

DATE:March 8, 2021TO:Members, Power Generation Advisory Panel of the Climate Action Council
Via Electronic Filing, PowerGenPanel@dps.ny.govFROM:Anne Reynolds & Kyle Rabin, The Alliance for Clean Energy New York

RE: 21 Policy Recommendations from ACE NY

The Alliance for Clean Energy New York (ACE NY) appreciates the work of the Power Generation Advisory Panel. The combined expertise on your panel will help New York State achieve an unprecedented transformation of its electricity grid and develop and implement strategies to attain zero-emission electricity by 2040, as required by the Climate Leadership and Community Protection Act (CLCPA), while still maintaining electric system safety and reliability.

In New York, a great deal has been accomplished on the clean energy front. These ACE NY policy recommendations are focused on renewable energy technologies and how New York can overcome remaining barriers to the development of wind, solar, hydro, storage, fuel cells, transmission, and other renewable energy projects. While we recognize that the CLCPA directs New York to essentially phaseout fossil fuel use, and that the Power Generation Advisory Panel will need to put forward recommendations encompassing that directive, these ACE NY recommendations focus on the promotion of renewables rather than the phase-out of fossil fuel.

Similarly, our recommendations do not focus on the imperative to maintain system reliability, although we acknowledge its unquestioned importance. The unprecedented, severe winter storm that wreaked havoc with the Texas power grid in February will rightly serve as a reminder to all states of the need to be proactive and aggressive in protecting electrical systems. A wide range of measures can improve the resilience of electricity assets and systems to climate change impacts., such as physical and structural improvements to "harden" the system components as well as planning and modifying operations to build resilience. These types of important measures are described in <u>Climate Change and the Electricity Sector: Guide for Climate Change Resilience Planning</u> (U.S. DOE, 2016).

We have also submitted detailed policy recommendations to the Energy Efficiency and Housing Advisory Panel and the Transportation Advisory Panel. Our twenty-one recommendations herein are organized in the following categories:

- Recommendations to Achieve 70% Renewable Electricity by 2030
- Cost-Effectiveness and Equity Recommendations
- Recommendations to Prepare for 100% Emissions-Free Electricity by 2040

ACE NY is a member-based organization of clean energy companies and environmental organizations whose mission is to promote the use of clean, renewable electricity technologies and energy efficiency in New York State, in order to increase energy diversity and security, boost economic development, improve public health, and reduce air pollution. Our member companies are engaged in land-based and offshore wind power, grid-scale and distributed solar, hydroelectric power, fuel cells and electric vehicles, energy efficiency, and sustainable biomass. The New York Offshore Wind Alliance is a project of ACE NY. The clean energy industry is creating both construction and long-term jobs in New York, with job growth at roughly twice the rate of other industries. The right policies will allow these companies to continue to invest in New York, compete for contracts, contribute to New York's economic recovery, and help New York achieve its goals for clean energy and climate action.

Recommendations to Achieve 70 Percent Renewable Electricity by 2030

Without question, the most important task is to build renewable energy projects. To achieve the 70% mandate, New York needs to push a significant pipeline of projects into the construction phase and overcome any barriers to project development. In the near-term, New York's clear focus should be on getting enough renewable energy projects built to reach 70% by 2030. The following are some priorities related to this goal:

- 1. Implement More Efficient Project Review and Permitting: We congratulate New York and the Office of Renewable Energy Siting (ORES) on their timely finalization of the <u>new 94-c siting</u> regulations before the April 3, 2021 deadline required in law. The new 94-c process should be more uniform and predictable for all stakeholders than the Article 10 process. The new siting regulations will help ensure that the permitting process delivers more projects into construction and operation sooner than under the previous regulatory process in Article 10. In addition to finalizing the implementing regulations, the successful staffing and launch of the ORES is key to improving the permitting process; ORES will need staff to process applications. To further this effort, ACE NY also suggests that the Power Generation Advisory Panel recommend that New York State establish a *non-binding* metric for ORES of megawatts of renewable energy to permit each year, based on what is required to reach 70%. We also suggest that the Article VII permitting process be comprehensively evaluated and streamlined, to ensure that offshore wind projects can connect to the onshore transmission grid in a timely and cost-effective manner.
- 2. Maximize Procurement of Renewable Energy: New York should continue procurement on an aggressive schedule of at least 4,500 gigawatt hours/year, 2021 thru 2026. For developers of wind, solar, hydro, and renewable fuel cell projects, the most critical element is a clear and certain market demand. The recent Commission Order's directive for NYSERDA to enter into contracts for Tier 1 renewables (4,500 gigawatt-hours/year per solicitation) and offshore wind (700 1,000 megawatts/year) creates a strong market in New York and should attract the private investment New York needs to get an adequate number of projects under development. New York should continue with its steady procurement strategy to ensure continued momentum and investment with regularly scheduled annual requests for proposals (RFPs).
- 3. Proceed with Strategic Transmission Investments: As described in <u>Building Clean Energy in</u> <u>NY: The Case for Transmission Investments</u>, transmission is clearly a climate action issue. New York has recently taken critical steps to accelerate transmission planning and investment using the

