TESTIMONY

By

The ALLIANCE FOR CLEAN ENERGY - NEW YORK
Anne Reynolds
Executive Director

Senate Standing Committee on Environmental Conservation
Public Hearing to Discuss the Climate and Community Protection Act

February 12, 2019
On behalf of the Board of Directors and member companies and organizations of the Alliance for Clean Energy New York (ACE NY), listed below, we are grateful for the opportunity to share our comments regarding the Climate and Community Protection Act (S.2992/A.3876) (“CCPA”).

I want to thank the Committee for your leadership on climate change and the transition to a clean energy economy, as represented by the CCPA.

ACE NY member companies are engaged in renewable electricity generation and electric system efficiency. As such, these comments are going to largely focus on the electricity portions of the CCPA, and less on the economy-wide greenhouse gas emissions (GHG) reduction targets – i.e. for building heating or transportation – although we do agree that reducing GHG emissions from all sources is important. It is important to note, though, that the most promising and commercially-ready route to reducing emissions from transportation and heating is to electrify these sectors. If you do that – use electric vehicles and high-efficiency electric heating – you do need more clean and renewable electricity generation. So, though we focus on renewable electricity, progress in this sector is absolutely critical to progress in the other two.

Modern and clean renewable electricity technologies—like wind and solar power—lie firmly at the intersection of progressive policy and economic progress. When we transition to a clean energy economy, we will reduce air pollution, create in-state jobs, keep more energy dollars in-state, use electricity more efficiently, modernize the grid and the power plant fleet, and address climate change.

My main message for you today is: To make any real and meaningful progress combating climate change, we need to build many more renewable energy projects, and soon. The strongest legislation on climate change would be a bill that establishes an ambitious renewable electricity mandate in law; directs the State in how and when to implement that mandate; and includes policies that help projects – like wind and solar – get built and begin to start generating pollution-free power in the near-term.
Second, I want to highlight that New York State is the only state that has had a renewable energy standard for electricity that is not established in law, and has for twelve years. Both the CCPA and the governor’s Climate Leadership Act (Part X of the Executive Budget) would establish the renewable electricity standard in law, which would be excellent progress.

The main difference between the CCPA and the Governor’s proposal, in terms of the electricity portion, is that Part X includes 70% renewable electricity by 2030 and the CCPA includes 50% by 2030. Since we have the 50% standard now (via Commission Order), and because it is a more aggressive target, we enthusiastically support the 70% by 2030 mandate.

*How could NYS get to 70% by 2030?*

In developing the 50% Clean Energy Standard (CES), New York did a CES Cost Study that predicted that the amount of new renewable generation needed to achieve 50% was 29.2 million megawatt-hours (MWhr) in 2030. This would amount to very roughly 22% of 2030 electricity demand, while the renewables we already have – assuming we could keep them – would provide roughly 28%. Energy efficiency would significantly reduce the total electricity demand that is otherwise projected for 2030. Since that time, the Public Service Commission has established accelerated energy efficiency (EE) goals. Including those EE goals in this legislation would significantly strengthen the state’s energy efficiency program. Further, keeping the renewable energy projects we have, and keeping their clean energy in-state, remains a priority. Senate Bill 23, sponsored by Senator Parker, would achieve that goal.

The CES Cost Study predicted that half of the 29.2 million MWhr would come from new land-based wind, 15% from utility-scale solar, 9% from hydropower, 4% from bio sources, 14% from offshore wind, and 7% from imports. This is just a modelled prediction; the actual results will depend on how the costs come down for different technologies over time and how these technologies and individual proposed projects compete with each other to win contracts from NYSERDA.
(In the table below, the alternative scenarios are for illustrative purposes only, and do NOT represent modelled results based on cost differences. Instead, in each alternative the offshore wind or hydro MW were added, and the other technologies were reduced proportionally)

