



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

**STATE OF CONNECTICUT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION**

Public Hearing – March 19, 2013
Energy and Technology Committee

Testimony Submitted and Presented by Commissioner Daniel C. Esty

Proposed Substitute Senate Bill No. 1138 –AN ACT CONCERNING CONNECTICUT’S CLEAN ENERGY GOALS (LCO No. 1467)

Thank you for the opportunity to present testimony regarding Proposed Substitute Senate Bill No. 1138 – AAC Connecticut’s Clean Energy Goals (LCO No. 4767). The Department of Energy and Environmental Protection (DEEP) offers the following testimony.

DEEP strongly supports the concepts within this bill. These concepts are consistent with DEEP’s draft 2013 study of Connecticut’s Renewable Portfolio Standard, entitled “Restructuring Connecticut’s Renewable Portfolio Standard,” which was released for public comment this morning.

Substitute Senate Bill No. 1138 proposes several modifications to Connecticut’s current Renewable Portfolio Standard (RPS) that would (1) extend and expand the RPS requirements from 20% renewable by 2020 to 25% renewable by 2025; (2) recognize the value of renewable resources like large-scale hydropower that do not need the type of Renewable Energy Credit (REC) support provided by a traditional RPS; and (3) limit the likelihood that Connecticut ratepayers will incur large costs while receiving little benefit. The bill further enables Connecticut to take immediate steps to take advantage of federal support – in the form of the Production Tax Credit (PTC) – and regional economies of scale to procure a significant amount of new Class I wind renewable generation.

The bill’s proposed updates to the RPS build upon Connecticut’s long standing commitment to promoting clean energy resources. When passed in 1998, the RPS sought to enable new, clean renewable power to be financed and developed by guaranteeing a market for the power from these sources even though it would be more expensive than non-renewable generation. To some degree that has happened, but 15 years later, we now see that the RPS is not fully living up to its original vision of supporting the cleanest possible renewable power. DEEP estimates that in 2010, a total of 76% of Connecticut ratepayer’s investment in Class I resources went to support biomass plants located primarily in Maine and New Hampshire. These plants are among the least “clean” Class I resources. Another 13% of Connecticut’s Class I requirement in 2010 was supplied by landfill gas projects primarily located in New York. When the RPS was originally enacted in 1998, few would have anticipated that

more than a decade into the program, biomass and landfill gas would constitute the bulk of Connecticut's investment in renewable resources.

In addition, rather than supporting the development of new resources, the existing RPS construct provides ongoing financial support to facilities that have long since been paid for – and in many cases existed prior to the enactment of the RPS. For example, DEEP estimates that in 2012, 37% of Connecticut's Class I obligation was being met by biomass plants that were built before 1998. Similarly, 8% of the RPS was being met by landfill gas projects that already existed in 1998. The supply from this legacy biomass, legacy landfill gas, some smaller legacy hydropower facilities (that converted to run-of-river technologies), and a legacy Vermont wind project comprised an estimated 43.5% of Connecticut Class I supply in 2012. All of this "legacy" generation is only Class I eligible in Connecticut. In sum, DEEP estimates that only slightly more than half of the 2012 Connecticut Class I target is encouraging the development and construction of new regional supply -- which seems contrary to the original intended purpose of the RPS.

Sections 1 and 3 of this proposed substitute bill seek to begin redirecting Connecticut's RPS ratepayer support to new, cleaner renewable supply that is better-aligned with Connecticut's stated objectives, and is better-aligned with the original intent of the RPS. By requiring biomass and landfill gas plants to improve their environmental performance to remain eligible for Class I, the proposed bill not only furthers the original goals of the RPS but also improves conformity with the Class I qualifications of other states in our region. DEEP and the General Assembly should solicit input from interested stakeholders in the coming weeks regarding the timing of when these new emissions requirements on biomass and landfill gas plants should be phased in. Some factors to consider include the practicality of making improvements to these facilities, as well the availability of new Class I supply if these biomass and landfill gas facilities ultimately become ineligible in Connecticut.