CLCPA goals as a planning lens, and we applaud these efforts. Strategic efforts are needed by New York to accelerate transmission buildout. With respect to advanced transmission technologies, with robust investments and wise policy, New York (and the U.S.) can become a global leader in designing, developing, and using transmission technologies into the next decade and beyond – while increasing energy security. We urge New York, and specifically the Public Service Commission, to continue this work by:

- Expediting approval of Phase I projects identified by utilities in Case 20-E-0197;
- Expediting further review of Phase 2 projects to identify the most cost-effective ones that will facilitate renewable energy development, allow for comparison with potential bulk system improvements, and result in the approval of a suite of Phase 2 projects by the end of 2021;
- Pursuing Renewable Energy Zones in transmission investment as suggested in the *Initial Report on the New York Power Grid Study*, and also pursue those as Phase 2 projects;
- Identifying/declaring public policy transmission needs under the FERC Order 1000 process currently underway for both offshore wind and Upstate wind and solar so that the private sector can propose transmission solutions to the NYISO;
- Streamlining the public policy transmission planning process to yield results on an expedited timeline;
- Continuing to assertively examine local distribution and transmission needs, and bulk transmission system needs, that will arise from the CLCPA mandates, including both renewables buildout and the closure of gas-fired power plants;
- Continuing to have NYPA assist in high priority transmission system investments;
- Streamlining the Article VII transmission siting process; and
- Once new offshore Wind Energy Areas are established by the federal government, and CES Tier 4 projects are selected and their interconnection points are known, reevaluating the issue of grid needs to achieve the 9,000 MW of offshore wind and the cost and benefits of an offshore transmission meshed versus radial system.
- 4. Implement standardized taxation of renewable energy projects: New York should move towards appropriate and fair property taxes for wind and solar projects that are standardized across the state while still recognizing New York's Home Rule approach. Specifically, we believe that State agencies should publish a standard methodology for the assessment of wind and solar projects using a discounted cash flow approach that facilitates meeting New York's aggressive carbon reduction goals, while still leaving municipalities the flexibility to negotiate Payments in Lieu of Taxes (PILOT) agreements. It is important to note that nearly all wind and solar projects in New York are taxed via PILOT agreements, and Part X of the Revenue Bill in the proposed 2021-2022 Executive Budget, which ACE NY supports, would maintain the flexibility for communities to continue to use the PILOT approach. It is also important to note that New York State law includes a specific method for assessing and taxing the oil and gas industries, and so establishing this in law for wind and solar projects is not unprecedented.
- **5.** Engage BOEM on Federal Leasing in the NY Bight and Timely Permitting: The CLCPA established a legally binding commitment to generate 9,000 megawatts of offshore wind by 2035, enough energy to power up to six million homes. Currently, New York State is poised to benefit from five proposed offshore wind projects in federal waters that have or will soon be awarded NYSERDA contracts. Additional projects are needed in order for the state to achieve 9,000

megawatts of offshore wind energy by 2035. However, existing lease areas are not adequate for New York and surrounding states to meet their respective renewable energy goals and targets. BOEM was scheduled to announce new Wind Energy Areas (WEAs) in the New York Bight in early 2019 but that process has been stalled. New York should work with the new Administration in Washington to re-start the designation process in the New York Bight so that new WEAs could be designated by the fall of this year, followed by lease auctions. New lease areas in the NY Bight hold the potential for greater competition, lower bid prices and expanded capacity for future projects off of New York's coastline.