<table>
<thead>
<tr>
<th>Technology</th>
<th>I. 2030 Cost Study Projected Mix (%) of Tier 1</th>
<th>II. Cost Study w/ 2400 MW OSW (%)</th>
<th>III. Cost Study w/ 2400 MW OSW &amp; 1000 MW Hydro Imports</th>
<th>MW of each Technology in Scenario I</th>
<th>MW of each Technology in Scenario III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Based Wind</td>
<td>50%</td>
<td>35%</td>
<td>25%</td>
<td>4,483</td>
<td>1,828</td>
</tr>
<tr>
<td>Utility Scale Solar</td>
<td>15%</td>
<td>11%</td>
<td>9%</td>
<td>3,855</td>
<td>1,905</td>
</tr>
<tr>
<td>Hydropower</td>
<td>9%</td>
<td>7%</td>
<td>5%</td>
<td>600</td>
<td>245</td>
</tr>
<tr>
<td>Bioenergy/Other</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
<td>189</td>
<td>77</td>
</tr>
<tr>
<td>Offshore Wind</td>
<td>14%</td>
<td>40%</td>
<td>41%</td>
<td>1,000</td>
<td>2,400</td>
</tr>
<tr>
<td>Imports</td>
<td>7%</td>
<td>5%</td>
<td>19%</td>
<td>516</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Since that time, the Commission adopted an offshore wind tier of the CES of 2,400 MW, and more recently (in the 2019 State of the State speech), the governor announced a proposed goal of 9,000 MW of offshore wind. To put this aggressive goal in context, 9,000 MW of offshore wind would roughly provide 26% of total 2030 electricity demand, assuming a capacity factor of 44% for offshore wind. The increment above the current goal of 2,400 MW is roughly 19% of 2030 electricity demand. Thus, the ambitious 9,000 goal – when it is achieved – would be nearly (but not quite) enough to get New York State from 50% renewables to 70% renewables. (Note that the Governor’s proposal was 70% by 2030, but the offshore wind proposal was 9,000 MW by 2035.)

<p>| The Estimated Generation Produced by Specified Megawatts of Offshore Wind |
|-----------------------------|------------------|---------------------------|</p>
<table>
<thead>
<tr>
<th>(MW)</th>
<th>MWhr</th>
<th>% of Total 2030 Electricity Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,400</td>
<td>9,636,000</td>
<td>7%</td>
</tr>
<tr>
<td>6,600</td>
<td>26,499,000</td>
<td>19%</td>
</tr>
<tr>
<td>9,000</td>
<td>36,135,000</td>
<td>26%</td>
</tr>
</tbody>
</table>

Assumed a 2030 Load of 140,992,000 MWhrs and an Offshore Wind capacity factor of 44%.
I present this data to make two points. First, reaching 70% by 2030 is aggressive, ambitious, and achievable. It will depend on the State’s continued commitment to procurement of renewable energy and the developers’ ability to get projects through the permitting, siting, and interconnection processes, which are all lengthy and comprehensive.

Second, getting to 70% requires that New York achieve a lot of everything. This means aggressive energy efficiency; a flourishing of distributed renewables and storage; keeping the renewables we have; and building a lot more new renewables. And the renewables need to be diverse: land-based wind, offshore wind, solar, hydropower, fuel cells, and sustainable biomass. We note that the CCPA and the Climate Leadership Act (CLA) have slightly different definitions of eligible technologies. We strongly support keeping the definition consistent with what the Commission has established for the Clean Energy Standard, which would include wind, solar, and hydro smaller than 50 MW, plus fuel cells, and also biomass subject to strict sustainability criteria. These are all clean and efficient technologies that can help New York reach its goals and in the interest of consistency and stability, the legislation should adhere to the CES eligibility criteria.

As the Committee discusses legislation to address global warming, we urge you to consider elements that will strengthen the near-term investment climate in New York. While the member companies and organizations of ACE NY welcome a standard that goes beyond 50% renewable electricity, specific actions that help to get clean energy projects financed and constructed in the next three to five years are needed. This will build the momentum necessary to achieve first 50% and then 70% and 100% renewable electricity. Without a near-term acceleration in project construction, New York is in danger of not meeting its ambitious goals.

