



STATE OF MAINE
PUBLIC UTILITIES COMMISSION

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COMMISSIONERS

March 31, 2010

Honorable Barry Hobbins, Senate Chair
Honorable Jon Hinck, House Chair
Joint Standing Committee on Utilities and Energy
115 State House Station
Augusta, Maine 04333-0115

Re: Annual Report on Renewable Resource Portfolio Requirement

Dear Senator Hobbins and Representative Hinck:

During its 2007 session, the Legislature enacted an Act to Stimulate Demand for Renewable Energy (Act), P.L. 2007, ch. 403. The Act added a mandate that specified percentages of electricity that supply Maine's consumers come from "new" renewable resources. The Act also required that the Commission submit annual reports on the status of the new renewable resource portfolio requirement. The reporting provision specifies:

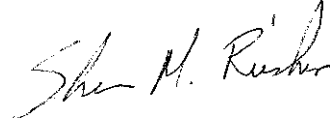
Annual Reports. No later than March 31, 2008, and annually thereafter, the Commission shall submit a report regarding the status of new renewable capacity resources in the State and New England, and compliance with the portfolio requirement required by this section to the joint standing committee of 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.

As you are aware, during the 2009 session, the Legislature enacted a Resolve, Resolves 2009, ch. 51, that required the Commission to review a variety of issues involving the operation of the new renewable resource portfolio requirement and submit a report to the Committee. On January 19, 2010, the Commission submitted the written report and on March 3, 2010, the Commission presented the report to the Committee.

Section IV of the January 19th report contains the information required by the annual reporting requirement. To avoid unnecessary duplication, the January 19th report is attached to this letter to comply with the portfolio requirement annual reporting requirement.

If you have any questions regarding the report, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Sharon M. Reishus". The signature is fluid and cursive, with the first name "Sharon" being the most prominent.

Sharon M. Reishus, Chairman

On behalf of

Vendean V. Vafiades

and

Jack Cashman

Commissioners

Maine Public Utilities Commission

Attachment

cc: Utilities and Energy Committee Members
Lucia Nixon, Legislative Analysts

MAINE PUBLIC UTILITIES COMMISSION

REPORT ON NEW RENEWABLE RESOURCE PORTFOLIO REQUIREMENT

**Presented to the
Utilities and Energy Committee
January 19, 2010**

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I. INTRODUCTION

During the 2009 session, the Legislature enacted Resolve, Regarding Maine's Renewable Resource Portfolio Requirements ("Resolve").¹ The Resolve directs the Commission to review and make recommendations for improvements to the new renewable resource portfolio requirement authorized in 35-A M.R.S.A. § 3210(3-A). Specifically, the Resolve directs the Commission to:

- Examine the resources used to satisfy the new renewable resource portfolio requirement;
- Analyze the costs and benefits of: 1) a requirement that all or a fixed percentage of the electricity from eligible facilities be supplied to the ISO-NE control area or the area administered by the Northern Maine Independent System Administrator (NMISA); and 2) a prohibition of economic withholding or curtailment of the delivery of electricity from eligible facilities located outside the ISO-NE control area or the area administered by the NMISA (with an exception for transmission line outages preventing the import of electricity or when the applicable tie line is operating at full capacity);
- Review the current law and Commission rules to assess the risks and costs of making no change to the existing new renewable resource portfolio requirement; and
- Develop recommendations for changes to law or the rules that would strengthen the incentives for the development of new renewable resources within Maine, enhance the Commission's ability to address cost concerns associated with the renewable resource portfolio requirement, and ensure delivery of renewable power into Maine or the ISO-NE control area during periods of high prices or peak loads.

The Resolve requires the Commission to submit a report of its findings and recommendations to the Utilities and Energy Committee by January 15, 2010.

As a vehicle for conducting the required review, the Commission, on July 14, 2009, initiated an Inquiry to explore the issues involved with Maine's new renewable resource portfolio requirement.² The Notice of Inquiry ("NOI") contained a series of items, issues and questions related to Maine's portfolio requirement. To obtain information, viewpoints and recommendations from interested persons on the issues raised in the Resolve as presented in the NOI, the Commission requested both initial and responsive comments. On December 22,

¹ Resolves 2009, ch. 51.

² *Inquiry into Maine's New Renewable Resource Requirement*, Docket no. 2009-212.

2009, the Commission released a draft report on the new renewable resource requirement for comment by interested persons.³

The following interested persons participated in the Commission's portfolio requirement Inquiry: TransCanada Power Marketing Ltd.; Brookfield Energy Marketing Inc; Iberdrola Renewable, Inc.; Conservation Services Group; Innovative Energy Systems; Lincoln Paper and Tissue, LLC; and Ed Holt & Associates.

