



**Testimony of RENEW Northeast before the
Energy and Technology Committee on**

Senate Bill 9

An Act Concerning Connecticut's Energy Future

March 1, 2018

Senator Winfield, Senator Formica, Representative Reed, Representative Ackert and members of the Energy and Technology Committee, my name is Francis Pullaro and I am here on behalf of RENEW Northeast (RENEW),¹ its Executive Director, to testify in support of the language in Section 1 of Senate Bill 9, *An Act Concerning Connecticut's Energy Future*, to extend the annual increases in the Renewable Portfolio Standard (RPS) to reach 40 percent renewable energy by 2030. These increases will help achieve greenhouse gas reduction compliance under Connecticut's Global Warming Solutions Act (GWSA) with low-cost renewable energy resources that provide local economic development benefits and increase our power system reliability by lessening our heavy dependence on natural gas fueled electric power generation.

I. This Pro-Renewables Strategy Is a Ready-Made, Cost-Effective Approach to Meeting Environmental and Economic Development Goals

Renewable energy projects are providing Connecticut with positive economic benefits to host communities including much needed new tax revenue. The stream of projects supports local construction and service jobs during development and new opportunities in operations and maintenance once projects are supplying clean energy.

¹ The comments expressed herein represent the views of RENEW and not necessarily those of any particular member of RENEW. RENEW is a non-profit association uniting the renewable energy industry and environmental advocates whose mission involves coordinating the ideas and resources of its members with the goal of increasing environmentally sustainable energy generation in the Northeast from the region's abundant, indigenous renewable resources. RENEW has focused on highlighting the value of grid-scale resources- specifically offshore and onshore wind and small hydropower- and the benefits of transmission investment to deliver renewable energy to load centers in the Northeast. RENEW members own and/or are developing large-scale wind and hydropower facilities in Connecticut and across the Northeast. Others are independent transmission developers with proposals for transmission facilities to connect clean energy resources from around the region to Southern New England.

Today's level of installed renewable energy pales in comparison to the region's wind and solar potential. The recent Massachusetts Clean Energy RFP produced bids for more than 7,000 megawatts of new wind and solar generation. Other recent competitive solicitations reveal onshore wind and solar developers are providing renewable energy at prices that compare favorably to the projected long-term market prices of power and renewable energy certificates.

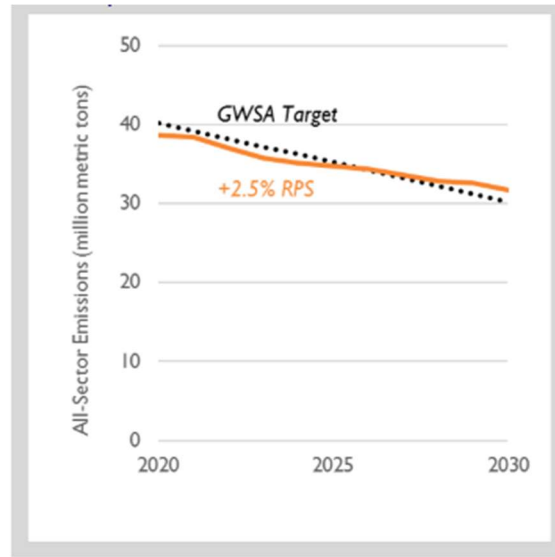
Abundant offshore wind can connect to southeastern Connecticut and provide opportunities for the state to be involved in the construction, maritime and service sector activities related to the construction of offshore wind generation and transmission facilities. The states that go first in establishing this new growth industry will likely capture the largest amount of this market share.

Competitive clean energy procurements (Public Acts 13-303,15-107 and 17-144) complement the RPS requirements by lowering cost and improving the chances of projects receiving financing. The greater revenue certainty of contracts from reduced investor exposure to commodity market price risk increases the chances of projects getting financing and at a lower rate. Lower financing costs and the competitive nature of the law's procurement lowers consumer costs.

