

Oral testimony of
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LD 1929

March 22, 2004

Background on UCS

UCS is an independent nonprofit alliance of more than 100,000 concerned citizens and scientists. Founded over 30 years ago, UCS combines rigorous analysis with committed advocacy to reduce the environmental impacts and risks of energy. UCS' energy program focuses on encouraging the development of clean and renewable energy resources, such as solar, wind, geothermal and biomass energy, and on improving energy efficiency. Participating in the design and implementation of state renewable policies is one way UCS actively works toward these ends.

In addition, UCS has participated in the development of policies and market rules throughout the region in support of an expanded role for renewable and environmentally preferable energy. UCS appreciates the opportunity to offer to the Committee these comments. Recognizing the critical role that renewable energy generators play in improving the resource diversity and environmental sustainability of our regional electric grid, we submit these comments as part of our continuing efforts to establish, support and improve the various public policies affecting electricity resource portfolios at the state and federal level, including RPS policies.

UCS favors RPS programs because they create a market for renewable energy with specific targets. The RPS is the best policy to ensure we meet resource diversity and environmental goals at the lowest cost. By stimulating a long-term market for renewable energy, the RPS reduces the investment risk associated with building renewable facilities. Lower investment risk promotes cost-effective financing of new projects. Increasing the deployment of renewable technologies reduces manufacturing, installation, maintenance, and other costs over the long term. At the same time, competition among a variety of renewable sources to meet the RPS also helps drive renewable energy prices down.

While UCS also supports incentives and voluntary purchases of "Green Power," UCS believes that these are complimentary policies. Buying "green power" can help stimulate the market for renewable energy. But renewable energy provides environmental, fuel diversity, national security, and economic

development benefits to everyone, not just to those who volunteer. Increasing renewable energy will reduce the risks to the economy posed by over-reliance on a single source of new power supplies, such as natural gas. A study by the National Renewable Energy Laboratory shows that by 2010 voluntary programs could increase renewable energy generation from 2% of electricity sales today to less than 3% of sales.

The current version of Maine's RPS has yet to provide an incentive for the development of those resources. UCS has provided testimony to this committee and to the Maine Public Utility commission in the past encouraging the efforts to strengthen the RPS. UCS supports the effort to improve Maine's Renewable Resource Portfolio Requirements. Maine has excellent renewable resources. Based on DOE data, UCS estimates that the technical potential of renewable energy from wind and biomass is over 3,800 MW – more than 70% of the state's current electricity needs.

Summary

UCS has some suggestions for improving the draft legislation. These suggestions are made in the hopes that the modifications to ME's RPS will make it a stronger policy that results in a more effective program and a more sustainable electricity system for the state and the region.

Tier II

Tier II should be an incentive for the development of new renewable facilities. UCS supports the definition of eligible technologies to exclude hydro, biomass (as currently defined), and MSW.

I will comment separately on UCS's suggestions regarding the inclusion of hydro, biomass, and MSW later in my comments on Tier I.

However, UCS would consider supporting the inclusion of biomass in Tier II if it were appropriately defined so that only new, technologically advanced, efficient, and low emitting facilities were eligible.

UCS does not believe that the capacity limit of 100 MW is necessary. This cap will reduce the incentive to develop commercial scale non-hydro renewable facilities in ME and the region. ME has significant high-class windy land areas that are prime candidates for such facilities.

UCS also recommends that the legislation restrict fuels cells to those that are fueled by renewable resources (see MA 225 CMR 14.00). Specifically, these should include eligible biomass, landfill or aerobic digester methane gas, hydrogen derived from such fuels, or hydrogen derived from the electrical output of a generation unit (solar, wind, and ocean energy).

On the provision that 50% of eligible wind power must be located on tribal lands: while we support the effort to bring the numerous benefits of RE development to tribal lands, UCS does not agree with the approach in the current version of the regulation. The biggest shortcoming of this approach is that it reduced the flexibility that should be encouraged through the RPS. Rather, the legislation should provide some alternative incentive for development on tribal lands, perhaps through the ME renewable power fund.

UCS supported the elimination of fossil fueled co-generation facilities as an eligible technology type in LD 1312 introduced last year and continues to do so. While LD 1312 also eliminated facilities already receiving above-market revenues through PURPA contracts from RPS eligibility, the current legislation under consideration does not include such language. UCS urges the committee to reconsider this language and include it in the bill.

Tier II ramp up

UCS research has found that renewable energy targets that increase gradually and remain in place over a long period provide a stable and predictable market for renewable developers and reduce potential price volatility. UCS strongly supports the addition of Tier II to the ME RPS. We also believe that the initial annual target of 1% is an excellent beginning. However, it is our view that the annual increase of 0.5% is quite modest. UCS recommends that the Tier II ramp up rate by 1% per year so as to put the ME RPS on par with the strongest policies among the other 12 states that have adopted standards. It is reasonable to set the ramp up rate at 1% given Maine's excellent renewable resource potential. Doing so would maximize the benefits of an RPS, including economic development, environmental improvement, and energy security.