II. PORTFOLIO REQUIREMENT OVERVIEW

A. Resource Planning Prior to Industry Restructuring

Prior to the restructuring of Maine's electric industry in March 2000, the State, through its Public Utilities Commission, had substantial control and influence over the resources used to supply electricity to Maine's public. This occurred through the Commission's oversight of vertically integrated electric utilities that had the obligation to provide electricity through a least cost mix of generating (as well as demand-side) resources.

Beginning in the early 1980s, the Commission's oversight of utility resource acquisition was guided by several legislative directives that promoted resource diversity and the development of renewable and indigenous generating resources.⁴ By the time the industry was restructured, these policies resulted in an overall resource mix serving Maine's public that consisted of almost 50% renewable power.

The State's ability to impact the mix of generating resources through the oversight of utility planning and acquisition came to an end with the implementation of the industry restructuring. By opening the provision of generation supply to competition and requiring the State's utilities to exit the generation business, industry restructuring rendered the traditional mechanisms to influence the State's generation mix inapplicable. Recognizing this result, the Legislature included a generation resource portfolio requirement in the Restructuring Act.

B. Description of Portfolio Requirements

A renewable resource portfolio requirement, also typically referred to as a renewable portfolio standard or an RPS, is a market mechanism to encourage the development and use of specific types of grid-scale generating facilities (primarily renewable

³ All comments filed in the Inquiry are posted on the Commission's virtual case file on its webpage, www.maine.gov/mpuc, through reference to Docket No. 2009-212.

⁴ These legislative directives were embodied in the Electric Rate Reform Act, 35-A M.R.S.A. §§ 3151-3155, the Small Power Production Act, 35-A M.R.S.A. §§ 3301-3308, and the Maine Energy Policy Act, 35-A M.R.S.A. § 3191. These legislative provisions were either repealed or substantially revised with the restructuring of the industry.

resources). Generally, the purpose of a renewable resource requirement is to promote regional resource diversity and to reduce greenhouse gas emissions. The market mechanism is consistent with a competitive regional generation market.

The mechanism works by legislatively creating a demand for specified resources by mandating that pre-specified percentages of a retail provider's load are served by designated resources. The market then operates to meet this legislatively created demand at the lowest cost. The result of the portfolio requirement mechanism is that a premium over wholesale electricity market prices is created for the designated renewable resources. This premium is paid for by electricity customers through the generation portion of their bills. Thus, a portfolio requirement is a mechanism that essentially provides for a subsidy to renewable generators that is paid for by electricity customers.

C. Maine's Eligible Resource Portfolio Requirement

Maine's original restructuring legislation included a 30% eligible resource portfolio requirement that became effective in 2000. The portfolio requirement mandated that each retail competitive electricity supplier meet at least 30% of its retail load in Maine from "eligible resources." Eligible resources are defined in statute as either renewable resources or efficient resources. Renewable resources are defined in statute as fuel cells, tidal power, solar arrays, wind power, geothermal installations, hydroelectric generators, biomass generators, and municipal solid waste facilities. Renewable resources may not exceed a production capacity of 100 megawatts. "Efficient" resources are cogeneration facilities that were constructed prior to 1997, meet a statutory efficient standard and may be fueled by fossil fuels.⁵ An eligible resource is not required to be located in the State, but its energy must be delivered to the New England grid or the northern Maine grid.

The eligible resource portfolio requirement has ensured that at least 30% of Maine's electric load since restructuring has come from some combination of the resources designated in statute. However, the eligible resource portfolio requirement has not significantly satisfied the policy of promoting the generation of electricity from renewable and efficient resources. The primary reason is that the "supply" represented by the list of eligible resources, and the lack of a "vintage" or in-service date eligibility requirement is significantly greater than the "demand" created by the 30% requirement. As a result, retail suppliers have been able to satisfy the portfolio requirement through facilities that can supply power at or near the prevailing market price. The consequence is that Maine's eligible resource portfolio requirement produces very small financial premium over market for eligible facilities. Because the eligible resource portfolio requirement has had no significant impact on prices paid to generators, it has had little impact on Maine's retail rates. The requirement does, however, cause some administrative burden to retail suppliers in complying with the requirement and to the Commission in verifying compliance.

⁵ 35-A M.R.S.A. § 3210(2)(A)(B)(C).

D. Maine's "New" Renewable Resource Portfolio Requirement

In 2007, the Legislature enacted a "new" renewable resource portfolio requirement that defines eligibility as a renewable resource that began service, resumed operation or was substantially refurbished after September 2005.⁶ The legislation added a mandate that specified percentages of electricity that supply Maine's consumers come from "new" renewable resources, which are generally renewable facilities that have an in-service date after September 1, 2005. The percentage requirement started at one percent in 2008, and increases in annual one percent increments until it reaches ten percent in 2017, and remains at ten percent thereafter. The statute contains an exemption for sales pursuant to a supply contract or standard offer arrangement in effect on the effective date of the legislation ("grandfathering provision")

Under the statute, the Commission may suspend the scheduled increases in the portfolio requirement if it finds that the requirement has placed a burden on Maine's electricity customers without providing the benefits of new renewable resources or if there is an over-reliance on the alternative compliance mechanism.⁷ Under current rules, any renewable generator that is "new" as defined by law is eligible if its power is used to serve load in New England. Thus, the generator does not have to be located in Maine or New England as long as the energy is delivered into New England.

