STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 18-E-0071 – In the Matter of Offshore Wind Energy

COMMENTS ON THE
DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT
FOR
PROCUREMENT OF OFFSHORE WIND

PROVIDED BY

NEW YORK OFFSHORE WIND ALLIANCE
AND
AMERICAN WIND ENERGY ASSOCIATION

April 9, 2018

I. INTRODUCTION

The New York Offshore Wind Alliance ("NYOWA") and the American Wind Energy Association ("AWEA") respectfully submit the following comments concerning the Draft Generic Environmental Impact Statement ("DGEIS") for Offshore Wind dated February 2018 and accepted and determined complete by the Public Service Commission (PSC) on February 22, 2018.

NYOWA is a project of the Alliance for Clean Energy New York ("ACE NY") and consists of a broad and diverse coalition, with twenty-eight partner organizations supporting its mission to promote policies that will lead to the development of demand for offshore wind in the Atlantic Ocean off the coast of New York State. NYOWA is guided by a Steering Committee that includes ACE NY, Deepwater Wind, Orsted, Statoil Renewables, the National Wildlife Federation, the Natural Resources Defense Council, and the University of Delaware's Special Initiative On Offshore Wind.

AWEA is a national trade association representing a broad range of entities with a common interest in encouraging the expansion and facilitation of wind energy resources in the United States. AWEA members include wind turbine manufacturers, component suppliers, project developers, project owners and operators, financiers, researchers, renewable energy supporters, utilities, marketers, customers, and their advocates. ACE NY is a regional partner of AWEA.

NYOWA and AWEA strongly support New York State Clean Energy Standard's requirement of 50% renewable electrical generation by 2030 and believes that large-scale offshore wind power is essential to achieving that objective. NYOWA applauds Governor Cuomo's offshore wind energy development goal of 2,400 megawatts ("MW") by 2030 and the procurement of at least 800 MW of offshore wind between two solicitations to be issued in 2018 and 2019. The preparation of the DGEIS for Offshore Wind

Procurement, which incorporates relevant sections of the New York State Offshore Wind Master Plan ("Master Plan") (NYSERDA Report 17-25) is an essential step toward meeting these goals.

II. OFFSHORE WIND BENEFITS

- Economic and Environmental Benefits: There are significant net environmental and economic benefits associated with the development of 2400 MW of offshore wind contributing to New York's electricity grid. Those benefits, as summarized in the DGEIS, include:
- Helping New York meet the Clean Energy Standard of attaining 50% renewable energy electrical generation by 2030[1];
- Cumulative reduction in carbon emissions in New York by more than 5 million short tons of CO2 equivalent by 2030;
- An emissions-reduction benefit of $1.9 billion (NPV) based on the social cost of carbon;
- A reduction of more than 1,800 tons of nitrogen oxides (NOx), 780 tons of sulfur dioxide (SO2) and 180 tons of PM 2.5;
- Total annual health benefits valued at between $73 million and $165 million;
- 5,000 new jobs in manufacturing, installation and operation of offshore wind facilities;
- $6 billion of in-state economic activity.

In addition to the significant economic and environmental benefits outlined in the DGEIS and Offshore Wind Master Plan, the following additional benefits should be noted and recognized.

- Offshore Wind Energy Can Avoid or Defer other New Generation and/or Transmission Capacity, as well as avoid a costly repowering of existing aging power plants on Long Island.
  Offshore wind energy helps address one of the biggest challenges facing the New York electric system: transmission constraints that impair the flow of renewable energy from upstate to downstate New York.

  As noted in Power Trends 2017[2], "The emerging story of the New York electric system is a tale of two grids – a tale of clean energy abundance and surplus generating capacity upstate and fossil fuel dependence and high demand downstate." Offshore wind power presents a unique opportunity to address this imbalance by directly providing energy and capacity into the downstate New York grid, specifically to Zones J and K. Offshore wind power generates higher capacity value than other renewable resources since it provides peak production during the late morning through early evening hours when capacity is needed.

  As an example, the Long Island Power Authority's South Fork RFP sought to "acquire additional local power production and /or load reduction resources in the South Fork to meet projected load growth and thereby defer the need for new transmission," and offshore wind was a key component of the winning bid because of its ability to meet that increased demand while minimizing the transmission investments required.[3]

[1] As noted in Section II.E below, it may not be possible to meet the CES without undertaking the proposed action.
[2] NYISO Power Trends, New York's Electric Grid 2017, page 8, New York Independent System Operator. Online. Available:http://www.nyiso.com/public/webdocs/media_room/publications_presentations/Power_Trends/Power_Trends/2017_Power_Trends.pdf
[3] PSEG Long Island (2016) Utility 2.0 Long Range Plan, 2016 Annual Update. PSEG Long Island December 2016. Online. Available: http://files.constandcontact.com/3b66bb7e501/60eadc99-d5f7-4c9d-94-e0-dea5186c2984.pdf

