

# STATE OF NEW HAMPSHIRE

## Intra-Department Communication

**DATE:** July 5, 2012  
**AT (OFFICE):** NHPUC

**FROM:** Barbara Bernstein  
Sustainable Energy Analyst

**SUBJECT:** **DE 12-091**, Berlin Station, LLC – Burgess BioPower’s Application for Class I, New Hampshire Renewable Energy Certificates, for the Electrical Production from the Berlin Station Biomass Plant Currently Under Construction Pursuant to RSA 362-F.  
**Staff Recommends that Conditional Approval be Granted**

**TO:** Chairman Amy L. Ignatius  
Commissioner Robert R. Scott  
Commissioner Michael Harrington  
Debra A. Howland, Executive Director and Secretary

**CC:** Jack K. Ruderman, Director of the Sustainable Energy Division  
Suzanne Amidon, Staff Attorney

### *Summary*

Staff has reviewed Burgess BioPower’s (Burgess) application for Class I, New Hampshire Renewable Energy Certificates (RECs) for the proposed 75 megawatts (MW) of electrical production from the Berlin Station Biomass Plant (Berlin Station) facility and has determined that it meets the eligibility requirements under RSA 362-F:4, as a Class I facility, and complies with the New Hampshire Code of Administrative Rules Puc 2505.02. Staff recommends the Commission grant conditional approval of the Berlin Station based on the New Hampshire Department of Environmental Services’ recommendation in a letter dated May 18, 2012. Final approval would be granted if emissions allowances and monitoring requirements are met as determined by DES.

### *Analysis*

On April 11, 2012, the PUC received an application requesting that the proposed Berlin Station, located in Berlin, NH, be certified to produce New Hampshire Class I RECs. Upon review of the application the Commission, in a non-adjudicative process, must issue a determination of eligibility within 45 days of receipt of a completed application.<sup>1</sup> On May 17<sup>th</sup> staff notified Burgess that DES must provide a recommendation for conditional approval of the facility. A letter of recommendation from DES was received by the Commission on May 18, 2012. In addition, Burgess was

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<sup>1</sup> Pursuant to RSA 362-F

asked to provide documentation to the Commission on materials submitted that were confidential. A summary of materials required to complete Staff's review was received from Burgess on May 25, 2012, thus completing the application.

RSA 362-F:11, III provides that the Commission may certify a biomass facility on a conditional basis subject to compliance with the applicable nitrogen oxides (NO<sub>x</sub>) and particulate matter (PM) emission standards. On May 18, 2012, the Commission received a Conditional Certification as a Class I Renewable Energy Source for the Berlin Station from DES. Prior to final approval to produce RECs, DES recommends the following conditions:

- a) Berlin station shall emit NO<sub>x</sub> at a quarterly average rate less than or equal to 0.075 lb/MMBtu; and,
- b) Berlin Station shall emit PM at an average rate less than or equal to 0.02 lb/MMBtu.

To qualify the Berlin Station's electrical production as eligible to acquire Class I RECs, Puc 2505.02 (b) requires the source to demonstrate its eligibility by completing the following application requirements:

- 1) *The name and address of the applicant.* The applicant is Berlin Station LLC – Burgess BioPower, One Cate Street, Portsmouth, NH 03801.
- 2) *The name and location of the facility.* Berlin Station, LLC, Community Street, Berlin, NH 03570. (The site of the former Fraser Pulp Mill.)
- 3) *The ISO-New England asset identification number (if available).* The ISO-New England asset identification number has not yet been assigned because the plant is under construction.
- 4) *The GIS facility code if available.* Berlin Station does not yet have an active GIS account, however, the applicant did provide the Lead Participant number 51176.
- 5) *A description of the facility including fuel type, gross nameplate generation capacity, the initial commercial operation date, and the date it began operation, if different.* Exhibit 1 of the Burgess application states:

Berlin Station, LLC is converting and upgrading the existing facility equipment and infrastructure located at the former Fraser Pulp Mill in Berlin, NH, in order to develop a biomass fueled energy generating facility. The facility will be a base loaded electric generating facility located in the City with a nominal gross electrical output of 75 MW. It will utilize only clean biomass as a fuel.