The statute allows for an alternative compliance mechanism ("ACM") that permits competitive suppliers to make a payment into a fund in lieu of satisfying the portfolio requirement.⁸ This mechanism serves to cap ratepayer exposure to costs that might result from the portfolio requirement because, if the cost of compliance rises above the alternative payment amount, suppliers would generally make an alternative payment. Under the statute, the Commission establishes the alternative compliance amount by rule.

As required by the legislation, the Commission modified its portfolio requirement rule (Chapter 311) to implement the "new" renewable resource requirement.⁹ The implementing rules designated the "new" renewable resource requirement as "Class I" and the

⁶ P.L. 2007, ch. 403 (codified at 35-A M.R.S.A. § 3210(3-A)).

⁷ 35-A M.R.S.A. § 3210 (3-A)(A)(B).

⁸ The statute specifies the alternative compliance payment be put into the Voluntary Research and Development fund. 35-A M.R.S.A. § 3210 (9).

⁹ *Order Adopting Rule and Statement of Factual and Policy Basis*, Docket No. 2007-391 (Oct. 22, 2007).

pre-existing 30% “eligible” resource portfolio requirement as “Class II.”¹⁰ The rules incorporated the resource type, capacity limit and the vintage requirements as specified in statute. 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;
- wind power installations;
- geothermal installations;
- hydroelectric generators that meet all state and federal fish passage requirements; or
- biomass generators, including generators fueled by landfill gas.¹¹

In addition, except for wind power installations, the generating resource must not have a nameplate capacity that exceeds 100 MW.¹² 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; or

¹⁰ 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.

¹¹ The list of renewable resources is the same as those that qualify for the eligible resource portfolio requirement, except that municipal solid waste is excluded and hydroelectric facilities are specifically required to meet all state and federal fish passage requirements.

¹² As a result of varying definitions of renewable resources and statutory cross-references, see 35-A M.R.S.A. §§ 3210 (B-1)(C), 3210-C(1)(C)(E), 3212-A(1)(A), there is some ambiguity over whether the Legislature intended to remove the 100 megawatt eligibility limit for all facilities, rather than just wind installations. The Commission understands that legislation will be introduced during the 2010 session to resolve this issue.

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 rules¹³ established 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.¹⁴ 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.¹⁵

Finally, the Commission rules incorporate an ACM. To avoid market distortions that might otherwise occur, the rules established an alternative compliance rate similar to those in the other New England states and, like the mechanism in most of those states, the amount changes each year with a measure of inflation.¹⁶ The alternative compliance payment in 2009 was \$60.92 per megawatt-hour.

E. Renewable Energy Credits

NEPOOL has established a renewable energy credit (REC) creation and tracking mechanism referred to as the Generation Information System ("GIS"). This system allows for the trading of the renewable attribute separate from the energy commodity. This mechanism serves to significantly simplify compliance by suppliers and verification by regulatory commissions, and avoids double counting. Consistent with statutory direction,¹⁷ the

¹³ Chapter 311, § 3(B)(4).

¹⁴ In the *Order Adopting Rule* at 6, the Commission noted that a request for certification can be made at any time so that a ruling can be obtained before a capital investment is made in a generation facility.

¹⁵ The Commission has certified over 35 facilities as eligible for the new renewable resource portfolio requirement with a combined installed capacity of over 580 MW. However, not all of the certified facilities are in-service. A list of the certified facilities is attached to the Report as Attachment 1.

¹⁶ The rules specify that the alternative compliance base rate is \$57.12 per megawatt-hour that is adjusted each year beginning in 2008, by the annual change in the U.S. Bureau of Labor Statistics Consumer Price Index.

¹⁷ Section 3210(8) states that the Commission shall allow competitive providers to satisfy the portfolio requirements through the use of RECs if it determines that a reliable system of electrical attribute trading exists. The GIS is such a reliable system.

Commission requires suppliers in the ISO-NE to verify compliance with the portfolio requirement through the GIS. Because of its small size, northern Maine does not have REC system and therefore compliance is verified through contractual documentation and settlement data.