- 6. Accelerate Policies to Invest in Energy Storage. The right policies can help overcome the technical and market barriers to wide-scale deployment of energy storage. Storage can benefit utilities and grid operators by providing more flexible control of the electric grid, improving power quality and availability, and reducing operating expenses. The recently released Initial Report on the New York Power Grid Study (Case 20-E-0197) pointed to a necessary level of storage deployment of 15,000 megawatts (MW), well above the 3,000 MW requirement in the CLCPA. Consequently, ACE NY recommends that New York develop a new and more aggressive storage goal, in law or administratively (in the State Energy Plan, for example), and then develop the necessary policy framework to achieve that level. Our view is that a truly robust investment in storage will definitely require more certainty and clarity on revenue streams for energy storage projects and will likely require the provision of long-term contract opportunities for storage developers, akin to the Clean Energy Standard contracts for renewable energy projects. ACE NY recommends that a specific goal and program to achieve that goal be designed for storage. In addition, ACE NY recommends that the variety of rules for permitting and interconnecting energy storage should be examined to ensure that storage not face double rules and unfair charges. Permitting rules for energy storage should be streamlined and DPS and utilities should reexamine their tariffs on energy storage resources to ensure that they fair and applied fairly.
- 7. Promote the multi-port infrastructure strategy: New York should continue to promote multiport infrastructure investment to support and facilitate the growth of the offshore wind industry in New York. Future offshore wind solicitations should continue to include a multi-port strategy and requirement for offshore wind generators to partner with any of the 11 prequalified New York ports to stage, construct, manufacture key components, or coordinate operations and maintenance activities.
- 8. Improve the interconnection process at the NYISO/Ensuring Class Year takes one year: ACE NY welcomed the NYISO's recent efforts to streamline the Class Year Study component of the interconnection process in pursuit of the goal of a one-year long Class Year Study. Progress was made, but unfortunately the Class Year still took 18 months, likely due in part to the large size of the cohort. Thus, this remains a high priority for renewable energy developers and is a prerequisite for the successful attainment of the State's clean energy goals. The Power Generation Advisory Panel should recommend provisions to streamline and speed up the interconnection process, including the Class Year Process, consistent with all reliability requirements.
- **9.** Establish a New Distributed Solar Target and Program. The CLCPA has a target of 6,000 MW of distributed solar by 2025, a goal that ACE NY supports. But, given the equity, access, grid and local resilience benefits of distributed generation, New York should establish a goal beyond 6,000 MW to be achieved by 2030 or later, and remain committed to the viability and sustainability of the rooftop and community solar segment of the solar industry, and its ability to contribute to

the 70% and 100% mandates. As we write this, the community solar sector, for example, is in a state of great uncertainty. In order to maintain job growth in this sector and to ensure that New York's grid continues to benefit from growth in community solar, New York should send a clear signal regarding its continuing commitment. This could be, for example, in the form of a recalculation and increase in the E-Value in the VDER tariff or it could be through another approach.

10. Maximize Build Ready Sites: ACE NY is supportive of the new Build Ready Program, given its goal to create opportunities for renewable energy project development in niches that have significant barriers or are otherwise not being addressed by the market. We suggest that as the program gains experience, that New York State should continue to develop the program, ideally with stakeholder input, to fully evaluate and capitalize on opportunities. See ACE NY's <u>comments</u> on the Build Ready Program for additional information.

Cost-Effectiveness and Equity Recommendations

New York should continue to make a strong commitment to equity and cost-effectiveness in its policies, programs and goals. This entails making disadvantaged communities a priority for investment, as required by the CLCPA, as well as seeking least-cost measures to protect consumers. It also includes making efforts to provide a just transition for displaced workers; supporting community solar and solar access for all; and achieving the energy efficiency gains that can both reduce electric bills and reduce the cost of other measures, such as electrification. We would like to highlight our support for the following concepts with regard to equity and cost-effectiveness:

- **11.** New York should <u>strive to ensure a voice for consumers and disadvantaged communities</u> by considering the creation of an Equity and EJ Coordinator at DPS and NYSERDA to bring this point of view to decision-making at these agencies, as well as at the NYISO and FERC. New York should authorize intervenor funding for nonprofits and community-based organizations to work in DPS, NYSERDA, and NYISO cases, matters and proceedings.
- 12. As mentioned above, New York State should <u>maintain a continuing commitment to rooftop</u> <u>and community solar</u>, beyond the legal mandate of 6,000 MW, specifically because it allows for broader access, targeted investment in low- and medium-income communities, and renewable project development in urbanized areas. Community solar projects, for example, offer an opportunity for environmental justice (EJ) communities to pursue ownership of clean energy solutions. Therefore, distributed renewable energy should remain a State priority. In pursuit of this priority, New York should also consider issues of geographic equity and access. This strategy will necessarily require specific efforts to overcome the barriers to solar in NYC.
- **13.** New York should <u>fully integrate its economic development goals with clean energy goals.</u> This could include, for example, developing criteria for state economic development funding that also supports CLCPA equity and climate goals. Or, it could include prioritization and support of local community solar projects which have the potential to provide deeper utility bill discounts while offering positive health benefits. Economic development projects supported by the State of New York should be required to include renewable energy and meet stretch goals for energy