We respectfully ask you to consider including the following ten elements in any global warming legislation to improve the near-term commercial opportunities for renewables developers and energy efficiency companies and expand clean energy jobs in New York State:
1. **Establish these nation-leading clean energy goals in law and establish a clear pathway for achievement.** To ensure that these policies remain intact and administered over time, codify 70% renewable electricity by 2030 and establish specific ramp rates that will achieve this requirement (i.e. percentage goals in 2020, 2022, 2024, etc.). For the 2019-2030 time period, establish annual statutory obligation percentages for all electricity suppliers (“load serving entities”) and annual NYSERDA procurement amounts in law. Also, codify the post-2030 goal of 100% carbon-free electricity, using the renewable technologies that are currently eligible in the Renewable Energy Standard.

2. **Streamline the siting¹ of renewable energy projects.** The siting of grid-connected wind and solar projects is governed by Article 10 of the Public Service Law, which was originally designed for fossil fuel power plants. It is unnecessarily complicated and time-consuming when applied to renewable energy projects and is slowing construction at a time it desperately needs to accelerate. In fact, only one project has been certified since the law was passed (The Power Act of 2011), and it is unlikely that the next project will be certified before an additional six months. We suggest two simple changes to Article 10. First, establish a 6-month review period for renewable energy projects after an application is deemed compliant. (Current law specifies a 12-month review for all new generators, renewable or not, but 6 months for repowering.) Second, add a statement in the decision-making section that the Siting Board must consider greenhouse gas emissions reductions goals and/or renewable energy mandates in its determination of whether to waive local law. Further, and perhaps more importantly, we urge you to support the appropriation in the Governor’s Proposed Budget for additional resources and the hiring of eight professionals for the Department of Public Service (DPS) to augment the small staff now responsible for a long, long queue of project reviews. Many of the delays in the Article 10 process can be solved with process improvements and additional staff resources.

3. **Provide NYSERDA flexibility in procurement mechanisms.** Legislation should authorize NYSERDA to procure renewable energy in a variety of ways in furtherance of the Clean Energy Standard goals. (Neither the CCPA or the CLA do this). NYSERDA

---

¹ Here, siting refers to the State and local permitting requirements. The New York Independent System Operator (NYISO) interconnection process, which is not under the jurisdiction of New York, is also overly time-consuming and expensive, and is significantly slowing down renewable energy development.
should be authorized to procure renewable energy through (1) the competitive procurement of RECs under 20 year fixed REC contracts (as is used now for Tier 1 of the CES); (2) through the competitive procurement of RECs under 20 or 25 year indexed, variable REC contracts (as is about to be used for offshore wind procurement); and (3) through standard offers for RECs under long-term fixed REC contracts. This flexibility could help accelerate procurement and construction.

4. **Require utilities to sign Power Purchase Agreements.** To augment and strengthen the Clean Energy Standard (CES), and to reduce ratepayer costs, a legislative initiative could require utilities to buy a small percentage of the electricity that they supply through long-term contracts to purchase the power and its renewable attributes. These Power Purchase Agreements (PPAs) are used in nearly all other states that have renewable energy standards; states that are competing with New York for investment. The percentage could start low, at 1% of a utility’s load for example, and ramp up to 10% over time. The amount that a utility buys through PPAs would serve to meet a portion of their CES obligation and would complement the NYSERDA procurement program. The PPAs would not be revised unless there was full consent of the contracting parties and the Commission. Contracts entered into by utilities and approved by the Commission would be deemed prudent by the Commission.

