

The State of New Hampshire DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

DE 09-104

July 7, 2009

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

Re: Conditional Certification as a Renewable Energy Source Springfield Power, LLC Springfield, NH

Dear Ms. Howland:

The New Hampshire Department of Environmental Services (DES) received an application from Springfield Power, LLC for their wood-fired power plant located in Springfield, NH to be certified as a renewable energy source. DES has reviewed the application and recommends that the Public Utilities Commission (PUC) grant conditional approval to Springfield Power as a 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 recommended conditions of the approval are presented below.

Facility Description

Facility Name:	Springfield Power, LLC
Facility Location:	54 Fisher Corner Road
	Springfield, NH 03284

Gross Nameplate Capacity:	16 MW (to be up-rated to 18 MW)
Began operation:	July 1988
Primary Fuel:	Whole-tree wood chips, sawdust, and clean processed wood
	fuels

Particulate Emissions

New Hampshire Code of Administrative Rules Puc 2502.15, *"Eligible biomass technologies"*, requires that the facility meet an average particulate emission rate limit of 0.02 lb/MMBtu.

Emission Rate

A particulate emission test was performed on May 21, 2008. 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 indicate that the actual TSP emission rate in lb/MMBtu was 0.017 with emissions control devices operating and it meets the particulate Renewable Portfolio Standard (RPS) standard of 0.02 lb/MMBtu pursuant to RSA 362-F:2 VIII(a).

Emissions Confirmation

Puc 2505.05(c), *Certification of Biomass Facilities*, requires facilities to conduct periodic stack tests to verify compliance with the particulate RPS. Springfield Power 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 2505.05(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

Springfield Power measures actual NOx emissions using a continuous emissions monitor (CEM). The CEM is required to be operated in accordance with Env-A 808, *Continuous Emissions Monitoring*, as specified in Condition VI, Table 5, Item #19 of Springfield Power's Temporary Permit TP-B-0552. The results of the monitoring indicate that the actual NOx emission rate for the first quarter of 2009 was 0.074 lb/MMBtu.

Emissions Confirmation

Springfield Power will continue to measure actual NOx emissions using a continuous emissions monitor (CEM). DES' review of Springfield Power's operational and testing data, including DES observation and review of Relative Accuracy Test Audits (RATA), will indicate if Springfield Power operates the NOx CEM in accordance with all applicable requirements, and the CEM data is suitable for determining compliance with NOx emission limitations.

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Conclusion and Recommended Conditions of Approval

DES believes that Springfield Power will continue to meet the requirements to be certified as a renewable energy source. DES recommends that, with the following conditions, the PUC certify Springfield Power as a renewable energy source eligible to generate renewable energy certificates:

- 1) Springfield Power shall maintain its quarterly average NOx emissions rate at or below 0.075 lb/MMBtu as measured by the CEM.
- 2) Springfield Power shall perform annual emission tests for TSP in accordance with the procedures specified in Env-A 800 and schedule required by Puc 2505.05(c) and shall maintain an average particulate emission rate at or below 0.02 lb/MMBtu.

If you have any questions regarding DES's evaluation of the application or our conclusions, please contact me at joseph.fontaine@des.nh.gov or (603) 271-6794.

Sincerely

Joseph T. Fontaine Trading Programs Manager Air Resources Division