



**STATE OF NEW JERSEY**  
**Board of Public Utilities**  
44 South Clinton Avenue, 9<sup>th</sup> Floor  
Post Office Box 350  
Trenton, New Jersey 08625-0350  
[www.nj.gov/bpu/](http://www.nj.gov/bpu/)

CLEAN ENERGY

IN THE MATTER OF THE BOARD OF PUBLIC UTILITIES OFFSHORE WIND SOLICITATION FOR 1,100 MW – EVALUATION OF THE OFFSHORE WIND APPLICATIONS )  
ORDER AUTHORIZING OCEAN WIND’S PETITION FOR AN INCREASE IN TURBINES )  
DOCKET NO. QO18121289 )

**Parties of Record:**

**Ira G. Megdal, Esq.**, Cozen O’Connor, on behalf of Ocean Wind, LLC  
**Stefanie A. Brand, Esq., Director**, New Jersey Division of Rate Counsel

BY THE BOARD:

By this Order, the New Jersey Board of Public Utilities (“Board” or “BPU”) approves a petition (the “Clarification Petition”) submitted by Ocean Wind, LLC (“Ocean Wind”) on May 29, 2020, for authorization to increase the number of turbines previously approved by the Board in its November 13, 2019 Order (the “November 2019 Order”).

**I. BACKGROUND AND PROCEDURAL HISTORY**

The Offshore Wind Economic Development Act (“OWEDA”)<sup>1</sup> and the Board’s rules<sup>2</sup> require that an offshore wind (“OSW”) application submitted under the Board’s September 17, 2018 Solicitation for 1,100 MW<sup>3</sup> include a comprehensive description of the project. The description must include turbine details such as the type, size, and proposed number of turbines and foundations.

In its original application to the Board, Ocean Wind proposed a turbine to be used for the proposed project; however, Ocean Wind also stated in its application that “...Ocean Wind has not made a final WTG [Wind Turbine Generator] selection, and other suppliers are under consideration.” Ocean Wind

<sup>1</sup> N.J.S.A. 48:3-87d(4) to -87.2.

<sup>2</sup> N.J.A.C. 14:8-6.5.

<sup>3</sup> In the Matter of the Opening of Offshore Wind Renewable Energy Certificate (OREC) Application Window for 1,100 Megawatts of Offshore Wind Capacity in Furtherance of Executive Order No. 8, Docket No. QO18080851, Order dated September 17, 2018.

further indicated that one of the other suppliers under consideration was GE, and specifically the GE Haliade-X 12 MW WTG (the “GE 12 MW WTG”).

On June 19, 2019, the Board approved the Ocean Wind 1,100 MW project (“Project”) as a Qualified Offshore Wind Project (the “June 21 Order”).<sup>4</sup> The June 21 Order set an annual OREC allowance of 4,851,489 MWhs per year (the “Annual OREC Allowance”). The Annual OREC Allowance sets the maximum amount of energy approved for ORECs for the Project each year.

On October 2, 2019, Ocean Wind submitted a petition to the Board seeking authorization to utilize the GE 12 MW WTG instead of the originally proposed WTG (the “WTG Petition”). The WTG Petition, including supplemental information submitted by Ocean Wind in response to two rounds of questions from Staff (collectively the “WTG Petition Information”), was considered and approved by the Board on November 13, 2019.<sup>5</sup>

The WTG Petition Information included the number of GE 12 MW WTGs to be installed for the project.

In the Clarification Petition, Ocean Wind seeks clarification that it may increase the number of GE 12 MW WTGs from the number contained in the WTG Petition Information up to the maximum number described in the Clarification Petition. The ultimate number of turbines to be installed will depend on Ocean Wind’s ability to negotiate with GE on successful terms for additional turbines or to implement other methods of optimizing production.

## **II. OCEAN WIND’S CLARIFICATION PETITION**

The Clarification Petition is based on the October 29, 2019 announcement by Ørsted (owner of the Project) that it was running a comprehensive project to upgrade models and processes used to forecast energy production based on extensive production data from Ørsted’s global asset portfolio. This analysis concluded that prior production forecasts underestimated the negative impact of two effects on energy production from wind farms—the blockage effect and the wake effect. The blockage effect arises when the wind slows down as it approaches turbines. The wake effect is the aggregated influence on the energy production of the wind farm, which results from the changes in wind speed caused by the impact of the turbines on each other. As a result of the analysis, Ocean Wind will likely need to increase the number of turbines in order to consistently achieve the Annual OREC Allowance.

