


STATE OF NEW HAMPSHIRE


Inter-Department Communication

DATE: July 25, 2014**AT (OFFICE):** NHPUC

FROM: Barbara Bernstein 
Sustainable Energy Analyst

SUBJECT: Monadnock Paper Mills, Inc., Applications for Certification of Class IV REC Eligible Facilities
DE 14-088 Pierce Dam
DE 14-089 Paper Mill Dam
DE 14-090 Monadnock Dam Power Station
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 
David K. Wiesner, Staff Attorney

Summary

On April 4, 2014, the Commission received three applications from Hydro Management Group (Hydro Management) on behalf of Monadnock Paper Mills, Inc. (MPM). MPM is requesting Class IV renewable energy certificate (REC) eligibility certification for three hydroelectric facilities: the 0.770 megawatt (MW) Pierce Dam hydroelectric facility (Pierce Station), the 0.750 MW Paper Mill Dam hydroelectric facility (Paper Mill Station), and the 0.425 MW Monadnock Dam Station hydroelectric facility (Monadnock Station), pursuant to RSA 362-F:4, New Hampshire's Renewable Portfolio Standard law.

In support of its applications, and in response to a series of several Staff requests, MPM and its consultant, Hydro Management, submitted detailed supplemental information demonstrating that Pierce Station, Paper Mill Station, and Monadnock Station should be qualified as separate and individual renewable energy sources.¹ Based on Staff's review of the MPM applications and the supplemental information provided,² Staff has concluded that Pierce Station, Paper Mill Station, and Monadnock Station may be certified as eligible to produce Class IV RECs, and Staff recommends that the Commission grant such certifications, effective as of July 10, 2014.

¹ In DE 10-151, Holyoke Gas and Electric Company, the Commission denied Class IV REC eligibility because the facilities could not be shown to be separate and distinct and the total MW production was well over the 5 MW maximum limit for Class IV eligibility.

² MPM and Hydro Management submitted additional information in response to Staff's requests on June 2, 2014, July 2, 2014 and July 10, 2014.

Analysis - Pierce, Paper Mill, and Monadnock Stations Class IV Eligibility

To qualify as a facility eligible to produce RECs, Puc 2505.02(b) requires the source to provide the following:

1. *The name and address of the applicant:* The MPM Pierce Station, Paper Mill Station, and Monadnock Station applications requesting Class IV eligibility were filed listing as primary contact Stephen J. Hickey, Hydro Management Group, LLC, 55 Union Street, 4th Floor, Boston, MA 02108, as authorized agent for MPM. The contact name and address for MPM is Michelle Hamm, Manager – Environmental Services, Monadnock Paper Mills, Inc., 117 Antrim Road, Bennington, NH 03442-4205.
2. *The name and location of the facility:* The Pierce Station, the Paper Mill Station, and the Monadnock Station are located on the Contoocook River in Bennington, New Hampshire, on the site of MPM's paper manufacturing complex.
3. *The ISO-New England asset identification number (if available).* According to the applications, the asset identification number, MSS915, reports excess generation not consumed behind the meter at the MPM paper manufacturing complex and delivered into the PSNH distribution system. This reported generation will not be qualified for the New Hampshire RPS program, in order to avoid any double counting of RECs created based on the generation reported to the New England Power Pool Generation Information System (GIS) by MPM's independent monitor.
4. *The GIS facility code if available.* Monadnock Station is a customer-sited source pursuant to RSA 362-F:2,V. William P. Short, III, has been identified as MPM's independent monitor. MPM and Hydro Management have established GIS accounts for the three stations as follows:

Table 1: MPM Facilities Details			
Facility Name	GIS Unit ID	Nameplate Capacity	Date of Operation
Pierce Dam	NON39971	0.770 MW	June, 1975
Paper Mill Dam	NON39969	0.750 MW	June, 1975
Monadnock Station	NON39968	0.425 MW	June, 1975

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.*
 - Pierce Station is located 900 feet downstream from the Monadnock Station dam. The facility includes a 420 feet long and 28 feet high concrete dam, with two spillway sections on a dogleg alignment and with two-foot-high flashboards, a reservoir having minimal pondage, a gated intake structure, a powerhouse located at the right dam abutment containing two turbine generator units rated at 220 kW and 550 kW, and other related appurtenances.

- Paper Mill Station is located 1,200 feet downstream of the Pierce Station dam. The facility includes a 280 feet long and 19 feet high concrete dam with a 142-foot-long spillway, a canal headworks just upstream of the right dam abutment, a 300-foot-long canal with concrete wall leading to a forebay, an intake structure and steel penstock, a powerhouse containing a turbine-generator unit rated at 750 kW, and other related appurtenances.
- The Monadnock Station facility includes a 500 feet long and 22 feet high concrete gravity dam, with two spillway sections, a headgate structure, two-foot high flashboards, an integral powerhouse containing two turbine generator units rated at 125 kW and 300 kW, and other related appurtenances.

The initial date of commercial operation and the total nameplate capacity for the three stations is provided in Table 1 above.