- Offshore Wind will Promote Fuel Diversity and Winter Gas Price Relief. According to the NYISO[4], natural gas and oil supply 100% of New York City's local power generation and 97% of Long Island's. As a result, downstate New York ratepayers are exposed to uncertainty resulting from the volatility in the gas markets. This can become extreme during winter months when gas pipeline capacity becomes constrained. This problem is compounded by local restrictions on the use of fuel oil and the uncertainty over future natural gas infrastructure expansions. Specifically, there is increasing concern over the gas system's ability to keep pace with the needs for gas utilities serving residential, commercial and industrial customers, while simultaneously meeting the expanding needs of gas-fired power plants, especially during peak demand conditions in winter and summer[5].
  Offshore wind helps address these challenges. Offshore wind will significantly increase the diversity of energy sources in the downstate region by providing 2.4 GW of clean, renewable power by 2030. Further, offshore wind power peaks in output during the coldest winter days, which will reduce demand for natural gas-fired generation, reducing demand for natural gas and the wholesale market price for energy.

- Offshore Wind will promote Geographic Balance and Equity. According to the 2016 Renewable Portfolio Standard (RPS) annual performance report, the RPS has resulted in at least "$2.7 billion of direct investment in New York State" and significant environmental benefits, including 6,700 tons of nitrogen oxides; 12,200 tons of sulfur dioxides; and 6.4 million tons of carbon dioxide in reduced emissions."[6] These benefits have accrued disproportionally upstate according to Con Edison's October 7, 2009 comments in case 03-E-0188, which stated that the RPS has been "successful at facilitating the development of upstate wind…[but has] not enhanced clean energy opportunities in the downstate area." Thus, downstate ratepayers have not received the same emission reduction and price suppression benefits as upstate ratepayers, despite contributing at least half the RPS funds.

- Offshore Wind is Critical to Meeting New York's 50x30 Renewable Energy Standard. According to the PSC Order Establishing a Clean Energy Standard[7], in order to achieve the 50 by 30 goal, the identified Tier 1 need is 29,200,000 megawatt-hours (MWh). Achieving 2,400 MW of offshore wind energy will meet approximately one-third of the GWh necessary to achieve the 50x30 target, with the remaining two-thirds being met by land-based wind, solar, fuel cells, and capacity additions at existing hydropower facilities. This two-thirds is a significant amount relative to the current level of non-hydropower deployment of renewables in New York. Thus, even with significant and accelerated development of these other technologies, it will be difficult if not impossible for New York to achieve 50% renewable electricity generation by 2030 without at least 2.4 GW of offshore wind by that date.

- Offshore Wind will Promote Environmental Justice: The New York metropolitan area is one of two areas in NYS that do not meet Clean Air Act standards for criteria air pollutants. Delivering

[4] NYISO Power Trends 2015, Right Sizing the Grid 2015, New York Independent System Operator. Online. Available: http://www.nyiso.com/public/webdocs/media_room/press_releases/2015/Child_PowerTrends_2015/ptrends2015_FINAL.pdf

[5] NYISO Power Trends 2017

[6] NYSERDA (2016) New York State Renewable Portfolio Standard Annual Performance Report Through December 31, 2015. NYSERDA. March 2016. Online. Available:

[7] Cite CES Order, August 1, 2016

large quantities of offshore wind energy to New York City and Long Island would improve living conditions in environmental justice communities by improving air quality and public health and lowering health care costs, assuming it will displace electricity production in New York City and Long Island from natural gas or dual fuel oil/gas plants, many of which are inefficient and aged.

III. Areas of Potential Environmental Impact: The Draft GEIS identifies environmental areas that could be impacted by the Proposed Action and that must be assessed when future offshore wind projects are undertaken or approved. Potential adverse impacts are wide ranging and varied and include impacts from preconstruction siting studies, to construction related activities to long-range impacts from buried submarine cables and operation and maintenance operations. The Draft GEIS identifies a host of measures that would help avoid, minimize or mitigate potential adverse impacts. The Alliance and AWEA applaud the State's efforts through the Draft GEIS and the New York Offshore Wind Master Plan to explore all facets of offshore wind development so that it can move forward in New York responsibly, at the lowest cost and with the lowest possible environmental impact.

Although the Draft GEIS and Master Plan have identified a wide range of Best Management Practices (BMPs) and mitigation measures that will reduce environmental impacts, New York State acknowledges that this is just the beginning of a process to ensure offshore wind energy is developed responsibly, not only in New York, but in the United States. To that end, NYSERDA has initiated the formation of various technical working groups to improve our understanding of offshore wind and inform how it is developed. One of those groups, the Environmental Technical Working Group, will focus on ways to avoid, minimize and mitigate anticipated impacts on wildlife by developing wildlife BMPs, identifying research needs and coordinating adaptive management measures. Importantly, it will also explore the creation of an Environmental Conservation Fund to address ongoing funding needs associated with offshore wind's impacts.

Finally, although the Alliance and AWEA are unified in our support for the responsible development of offshore wind off New York's coast, individual members of our organizations will invariably be commenting on this Draft GEIS with recommended improvements.

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