## **III. DISCUSSION AND FINDINGS**

The primary goal of the 1,100 MW solicitation was to procure clean offshore wind energy generation, and thereby realize all of the benefits associated with that clean energy generation, including reductions in greenhouse gas emissions to mitigate the impacts of climate change, and to meet the State’s goal of 100% clean energy by 2050, while minimizing the cost to ratepayers, minimizing environmental impacts, and maximizing the economic benefits associated with the new offshore wind

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<sup>4</sup> In the Matter of the Board of Public Utilities Offshore Wind Solicitation for 1,100 MW – Evaluation of the Offshore Wind Applications, Docket No. QO18121289, Order dated June 21, 2019.

<sup>5</sup> In the Matter of the Board of Public Utilities Offshore Wind Solicitation for 1,100 MW – Evaluation of the Offshore Wind Applications, Docket No. QO18121289, Order dated November 13, 2019.

market. An increase to the number of WTGs in order to be in a better position to achieve the Project's Annual OREC Allowance is reasonable in light of the goals of the solicitation.

Increasing the number of WTGs will increase the nameplate capacity of the Project. The Board considers this increase reasonable in order to achieve the goals and benefits stated above. Additionally, the proposed nameplate capacity remains within the range contemplated by the Board in the June 21 Order, as demonstrated by the four options the Board considered which all ranged in size from 1,104 MW to 1,208 MW.

The Board's OREC funding mechanism requires a fixed, pay-for-performance OREC Purchase Price, not subject to modification unless otherwise agreed to by both parties. N.J.A.C. 14:8-6 et seq. Therefore, there will be no increase borne by ratepayers above the rates contained and described in the June 21 Order.

Having thoroughly reviewed the Clarification Petition, and having analyzed the anticipated impacts on the Project, Ocean Wind and ratepayers, the Board **HEREBY FINDS** that an increase in the number of WTGs by Ocean Wind for the Project will better position Ocean Wind to achieve the Project's Annual OREC Allowance originally approved by the Board.

The Board further **HEREBY FINDS** that achieving the Annual OREC Allowance will enable the residents of New Jersey to realize the maximum clean energy benefits expected from the Project.

The Board further **HEREBY FINDS** that even with an increase in the number of WTGs authorized in the November 2019 Order, the number of WTGs to be installed is still well below the number proposed in Ocean Wind's December 2018 Application and will likely result in equivalent, reduced, or a negligible change in environmental impacts compared to Ocean Wind's December 2018 Application, especially during construction, since fewer foundations would require fewer physical disturbances to the ocean floor and fewer array cables to bury in the ocean floor. In addition, fewer turbines allow more flexibility to increase turbine spacing and orientation.

The Board **HEREBY FINDS** that Ocean Wind is still bound by the OREC Pricing Schedule set forth in Attachment A of the June 21 Order approving the Project and all Additional Terms and Conditions listed in Attachment B of the June 21 Order, including, but not limited to, the total Annual OREC Allowance.<sup>6</sup> The Board further **HEREBY FINDS** that Ocean Wind is also subject to N.J.A.C. 14:8-6.6(a)(6), according to which "[a]ll revenues generated by an OSW project shall be returned to ratepayers," all other guarantees and representations in its original application, all supplemental material submitted to the Board in response to this solicitation, and the June 21 Order.

#### **IV. CONCLUSION**

The Board, having carefully reviewed the record in this proceeding, **HEREBY APPROVES** Ocean Wind's Clarification Petition.

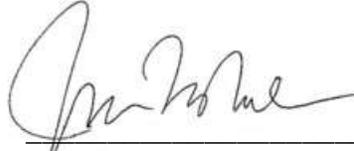
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<sup>6</sup> In the Matter of the Board of Public Utilities Offshore Wind Solicitation for 1,100 MW – Evaluation of the Offshore Wind Applications, Docket No. QO18121289, Order dated June 21, 2019.