efficiency. Grid-scale renewable energy projects should be viewed as economic development projects supported by Industrial Development Agencies (IDAs) and attracting clean energy manufacturers and supply chain businesses to New York should be a high priority to the Empire State Development Authority. New York has a proud history of manufacturing in the power sector and strong university research programs. These assets should be tapped in an effort to attract manufacturing or other supply-chain companies to New York.

- 14. New York should <u>pursue all cost-effective energy efficiency and load flexibility measures</u>, with an emphasis on getting energy efficiency, load flexibility, and distributed energy resources (DERs) into EJ communities. Grid interactive buildings and managed EV charging should be prioritized so that these technologies can be accelerated. The State should consider targeting energy efficiency and load flexibility in those parts of the state that are not meeting health-based air quality standards.
- **15.** New York <u>should strive for methods to protect consumers from the costs of the energy</u> <u>transition</u>, by, for example, increasing financial assistance to help New York's most vulnerable afford their energy bills; by continuing to integrate competition into procurement programs (to get the best price); and avoiding unnecessary costs, such as eliminating buyer side mitigation (BSM) and minimum offer price rules (MOPR) being applied to renewable projects by the Federal Energy Regulatory Commission (FERC). On this last issue, New York should continue to strive to eliminate BSM and MOPR to protect consumers, or re-design the capacity markets to reduce and minimize the impacts to consumers.
- **16.** New York should <u>target energy storage investments to locations with air quality challenges</u>. For example, energy storage projects could help facilitate the phaseout of urban fossil fuel power plants, particularly little-used peaker plants if reliability standards allow. This can simultaneously support several policy goals: improving air quality in vulnerable communities, facilitating additional renewable energy deployment, and building local grid resilience and safety.
- 17. New York should <u>design its suite of programs to also minimize household energy burden</u> <u>under 6% of income</u>. This is important to maintaining energy affordability for low-income utility customers and programs should be continually be evaluated through this affordability lens. (See, The Dept. of Public Service's Low-Income Affordability Program, as established by Case 15-M-0565).

Recommendations to Prepare for 100% emissions-free electricity by 2040

Moving from 70% renewable electricity in 2030 to 100% emissions-free by 2040 will require a continuation of the same suite of policies implemented to reach 70%, plus additional activities as the grid continues to evolve. The recommendations below are actions that New York should commence in the near-term to ensure that we are well positioned to continue that grid evolution past 70%.

18. <u>Explore and Implement Carbon Pricing Policies</u>. There are several options for the design and implementation of carbon pricing policies. In general, carbon pricing policies will provide value by (1) aligning financial incentives with policy goals to facilitate the directionally correct

investments and (2) generating revenue that can be reinvested in policies and programs to achieve policy goals. One threshold question is whether a carbon pricing policy is economy-wide or specific to one sector, such as the electricity sector. Generally speaking, an economy-wide carbon pricing policy would be more comprehensive and therefore preferred. But an economy-wide carbon price might be more challenging, or take longer, to adopt, design, or implement. If a variety of carbon pricing policies were designed that each focus on different sectors, but were sequentially or simultaneously implemented, the same ends could be achieved as an economy-wide carbon price. That is, a carbon price could be implemented in different ways for the electric sector, the transportation sector, and the building sector. For the electric sector, New York State could support a carbon price being integrated into the wholesale electricity market, a policy thoroughly researched and assessed by the New York Independent System Operator (NYISO). ACE NY supports the integration of a carbon price into the NYISO energy market. Capturing the price of carbon pollution in New York's electricity market will allow the state to achieve its ambitious decarbonization goals at least cost to consumers. Carbon pricing can simultaneously improve the efficiency and transparency of the organized wholesale markets See ACE NY's "Building Clean Energy in NY: The Case for Carbon Pricing at the NYISO" white paper for information.

