

April 8, 1998

Dennis Keschl, Administrative Director
Maine Public Utilities Commission
242 State Street
State House Station 18
Augusta, Maine 04333

Re: Docket No. 97-584, Renewable Resource Portfolio Requirement

The Union of Concerned Scientists (“UCS”) seeks to late-file these brief comments to the Public Utilities Commission (“PUC” or “Commission”) Notice of Inquiry of the Renewable Resource Portfolio Requirement. We apologize for the late-filing, as we only recently received the notice, and hope that these comments may still be useful to the Commission. We would appreciate being placed on a service list for future filing deadlines, hearings, or technical sessions.

UCS has been performing research and advocacy on the Renewables Portfolio Standard (“RPS”) in a number of states and nationally. We performed the analysis and developed the original proposal underlying the RPS targets subsequently adopted in the Massachusetts restructuring law, and proposed in Vermont (S. 62) and Connecticut (H. 5005) and have actively supported RPS adoption in other states. We attended several meetings of the Maine Electric Consumers Coalition as it was developing its support for an RPS. We have worked with the staffs developing the federal RPS proposals of Rep. Dan Schaefer (R-CO), Rep. Edward Markey (D-MA), Sen. James Jeffords (R-VT), Sen. Dale Bumpers (D-AR), and the Administration.

Responses to NOI Questions

A. Eligibility and design.

1. We recommend an annual requirement for renewable energy kWh for each electricity supplier and product selling to Maine retail electricity requirements. For disclosure purposes, we have supported measurement periods as little as quarterly or monthly. However, annual periods appear most appropriate for compliance with minimum generation requirements. Shorter periods could make compliance significantly more difficult and costly, given daily and seasonal fluctuation in the output of many renewable resources, and would not better meet the basic policy objective of preserving a percentage of the renewable energy generation in the state’s mix. Compliance will be more easily monitored and verified on a historical basis. State RPS policies are generally intended to provide environmental, fuel diversity, economic development and resource commercialization benefits to the state customers purchasing the electricity with the renewables content requirement.

Accordingly, the standard is best placed on the generation portfolio of a supplier's sales to state customers. In order to ensure that the RPS is a floor, on which green marketing can build to pull new resources into the market, the RPS should also be for each product sold into the retail market.

2. Credit trading can make the RPS easier and less expensive for suppliers to comply with, and more easy for the state to administer. With a credit trading system, suppliers can meet their obligation by acquiring credits in a secondary market as well as by buying them directly from a renewable energy producer or developing the renewables themselves. The credit trading market should increase market efficiency and reduce transaction costs, especially for suppliers who are small and/or do not want to develop expertise in renewables. Credit trading should also benefit renewables producers, giving them more flexibility in where they sell their kWh. By turning the "renewables value" of their product into a tradable commodity, they can be sure of always capturing the full value of that product, whether they sell their kWh through a direct contract or into the spot market, where the renewables value may otherwise be lost. Creating a tradable credit market may also reduce potential market power problems in the renewables market. Since current renewables owners and contract holders would own a commodity whose value would expire if not sold to another entity within a reporting period.
3. New construction could be encouraged through either a credit trading system or a kWh contract system, by creating a requirement that a given percentage of credits or kWh must be obtained from renewable generation placed on-line after a certain date. UCS has successfully encouraged separate tiers for preserving existing and stimulating the development new renewables in Massachusetts, Connecticut and Vermont. New England-wide, we have encouraged the supply of new renewables to grow by an amount equal to 4% of sales over a ten year period. Policy encouraging the development of new renewables can be beneficial because a) new renewable technologies are often more efficient, and can supply lower-emission or zero-emission generation to help meet environmental goals; and b) there is a "commercialization benefit" and additional diversity benefits to policies which enable emerging technologies to overcome market barriers, build delivery and maintenance infrastructures, and achieve economies of scale which will reduce costs and enable them to be competitive more quickly.