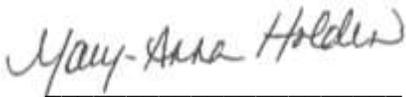
The effective date of this Order is July 25, 2020

DATED: July 15, 2020

BOARD OF PUBLIC UTILITIES  
BY:



JOSEPH L. FIORDALISO  
PRESIDENT



MARY-ANNA HOLDEN  
COMMISSIONER



DIANNE SOLOMON  
COMMISSIONER

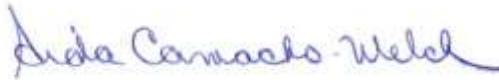


UPENDRA J. CHIVUKULA  
COMMISSIONER



ROBERT M. GORDON  
COMMISSIONER

ATTEST:



AIDA CAMACHO-WELCH  
SECRETARY

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FOR 1,100 MW – EVALUATION OF THE OFFSHORE WIND APPLICATIONS  
BPU DOCKET NO. QO18121289

SERVICE LIST

**Ocean Wind**

Ira G. Megdal, Esq.  
Suite 300 Liberty View  
457 Haddonfield Road  
P.O. Box 5459  
Cherry Hill, NJ 08002  
[imegdal@cozen.com](mailto:imegdal@cozen.com)

Gregory Eisenstark, Esq.  
One Gateway Center, Suite 200  
Newark, NJ 07102

Simon Chignell, Lead Commercial Manager  
Ørsted Offshore Wind  
[simch@orsted.dk](mailto:simch@orsted.dk)

Jens Hieronymus Gravgaard, Project  
Development Director  
Ørsted Offshore Wind  
[jehgr@orsted.com](mailto:jehgr@orsted.com)

**Division of Rate Counsel**

Post Office Box 003  
Trenton, NJ 08625-0003

Stefanie A. Brand, Esq., Director  
[sbrand@rpa.nj.gov](mailto:sbrand@rpa.nj.gov)

Brian Lipman, Esq., Litigation Manager  
[blipman@rpa.nj.gov](mailto:blipman@rpa.nj.gov)

Felicia Thomas-Friel, Esq.  
[ftomas@rpa.nj.gov](mailto:ftomas@rpa.nj.gov)

Henry Ogden, Esq.  
[hogden@rpa.nj.gov](mailto:hogden@rpa.nj.gov)

**Board of Public Utilities**

Post Office Box 350  
Trenton, NJ 08625-0350

Aida Camacho-Welch  
Secretary of the Board  
[board.secretary@bpu.nj.gov](mailto:board.secretary@bpu.nj.gov)

Paul Flanagan, Executive Director  
[paul.flanagan@bpu.nj.gov](mailto:paul.flanagan@bpu.nj.gov)

Abe Silverman, Chief Counsel  
[abe.silverman@bpu.nj.gov](mailto:abe.silverman@bpu.nj.gov)

Kelly Mooij, Director of Clean Energy  
[kelly.mooij@bpu.nj.gov](mailto:kelly.mooij@bpu.nj.gov)

Jim Ferris, Director of New Technology  
[jim.ferris@bpu.nj.gov](mailto:jim.ferris@bpu.nj.gov)

Cynthia Holland, Esq.  
[cynthia.holland@bpu.nj.gov](mailto:cynthia.holland@bpu.nj.gov)

Joe DeLosa  
[joseph.delosa@bpu.nj.gov](mailto:joseph.delosa@bpu.nj.gov)

Andrea Hart, Esq.  
[andrea.hart@bpu.nj.gov](mailto:andrea.hart@bpu.nj.gov)

**Division of Law**

Public Utilities Section  
R.J. Hughes Justice Complex, 7<sup>th</sup> Floor West  
25 Market Street, P.O. Box 112  
Trenton, N.J. 08625

Daren Eppley, Deputy Attorney General  
Section Chief  
[daren.eppley@law.njoag.gov](mailto:daren.eppley@law.njoag.gov)

Pamela L. Owen, Deputy Attorney General  
Assistant Section Chief  
[pamela.owen@law.njoag.gov](mailto:pamela.owen@law.njoag.gov)

Alex Moreau, Deputy Attorney General  
[alex.moreau@law.njoag.gov](mailto:alex.moreau@law.njoag.gov)