



STATE OF NEW HAMPSHIRE**Inter-Department Communication****DATE:** February 25, 2014**AT (OFFICE):** NHPUC

FROM: Barbara Bernstein 
Sustainable Energy Analyst

SUBJECT: DE 14-007 - GDF SUEZ Energy North American, Inc., Application
for Certification as a REC Eligible Facility - Ryegate Associates
Staff Recommends that Eligibility be Granted.

TO: Chairman Amy L. Ignatius
Commissioner Robert R. Scott
Commissioner Martin P. Honigberg
Debra A. Howland, Executive Director and Secretary

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

Summary

On January 8, 2014, the Commission received an application from GDF SUEZ requesting Class III New Hampshire renewable energy certificate (REC) eligibility for the 20 megawatt (MW) Ryegate Associates – Ryegate Power Station (Ryegate) biomass facility located in East Ryegate, Vermont, pursuant to RSA 362-F. RSA 362-F: 11, III provides that the Commission may conditionally certify a biomass facility pending New Hampshire of Department of Environmental Services (DES) verification of compliance for nitrogen oxide (NO_x) and particulate matter (PM) emission rates and monitoring requirements.

On January 31, 2014, the Commission received a letter from DES recommending the Commission grant Ryegate conditional approval for Class III REC eligibility as DES anticipates that NO_x emissions from the facility will meet the requirements of RSA 362-F:2 VIII(a) and Puc 2502.16 in the third quarter of 2014. At that time, a new system will be installed that will reduce NO_x emissions from 0.15 lbs/mmBTU to no greater than 0.075 lbs/mmBtu.

Analysis

To qualify Ryegate as a REC eligible facility, Puc 2505.02 (b) requires the source to demonstrate its eligibility by completing the following:

- 1.) *The name and address of the applicant:* The application was prepared by GDF SUEZ, Energy, Inc., 200 Glastonbury Boulevard, Suite 303, Glastonbury, CT 06033 for Ryegate Associates.

- 2.) *The name and location of the facility:* Ryegate Power Station is located at 247 Weesner Drive, East Ryegate, VT 05042.
- 3.) *The ISO-New England asset identification number (if available).* The ISO-New England asset identification number is ISO-NE#: 2433.
- 4.) *The GIS facility code if available.* The NEPOOL GIS facility code has been verified as MSS 2433.
- 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.* Ryegate is a 20 MW biomass fired steam electrical generating facility that began commercial operation in October 1992. The facility burns approximately 266,000 tons of biomass wood per year including wood chips and other low-grade clean wood fuels. The Ryegate wood procurement process, developed in cooperation with state forestry officials, promotes sound forest management principles.
- 6.) *If a biomass source, NO_x and particulate matter emission rates and a description of pollution control equipment or proposed practices for compliance with such requirements.* Air pollution control equipment consists of an Electrostatic precipitator to manage particulate matter and Selective Non-Catalytic Reduction (SNCR) technology for NO_x emissions to maintain emissions within Vermont state standards.
 - a. Pursuant to RSA 362-F:2 and Puc 2502.16, a quarterly average NO_x emission limit of 0.075 lb/MMBtu must be met. Ryegate proposes to install a selective catalytic reduction system (SCR) to further reduce NO_x emissions from 0.15 lbs/mmBtu to emissions no greater than 0.075 lbs/MMBtu. The existing SNCR system will continue to be utilized; the proposed SCR which will be located downstream of the boiler to enable emissions to be reduced to the final level of 0.075 lbs/MMBtu or less. DES currently anticipates initial operation of the new SCR and NO_x emission rates will meet New Hampshire NO_x emission standards in the third quarter of 2014.
 - b. A PM emission test was performed in accordance with federal requirements¹ for Ryegate on June 18, 2013 by CEMServices, Inc., of Norton, MA. The results of the test indicate the actual PM emission rate in lbs/MMBtu was 0.0012 lbs/MMBtu, which meets the requirements of RSA 362-F:2 and Puc 2502.16 of 0.02 lbs/MMBtu.
- 7.) *All other necessary regulatory approvals, including any reviews, approvals or permits granted by the department.* DES recommends that the Commission grant Ryegate conditional approval as a Class III facility based on its capability to meet the emissions standards pursuant to RSA 362-F:2, and Puc 2504.04. In addition, Ryegate

¹ 40 Code of Federal Regulations Part 60, Appendix A, Reference Method 5.

must continue to perform annual stack testing, report the results to DES and the results must verify that the facility is in compliance with Puc 2505.04. In addition, Ryegate provided the following regulatory approvals, and other supporting documentation:

- a. State of Vermont Agency of Natural Resources, Department of Environmental Conservation, Wastewater Management Division Discharge Permit, March 24, 2010;
- b. Ryegate Power Station Chip Management Plan;
- c. State of Vermont Agency of Natural Resources, Department of Environmental Conservation, Title V Air Pollution Control Permit to Construct and Operate, May 16, 2011; and,
- d. Ryegate Power Station Emission Compliance Test Program, July 16, 2013.

- 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.* An Interconnection Agreement Between Green Mountain Power Corporation and Ryegate Wood Energy company has been provided.
- 9) *If a biomass facility, proof that a copy of the completed application has been filed with the department.* Ryegate filed an application with DES. DES has reviewed the application and recommends that the Commission grant Ryegate conditional approval as a Class III facility.
- 10) *A description of how the generation facility is connected to the distribution utility.* Ryegate is interconnected to the Green Mountain Power system.
- 11.) *A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof.* A copy of the Generation Information System's (GIS) tracking data for Ryegate was included with the application and verifies that Ryegate has been certified as a Connecticut Class I renewable resource.
- 12.) *A statement as to whether the facility's output has been verified by ISO New England.* The application includes a statement that the output of the facility is settled in the ISO-NE market systems and is therefore verified through the ISO-NE market system.
- 13) *A description of how the facility's output is reported to the GIS if not verified by ISO-England.* The facility's output is reported to the GIS.
- 14.) *An affidavit by the owner attesting to the accuracy of the contents of the application.* An affidavit signed by Eric A. DeBarba, Director- New England Origination, Ryegate Associates, was provided with the application.

15) *The name and telephone number of the facility's operator, if different from the owner.*

The facility is operated by Mark Driscoll, 802-633-3500 x 104.

16) *Such other information as the applicant wishes to provide to assist in classification of the generating facility.* The applicant provided ample information to complete the review of the application.

Recommendation

Staff has reviewed the Ryegate biomass facility application and the DES letter recommending conditional approval and can affirm the application is complete pursuant to Puc 2500. The applicant has provided all the necessary information and documentation demonstrating that Ryegate anticipates meeting the requirements set forth in RSA 362-F:2 and Puc 2502.16 for Class III eligibility. Staff recommends that the Commission grant Ryegate conditional approval for Class III eligibility. The facility will be eligible to produce RECs effective the date that the Commission receives DES verification that the facility is operating in conformance with Puc 2502.16.² This approval should be conditioned upon DES providing the Commission with information on a quarterly basis that the facility complies with applicable emissions standards.

² In DE 08-051, Pinetree Power – Tamworth, Inc., the Commission determined that the appropriate effective date for biomass facilities is the date on which the Commission receives notification from DES that the facility meets the emission requirements, thereby completing an application in accordance with NH Code Admin. Rules Puc 2505.01 (c) and 2505.02.