5. **Solve the “Tier 2” issue.** New York’s current Clean Energy Standard does not address support for any pre-2015 renewable energy facilities. If these facilities either close down or export their Renewable Energy Certificates (RECs) to New England, achieving New

---

2 During the Public Service Commission Clean Energy Standard proceeding, there have been three NYS papers that have determined or projected that Power Purchase Agreements (PPAs) would yield ratepayer savings as compared to Renewable Energy Certificates (REC)-only contracts. The [Large Scale Renewables Development, Options Assessment, Final Report](http://www.nysenate.us/p钌ss/legislation/15344) (June 2015), in Section 1.8.1 Economic Modelling Results, states, “New procurement options (Utility-Backed PPAs or Utility-Owned Generation) can significantly reduce the cost of electricity relative to current policy (NYSERDA 20-year REC Contracts).” The [Clean Energy Standard White Paper Cost Study](http://www.nysenate.us/p钌ss/legislation/18813) (April 2016) states at page 40, “Consistent with the analysis presented in the 2015 LSR Options Paper, the greater revenue certainty of PPAs (resulting in reduced investor exposure to commodity market price risk), allows projects to come forward at a lower expected gross program cost than a fixed-price REC approach.” Section 9-Bill Impacts in this same paper concludes on page 97, “The base case impact is forecast at 0.95%. Under 100% PPA procurement this drops to 0.66%; under 100% fixed-REC procurement this is projected at 1.23%.” Most recently, the [Offshore Wind Policy Options Paper](http://www.nysenate.us/p钌ss/legislation/21223), (January 2018), examined seven procurement options. It concluded that PPAs would have lower ratepayer impact than fixed REC contracts, estimating a $1.2B incremental cost (.76% bill impact) for fixed REC contracts versus a $.3B incremental cost (.19% bill impact) for PPAs.
York’s renewable energy targets will be that much harder. To address this policy gap, any legislation should require electricity suppliers to buy RECs from pre-2015 generators, as is required in Senate Bill 23 (S.23/Parker).

6. **Codify New York’s commitment to offshore wind.** New York should be the epicenter of the nascent U.S. offshore wind industry. To ensure that New York realizes the thousands of jobs and billions of dollars in investment related to offshore wind development, we urge the Committee to consider expanding our State’s offshore wind goal to 9,000 MW by 2035. Further, we urge you to support the $200 million in the Governor’s Proposed Executive Budget for port development. This investment is critical to establishing New York as the epicenter of this new American clean energy industry and would send a strong, positive signal to the companies bidding into the NYSERDA offshore wind solicitation. It will help attract supply chain businesses and generate hundreds of jobs now and well into the future.

7. **Codify energy efficiency goals and double down on distributed solar.** To achieve 100% renewable electricity, New York is going to need significant investment in all three market segments: Efficiency, Distributed Renewables, and Grid-connected Renewables. The NYS Public Service Commission recently issued an Order\(^3\) that established a strong new statewide energy efficiency mandate and assigned energy efficiency targets to each of the state’s investor-owned utilities. We urge the Committee to establish this target (185 TBtu) in law as part of your legislation. Furthermore, the successful NY-Sun Program is on target to achieve 3,000 MW of distributed solar by 2023. We encourage you to raise the bar and establish in law an even more aggressive goal of 6,000 MW – enough to power 1 million homes -- as promoted by the Million Solar Strong\(^4\) campaign. The Governor’s proposed 3,000 MW energy storage goal should also be established in law.

8. **Public procurement of 100% renewable electricity.** New York can jumpstart progress towards the 100% clean energy goal by procuring renewable electricity for its own use and providing NYPA the authority to procure renewable energy for cities, towns, and school districts. This would entail a statutory commitment that New York State cover 100% of its

---


\(^4\) To learn more about the Million Solar Strong campaign, please see: [https://www.solarstrongny.org/](https://www.solarstrongny.org/)
electricity demand through the purchase and retirement of RECs. Further, we support NYPA obtaining authority to buy renewable energy for all interested public entities and Community Choice Aggregation programs that request it, as proposed in Part LL of the Governor’s Executive Budget. ACE NY has issued a Memo of Support for this portion of the Executive Budget. NYPA should procure renewable energy rather than develop or own new generation projects itself.