To further reduce costs associated with transitioning to cleaner non-fossil fuel generation, Section 1(B) creates a "Class I contracted tier renewable energy source" within which both Class I sources and large scale hydropower would be eligible. But, unlike the traditional Class I resources (wind, solar, small scale hydropower), large scale hydropower in the contracted tier would not be eligible to receive REC payments through the New England Power Pool (NEPOOL) Generation Information System (GIS) trading system.

The new RPS of twenty-five per cent by 2025 in Section 4 would incrementally allow some portion of each year's RPS obligation to be filled by the new contracted tier that includes large scale hydropower, though if cost competitive, these obligations could also be met by other Class I resources. Beginning with two percent in 2014 and ramping up to up to seven and one half per cent in 2025, contracting for some amount of large hydropower would further the state's clean energy and greenhouse gas reduction goals, provide continued support for Class I renewable development, and lower overall costs.

Section 5(h) of the proposed substitute bill would enable the state to seize upon a very limited opportunity that could result in the development of significant wind resources in the region. The federal PTC which provides a 2.2-cent per kilowatt-hour (kWh) benefit for the first ten years of a renewable energy facility's operation will expire at the end of 2013 and while it may be extended again, there is no guarantee that it will be. As a result, the economics of new renewable developments such as wind will become significantly less attractive once the PTC expires. For a developer to take advantage of the PTC they will need to begin construction this year, which in turn means that the long term power

purchase agreements necessary for a project to get financed will need to be signed in the next couple of months.

Section 5(h) therefore authorizes DEEP to work with the electric distribution companies, the Public Utilities Regulatory Authority's (PURA) Procurement Manager, and other states in the region to see if we can take advantage of this time-limited opportunity to support the development of significant wind resources within the region. If prices for these long-term contracts (up to 20 years in duration) are significantly lower than they have been for comparable renewable resources, Connecticut could potentially procure as much as 150 MW of wind on behalf of all customers in the state to meet the our RPS obligations.

Section 5 (i) of the proposed substitute bill would authorize DEEP – in conjunction with the electric distribution companies and PURA's Procurement Manager – to enter into similar (but less time urgent) contracts for large scale hydropower resources from the Independent System Operator New England (ISO NE) region or Quebec, the Maritimes, Labrador or Nova Scotia with incrementally increasing amounts of this supply eligible to meet some portions of the proposed increased RPS requirements. As with the potential regional wind purchases envisioned in Section 5 (h) described above, these purchases would be made on behalf of all customers in the state in order to meet our RPS obligations.

In order to avoid potential confusion and clarify the legislation's intent, DEEP requests that the committee consider the following changes:

- On line 6, insert biologically derived before "methane" and replace "gas" with or biogas;
- On line 24, insert Megawatt hours of electricity from a before "renewable" and replace "used for " with counted toward;
- On line 37, after "area," insert and delivers such power into the NEPOOL GIS eligibility area;
- At the end of line 39, after "act" insert or to trade in the NEPOOL GIS REC market;
- On line 52, after "programs" insert or measures undertaken by third parties for clarification purposes; and
- On line 98, after "Initiative" insert or other mechanism as proscribed by the commissioner and implemented by PURA.

In sum the changes to the RPS proposed in this substitute bill will have numerous benefits for Connecticut and its ratepayers. The proposed bill will diversify the mix of clean renewable energy resources which increases reliability and provides a hedge against rising fossil fuel generation; shift ratepayer support from legacy "renewables" with less than optimal emissions to new in-state and regional resources; and reduce criteria pollutant and greenhouse gas emissions – all at a lower cost to Connecticut's citizens and businesses than would be incurred if these changes are not enacted.

Thank you for the opportunity to present testimony on this proposal. If you should require any additional information, please contact DEEP's legislative liaison Robert LaFrance at (860) 424-3401 or Robert.LaFrance@ct.gov.