F. Other States

Renewable portfolio requirements are a common mechanism. Twenty-nine states have adopted such requirements, including five of the New England states.¹⁸ The requirements, however, vary significantly across the states, primarily with respect to the percentage requirements and eligible fuels and technologies.¹⁹

G. Energy Policy Considerations

As discussed above, a portfolio requirement serves to promote the development and operation of legislatively-determined resources by providing for a market premium that is paid for by ratepayers through higher generation rates. Thus, the design of the essential components of a portfolio requirement (such as the required percentages, eligibility requirements and geographical restrictions or limitations) is a fundamental question of State energy policy and should therefore be determined by the Legislature.

The generally accepted purpose of portfolio requirements is to promote resource diversity and reduce greenhouse gas emissions. An increase in resource diversity will help to stabilize and lower electricity rates, by reducing reliance on generating facilities that rely on volatile fossil fuels (primarily natural gas). The reduction in fossil fuel use also results in the environmental benefits of lower air emissions. These electricity rate and environmental benefits do not depend on whether facilities are developed in Maine, as long as they are developed in the region and their energy is used to serve load in New England.²⁰ Economic development benefits do occur when facilities are developed in Maine. However, it should be recognized that portfolio requirements in other regional states have and continue to play a substantial role in promoting development of renewable resources in Maine (just as Maine's portfolio requirement serves to promote development in other regional states).

As a general matter, larger markets for RECs are preferable in that more competition is created, resulting in the fulfillment of State energy policy goals at the lowest cost

¹⁸ Vermont does not have a portfolio requirement, but does have renewable resource goals.

¹⁹ Attachment 2 to this Report contains a map that summarizes portfolio requirements in the other states.

²⁰ As stated above, the Commission's portfolio requirement rules require that energy be used to serve load in New England to qualify.

to Maine's electricity consumers.²¹ In the event that policy makers believe REC prices may be too low to satisfy the goal of promoting legislatively- designated renewable resources, a proper response would be to consider an increase in the required percentages, rather than any attempt to limit competition through unnecessary participation restrictions.

III. INQUIRY COMMENTS

Most of the comments submitted in the Inquiry involved the issue of whether Maine's new renewable resource portfolio requirement should be amended to add: 1) a requirement that eligible facilities supply all or a fixed percentage of their output to the ISO-NE or NMISA areas; and 2) a prohibition against economic withholding or curtailment of delivery by facilities located outside the ISO-NE and NMISA.

A. TransCanada Power Marketing

TransCanada Power Marketing ("TransCanada") commented in favor of adding to the portfolio requirement statute a requirement to supply power and a prohibition on delivery withholding. TransCanada states that these changes would ensure that monies paid by Maine's ratepayers are directed towards the development of new renewable resources that will dedicate their output for the benefit of those ratepayers. TransCanada believes this could result in further development of renewable resources in Maine and within New England. It would also ensure generators that benefit from Maine's portfolio requirement deliver their power at peak times when the power is needed most. Moreover, TransCanada noted that promoting the development of renewable resources in Maine and New England would lower the capacity market need and cost.

TransCanada also comments that the delivery requirement and withholding prohibition would not be unfair or discriminatory in that Maine and New England generators are effectively ineligible for any resource-based premiums in certain Canadian provinces or New York. TransCanada states that Quebec's periodic solicitations for wind projects only include projects in the Province and New York places a 30% weight on in-state benefits provided by a project.

B. Others Commenters

Brookfield Energy Marketing Inc. ("Brookfield") takes an alternative view to TransCanada, stating that a supply requirement and withholding prohibition are not necessary to maintain a competitive and healthy Maine REC market, and imposing such a requirement would create an artificial trade barrier that would ultimately harm Maine ratepayers. The harm would be higher REC prices that translate into higher electricity prices for Maine ratepayers. According to Brookfield, the current requirement that energy be delivered into the New England market ensures a competitive market outcome and that environmental benefits accrue to Maine customers. A supply requirement and a withholding prohibition will chill competition for renewable energy, resulting in harm to Maine ratepayers through higher REC prices.

²¹ Larger markets tend to benefit all market participants in that suppliers have more liquidity, buyers have more choice, and regulators obtain better pricing transparency.

Brookfield notes that Maine and New England benefit from the resource diversity procured by imports from regions outside New England. Brookfield also states that such a requirement would be discriminatory and constitute protectionist restrictions.

Iberdrola Renewable, Inc. (“Iberdrola”) comments that allowing resources that import electricity into New England to qualify for Maine’s RPS is sensible and creates greater supply and more REC market liquidity. To the extent that Maine wishes to induce investment of renewable resources in Maine, it should adopt policies that allow for long-term contracts for RECs and energy, and adopt transmission policies that promote renewable development.²²

Conservation Services Group and Innovative Energy Systems (“CSG/IES”) comment against both a supply requirement and a withholding prohibition. In their view, the purpose of such a requirement would be to impose business constraints on owners of renewable generation located outside the ISO-NE and NMISA areas by increasing transaction costs. Further, the suggested changes would place a requirement on generators located outside of the New England region that may be outside of their control. For example, limited tie line capacity and/or actions of the control area administrator may prevent compliance with the proposed restriction despite the generator’s best efforts. The result would be a limit on imports that would increase costs for Maine’s ratepayers, without providing any material benefit and would represent undue discrimination. CSG/IES believe that it would be disadvantageous for Maine to adopt protectionist strategies and instead it is in the State’s best interest to support open competitive markets. Finally, CSG/IES supports higher minimum purchase requirements to induce more renewable resource development.