9. Establish incentives for communities that host renewable energy projects. Renewable energy development needs to significantly accelerate in order to meet New York’s ambitious goals and proposed renewable energy projects need to be hosted and welcomed by New York’s municipalities. Your legislation could establish incentives for communities that host renewable energy projects in order to make hosting renewable energy more attractive to local governments and to harmonize State goals. Incentives could take the form of (1) new grants, (2) prioritization in the existing suite of municipal grants administered through the Regional Economic Development Councils, and (3) legislative language that specifies that local tax revenue paid under Payments in Lieu of Taxes (PILOTs) by renewable energy generators does not have to be included in a municipality’s calculation under the 2% property tax cap.

10. Provide incentives to grow the voluntary market. New York should establish incentives for the voluntary purchase of renewables, using grants for non-profits or municipalities (e.g., towns, cities, schools or hospitals) that enter into long-term contracts to buy renewable electricity. Similarly, New York should establish tax credits for for-profit companies that voluntarily buy renewable electricity using long-term contracts for “Made in NY” renewable energy. These tax credits could offset some portion of the premium that companies may need to pay for renewable electricity. The legislation should define “Made in NY” renewable energy and could address confusion about the additionality of voluntary renewable energy purchases.

Senator Kaminsky, thank you for your leadership and that of the Senate Environmental Conservation Committee in exploring the CCPA and holding this hearing. The fact is, New York’s progressive energy and environmental policies are the talk of the nation. And this role could be
further strengthened – and made more permanent – by passing legislation. Legislation to address climate change could set the stage for aggressive action that will help ensure that these goals become lasting requirements; that renewable energy projects get built according to a rigorous schedule that meets those requirements; and that thousands of New Yorkers are put to work in the process.

The Alliance for Clean Energy New York appreciates your consideration of the ten potential legislative elements outlined above, and we hope they are included in the legislation so that it stimulates clean energy investment in New York. We stand ready to help you accomplish these recommendations, and other aspects of the Community and Climate Protection Act, including job training and transition initiatives, education programs, and other activities.

I welcome any questions you or your staff may have regarding our proposals. I can be reached at 518-432-1405, 518-248-4556 (mobile), or areynolds@aceny.org.

Sincerely,

Anne Reynolds
Executive Director, Alliance for Clean Energy New York
2019 Members of the Alliance for Clean Energy – New York

AES
American Wind Energy Association
Apex Clean Energy
Association for Energy Affordability, Inc.
AvanGrid Renewables
Azure Mt. Power Company
Barclay Damon, LLP
Bloom Energy Corporation
Borrego Solar Systems, Inc.
BQ Energy, LLC
Brookfield BRP Canada Corporation
Bryan Cave Leighton Paisner LLP
Calpine
CLEAResult Consulting, Inc.
Cogen Power Technologies/Bette & Cring, LLC
Community Energy
ConnectGen LLC
Conti Solar
Cypress Creek
Direct Energy
Doosan Fuel Cell America, Inc.
Dynamic Energy
Ecology & Environment
EDF Renewables
EDP Renewables North America, LLC
EDR (Environmental Design & Research)
EnBW North America Inc.
Enel Green Power North America, Inc.
Environmental Advocates of New York
EONY Generation Limited
Equinor
First Solar
Geronimo Energy
Greenberg Traurig, LLP
Harris Beach, PLLC
Hecate Energy
Hudson Energy Development
Innogy SE
Invenergy
Jordan Energy
Key Capture Energy
Kruger Energy Inc.
Lime Energy
Natural Resources Defense Council
New York League of Conservation Voters
NextEra Energy Resources, LLC
Nixon Peabody, LLP
OpenEE
Ørsted Wind Power North America LLC
Pace Energy & Climate Center
Pro Wind Inc.
Read & Laniado
ReEnergy Holdings, LLC
Sealed
Siemens Gamesa
Sierra Club
Stantec
Terra-Gen
Tesla
The Nature Conservancy - New York
The Roffe Group P.C.
The Standard Hydrogen Corporation
The West Firm, PLLC
TRC Solutions, Inc.
UL
Union of Concerned Scientists
Valcour Wind
Vote Solar
Young/Sommer, LLC