


STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: September 11, 2008

AT (OFFICE): NHPUC

FROM: *SEM*
Henry J. Bergeron 
Utility Analyst III

SUBJECT: DE 08-042, Public Service Company of New Hampshire's
Application of the J. Brodie Smith Hydroelectric Facility for Class I
Eligibility Pursuant to RSA 362-F
Staff Recommendation

TO: Chairman Thomas B. Getz
Commissioner Graham J. Morrison
Commissioner Clifton C. Below
Debra A. Howland, Executive Director and Secretary

CC: Thomas Frantz, Director of the Electric Division
Steven Mullen, Assistant Director of the Electric Division
Suzanne Amidon, Staff Attorney

Summary

On March 18, 2008, Public Service Company of New Hampshire (PSNH) submitted an application requesting the Commission grant approval of its J. Brodie Smith (Smith) hydroelectric facility to produce Class I Renewable Energy Certificates (RECs) pursuant to RSA 362-F, New Hampshire's Renewable Portfolio Standard law. PSNH recently completed a major capital investment project at the Smith facility to replace the original hydroelectric turbine with a high-efficiency design turbine. The resulting improvement in generation qualifies the facility to be certified as a Class I renewable energy source, as defined in the interim N.H. Admin. Code Rule Puc 2502.06 (d), and would thus be eligible to produce RECs equal to the amount of its incremental new production of electricity over its historical generation baseline pursuant to RSA 362-F:4, I(i).

Pursuant to RSA 362-F, the Commission, in a non-adjudicative process, must issue a determination of whether a facility meets a particular classification within 45 days of a completed application. The Smith hydroelectric facility application was completed on July 29, 2008. The facility meets the Class I eligibility requirements under RSA 362-F:4, I(i) and complies with the interim Puc 2500 rules. PSNH has provided all the necessary information. Based on its review of the application, Staff recommends that the

Commission approve the incremental output from the Smith hydroelectric facility as eligible for Class I RECs.

Analysis

The Smith hydroelectric facility is a single-unit hydroelectric generation facility located on the Androscoggin River at 99 Glen Avenue, Berlin, New Hampshire. The facility originally had a gross nameplate capacity of 15 megawatts (MW) and was issued a 30-year renewed license in 1994 by the Federal Energy Regulatory Commission (FERC). *See* Appendix A – FERC Operating License. PSNH completed a capital investment project in 2006 to replace the original turbine with a high-efficiency design turbine. Based on the investment in the high-efficiency design turbine, the facility entered commercial operation with an improved gross nameplate capacity of 17.6 MW on December 15, 2006. The facility's ISO-NE asset identification number is 570 and NEPOOL GIS facility number is MSS570.

RSA 362-F:2, X defines “historical generation baseline” as “[T]he average annual production of a hydroelectric facility from the later of January 1, 1986 or the date of first commercial operation through December 31, 2005.” In response to Staff's request, PSNH submitted the average annual generation for the twenty (20) years required by the statute.¹ The average annual generation was 102,431.2 MWh.² This is the historical annual generation baseline production against which future annual generation will be compared to determine the annual incremental new production eligible for Class I RECs.

Pursuant to Puc 2505.02 (h), the applicant is also required to provide proof of an approved interconnection study. According to the applicant, since passage of the Public Utility Regulatory Act (PURPA) in 1978, interconnection studies are required for non-utility generators seeking to connect with utility transmission and distribution systems.³ Given that the Smith hydroelectric facility entered commercial service prior to passage of PURPA and was connected to PSNH's electrical transmission and distribution infrastructure, no interconnection studies were required for the facility at the time of construction. The applicant further avers that the new turbine replacement did not involve modification of the generator or electrical interconnection infrastructure of the unit. Although the facility's generating capacity has been improved due to efficiency gains, this improvement is below the threshold for which ISO-NE would require an interconnection study. Staff believes that the above explanation meets the requirements of interim Puc 2505.02 (h).

Recommendation

Staff has reviewed PSNH's application for the J. Brodie Smith hydroelectric facility and can affirm it is complete pursuant to interim Puc 2505.02. Staff recommends

¹ PSNH letter dated July 29, 2008.

² The amount reported in the letter is 104,231 MWh, but this appears to be a typographical error. The annual average, calculated on the numbers reported, is 102,431.2 MWh.

³ PSNH Response to Staff Data Request Q-STAFF-003, dated June 4, 2008.

that the Commission certify as being eligible for Class I RECs, effective July 29, 2008, the Smith hydroelectric facility's incremental new production of electricity in any year and for any megawatt hours that exceed the historical generation baseline production.