Rhode Island Governor Raimondo recently directed her state's utility to issue a procurement for up to 400 megawatts of RPS Class I resources and small hydropower by this summer. The largest renewable energy proposals- up to 1,200 megawatts in size and including new transmission- from the completed Massachusetts RFP are still available to bid into a new RFP but are too large for smaller Rhode Island's needs. The Connecticut Department of Energy and Environmental Protection has statutory authority remaining to procure over 1,200 megawatts of Class I RPS resources. RENEW recommends Connecticut join Rhode Island in its summer RFP to increase the size to enable the largest projects to become eligible. Greater competition can lead to lower prices.

II. Moving from 2 Percent to 2.5 Percent Annual RPS Increases Will Bring Connecticut Closer to Meeting its Greenhouse Gas Emission Reduction Requirements

According to a recent analysis prepared for Connecticut Fund for the Environment, Consumers for Sensible Energy, RENEW Northeast, and the Sierra Club, 2.5 percent annual increases in the RPS through 2030 will bring Connecticut closer to meeting statutory required greenhouse gas emission requirements using a line drawn between the 2020 and 2050 targets. While even annual RPS increases of 2.5 percent will not guarantee that Connecticut will meet its legally required reductions- the cap would still be predicted to be exceeded in 2028, 2029 and 2030- the 2.5 percent RPS trajectory puts Connecticut closer to its required reductions. So while 2 percent per year annual increases through 2030 are good, 2.5 percent increases are better.



Projection of Connecticut's CO2 Emissions and Compliance with the GWSA.²

2.5 percent annual increases in renewable energy requirements, combined with more action in other sectors, such as the deployment of heat pumps, water heating, and expanded vehicle electrification, will allow Connecticut to meet its GWSA goals. Reducing carbon emissions in the electric sector by expanding the RPS, though, is a necessary first step to ensure that as levels of electrification increase, total emissions go down, not up.

III. RPS Policies Are Needed to Help Small Hydropower Overcome the Same Economic Challenges Faced by Nuclear

Small hydropower facilities are the region's oldest carbon free energy resources. They have many of the same operations and maintenance costs as larger renewable energy facilities but with lower output to spread across the cost. They also face the same economic pressures from today's low wholesale electricity prices. While existing state contracting opportunities might be able to assist legacy hydropower units, the RPS could also provide a way to offset these costs, but now excludes hydropower based on an age limit. RENEW recommends the expanded Class I RPS in this bill be amended to allow for greater inclusion of hydropower under 30 megawatts without regard to vintage.

² Sustainable Energy Advantage and Synapse Energy Economics, *Increasing the Connecticut Renewable Portfolio Standard* (September 25, 2017), http://www.synapse-energy.com/sites/default/files/Increasing-the-Connecticut-Renewable-Portfolio-Standard-17-070_0.pdf

IV. Siting Law Could Increase Cost to Connecticut to Meet Higher RPS Requirements

If Connecticut is going to meet increased Class I RPS requirements using a significant component of the most cost-effective form of renewable energy development in the state- utility-scale solar- the siting laws must be better aligned to facilitate utility-scale solar development. RENEW believes that the measures on the siting of utility-scale solar energy projects on farmland in Public Act 17-218 are harming ratepayers by making it significantly harder to deploy utility-scale solar. It will also discourage the use of utility-scale solar projects on farmland as an alternative revenue stream for farmers or on lands no longer economically viable for farming.

The power given to the Department of Agriculture (DOA) in Public Act 17-218 singles out utility-scale solar development and allows DOA to impose a permitting process on utility-scale solar intended for large fossil fueled power plants. DOA effectively can “veto” any solar project- even non-farmland ones- and require it face the “certificate” process designed for large fossil-fueled power plants. To achieve Connecticut’s environmental, renewable and economic development goals, a solar energy project should not face a riskier and costlier permitting process compared to a project to be fueled by natural gas or oil, or a permanent housing or commercial development. The added costs and risks will needlessly increase Connecticut’s electric rates; jeopardize stable and predictable increases in municipal tax revenue; weaken alternative revenue streams and property rights for farmers; and hinder the state’s ability to meet renewable energy goals.

It could ultimately cause renewable energy developers to look outside of Connecticut to states not subjecting large-solar projects to these risks. According to the Solar Foundation’s most recent jobs census, one out of every fifty new jobs added in the United States in 2016 was created by the solar industry.³ A January 2017 report by U.S. Department of Energy found that solar makes up the largest segment of Connecticut’s electric power generation workforce, with 2,927 jobs.⁴

RENEW strongly recommends the Energy & Technology Committee incorporate into legislation this session the attached language to restore an appropriate balance between Connecticut’s renewable energy and agriculture policies.

