

MAINE PUBLIC UTILITIES COMMISSION

Annual Report on the New Renewable Resource Portfolio Requirement

Presented to the Utilities and Energy Committee
March 31, 2009

Introduction

During its 2007 session, the Legislature enacted an Act to Stimulate Demand for Renewable Energy (Act).¹ The Act added a mandate that specified percentages of electricity that supply Maine's consumers come from "new" renewable resources.² Generally, new renewable resources are renewable facilities that have an in-service date, resumed operation or were refurbished after September 1, 2005. The percentage requirement begins at one percent in 2008 and increases in annual one percent increments to ten percent in 2017, unless the Commission suspends the requirement pursuant to the provisions of the Act.

As required by the Act, the Commission modified its portfolio requirement rule (Chapter 311) to implement the "new" renewable resource requirement.³ The implementing rules designated the "new" renewable resource requirement as "Class I"⁴ and incorporated the resource type, capacity limit and the vintage requirements as specified in the Act. The rules thus state that a new renewable resource used to satisfy the Class I portfolio requirement must be of the following types:

- fuel cells;
- tidal power;
- solar arrays and installations;

¹ P.L. 2007, ch. 403 (codified at 35-A M.R.S.A. § 3210(3-A)).

² Maine's electric restructuring law, which became effective in March 2000, contained a portfolio requirement that mandates that at least 30% of the electricity to supply retail customers in the State come from eligible resources, which are either renewable or efficient resources. 35-A M.R.S.A. § 3210(3).

³ *Order Adopting Rule and Statement of Factual and Policy Basis*, Docket No. 2007-391 (Oct. 22, 2007).

⁴ The "new" renewable resource requirement was designated as Class I because the requirement is similar to portfolio requirements in other New England states that are referred to as "Class I." Maine's pre-existing "eligible" resource portfolio requirement is designated as Class II.

- wind power installations;
- geothermal installations;
- hydroelectric generators that meet all state and federal fish passage requirement; or
- biomass generators, including generators fueled by landfill gas.

In addition, except for wind power installations, the generating resource must not have a nameplate capacity that exceeds 100 MW. Finally, the resource must satisfy one of four vintage requirements. These are:

- 1) renewable capacity with an in-service date after September 1, 2005;
- 2) renewable capacity that has been added to an existing facility after September 1, 2005;
- 3) renewable capacity that has not operated for two years or was not recognized as a capacity resource by the ISO-NE or the NMISA and has resumed operation or has been recognized by the ISO-NE or NMISA after September 1, 2005; and
- 4) renewable capacity that has been refurbished after September 1, 2005 and is operating beyond its useful life or employing an alternate technology that significantly increases the efficiency of the generation process.

The implementing rules also establish a certification process that requires generators to pre-certify facilities as a new renewable resource under the requirements of the rule and provide for a Commission determination of resource eligibility on a case-by-case basis.⁵ The rule also specifies that the Commission may revoke a certification if there is a material change in circumstance that renders the generation facility ineligible as a new renewable resource.

As required by the Act, the rules contain an “alternative compliance mechanism” (ACM) that allows suppliers to pay specified amounts into the Renewable Resource Fund⁶ in lieu of compliance with the new renewable resource portfolio requirement.⁷ The rule established a base alternative compliance payment rate of \$57.12 per megawatt-hour that is adjusted annually based on the Consumer Price Index.

⁵ Chapter 311, § 3(B)(4).

⁶ The Renewable Resource Fund was established pursuant to 35-A M.R.S.A. § 3210(6) to be used to fund research, development and demonstration projects related to renewable energy technologies.

⁷ Chapter 311, § 3(C).

The Act contains an annual reporting requirement on the status of Class I renewable resource development that is incorporated into the implementing rules.⁸ The reporting provision specifies:

Annual Reports. No later than March 31, 2008 and annually thereafter, the Commission shall submit a report regarding the status of new renewable capacity resources in the State and New England, and compliance with the portfolio requirement required by this section to the joint standing committee of the Legislature having jurisdiction over utilities and energy matters. The report shall include, but is not limited to, a description of new renewable capacity resources available to meet the portfolio requirement required by this section, documentation of the loss of any existing renewable generation capacity in the State, the status of implementation of the new renewable resources portfolio requirement, including any suspensions pursuant to subsection D, and recommendations to stimulate investment in new renewable resources.

The Commission hereby submits its report to the Utilities and Energy Committee to describe the status of new in region renewable capacity and compliance with the portfolio requirement.