Lincoln Paper and Tissue, LLC (“Lincoln”) requests that a delivery requirement not be imposed because it would adversely impact renewable behind-the-meter generation that would otherwise be eligible for new renewable resource certification. Such a requirement would preclude behind-the-meter generation and undermine the goal of Maine’s RPS to increase renewable generation and to decrease Maine’s dependence on natural gas.

Ed Holt & Associates (“Holt”) did not comment on the supply requirement or withholding prohibition, but suggests that Maine increase its requirement for new renewable resources to 25% by 2025, rather than 10% by 2017, as currently required to prevent a reduction of investment as the current statutory percentage target is met. That would give the renewable energy industry a more aggressive target to work for, justify more investment in development and would provide longer-term stability. Second, Holt recommends that Maine create a tier for new distributed renewable technologies that would provide impetus to smaller

²² The issues of long-term contracts and transmission upgrades to support renewable generation are outside the scope of this Report. However, the Commission notes that it currently has the authority to direct utilities to enter into long-term contracts with generators for capacity and energy (the authority does not include the purchase of RECs), 35-A M.R.S.A. § 3210-C, and is examining major upgrades to Maine’s transmission system, see e.g., *Request for Certificate of Public Convenience and Necessity for the Maine Power Reliability Program (MPRP)*, Docket No. 2008-255.

customer and community scale technologies, noting that several states have established a tier for solar or distributed generation.

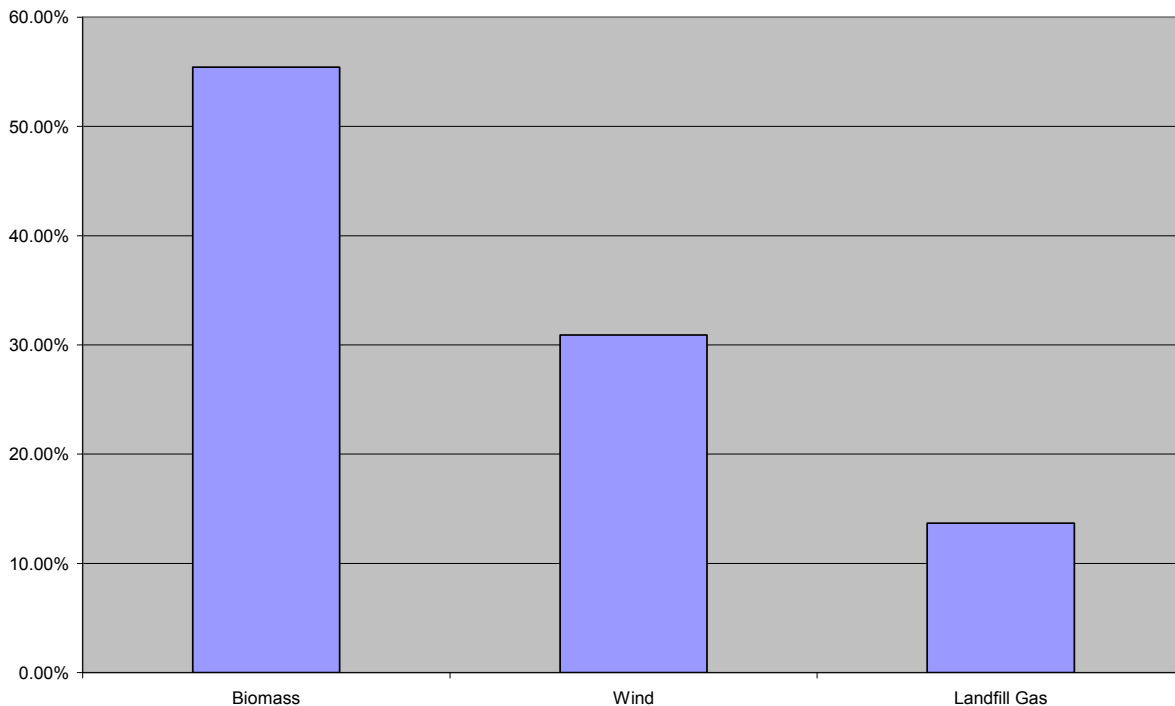
IV. SPECIFIC ITEMS FOR CONSIDERATION

As stated in section 1 of this Report, the Resolve states that the Commission shall include, at a minimum, several specified items in its review of the new renewable resource portfolio requirement. These items, as well as other relevant matters, are discussed in this section of the Report.

