate Emissions

New Hampshire Code of Administrative Rules Puc 2502.16, "*Eligible biomass technologies*", requires that the facility meet an average particulate emission rate limit of 0.02 lb/MMBtu.

Emission Rate

Schiller Unit #5 uses a fabric filter to control particulate emissions. The most recent particulate emission test performed for Schiller Unit #5 was performed on August 22, 2007. The emission test was performed for total suspended particulate (TSP) using USEPA Method 5. The emission test was observed and the results were approved by DES. The results of the test indicated a TSP emission rate of 0.0011 lb/MMBtu. This meets the particulate Renewable

Portfolio Standard (RPS) standard of 0.02 lb/MMBtu. DES anticipates that Schiller Unit #5 will be able to continue to meet the RPS standard.

Emissions Confirmation

Puc 2505.05(c), *Certification of Biomass Facilities*, requires facilities to conduct stack tests to verify compliance with the particulate RPS. Schiller Unit #5 will need to perform future periodic particulate emission tests in accordance with Env-A 800, *Testing and Monitoring Procedures* on the schedule required by Puc 2505.04(c).

NOx Emissions

New Hampshire Code of Administrative Rules Puc 2502.15 requires that the facility meet a quarterly average NOx emission rate limit of 0.075 lb/MMBtu.

Emission Rate

Schiller Unit #5 uses selective non-catalytic reduction (SNCR) to control NOx emissions. Actual NOx emissions from Schiller Unit #5 are measured using a continuous emissions monitor (CEM). CEM data reported to DES indicates that NOx emissions from Schiller Unit #5 can meet the RPS standard. For example, the quarterly average NOx emission rate for the January 1, 2008 through March 31, 2008 quarter was 0.063 lb/MMBtu, which meets the RPS standard of 0.075 lb/MMBtu. DES anticipates that Schiller Unit #5 will be able to continue to meet the RPS standard.

Emissions Confirmation

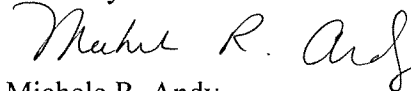
The CEM used to measure NOx emissions from Schiller Unit #5 is required to be operated in accordance with Env-A 808, *Continuous Emissions Monitoring*, as specified in Condition VIII.C, Table 7 of PSNH's Temporary Prevention of Significant Deterioration Permit TP-B-0501. DES review of Schiller Unit #5's operational and testing data, including DES observation and review of Relative Accuracy Test Audits (RATA), indicates that PSNH has historically operated the NOx CEM in accordance with all applicable requirements, and the CEM data is suitable for determining compliance with NOx emission limitations.

Conclusion and Recommended Conditions of Approval

DES believes that Schiller Unit #5 can meet the requirements to be certified Class I renewable energy source. DES recommends that PUC certify Schiller Unit #5 as Class I renewable energy source eligible to generate renewable energy certificates.

If you have any questions regarding DES's evaluation of the application or our conclusions, please contact Todd A. Moore of the Permitting and Environmental Health Bureau at todd.moore@des.nh.gov or (603) 271-6798.

Sincerely



Michele R. Andy
Administrator
Permitting & Environmental Health Bureau

Cc: William H. Smagula, P.E., PSNH
Elizabeth H. Tillotson, PSNH