New renewable resources

There are a significant number of new renewable resource projects planned for New England and the Eastern Canadian Provinces. The New England states (except for Vermont)⁹ have new renewable resource portfolio requirements similar to that of Maine's Class I RPS requirement, which incrementally increases the required percentage of load that must be met by renewable resources over a period of years. In addition, low-carbon resource development is required to meet the targets of the Regional Greenhouse Gas Initiative (RGGI).

Generally, newly developed renewable resources located within or adjacent to New England can be used to satisfy the various New England state's portfolio requirements. As of mid-March 2009, the New England Independent System Operator (ISO-NE) had recorded 4,563 MW of renewable capacity in the transmission interconnection queue that would be eligible to meet Maine's Class I renewable requirement. The queue represents projects with transmission in-service dates between 2009 and 2014. There are 18 wind interconnection requests for projects in Maine comprising 1,247 MW in capacity. In the rest of New England, interconnection requests include over 2,672 MW of additional wind resources, 523 MW of biomass resources, and over 85 MW of hydro electric capacity. New Brunswick, Nova Scotia, Prince Edward Island, and Quebec are

⁸ Chapter 311, § 3(E).

⁹ Vermont has specified renewable resource portfolio targets.

working to develop approximately 13,000 MW of potential wind and hydro-electric resources, but significant transmission upgrades are necessary to bring these resources to New England.¹⁰

During 2007, the Boralex-Sherman (formerly Wheelabrator-Sherman) 19 MW biomass plant located in Stacyville Maine ceased operation several months after its long-term contract with Maine Public Service Company terminated. This plant remained down throughout 2008, and will continue to be inoperative for the foreseeable future.

A couple of new wind projects came on-line in Maine over the past year. One of those is the 57 MW Stetson Mountain wind project that began commercial operations in January of 2009. The other is a 4.5 MW wind project located in Freedom, which began operations in November 2008.

The primary indicator of whether new renewable resource development will be sufficient to meet Maine's portfolio requirement will be the degree to which compliance is satisfied through the ACM. In the event that a significant degree of compliance occurs through ACM over a number of years, this would indicate that the portfolio requirements in Maine and the other New England states are not satisfying their goals of fostering new renewable resource development in the region.¹¹ The Commission's first indication of the extent of the reliance on the ACM will occur in July 2009 when suppliers file their compliance report for calendar year 2008.

Implementation and Compliance

As mentioned above, the implementing rules require generation facilities to be certified by the Commission as a Class I new renewable resource before such facilities can be used to satisfy Maine's new renewable resource portfolio requirement. To date, the Commission has certified over 20 facilities, totaling over 285 MW. However, not all of the facilities are in-service and many of the facilities are eligible portfolio requirements in other New England states. A list of the certified facilities is attached.

Electricity suppliers are required to demonstrate compliance with the one percent requirement for calendar year 2008 in a filing on July 1, 2009. Any retail electricity sales pursuant to a supply contract or standard offer service arrangement executed on or before September 20, 2007 are exempt from complying with the portfolio requirement until the end of the current term of the arrangement. At this time, the specific number or

¹⁰ ISO-NE NYISO and PJM, *2008 Northeast Coordinated Electric System Plan*, at § 6.2 (Final Mar. 1, 2009).

¹¹ As required by the Act, the implementing rules specify that the Commission shall temporarily suspend the scheduled percentage increases in the new renewable resource requirement if reliance on the ACM in the aggregate is more than 50% of the statewide obligation in three consecutive years. Chapter 311, § 3(D)(1).

duration of supply contracts that will be exempt from meeting the requirement is unknown. However, approximately forty-five percent of the standard offer load will be required to meet the new RPS in 2008.

As mentioned above, suppliers that do not meet the portfolio requirements may comply with the requirement through the ACM. The compliance payment for 2008 would equal a rate of \$58.58 per megawatt-hour multiplied by the number of deficient megawatt-hours. Presumably, suppliers will use the alternative compliance mechanism if the market price for eligible new renewable resources is higher than the \$58.58 alternative compliance rate or if the supply is insufficient. Based on this "cap," the maximum cost of the new renewable resource requirement in 2008 would be in the range of \$7.6 million and the maximum rate impact would be in the range of \$0.0006 per kilowatt-hour.

Recommendations to stimulate investment in renewable resources

At this time, the Commission has no additional recommendations to stimulate investment in renewable resources beyond those that already exist on the State and federal levels.

Conclusion

Maine's new renewable resource portfolio requirement became effective January 2008. Thus, the full impact of the new requirement will not be known for several years. Standard offer load across the state will be partially exempt until March, 2010. The entire Maine load will not be subject to the requirement until all contracts executed before September 20, 2007 have expired, which could be several years from now.

The Commission will continue to monitor the development of new renewable resources in Maine and throughout the region, and will act to ensure supplier compliance with the portfolio requirement.