A. Resources Used To Satisfy New Renewable Portfolio Requirement

The following chart shows the mix of resources used to satisfy Maine’s new renewable resource portfolio requirement during 2008.

Resources Used to Satisfy New Renewable Portfolio Requirement 2008



As the table below shows, the RECs from seven facilities were used by suppliers to comply with the 2008 new renewable resource requirement. Two of the facilities are biomass, four are wind facilities and one is a landfill gas facility. Five of the seven facilities are located in Maine and two are located in New Hampshire. Of the approximately 36.5 million RECs purchased to meet the portfolio requirement in 2008, 83% came from facilities located in Maine.

Thus, most of the facilities and the RECs used to satisfy the 2008 new renewable resource portfolio requirement came from facilities located in Maine and none of the facilities were located outside of New England.

Fuel Type and State	No. of Facilities	GIS Certificates	% of Total
Biomass - ME	1	18,865,000	51.67%
Biomass - NH	1	1,363,000	3.73%
Wind - ME	3	6,279,831	17.20%
Wind - NH	1	5,000,000	13.70%
Landfill Gas - ME	1	5,005,027	13.71%
Total – Overall	7	36,507,831	100%
Total - ME	5	30,144,831	82.57%
Total - NH	2	6,363,000	17.43%

B. Cost Impacts

The cost to ratepayers of Maine’s new renewable resource portfolio requirement is represented by the cost of compliance by suppliers, either through the purchase of RECs or payment under the ACM. During 2008, approximately 58% of the electricity sales in Maine were exempt under the grandfathering provision of the new renewable resource portfolio requirement legislation. For the electricity sales for which the 1% portfolio requirement applied, 75% was satisfied through the purchase of RECs and 25% was satisfied through the ACM.

During 2008, the costs of eligible RECs ranged from approximately \$27.00 per MWh to \$51.00 per MWh (or 2.7 cents per kWh to 5.1 cents per kWh), with an average cost \$37.19 per MWh or 3.72 cents per kWh and a total cost of \$1,353,574. A minority of suppliers (8 out of 41)²³ choose to satisfy the portfolio requirement through the ACM for a total cost \$693,103. Thus, the total cost to ratepayers during 2008 was \$2,046,678, which translates into a rate impact of .02 cent per kWh (or about a 10 cents monthly increase to a typical residential bill).

²³ Out of the 41 suppliers, 24 supplied only to an affiliated customer.

Based on this information, it appears that Maine's new renewable resource requirement is accomplishing its underlying purpose. It has created a substantial premium over market for eligible renewable generators (an average premium of 3.72 cents per kWh compared to an average wholesale rate during 2008 of approximately 7.5 cents per kWh, a 52% increase over market prices). It has created this premium at an acceptable cost to ratepayers of .02 cent per kWh, with a relatively small percentage of the requirement satisfied through the ACM.

C. Supply Requirement and Withholding Prohibition

The issue that received the most focus during the Commission's review of the new renewable resource portfolio requirement is whether the statute should be amended to include: 1) a requirement that all or a fixed percentage of the electricity from eligible facilities be supplied to the ISO-NE control area or the area administered by the NMISA; and 2) a prohibition of economic withholding or curtailment of the delivery of electricity from eligible facilities located outside the ISO-NE control area or the area administered by the NMISA (with an exception for transmission line outages preventing the import of electricity or when the applicable tie line is operating at full capacity).²⁴ TransCanada favors such a statutory change, while the other commenters oppose the change.

It is difficult to assess the potential benefits, costs and risks of a supply requirement and withholding prohibition statutory change. In the event the change results in increased regional imports during peak hours or expanded renewable resource development in Maine and New England, it would be beneficial to Maine ratepayers. However, the opposite scenario might also occur. If the supply requirement and withholding prohibition are enacted, fewer facilities may participate in Maine RPS and less electricity may be imported into the region. The result could be higher REC prices, as well as higher capacity and energy prices. There is no way to predict or quantitatively analyze the costs or benefits of the statutory change.²⁵

As discussed in section II(B), the general purpose of a renewable resource portfolio requirement is to promote regional resource diversity and to reduce greenhouse gas emissions. Maine's current new renewable resource requirement with its regional delivery requirement does serve that purpose within the current statutory scheme. It has resulted in REC prices that represent a significant premium over wholesale prices, and thus promotes renewable resource development in the region. Much of the development of renewable resources in the region resulting, at least in part, from renewable resource requirements in the New England states has occurred in Maine, primarily wind resources. This is a result of

²⁴ This was the issue raised by the bill last session that led to the Resolve. LD 1061, An Act to Improve Maine's Renewable Portfolio Standard.

