

**TESTIMONY OF THE
CONSERVATION LAW FOUNDATION**
Regarding
Proposed Substitute Bill No. 1138 (LCO No. 4767)
An Act Concerning Connecticut's Clean Energy Goals

Submitted by
Seth Kaplan
Vice President, Policy and Climate Advocacy

March 19, 2013

Chairman Duff, Chairwoman Reed and Members of the Energy and Technology Committee:

The Conservation Law Foundation (CLF) appreciates the opportunity to comment on Proposed Substitute Bill No. 1138 (LCO No. 4767), *An Act Concerning Connecticut's Clean Energy Goals*.

CLF is nonprofit, member-supported organization, founded in 1966, that protects New England's environment for the benefit of all people. Using the law, science and the market, CLF creates solutions that preserve natural resources, build healthy communities, and sustain a vibrant economy region-wide.

Summary:

- CLF is deeply opposed to the revision to Tier I of Renewable Portfolio Standard (RPS) that would lower the longstanding RPS requirement and insert a new "Class I contracted tier" – effectively reducing the current Tier I and replacing it with imported hydroelectric power, an unprecedented and shocking retreat from a clean energy goal;
- CLF supports the effort to craft a mechanism to bring in cleaner "firming power" like hydroelectric power that can displace coal generation and help balance and support wind and solar in a complementary and additive manner;
- CLF strongly supports the effort to put in place a regional coordinated procurement mechanism firmly grounded in state law that allows the states to "buy in bulk" and maximize their collective efforts to foster clean renewable energy generation.

CLF has long worked to build a clean energy future for New England and was at the forefront of the effort to restructure the electric industry and change the energy resources that supply this key energy system. During the last 15 years CLF has been deeply involved in the design and implementation of Renewable Portfolio and Energy Standards across the region. These efforts not only are building a critical new sector of the economy but they are key steps in building a cleaner system that brings our society closer to the much-needed goal of reducing our greenhouse gas emissions to the level that science tells us is needed.

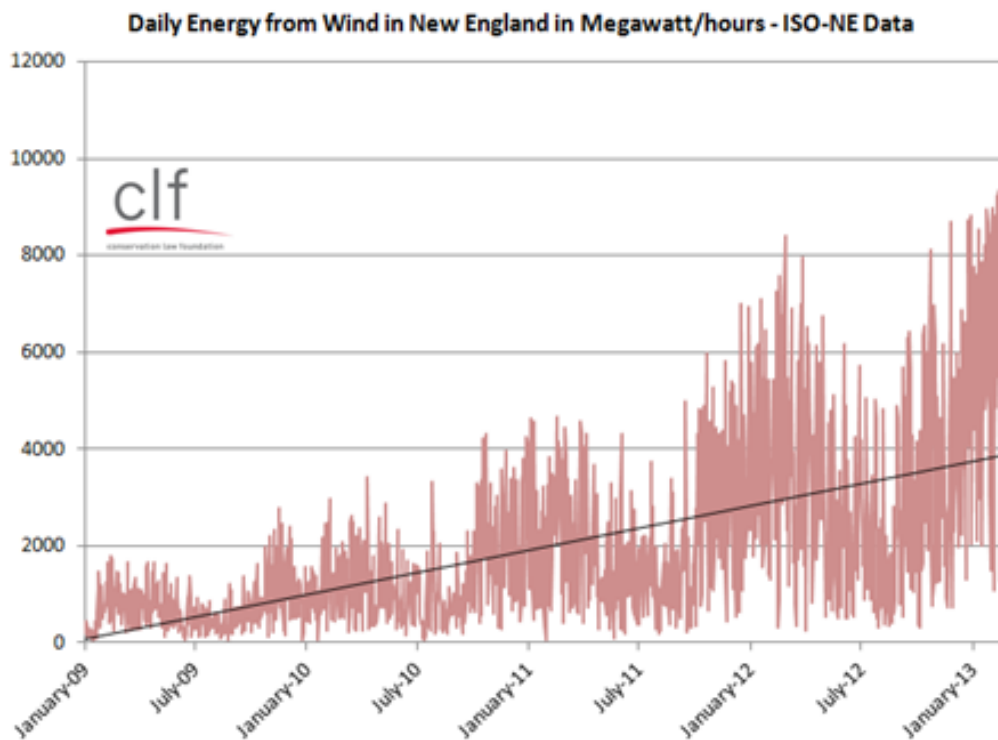
This history means that we are uniquely positioned to describe how the story of the RPS, in Connecticut and across the region, has been a powerful and effective narrative of consistency

