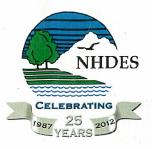
212-09



# The State of New Hampshire Department of Environmental Services

**Thomas S. Burack, Commissioner** 

Celebrating 25 years of protecting New Hampshire's environment.



May 18, 2012 RECEIVED MAY 18 2012 UTILITIES COMMISSION

Re: Conditional Certification as a Class I Renewable Energy Source Berlin Station, LLC Berlin, NH

Dear Ms. Howland:

Debra A. Howland

Executive Director and Secretary

21 South Fruit Street, Suite 10 Concord, NH 03301-2429

New Hampshire Public Utilities Commission

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

## **Facility Description**

<b>Facility Name:</b>	Berlin Station, LLC
<b>Facility Location:</b>	One Community Street
	Berlin, NH 03570

Gross Nameplate Capacity	: 75 MW
<b>Began operation:</b>	Expected October 17, 2013
Primary Fuel:	Whole-tree wood chips and other low-grade clean wood fuels

### Particulate Matter (PM) Emissions

New Hampshire Code of Administrative Rules Puc 2502.16, *"Eligible biomass technologies"*, requires that the facility meet an average PM emission rate limit of 0.02 pounds/million British thermal units (lb/MMBtu).

#### **Emission Rate**

A PM emission test has not yet been performed for Berlin Station. The emission test will be performed for PM in accordance with condition #2 of Table 6 in section VII of DES Temporary Permit TP-0054. The emission test will be observed and the results will be approved or denied by DES at a later date. The results of the test will indicate the actual PM emission rate in lb/MMBtu and whether or not it meets the Renewable Portfolio Standard (RPS) PM standard of 0.02 lb/MMBtu pursuant to RSA 362-F:2 VIII(a). DES anticipates that Berlin Station will be able to meet the RPS PM standard.

#### **Emissions Confirmation**

Puc 2505.04, *Certification of Biomass Facilities*, requires facilities to conduct stack tests to verify compliance with the RPS PM standard. Berlin Station will need to perform future periodic PM emissions tests in accordance with Env-A 800, *Testing and Monitoring Procedures* on the schedule required by Puc 2504.

## Nitrogen Oxides (NOx) Emissions

New Hampshire Code of Administrative Rules Puc 2502.16 requires that the facility meet a quarterly average NOx emission rate limit of 0.075 lb/MMBtu.

### **Emission Rate**

Berlin Station has not yet installed a continuous emissions monitoring system (CEMS) to record NOx emissions in accordance with condition #7 of Table 6 in section VII of DES Temporary Permit TP-0054. DES anticipates that NOx emissions from the facility will meet the RPS NOx standard of 0.075 lb/MMBtu or less.

### **Emissions Confirmation**

Berlin Station will measure actual NOx emissions using a CEMS. At a later date, DES review of Berlin Station's operational and testing data, including DES observation and review of Relative Accuracy Test Audits (RATA), will indicate if Berlin Station operates the NOx CEMS in accordance with all applicable requirements, and the CEMS data is suitable for determining compliance with NOx emission limitations.

#### **Conclusion and Recommended Conditions of Approval**

DES believes that Berlin Station will meet the requirements to be certified as a Class I - New Biomass renewable energy source. DES recommends that, with the following conditions, the PUC certify Berlin Station as a Class I renewable energy source eligible to generate renewable energy certificates:

- 1) Berlin Station shall emit NOx at a quarterly average rate less than or equal to 0.075 lb/MMBtu.
- 2) Berlin Station shall emit PM at an average rate less than or equal to 0.02 lb/MMBtu.

If you have any questions, please contact me at joseph.fontaine@des.nh.gov or (603) 271-6794.

Sincerely

Joseph T. Fontaine Trading Programs Manager Air Resources Division