UCS also strongly recommends that LD 1929 clearly state that the RPS requirement continues to be in effect for a sufficient period to amortize investment in new renewable generation. While the Statute has set the schedule for Tier II targets, it does not specify if (or for how long) the RPS requirement will continue after March 1, 2013, the date when the last and highest specified Tier II target must first be achieved.

We recommend that the rules specify that the RPS obligation be allowed to self-sunset when renewable energy credit prices fall to zero, to allow renewable developers and retail suppliers to recover any incremental costs over a reasonable period of time, minimizing the price of renewable energy credits. This could be accomplished by inserting "and thereafter" immediately after the phrase "on March 1, 2013" where the percentage targets are specified in Section 3-A.

At a minimum, the RPS target should continue to apply for at least 10 years after the highest target is reached. This approach was adopted in both the Texas RPS rule and national RPS included in the Senate energy bill. Not following suit in Maine will undermine the investment in new renewable energy resources in the later years of the program because cost recovery would be uncertain.

Tier I

Tier I should be defined so that the ME RPS provides incentives to those renewable facilities already operating that are most important to encourage. Maine's current RPS is considered weak and ineffective because of the broad definition of what is eligible to meet the 30% target. The committee's consideration of LD 1929 is an opportunity to also strengthen these provisions of the program.

Biomass

UCS urges the committee to consider UCS' comments submitted on LD 1312 on the inclusion of biomass as an eligible resource. Biomass is an abundant resource in ME and already a significant part of the state's energy production. However, UCS urges the committee to include in its bill language a more specific definition of eligible biomass to ensure that unsustainable and hazardous fuels do not receive credit under this program and to ensure that the legislation provides incentives to sustainable biomass. We provide our previous comments below:

UCS believes that definition of biomass as an eligible renewable resource is too vague and could result in unsustainable and hazardous fuels – such as municipal solid waste, contaminated waste wood, or tires – receiving credits under the renewable resource standard. UCS recommends that the Committee insert a new, separate definition of biomass using the following language to ensure that the RPS is providing incentives to sustainable biomass.

- Wood and wood waste biomass, including:
 - o harvesting and mill residue;
 - o precommercial forest thinnings;
 - o slash;
 - o brush; and
 - o stumps;
- Clean urban wood waste such as uncontaminated construction and demolition debris;
- Landscape or right-of-way- tree trimmings;
- Digester gas, dedicated energy crops;
- Agricultural crops;
- Crop byproducts;
- Biofuels; or
- Livestock residues.

We further urge the Committee to modify LD 1312 to explicitly exclude facilities directly combusting the following materials to generate electricity from eligibility as biomass facilities:

- Standing commercial timber;
- Recyclable post consumer waste paper;
- Painted, treated, or pressurized wood;
- Wood contaminated with plastic or metals; and
- Tires.

With respect to wood and wood waste biomass, UCS strongly supports the sustainable management of forests and encourages forest practices that enable a forest to maintain its delicate ecological balance. Therefore, we propose that to ensure that the source of the biomass fuel is from a sustainably managed forest, Maine's renewable resource standard limit eligibility to biomass facilities using wood or wood product harvested from forests certified by Forest Stewardship Council (FSC). Alternatively, the biomass facility must show that the original source of biomass fuel comes only from land that is harvested and managed so that it sequesters at least the same amount of carbon than the land in its preharvested condition.

We believe that the forest protection guidelines used to determine eligibility should represent the best practices of all New England states. We believe that our proposed guidelines should be used as the

common criteria for forest sustainability in the Maine renewable standard because the biomass energy serving the state's consumers could come from generators throughout the regional power pool, as well as adjoining areas such as Eastern Canada and New York. Furthermore, we believe that forest protection guidelines such as FSC certification are the most appropriate standards for sustainability.

MSW

In addition, UCS strongly urges the committee to exclude MSW as an eligible fuel. Our detailed comments on this point were also presented as part of our comments on LD 1312. Simply put, the incineration of MSW is neither renewable or an environmentally sound or sustainable technology. MSW incinerators are sources of dioxin, mercury, PCBs, and lead. Providing an incentive to such facilities embodies the opposite of what the stated goals of this legislation are.

Recycling is an important activity that should be supported and we encourage the ME legislature as well as the state's local governments to seek ways to address solid waste problems without creating another source of pollution via incineration.

Large hydro-electric facilities

It is UCS's belief that in general, hydroelectric facilities do not need the support of RPS policies for the following reasons:

- Hydro power is a mature technology
- Hydro electric facilities have significant impacts on environmentally sensitive rivers and streams
- It comprises roughly 10% of our nation's electricity supply
- It is often the least expensive generation available.
- In ME, hydro is about 30% of the state's generating capacity.