²⁵ All commenters on the issue agree that the results of the statutory change on the development of renewable resources in Maine and New England and on REC prices cannot be known in advance.

several factors. Maine already has a substantial wind resource and a favorable siting process. Maine also has a long-term contracting program that can help promote renewable resource development in Maine.²⁶ The REC prices in Maine and other New England states provide financial incentives for development in Maine. Due to the incentives that already exist for development in Maine, any suggested portfolio requirement statutory change would not significantly increase development.

The Commission also notes that the statutory change would raise issues of compliance verification. As suggested by TransCanada, the Commission could rely on corporate officer attestations. However, any greater level of verification would be difficult and require an increase in Commission resources to achieve satisfactory accountability.

Finally, a supply requirement and withholding prohibition could be viewed as protectionist and have the appearance of being discriminatory against eligible facilities located outside the New England region. Maine facilities are not prohibited or restricted from participating in other state renewable resource promotion programs (although New York's 30% weight on in-state benefits in the purchase of RECs does place New York facilities at an advantage). In its comments, TransCanada states that Quebec's periodic solicitation for wind projects only include projects in the Province and that New York places a 30% weight on in-state benefits provided by a project. The Commission notes that no resources from Quebec have been certified by the Commission as eligible to satisfy Maine's portfolio requirement and no certified facilities located in New York were used to satisfy the requirement in 2008.²⁷

D. Costs and Risks of the New Renewable Resource Requirement

The Resolve explicitly directed the Commission to review the current law and rules to assess the risks and costs of making no change to the existing new renewable resource portfolio requirement. The Commission's review reveals that no statutory changes are currently necessary to address the risks and costs of the new renewable resource portfolio requirement. As discussed in section IV(A)(B) of this Report, the current requirement appears to be satisfying its purpose by creating a substantial premium over market prices for new renewable resource development at an acceptable cost to Maine's electricity consumers. In

²⁶ The Commission has the authority to direct utilities to enter into long-term contracts for the output of generation facilities. 35-A M.R.S.A. § 3210-C. This authority is an important mechanism to promote renewable resource development in the State. The Commission has recently authorized long-term contracts that were necessary to the development of the Rollin Mountain wind facility. *Order Directing Utilities to Enter Into Long-Term Contracts*, Docket No. 2008-104 (Oct. 8, 2009).

²⁷ In its comments on the draft report, TransCanada suggested that the Commission look beyond the 2008 information on the Maine requirement and consider that imports into the region play a large role in satisfying the portfolio requirements in other New England states. Although this may be true, a change in Maine law would not affect the amount of imported resources used to satisfy portfolio requirements in other states.

addition, as stated in section II(D) of this Report, the current law provides the Commission's with the authority to suspend scheduled percentage increases if it determines that the portfolio requirement is burdening electricity consumers without providing the intended benefits.

Moreover, the ACM provides a cap on consumer exposure to cost impacts. For example, during 2009, the ACM of \$60.92 capped exposure at approximately \$14,300,000 or .14 cents per kWh (approximately a monthly increase of 75 cents for a typical residential customer), assuming all compliance was through the ACM and no load was exempt through the grandfathering provision. The actual cost to ratepayers is likely to remain lower, because RECs have been trading significantly lower than the alternative compliance payment and a significant amount of sales currently remain exempt under the grandfathering provision. Finally, the Commission notes that the current law requires the Commission to submit annual reports on the operation of the portfolio requirement. Through these reports, the Commission would notify the Utilities and Energy Committee of any developments that have or may increase the costs and risks to consumers so that statutory changes may be considered.

Other than the supply requirement and withholding prohibition, the only suggested changes to the current law were made by Ed Holt. Holt suggested increasing the percentage requirements to 25% by 2025 and creating a new portfolio requirement class for new distributed renewable technologies.

As discussed in section II(G) of this Report, a change to the statutory percentages is a question of energy policy for the Legislature, taking into account the benefits of increased renewable development and the corresponding costs to consumers

The addition of a new distributed renewable energy technologies class is similarly a question of State energy policy. The Commission notes that Maine law already contains incentives for smaller distributed renewable generation. These are the Commission's net energy billing rules and the recently enacted community-based renewable energy pilot program.²⁸ The addition of a new distributed resource portfolio requirement class would create additional transaction costs for suppliers in Maine's retail market and the need for Commission resources to be devoted to developing the implementation rules and verifying compliance.

²⁸ Chapters 313 of the Commission's rules govern net energy billing. Net energy billing allows customers with renewable facilities of 660 kW or less to offset their electricity usage with the output of their generation. This program provides a substantial benefit in that it, in effect, provides customers with the value of the full retail electricity rate for their generation, currently approximately 16 cents per kWh, for energy that has a wholesale value in currently in the range of 4 to 5 cents per kWh. See, the Commission's Report on Net Energy Billing, submitted to the Utilities and Energy Committee on January 15, 2009. The recently enacted community-based renewable energy pilot program, P.L. 2009, ch. 329, provides qualifying renewable generators with the option of a long-term contract at above market rates or a 150% REC multiplier.

