

New Jersey Awards its First Offshore Wind Renewable Energy Certificates Solicitation to Ørsted's 1,100 MW Ocean Wind Project

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To: Clients and Colleagues

From: John Dalton, President and Carson Robers, Senior Consultant, Power Advisory LLC

Today the New Jersey Board of Public Utilities (BPU) unanimously approved the state's first Offshore Wind Renewable Energy Certificates (OREC) award towards its 3,500 MW goal to Ørsted US Offshore Wind (Ørsted)'s 1,100 MW Ocean Wind project. Ocean Wind will be located in the federally leased New Jersey Wind Energy Area about 15 miles offshore Atlantic City, NJ. The commercial operation date for Ocean Wind is in 2024.

This award doubles Ørsted's contractual commitments in the early 2020s including the 704 MW Revolution Wind project (between Connecticut and Rhode Island PPAs), 130 MW South Fork Wind Farm (Long Island Power Authority PPA), 12 MW Coastal Virginia Offshore Wind pilot and 120 MW Skipjack Wind Farm (Maryland ORECs). The majority of these projects are in partnership with other parties but still leaves only two currently contracted projects not affiliated with Ørsted, Vineyard Wind's 800 MW project (Massachusetts PPA) and US Wind's 268 MW Maryland Wind Project (Maryland ORECs).



Source: Ørsted US Offshore Wind (Power Advisory annotation)

Ocean Wind is to be developed in partnership with Public Service Enterprise Group (PSEG)'s non-utility affiliates under a memorandum of understanding. PSEG's regulated distribution business, PSE&G, is New Jersey's largest electric and gas utility serving almost two thirds of the state. PSEG also holds an option to be an equity investor in the project. The relationship between the two companies stems from PSEG's partnership as Garden State Offshore Energy in acquiring an OSW lease area with Deepwater Wind, whom was subsequently acquired by Ørsted in November 2018. It also follows the model used by Ørsted offshore Massachusetts, where it has a joint venture with Eversource, Baystate Wind. Similar to PSEG, Eversource has a regulated electric and gas business and considerable local expertise that compliments Ørsted's extensive OSW experience.

New Jersey OSW Background

The Offshore Wind Economic Development Act authorized the New Jersey BPU to establish an OREC program in 2010. After almost eight years of stalled implementation and development under the previous administration, newly sworn in Governor Murphy signed Executive Order #8 (EO8) on January 31, 2018. EO8 directed all New Jersey agencies with responsibilities under the OWEDA to fully implement it to meet a goal of 3,500 MW from OSW by 2030. The timing of this first solicitation sought to maximize the selected project's eligibility for the expiring federal Investment Tax Credit, which is estimated represent over \$300 million in ratepayer savings. Two additional solicitations of 1,200 MW each are scheduled for 2020 and 2022 to reach the overall goal. Identifying these second and third large, near-term procurements is also intended to induce the OSW supply chain to locate in New Jersey.

The OREC structure in New Jersey differs from the other RECs, which provide an additional source of revenue beyond energy and capacity. The BPU's OREC Funding Mechanism is based on the procurement of a bundled energy, environmental attribute and capacity product, with settlement based on realized wholesale energy and capacity prices.

2018 OREC Application Window for 1,100 MW and Awarded Pricing

Applications were received by the BPU from three OSW developers: Atlantic Shores Offshore Wind (an EDF Renewables and Shell New Energies joint venture), Boardwalk Wind (an Equinor project from its New York lease area) and the ultimately successful proponent, Ocean Wind. The primary evaluation criteria the BPU employed to review these proposals included OREC purchase price, economic impact, ratepayer impact, environmental impact, the strength of guarantees for economic impact, and the likelihood of successful commercial operation.

The Ocean Wind project was accepted at a first year OREC price of \$98.10 per MWh. In levelized terms after the forecast energy and capacity revenues are netted out the Ocean Wind OREC cost to ratepayers is estimated by the BPU to be \$46.46/MWh. It is reported that the project is expected to result in net economic benefits of \$1.17 billion to the state.

For comparison the levelized PPA prices for the Revolution Wind project, which has a similar COD in 2024, is \$98.425/MWh in Rhode Island and \$99.50 (200 MW) and \$98.425 (104 MW) in Connecticut. This suggests New Jersey realized a discount relative to the pricing for these smaller OSW projects in New England. There are important differences between the two projects such as contract structure, e.g. Revolution Wind allowed to realize capacity market revenues; wind resource, which is generally superior in New England; project size; level of ITC realization; and market conditions at the time of bidding. To date Massachusetts has realized the most cost-effective OSW project at a nominal average price of \$84.23/MWh (Vineyard Wind).