Thank you Chair Lowenthal and all members of the Subcommittee on Energy and Mineral Resources for the honor of the opportunity to present testimony today on the topic of renewable energy.

I work for the Alliance for Clean Energy New York. We are a member-based organization with member companies involved in developing and operating wind power projects, both on land and offshore; solar power facilities of all sizes; and energy storage, sustainable biomass, hydroelectric power, and fuel cell projects. We also have member companies that support energy efficiency efforts, develop transmission projects, and are in the business of electric vehicles; and consultants, supply chain companies, and environmental groups. Our 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 combined industries supported 158,700 jobs in New York State in 2018, primarily in energy efficiency. Prior to COVID, clean energy jobs grew by 8.9% from 2016\(^1\) in New York, and our industries want to continue to create jobs and be part of New York’s economic revitalization in a State, and a Nation, so deeply affected by coronavirus.

Due to the scope of the Subcommittee on Energy and Mineral Resources, I want to focus my remarks today on offshore wind development and the significant economic development possibilities presented by a technology that is relatively new to the United States but quite mature in Europe.

But to first put that in context, I reiterate that ACE NY supports the full range of renewable energy technologies. In order for my state to achieve the aggressive goals in our landmark *Climate Leadership and Community Protection Act*, passed by NY’s Legislature and signed by Governor

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Cuomo in 2019, we need the full range of renewable electricity technologies, as well as energy efficiency. That means investments in building retrofits and efficient lighting and appliances; the construction of rooftop and grid-scale solar; continuing investment in our legacy hydro facilities; new transmission investments and strategic deployment of batteries; and the construction of land-based and offshore wind power. Deployment of all of these technologies can create jobs in both the construction and operation phases. In New York in 2018, Clean energy workers enjoyed wage premiums of 12%–32% for entry-level and mid-range skill levels as compared to other industries. About 70% of clean energy employees received healthcare, retirement, and paid vacation².

Although federal policy interacts with New York’s efforts to transition its electricity landscape in numerous ways, one of the most direct ways is in the leasing of underwater lands for offshore wind development and in the environmental review and permitting of proposed offshore wind projects in federal waters.

New York’s climate law, previously mentioned, requires the development of 9,000 megawatts (MW) of offshore wind by 2035. This will be roughly enough to power 6 million homes. New York has hit the ground running. The Long Island Power Authority signed a contract to buy electricity from a 130 MW project called the South Fork Wind Farm. And another State entity, the New York State Energy Research and Development Authority (NYSERDA) has already signed contracts for two large-scale projects totaling 1,700 MW of generating capacity, or enough to power about a million homes. Those two projects alone will generate $3.2 billion in economic activity, more than 1,600 good paying jobs and some $80 million in port investments.³ Perhaps even more important, these two projects would avoid $700 million in health impacts from burning fossil fuels.

Right now, a second offshore wind solicitation is on the street in New York for up to 2,500 MW of generating capacity and bids are due this fall. This is all good news for job creation in New York and the region.

The Critical Importance of Federal Leasing for Offshore Wind in the New York Bight

Now the bad news. If additional wind energy areas are not made available by the federal government, offshore wind could be stopped in its tracks because New York is not the only state


³ NYSERDA, Offshore Wind Projects, Quick Facts. https://www.nyserda.ny.gov/All-Programs/Programs/Offshore-Wind/Focus-Areas/NY-Offshore-Wind-Projects
committed to this clean, renewable technology. New Jersey has a 7,500 MW goal and Massachusetts, Connecticut and Rhode Island also have aggressive offshore wind targets. Several New England projects are well advanced.

Federal lands are leased for offshore wind development by the Department of the Interior through the Bureau of Ocean Energy Management, or “BOEM”. The existing lease areas simply cannot accommodate the demand in the Northeast, let alone the states of New York and New Jersey.

Therefore, designating new lease areas is critical to allowing this industry to flourish, and we need the federal government to act. The New York Bight – the area off of the Atlantic coastline from roughly Cape May, New Jersey to the eastern tip of Long Island – has been being evaluated by BOEM for several years. BOEM has received extensive input from NYSERDA, the commercial fishing industry and many other stakeholders and has gotten as far as identifying draft “primary” and “secondary” wind energy areas. BOEM was scheduled to finalize the designation by 2019 but that decision appears to be in limbo. The absence of new wind energy areas makes offshore wind transmission planning difficult - if not impossible; hinders competition by not allowing new offshore wind developers to enter the market; and has significant economic consequences, both to states and to the federal government, which I discuss below. This situation can be easily corrected if the Secretary of the Interior moves ahead with the process of designating new WEAs and initiates the leasing process.

As mentioned above, we want the offshore wind industry to become established and grow in New York not only because we want more pollution-free power to feed our State, but because we want the economic development that will come with it. Four organizations (the New York Offshore Wind Alliance, the American Wind Energy Association, the National Ocean Industry Association, and the University of Delaware Special Initiative on Offshore Wind) recently commissioned a study by Wood Mackenzie, an international energy consulting firm, to look at the economic benefits associated with leasing new wind energy areas.