- 6) *If a biomass source, NO<sub>x</sub> and particulate matter emission rates and a description of pollution control equipment or proposed practices for compliance with such requirements.* Exhibit 1 of the Burgess application states:

Pollution control will include a dry sorbent injection system for the control of sulfur dioxide, sulfuric acid mist and hydrochloric acid, a selective catalytic reduction system for the control of NO<sub>x</sub> and a fabric filter baghouse for the control of PM. Berlin Station will also operate continuous emission monitors (CEMs) to continuously record NO<sub>x</sub>, carbon monoxide (CO), ammonia slip oxygen, opacity

and certain operational parameters. Ammonia for the SCR system will be stored on-site in a storage tank equipped with secondary containment.

Ancillary equipment associated with the biomass boiler will include a 4-cell cooling tower and wood & ash handling systems. The exhaust system of the cooling tower will be equipped with mesh drift eliminators that will control entrained water droplets to less than 0.0005% of the recirculating water flow. Water for cooling and process operations will be provided by the Berlin Water Works municipal supply and distribution systems.

- 7) *All other necessary regulatory approvals, including any reviews, approvals or permits granted by the department.* Exhibit 3 of the application provides The State of New Hampshire Site Evaluation Committee Order and Amended Certificate of Site and Facility with Conditions including NHDES (conditional approvals) and A City of Berlin Agreement that addresses landscaping conditions, noise, air and water quality issues, truck traffic issues and community benefits.
- 8) *Proof 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.* Pertinent pages of the Large Generator Interconnection Agreement by and among ISO New England, Inc. and Berlin Station, LLC, and Northeast Utilities Service Company on Behalf of Public Service Company of New Hampshire has been provided.<sup>2</sup>
- 9) *If a biomass facility, proof that a copy of the completed application has been filed with the department.* Exhibit 3 of the application provides NH DES conditional approvals; in addition NHDES has provided the Commission with a recommendation that the Commission grant conditional approval to Berlin Station for Class I eligibility.
- 10) *A description of how the generation facility is connected to the distribution utility.* Electric power from the Berlin Station biomass facility will be the connected to the Berlin Eastside Substation.
- 11) *A statement as to whether the facility has been certified under another non- federal jurisdiction's renewable portfolio standard and proof thereof.* Berlin Station has not been certified under another non-federal jurisdiction's renewable portfolio standard.
- 12) *A statement as to whether the facility's output has been verified by ISO New England.* Berlin Station's output will be verified by ISO New England after the facility is operational.
- 13) *A statement of how the facility's output is reported to the GIS if not verified by ISO- New England.* Berlin Station's output will be verified by ISO New England and the GIS after the facility is operational.

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<sup>2</sup> This document contains critical energy infrastructure information; only pertinent pages required for the review were provided to the Commission.

- 14) *An affidavit by the owner attesting to the accuracy of the contents of the application.*  
An affidavit signed by Robert Desrosiers, Director, Berlin Station, LLC was provided in Exhibit 5 of the application.
- 15) *The name and telephone number of the facility's operator, if different from the owner.* Berlin Station is owned by Berlin Station, LLC – Burgess BioPower.
- 16) *Such other information as the applicant wishes to provide to assist in classification of the generating facility.* Burgess BioPower provided the Commission with copious information in their application for RECs.

***Recommendation***

Staff has reviewed the Berlin Station application for certification as a Class I facility and can affirm it is complete pursuant to N. H. Code Admin. Rule Puc 2500. Staff recommends that the Commission conditionally certify the Berlin Station's electrical production as being eligible for Class I RECs. Staff recommends final certification of the facility as a Class I renewable energy source effective on the date that DES is able to make a determination that Berlin Station meets the emissions rates required by RSA 362-F:2.