ACE NY would also support an economy-wide carbon price initiative, that is, a policy that would simultaneously integrate a price on carbon into the building/heating sector, the transportation sector, and the electric sector, and we recognize that there are benefits to this more comprehensive approach.

19. <u>Conduct 'Last Percent Analysis'</u>: NYISO modelling of a New York State electric grid that is 100% emissions-free in 2040 identifies the challenge of achieving the final percentage of renewable energy at those limited but critical times of peak demand and low wind and solar generation. The size of this 'last percentage'' will be minimized – although likely not eliminated – by increased transmission capacity at the bulk and local levels; by geographic and technology diversity in the renewables deployed; through demand response and load flexibility; and through extensive deployment and use of energy storage. To plan for 2040, New York and the NYISO should assertively continue this analysis and attempt to identify what the probable percentage is at both likely and optimal levels of transmission, storage, and renewables. The size of this last percentage is also related to cost factors and the degree to which New York would "overbuild" renewables vs. use other technologies.

Further, New York State should assess, research, and define what dispatchable emissions-free resources would be most able to meet this last percentage. This may, for example, identify some small but extremely critical niches to be filled by fuel cells using green hydrogen; methane collection and reuse at sewage treatment plants, food waste composters, or other facilities; use of forestry waste; powering of existing dams; wave or tidal technology; or other clean power generation technologies that are not yet commercialized. In sum, the Last Percentage Analysis has two important and distinct components that should be addressed in parallel: (i) identification of the optimal mix of investments that will minimize the size of this last percentage and (ii) identification of the best dispatchable renewable and emissions-free technologies that can meet this need in 2040 and beyond.

As a component of this Last Percentage Analysis, New York should consider if the definition of renewable energy included in the CLCPA should be revisited. Electricity production from the combustion of both anaerobic digestor gas and sustainable biomass were, prior to the passage of

the CLCPA, eligible for the Clean Energy Standard and its predecessor the Renewable Portfolio Standard. ACE NY understands and respects that with passage of the CLCPA, these combustion technologies are no longer eligible to be counted towards the 70% by 2030 legal mandate, while fuel cell generation using non-fossil fuel resources, such as biogas and biomass, is allowed by the CLCPA. In addition, the CLCPA clearly allows hydrogen produced from renewable energy systems to count as an eligible fuel source for a fuel cell.

Similarly, there is some vagueness in the term "zero-emission" as used in the CLCPA. As part of this Last Percent Analysis, New York can define zero-emission with more granularity, with meaningful stakeholder input. As New York State transitions the electric grid to a fully carbon-free future and takes determined steps to accelerate and expand renewable energy across the state, it is critical to have a clear definition for "zero-emission" electricity. Clarifying this definition will help ensure the state achieves the goals set forth in the CLCPA.

- **20.** Pursue Research on Untapped Renewables and Storage Potential: New York should pursue strategic research regarding untapped renewables and storage potential, including, for example, the types of renewable energy and storage projects that are *not* emerging in New York's competitive procurement programs (such as CES RFPs, NY-Sun, NYPA, or utility programs). One example is the Study of Great Lakes Offshore Wind that the Commission directed NYSERDA to undertake in 2020. Another example would be opportunities for pumped hydro or other energy storage options other than batteries. There also seems to be a market gap for distributed solar on large rooftops (e.g. big box stores or distribution centers). New York should conduct a study that assesses the financial and technical barriers to this type of large commercial rooftop solar energy. A fourth example could be agri-photovoltaics. New York could develop a research or demonstration program to encourage the installation of ground-mounted solar systems compatible with farming. Finally, New York should reevaluate the current 9,000 MW standard and consider increasing the standard if more offshore wind is needed to achieve the 100% emission-free 2040 mandate.
- **21. Maintain the Renewables We Have:** New York recently launched a Competitive Tier 2 Program under the Clean Energy Standard to support renewable energy facilities that were in operation prior to January 1, 2015. This is a move that ACE NY supports. But we do note that the program is temporary. Over time, New York will need to update and refine its policies with respect to existing renewables as their contracts with NYSERDA end, in the interest of ensuring a sustainable and permanent system for maintaining a grid that is 100% emissions-free. Further, if there is not an emerging pipeline of repowering projects for renewables, New York should conduct a potential study & barriers analysis for repowering wind, solar, and hydro projects.