The study specifically examined the economic impact of offshore wind activities as a result of potential BOEM lease auctions in 2020, 2021 and 2022. Based on existing activities and policy assumptions for future offshore wind development, two million acres of federal waters in the New York Bight, as well as California and the Carolinas, could be auctioned for commercial leases as early as this year, as well as in 2021. Such leasing could support 28 GW of offshore wind development and generate $1.2 billion in U.S. Treasury revenue. As a reminder, the last offshore wind auctions of three wind energy areas off the Massachusetts coast netted more than $400 million to the U.S. Treasury. Other auctions for lease areas in the Gulf of Maine and areas in California could happen in 2022 and would generate an additional $500 million in U.S. Treasury
revenue. Significant capital investment would be injected into the U.S. economy to support offshore wind activities. Total investment in the U.S. offshore wind industry would be $17 billion by 2025, $108 billion by 2030 and $166 billion by 2035. From 2022 to 2035, capital investment of $42 billion would go to turbine manufacturers and the supply chain, $107 billion would go to the construction industry, and $8 billion would go to the transportation industry and ports. Annual capital investment for O&M activities would increase to $2.4 billion in 2035. If the assumed BOEM auctions in 2021 and 2022 happen, total full time equivalent (FTE) job creation from the resulting offshore wind activities, including development, construction and operation would be approximately 80,000 jobs annually from 2025 to 2035.

In terms of just the impact of leasing areas in the New York Bight, The Wood Mackenzie Study concludes that it would mean:

- 32,000 annual jobs during the development and construction phase
- 5,800 annual O&M jobs
- $46 Billion in economic investment from 2022-2030
- $828 million to the U.S. Treasury from lease sales

In short, the opportunity we have before us is significant. And it comes at a time when new jobs and additional funds for the U.S. Treasury are sorely needed. Offshore wind companies are ready to invest heavily in this Region and make this new American industry a reality. Our federal colleagues have a unique, once-in-a-generation opportunity to unlock that opportunity. We don’t need legislation or new rulemaking to make this happen. We just need a decision -- a decision that would unlock billions in new investment, thousands of new jobs, and a huge reduction in greenhouse gases and conventional pollutants.

**The Imperative for Timely Environmental Review and Permitting**

The second federal role I want to mention is environmental review and permitting. It goes without saying that offshore wind projects should and do require a thorough environmental review, be responsibly sited and constructed; and built in a way that protects natural resources. For example, the first commercial-scale offshore wind project to advance in terms of the federal permitting process completed an Environmental Impact Statement (EIS) and then, more recently, a Supplemental Environmental Impact Statement (SEIS). The SEIS focused on the cumulative impacts of all the offshore wind projects that are “reasonably foreseeable.” BOEM’s decision in this first permitting case is critical to the future of this industry. All of the leaseholders included in this cumulative review have voluntarily agreed to 1 by 1 nautical mile spacing to address concerns raise
by both commercial fishermen and the Coast Guard. The U.S. Coast Guard has determined that this type of “standard and uniform grid pattern” would “maximize safe navigation”\(^4\) in the WEA.

I note that BOEM first went through an extensive process when it established the Massachusetts WEAs to minimize conflicts and environmental impacts. Then, the project applicant also went through an extensive process to develop a project that addressed concerns raised by a wide variety of stakeholders.

In sum, BOEM has undergone a careful, thorough, and protective process to first establish the Massachusetts WEA and then review the environmental impacts of the project in that area. We are hopeful that BOEM will complete this review by December and issue a permit for the project that properly balances environmental protection, protections for navigation and fishing, and the opportunity to grow a new industry to supply clean power for our future.

**Conclusion**

The Federal government has a linchpin role in facilitating the growth of a new American industry, offshore wind. The Federal government can and should facilitate the growth of this industry in order to garner funds for the U.S. Treasury and create jobs, as well as allow States to pursue their own approaches to providing electricity and their own approach to tackling climate change. Most critical is the timely designation of additional Wind Energy Areas, especially in the New York Bight; the leasing of these new WEAs; and advancing the permitting process for the first commercial-scale offshore wind project. I would add that it is important to ensure that BOEM has the resources it needs to get the job done; that offshore wind permitting is an excellent candidate for the FAST 41 process to ensure timeliness and transparency in the permitting process; and that Congress could and should establish a national offshore wind permitting goal to keep the agencies on track in its critical permitting role.

Offshore wind has been the focus of my testimony due to the scope of the Subcommittee on Energy and Mineral Resources, but there are other critical pieces to the puzzle of modernizing the U.S. electricity system by fostering innovation of all types; investing in a transmission system that is aging in order to ensure it is safe and reliable far into the future; and facilitating the growth of advanced energy technologies, energy efficiency, and the full range of technologies that can provide homegrown electricity without any air pollution. So far, 2020 has taught us many lessons


as a country, and whether we are focusing on COVID-19 or raging wildfires, one of those lessons is the importance of clean air. With clean, renewable electricity, we can tackle climate change, improve air quality, and power our future.

Thank you so much, again, for the opportunity to speak to you about renewable energy and the opportunity it presents to create both jobs and the electricity we all depend on, without air pollution. I look forward to answering your questions.