– a model of how government can induce action by sending a clear and consistent signal and providing the kind of regulatory certainty that business needs to thrive. The provisions of Bill No. 1138 that would, for the first time, reduce the RPS requirement of one of the New England states threaten to the upset this record of success.

The idea that we need to back down our commitment to clean in-region renewable power in order to import hydroelectric power the embrace of a false choice. We need, as a state and region, to continue to send the clear resource-building message of the RPS while designing and deploying a separate and well designed mechanism for procuring “firming power” from hydro, which is not a zero emissions power source but certainly is cleaner than coal, and over the long term cleaner than natural gas.¹

THE NEW ENGLAND RPS EXPERIENCE: A MODEL OF SUCCESS

As they say, a picture is worth a thousand words. And the image below shows that in the short time that has elapsed since January 2009 the daily energy flowing into the New England wholesale electric system from wind generation has radically increased.



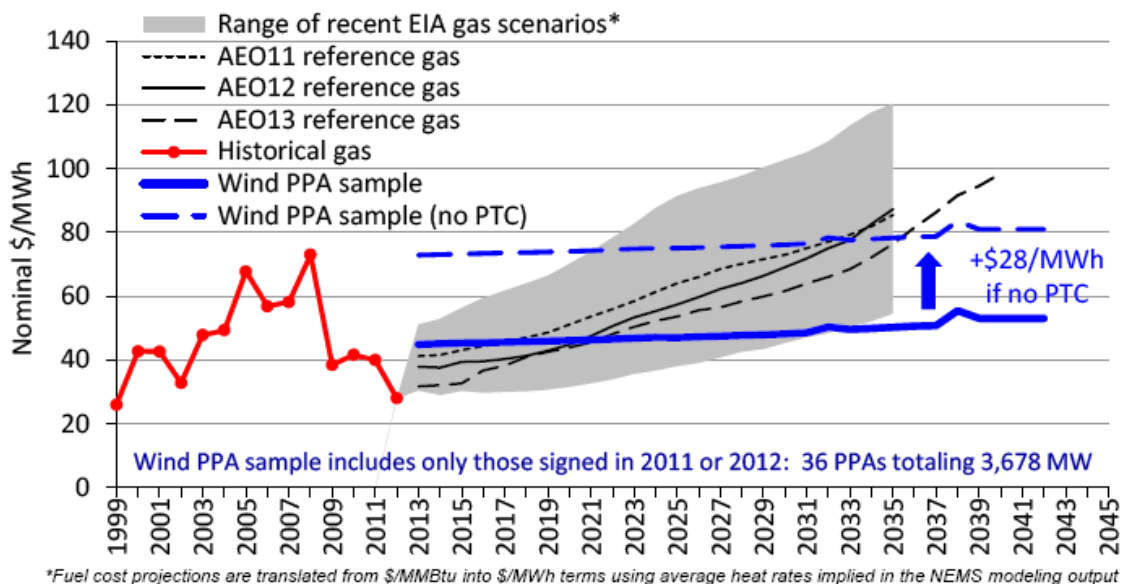
¹ For information on the actual emissions associated with large boreal (as in Quebec) hydropower see the [February 2012 report](#) prepared by Synapse Energy Economics which is discussed and presented [here](#).

And this rising trend is only the beginning of the story. Across the region wind and solar projects are at the very end of permitting or under construction because of the RPS and RES standards of our states.

This Connecticut native can recall sitting in meetings here in Hartford in 2006 where Northeast Utilities presented doomsday scenarios about the lack of RPS qualified renewable and the need to modify those requirements. They were wrong then, as shown by actual experience, and they (and those lobbying on their behalf) are wrong today when they claim that the RPS will fail. The Chicken Little argument about the current RPS is quite clearly nothing but an argument for subsidization for their Northern Pass transmission project and the hydroelectric power that would utilize that line.