Other issues

Product applicability

The RPS requirement should apply to each electricity supply *product*. The RPS design should require compliance by all obligated retail electricity suppliers at the electric product level as a percentage of energy delivered. Such an approach ensures that suppliers supply the same level of renewable energy to all customer classes. The rationale for requiring that a portion of Maine's electricity be generated from renewable energy sources stems from the fact that the use of such energy sources benefits the state and society as a whole rather than merely certain utilities, customer classes or individual customers.

Accordingly, the responsibility for implementation and cost of the RPS should be spread fairly and evenly across all regions of the state and be shared by all retail market participants, including retail suppliers and all customer classes served by them. One key component of a fair and equitable distribution of responsibility is to require that the renewable targets apply to each electric supply product. Adoption of language that is consistent with the RPS in Massachusetts will also enhance the compatibility of regional RPS programs.

ACM

While LD 1929 has added language to reflect a payment of \$35/MWh for non-compliance, we believe that this figure is unreasonably low. The alternative compliance mechanisms in MA and CT are \$50 and \$55 respectively. The logical result of a lower ACP in ME is that when supply is tight, Maine retail suppliers would pay the ACM and renewable certificates would be sold to Massachusetts and Connecticut suppliers. Therefore, UCS recommends that LD 1929 include an ACM set at a level at or near those in MA and CT. UCS also recommends that LD 1929 state clearly that the non-compliance payment is applicable to any and all compliance deficiencies.

We further recommend that the bill language be clarified to indicate that the alternative compliance payment will be adjusted annually for inflation, as MA has done. A fixed ACM that does not adjust for inflation makes the effective cost cap lower and lower (in real terms). As a result, more suppliers and utilities will pay into the penalty fund rather than develop more renewable energy. The result is less renewable energy, less natural gas savings, and fewer economic and environmental benefits.

Long Term Commitments

The proposed legislation does not address a significant market structure issue that is facing the developers of new renewable resources in New England and elsewhere around the country. UCS strongly supports the addition of a mechanism in Maine's RPS that ensures that renewable energy generation is procured by the state's retail suppliers for a period of at least 10 years.

Many renewable fueled generating technologies have higher capital costs and lower operating costs than traditional generating resources. As a result, renewable technologies require long-term contractual commitments from credit-worthy buyers in order to attract financing. Short-term procurement cycles are incompatible with the longer-term contractual commitments necessary for renewable energy developers to receive favorable financing terms. Longer contract terms are critical to the success of new development. Several states have adopted similar requirements, including CA, NV, NM, and CT.

There is a significant upside to such arrangements: RE facilities can offer fixed price contracts for 10, 15, or 20 years, they can provide an excellent hedge against other volatile fuels such as natural gas, and they can keep RPS costs down and provide savings to all consumers of natural gas. It would be far preferable for consumers to get the benefits of long-term arrangements with renewable energy facilities than to pay the maximum amount through the ACM and not receive any of the other benefits of renewable energy development.

Interaction of RPS with Markets for Tradable Emission Rights

LD 1929 is also silent on an issue that has become of greater relevance with the establishment of emission cap-and-trade regimes in the region. Some of the rules in New England states and elsewhere provide for set-aside allowances to be granted to renewable generators, a policy UCS wholeheartedly supports. A current example is the NO_x set-aside rules developed by the Massachusetts Department of Environmental Protection (310 CMR 7.28). The increasing prevalence of such mechanisms raises the issue of whether generation remains eligible for an RPS *if* such allowances have been acquired and sold off. While this issue post-dates the creation of many RPS regulations (and therefore most such regulations remain silent on this issue), some states have considered these interactions and addressed them differently. For example, the Texas RPS requires that emission rights be bundled with the

“renewable” attribute, so that generators cannot sell off rights to third parties and still have their associated production be eligible for RPS compliance. In contrast, Massachusetts appears to have been purposefully silent on the issue, so that generation selling off such rights could presumably continue to be eligible for their RPS.

Many of the programs and institutions supporting the nascent consumer “green power” market narrow eligibility to those generators that have not sold off such allowances. If requested, UCS can provide you with a briefing paper that addresses some of these issues.

In the future, particularly as similar programs are adopted for CO₂ trading regimes, modification to the ME RPS should also consider the appropriate treatment of renewable generators participating in such market schemes. We recommend that the Committee consider this issue as it finalizes the renewable energy portfolio regulations.

Maine Renewable Power Fund

UCS is supportive of the provisions in the draft legislation that directs ACM payments made by electricity suppliers to Tier II-eligible renewable resources and is supportive of the proposed approach presented by the Maine PUC.

Credit Trading

Since the ME PUC has already determined that the NEPOOL GIS is the appropriate attribute tracking system for compliance with the current renewable standard, UCS urges both the legislature and the state to quickly make the same determination for Tier II.

Issuance of Rules

UCS suggests that the committee to include a specific timeline for the issuance of rules by the ME PUC. Any delay in issuing rules will adversely affect the renewable energy market. Quick promulgation will lead to a smooth transition to the operation of the revised renewable standard.

Conclusion

Thank you for the opportunity to appear before you and offer testimony on behalf of UCS. I encourage you to consider the suggestions I have presented here to you today.