6. *(N/A – pertains to biomass sources).*
7. *All other necessary regulatory approvals, including any reviews, approvals or permits granted by the department.* A copy of the Federal Energy Regulatory Commission (FERC) Order Issuing License (Major), FERC Project Number 6597, covering all three of the MPM stations, was provided with the applications; therefore, the facilities are in compliance with applicable FERC requirements, including those related to fish passage restoration.
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.* A copy of the PSNH Interconnection Report Customer Generation for Monadnock Paper Mills, SESD Site No. 070, dated May 18, 1992, was provided with the application supplemental materials.
9. *(N/A – pertains to biomass sources).*
10. *A description of how the generation facility is connected to the distribution utility.* MPM's electrical generation facilities are interconnected to a tap on line 313, normally fed radially from PSNH's Jackman substation.
11. *A statement as to whether the facility has been certified under another non-federal jurisdiction's renewable portfolio standard and proof thereof.* The excess generation from the three MPM hydroelectric stations reported to GIS facility code MSS915 has been self-certified with the GIS as a Class II Eligible Resource in the State of Maine, according to the applications.
12. *A statement as to whether the facility's output has been verified by ISO New England.* The excess generation from the three MPM hydroelectric power stations that is not consumed on-site, behind-the-meter at the MPM paper manufacturing complex, but is

delivered into the PSNH distribution system, is reported to GIS under the ISO New England asset identification number MSS915. This excess generation should not be certified as eligible for the New Hampshire RPS program, in order to avoid any double counting of RECs reported to GIS by MPM's independent monitor.

13. *A description of how the facility's output is reported to the GIS if not verified by ISO-New England.* Each of the three MPM hydroelectric power stations is a customer-sited source pursuant to RSA 362-F:2, V, and a GIS account has been established for each facility under the following codes: Monadnock Station: NON 39968, Pierce Station: NON 39971, Paper Mill Station: NON 39969. William P. Short, III has been identified as the independent monitor who will report the gross generation of each of the three stations to GIS under these accounts.
14. *An affidavit by the owner attesting to the accuracy of the contents of the application.* As affidavit signed by Richard A. Norman of Hydro Management was provided with each of the three applications.
15. *The name and telephone number of the facility's operator, if different from the owner.* Each power station has a separate control room. Four electricians are employed by MPM to operate the dam facilities. The primary contact is Mr. Lombardi.
16. *Such other information as the applicant wishes to provide to assist in classification of the generating facility.* Commission Staff worked with MPM staff and Hydro Management to resolve two specific issues regarding the eligibility of the MPM hydroelectric power stations to produce Class IV RECs:

Verification That The Three Power Stations Are Separate and Independent Facilities. In order to be eligible for Class IV RECs, an existing hydroelectric facility located in New Hampshire must have actually installed both upstream and downstream diadromous fish passages approved by the FERC, unless it has a total nameplate capacity of one MW or less as measured by the sum of the nameplate capacities of all generators at the facility, pursuant to RSA 362-F:4, IV (3). Each of the three MPM stations has a nameplate capacity of less than one MW, if considered separately, but in the aggregate their total nameplate capacity exceeds one MW. None of the three facilities is required by FERC to install upstream and downstream fish passage, and none has actually installed such fish passage. Therefore, the three stations would be eligible for Class IV RECs only if they can be considered separate and independent facilities that are not aggregated for purposes of the capacity limitation.

MPM and Hydro Management submitted detailed information describing the configuration and operation of the three stations. This information demonstrates that each power station has a separate control room, and it is not possible to control all of the power stations from a single location. Each station is controlled by equipment at the respective station, and no station has any control mechanisms for any other station. The impoundments behind each of the three power station dams allow each facility to

operate independently from one another, dependent on stream inflow from Mill Pond. Each station has a separate generation meter to record its individual output. MPM employs four electricians who are responsible for the management and operation of the three power stations.

Staff has reviewed this information and determined that it is sufficient to support a finding that the three MPM power stations are separate and independent facilities that are not required to be aggregated for purposes of the capacity limitation under RSA 362-F:4, IV(3)(B).

Independent Monitor Meter Reading and GIS Reporting. MPM has proposed that its independent monitor, William P. Short, III, read the individual generation meters at Pierce Station, Paper Mill Station, and Monadnock Station, and report the gross generation output of each station directly to GIS under the facility codes NON 39971, NON 39969, and NON 39968, respectively. With respect to Monadnock Station, the annual generation output in excess of its historical generation baseline is eligible for Class I RECs. Accordingly, its cumulative gross generation output reported to GIS facility code NON 39968 during any given year up to 591,484 kWh should be issued Class IV RECs, and at such time during any year as its cumulative gross generation output reported to GIS under this facility code exceeds 591,484 kWh, any and all further electricity generation reported under this code will be designated by GIS as eligible for Class I RECs for the remainder of that year. Any excess generation output reported to GIS by PSNH under the code MSS915 should not be qualified for the New Hampshire RPS program, in order to avoid double counting of RECs.

Recommendation – Pierce Station, Paper Mill Station, and Monadnock Station Class IV Eligibility

Staff has reviewed the Class IV REC certification requests for Pierce Station, Paper Mill Station, and Monadnock Station, and has determined that these facilities meet the Class IV eligibility requirements under RSA 362-F:4, IV (for Monadnock Station, only the first 591,484 kWh reported in any year will be eligible for Class IV RECs), and that the three facilities comply with the New Hampshire Code of Administrative Rules Puc 2500. Staff recommends that the Commission approve Pierce Station, Paper Mill Station, and Monadnock Station as Class IV renewable energy sources, effective as of July 10, 2014, the date upon which Staff was able to make a determination that MPM and Hydro Management had provided all information necessary to complete review of the three applications.

Staff further recommends that a secretarial letter approving the MPM certification requests and related notice letter to GIS expressly state that no electricity generation output reported by PSNH to GIS under facility code MSS915 will be eligible for New Hampshire Class IV RECs, in order to avoid double counting of RECs created with respect to generation output reported to GIS by MPM's independent monitor.

SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED

Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.

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FILING INSTRUCTIONS:

- a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with:**
- DEBRA A HOWLAND
EXECUTIVE DIRECTOR
NHPUC
21 S. FRUIT ST, SUITE 10
CONCORD NH 03301-2429
- b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.**
- c) Serve a written copy on each person on the service list not able to receive electronic mail.**