It is important to recognize that hydroelectric power from Quebec has, and can continue, to serve as a cleaner source of market rate power – going up and down with fossil fuel prices. This is the role that it plays in Vermont – as recognized by the Department of Public Service (the utility commission in that state) in 2011 when in an [Order dated 4/15/2011 in Docket 7670](#) they noted that under the contract with Hydro-Quebec they were approving: “After the first year, the price of power under the HQ PPA is derived by a formula based on regional electricity prices and the movement in general of price levels observed across the U.S. economy, subject to a damping feature that limits the change from the prior year’s price.”

This is a very different animal that the inherently “hedging” quality of wind power offered under a contract with pre-determined price terms. Indeed, as noted in [a very recent study](#) by Lawrence Berkeley National Laboratory a conventional wind contract offers an energy price hedge against natural gas driven power prices that is simply not available in the financial markets. As the following chart demonstrates it is simply a matter of time until the gas-driven market prices rise up to, and pass, the power prices from wind power.



Indeed, this projection is very conservative in that it does not factor in any reduction in the cost of wind generation as technology improves – and all historical evidence tells us that this reduction will occur.

The successful addition of long-term contracting to the RPS program in Massachusetts, beefed up just last year by a new energy law just now being implemented, harnesses this hedging power for the benefit of customers – and a joint effort between the states that is joined by Connecticut can harvest this benefit in greater amounts and even more broadly.

BIOGAS AND BIOMASS

We note, with some confusion, the decision to remove the words “from landfills” from the definition of electricity generated by “methane gas from landfills”. It appears that this is an attempt to more clearly allow anaerobic digestion to qualify for RPS credit. If that is the case the language proposed will need to be more carefully drafted. Clearly, the bill does not intend to give RPS credit to all generation based on the burning of methane (the primary component in natural gas) and must be clarified to not accidentally give that indication.

Additionally, the desire to institute more rigorous emissions limits for biomass generation is laudable. However, simply putting in place a particulate matter limit of .02 pounds per million BTU of heat input, is not a very significant step. Biomass generation constructed over the last five years have permits requiring much tighter particulate emissions levels – as low as .01 pounds per million BTU of heat input. Moreover, there is an intense need to look at full life cycle emissions from biomass, particularly where greenhouse gas emissions are concerned and to put in place emissions monitoring equipment at biomass plants to make the emissions limits regarding NOx and Particulate Matter very real and effective.

NEXT STEPS

Enabling Connecticut to maintain a clean energy leadership role and to achieve its clean energy goals and the Comprehensive Energy Strategy’s objectives of cheaper, cleaner and more reliable energy for Connecticut’s future will require careful thought and action. This means:

- Maintaining and preserving the current definition and structure for Tier I of the RPS;
- Put in place long-term contracting authority that allows for joint procurement with other states and tracks the growth in the RPS, allowing a significant percentage of the RPS demand to be met through such contracts;
- Address the biogas and biomass issues raised above including more narrowly tailoring any expansion in methane-based RPS eligibility and application of rigorous emissions standards with real monitoring of emissions from biomass generation that is coupled with life-cycle emissions limits on biomass, with a special focus on greenhouse gas emissions.

Thank you for the opportunity to provide these comments. I apologize that we have not had sufficient opportunity to address the entire bill and all the issues raised by it and the RPS Study (which has not yet been fully released). However, I would note that this is due in large part to the truncated schedule and limited time available to engage this complex subject matter. The timing being forced on this Committee and the citizens is regrettable – and I would urge the Chairs to ensure that there is enough time to appropriately consider these issues and shape an appropriate legislative vehicle.

CLF looks forward to working with you as you to craft and implement policies to support the development of clean energy and seek chances to develop as much of those solutions as possible in Connecticut.

Sincerely,

A handwritten signature in purple ink, appearing to read 'S. Kaplan', is positioned above the typed name.

Seth Kaplan
Vice President, Policy and Climate Advocacy