Thank you for the opportunity to offer these comments.

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³ The Solar Foundation, Solar Jobs Census 2016, available at <https://solarstates.org/#state/connecticut/counties/solar-jobs/2016>.

⁴ U.S. Department of Energy, 2017 US Energy and Jobs Report, State Charts at 38, available at https://energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report%20State%20Charts%20_0.pdf.

Sec. 3. Subsection (a) of section 16-50k of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2017*):

(a) Except as provided in subsection (b) of section 16-50z, no person shall exercise any right of eminent domain in contemplation of, commence the preparation of the site for, commence the construction or supplying of a facility, or commence any modification of a facility, that may, as determined by the council, have a substantial adverse environmental effect in the state without having first obtained a certificate of environmental compatibility and public need, hereinafter referred to as a "certificate", issued with respect to such facility or modification by the council. Certificates shall not be required for (1) fuel cells built within the state with a generating capacity of two hundred fifty kilowatts or less, or (2) fuel cells built out of state with a generating capacity of ten kilowatts or less. Any facility with respect to which a certificate is required shall thereafter be built, maintained and operated in conformity with such certificate and any terms, limitations or conditions contained therein. Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling (A) the construction of a facility solely for the purpose of generating electricity, other than an electric generating facility that uses nuclear materials or coal as fuel, at a site where an electric generating facility operated prior to July 1, 2004, and (B) the construction or location of any fuel cell, unless the council finds a substantial adverse environmental effect, or of any customer-side distributed resources project or facility or grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as: [such] (i) Such project meets air and water quality standards of the Department of Energy and Environmental Protection, (ii) the council does not find a substantial adverse environmental effect, and (iii) for a solar photovoltaic facility with a capacity of two or more megawatts, to be located on prime farmland or forestland, excluding any such facility that was selected by the Department of Energy and Environmental Protection in any solicitation issued prior to July 1, 2017, pursuant to section 16a-3f, 16a-3g or 16a-3j, ~~the Department of Agriculture represents, in writing, to the council does not find that such project will not materially permanently affect the status of such land as prime farmland or the Department of Energy and Environmental Protection represents, in writing, to the council that such project will not materially affect the status of such land as core forest. In making such determinations, the council may also consider a mitigation plan offered by a project developer.~~ In conducting an evaluation of a project for purposes of subparagraph (B)(iii) of this subsection, the Departments of Agriculture and Energy and Environmental Protection may consult with the United States Department of Agriculture and soil and water conservation districts.

Sec. 4. Subsection (a) of section 16-50p of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2017*):

(a) (1) In a certification proceeding, the council shall render a decision upon the record either granting or denying the application as filed, or granting it upon such terms, conditions, limitations or modifications of the construction or operation of the facility as the council may deem appropriate.

(2) The council's decision shall be rendered in accordance with the following:

(A) Not later than twelve months after the filing of an application for a facility described in subdivision (1) or (2) of subsection (a) of section 16-50i or subdivision (4) of said subsection (a) if the application was incorporated in an application concerning a facility described in subdivision (1) of said subsection (a); and

(B) Not later than one hundred eighty days after the filing of an application for a facility described in subdivisions (3) to (6), inclusive, of subsection (a) of section 16-50i, provided the council may extend such period by not more than one hundred eighty days with the consent of the applicant.

(3) The council shall file, with its order, an opinion stating in full its reasons for the decision. The council shall not grant a certificate, either as proposed or as modified by the council, unless it shall find and determine:

(A) Except as provided in subsection (b) or (c) of this section, a public need for the facility and the basis of the need;

(B) The nature of the probable environmental impact of the facility alone and cumulatively with other existing facilities, including a specification of every significant adverse effect, including, but not limited to, (i) electromagnetic fields that, whether alone or cumulatively with other effects, impact on, and conflict with the policies of the state concerning the natural environment, (ii) ecological balance, (iii) public health and safety, (iv) scenic, historic and recreational values, (v) agriculture prime farmland resource, (vi) forests and parks, (vii) air and water purity, and (viii) fish, aquaculture and wildlife;