E. Consumer-Owned Utilities

In the original Restructuring Act, consumer-owned T&D utilities (“COU”)²⁹ were allowed to sell retail generation within their respective service territories.³⁰ The law explicitly required COUs that sell retail generation service to comply with the law’s original 30% eligible resource portfolio requirement.³¹ However, when the law was amended in 2007 to include the new renewable resource requirement, it did not include any requirement that COUs comply with the requirement. This may be an oversight in that there appears to be no reason to require COUs to comply with the eligible resource portfolio requirement, while exempting them from the new renewable resource portfolio requirement. Assuming that this was an oversight, the Legislature may want to consider a correction during the 2010 session.

V. COMMISSION RECOMMENDATIONS AND CONCLUSIONS

As stated in section II(G) of this Report, the determination of whether to significantly modify Maine’s new renewable resource requirement is an energy policy matter for the Legislature. The policy determination involves a balancing of the benefits of promoting the development of new grid-scale renewable generation with the costs to ratepayers that result from creating a premium over market electricity prices. As discussed in section IV of this Report, the current new renewable resource requirement appears to be accomplishing its purpose, without a significant impact on generation rates and with limited reliance on the ACM. Moreover, the requirement is relatively new and, as a result, there is limited experience with the requirement. Accordingly, the Commission does not recommend any substantial modifications to the current new renewable resource portfolio requirement.

A. Supply Requirement and Withholding Prohibition

As discussed in this Report, the major issue raised by commenters is whether the Legislature should amend the existing law to include: 1) a requirement that all or a fixed percentage of the electricity from eligible facilities be supplied to the ISO-NE control area or the area administered by the NMISA; and 2) a prohibition of economic withholding or curtailment of the delivery of electricity from eligible facilities located outside the ISO-NE control area or the area administered by the NMISA (with an exception for transmission line outages preventing the import of electricity or when the applicable tie line is operating at full capacity). The Commission suggests that the case has not been made to amend Maine’s new renewable resource portfolio requirement in this manner.

As discussed in section V(C) of this Report, the impacts of such a statutory change on the prices of RECs, retail electricity prices, regional resource diversity and power supply, the development of new renewable resources in the State and region, and related

²⁹ COUs are municipal or quasi-municipal utilities or consumer-owned cooperatives.

³⁰ 35-A M.R.S.A. § 3207(1). The Restructuring Act prohibited investor-own T&D utilities from providing generation service. 35-A M.R.S.A. §§ 3205 and 3206.

³¹ Section 3207(1) specifies that COU T&D utilities must comply with section 3210(3), the provision that contains the eligible resource portfolio requirement.

economic impacts in the State cannot be known with any certainty. Therefore, a change to the new resource portfolio requirement to include a supply requirement and withholding prohibition may well have unintended consequences. Without a firm demonstration of the need for or benefit of a major statutory change, the Commission does not recommend that the Legislature proceed to amend the portfolio requirement statute to include the supply requirement or withholding prohibition.

In the event that the Legislature decides to proceed with this statutory change, the Commission agrees with Lincoln that there should be an exemption for behind-the-meter generation. In a recent decision,³² the Commission found that behind-the-meter generation can be certified as eligible for Maine's new renewable resource portfolio requirement. The enactment of a delivery requirement would essentially preclude behind-the-meter generation from eligibility.

B. Other Changes to the New Renewable Resource Portfolio Requirement.

As stated, the Commission does not believe any major changes to the new renewable resource portfolio requirement are necessary to meet the current statutory policy objectives. However, the Commission has no position regarding the changes recommended by Holt in that they represent questions of State energy policy to be determined by the Legislature. The two changes suggested by Holt are: 1) increasing the required percentages to 25% by 2025; and 2) establishing a new distributed renewable energy portfolio requirement class. The first change would represent a simple statutory amendment. However, the second change would require significant work in establishing the statutory criteria and parameters. In the event that the Utilities and Energy Committee decides to pursue a distributed renewable resource portfolio requirement class, the Commission offers to work with the Committee on the design of a statute.

C. Consumer-Owned Utilities

As discussed in section IV(E) of this Report, the Commission believes that COUs may have been inadvertently excluded from satisfying the new renewable resource portfolio requirement. Accordingly, the Commission suggests that a statutory change be considered so that COUs that provide retail service are required to comply with the new renewable resource portfolio requirement. This can be easily accomplished by adding a reference to section 3210, subsection 3-A to the COU marketing provision of the Restructuring Act, section 3207(1)(A).

³² *Lincoln Paper and Tissue, Order Granting New Renewable Resource Certification*, Docket No. 2008-173 (Jan. 27, 2009).