The Commission may also want to structure the RPS to directly encourage diversity among supported renewable energy technologies, by either a) creating minimum or maximum levels for specific technologies; or b) by creating overall market share limits for one or more technologies. For example, no more than 60% of a supplier's RPS requirement could be met by any one technology or fuel source, and no more than 90% by any two technologies or fuel sources. Encouraging a diverse set of renewables could maximize long-run competition among renewables and diversity in the state's overall fuel mix. A diversity policy may also help maximize the economic development benefits of preserving generation from in-state renewables. Without such a policy, there is a substantial probability that Maine biomass plants, for

example, will be displaced by hydro imports from out-of-state or Canada, or by natural gas fired cogeneration imports, if that technology is interpreted as eligible.

4. Allowing a promise of making good in the future may encourage some suppliers to ignore the standard and hope for or press for its elimination, creating serious potential inequities with suppliers who meet the standard in good faith. A financial penalty per kWh or credit shortfalls, set to exceed the expected market value of the renewable energy credits (the above-market production cost for the marginal renewables unit needed to meet the standard), would provide an incentive to comply, while enabling new suppliers to enter the market if they were unable to secure the required renewables kWh or credits. Revenues derived from such penalties should go into a fund to support renewables development.
5. Compliance with the standard should be based on kWh delivered to Maine customers.
6. In theory, generation does not need to be ISO-controlled. If the Commission creates a requirement for new renewables, we recommend that such renewables need not be ISO controlled. Since we presume that most existing renewables which are not ISO controlled will generally continue to operate whether supported by the RPS or not, the maximum policy benefit of the RPS in preserving existing renewables would be derived from applying the RPS only to ISO controlled renewables.
7. We are not aware of a policy basis for not counting generation deliverable to northern Maine service territories.
8. Plant size would be an appropriate criterion.
9. There is a good policy basis for excluding large scale projects from eligibility, in that a) those projects should generally be able to compete successfully in the market without renewables policy support.; b) the environmental benefits of larger facilities become more suspect.
10. No, if facility size is the criterion.
11. For both disclosure and RPS purposes, any form of storage capacity should be considered to deliver the characteristics of the generation used to charge the storage, net of losses. Pumped storage should be considered hydro only to the extent that hydro was used to power the pumps.
12. We do not have a view on this question.
13. Dual fueled facilities should be credited for renewables generation only up to the proportion of renewable fuels that were used.

B. Implementation

1. We do not have an opinion on this question at this time.
2. To verify compliance with the RPS, an a system to track either renewable kWh sales or credits is needed. The Commission should verify compliance, although the tracking system could be managed by the ISO or an independent agency. Until an appropriate independent tracking mechanism is established, the best approach would probably be for the commission to issue credits for renewable energy generated and sold to Maine suppliers, and count credits to be turned in by suppliers within three months after the close of an annual reporting period.
3. As stated in response to question A. 4, a financial penalty for credit or kWh shortfalls would provide an appropriate consequence which would provide the right incentives to meet the standard, while fulfilling the policy objectives of the RPS if individual suppliers are unable or unwilling to comply. In order to ensure the development of a robust renewables market, the size of the penalty must be greater than the expected price of a renewable energy credit, or the above-market cost of marginal renewables generation. Fraudulent reports (e.g., double counting) may warrant license revocation.
4. Based on our current understanding, the recently developed ISO-NE settlements process is not sufficient for verifying compliance at this time since it does not track fuel used at generators and there is no mechanism for tracking generation type through system contracts or ANI sales.
5. Based on our current understanding, modifications suggested in the Regulatory Assistance Project (“RAP”) report on disclosure in New England would be needed in order to verify RPS compliance.
6. Either a settlements based system or a tagging system, both of which are discussed at length in the RAP report on disclosure, could be sufficient.
7. There is a potential for suppliers to double count available renewable resources. Such double counting would be a problem, since it would enable a marketer to sell the renewables characteristics of the same kWh twice (or more), once to the green customer in another state, and a second time to Maine customers through a premium or renewable energy credit price created by the RPS. A regional tracking system should be sufficient to prevent such double counting. The Commission should ask for a full accounting of all renewables kWh generated or purchased by a supplier and used to meet RPS requirements and green customer demand in Maine and other states.
8. The costs of administering a credit trading system should not be higher, and may be lower, than the costs of administering a kWh verification system. Costs of administering the program could be recovered from funding generated by financial penalties as well as general Commission revenues, and/or from a small fee per credit levied on renewables credit issuing or verification.

Thank your for the opportunity to provide comments in this matter and for your consideration.

Respectfully,

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