



**Pre-Qualification Package for
PJM Designated Entity Status from
Orsted N.A. Transmission Holding, LLC**

June 2021

1. Name and address of the entity including a point of contact

Orsted N.A. Transmission Holding, LLC
399 Boylston St.
12th Floor
Boston, MA 02116

Contact:

Eric Wilkinson
Electricity Market Policy Director
Orsted North America, Inc.
399 Boylston St., 12th Floor
Boston, MA 02116

Tel. (413) 387-7197
erwil@Orsted.com

2. Technical and engineering qualifications of the entity or its affiliate, partner, or parent company

Orsted N.A. Transmission Holding LLC, is a wholly-owned subsidiary of Orsted Holdings N.A. Inc. which is in turn a wholly-owned subsidiary of Orsted A/S (Orsted) that, either directly or through its affiliates, develops, constructs, owns, and operates offshore and onshore wind resources, solar farms and offshore transmission facilities. Orsted is among the world's largest renewable energy companies and the global-leader in establishing utility-scale energy projects at sea, including developing more than 28 offshore wind farms and 17 offshore transmission systems. This portfolio includes the world's first offshore wind farm (Vindeby, 1991); America's first offshore wind farm (Block Island); and the world's largest (Hornsea 1). Orsted's current installed offshore wind capacity is 7.6GW with another 2.3GW under construction.

With this extensive portfolio of offshore generation, Orsted has designed and built the associated transmission assets including on- and offshore substations and converter stations. We have also designed, permitted and constructed over one thousand miles of subsea export cables; and more than 1,700 miles of subsea array cables. The subsea export cables are typically in the range of [REDACTED] and the subsea array cables that connect the individual turbines are typically [REDACTED]. Simply put, Orsted has more experience installing offshore wind transmission facilities than any other company in the world.

Orsted was formed in Denmark in 1973 (then doing business as DONG (and acronym for Danish Oil and Natural Gas)). The early focus of DONG was on oil and natural gas extraction in the North Sea. In 2006, DONG merged with 5 electricity generation and transmission companies. In 2017, DONG changed its name to Orsted, and announced an effort to transform the company to a green power

producer and leader in offshore wind. (See Appendix 1 for additional details regarding Orsted's global and North American portfolios.)

3. Demonstrated experience of the entity or its affiliate, partner, or parent company to develop, construct, maintain, and operate transmission facilities. Including a list or other evidence of transmission facilities previously developed regarding construction, maintenance, or operation of transmission facilities both inside and outside of the PJM region

Examples of relevant transmission projects shown here supplement the information provided in response to question 2 above.

Project/Affiliate Company	Description	Status
Walney Extension Transmission Asset	[REDACTED]	Operating
Hornsea 1 Offshore Wind Transmission Asset	[REDACTED]	Operating
Hornsea 2 Offshore Wind Transmission Asset	[REDACTED]	Under Construction
Race Bank Transmission Asset	[REDACTED]	Operating

4. Previous record of the entity or its affiliate, partner, or parent company regarding construction, maintenance, or operation of transmission facilities both inside and outside of the PJM Region

The response to item 2 and 3 above identifies Orsted's experience in developing, constructing, maintaining and operating transmission facilities.

5. Capability of the entity or its affiliate, partner, or parent company to adhere to standardized construction, maintenance and operating practices

One of Orsted's offshore business' key advantages has been its in-house engineering, procurement and contract management organization, a team of more than a thousand specialists in fields that include civil and electrical engineering, sourcing and procurement, and contract management (among many others). By leveraging its scale, experience, and this home-grown talent, Orsted's offshore business has been at the forefront of cost-reduction initiatives for the offshore wind industry. It has fostered growth, diversification, and regionalization of the supplier base, thereby increasing competition. It has driven innovation, for example partnering with industry players and research institutions on an initiative to transform design principles for monopile foundations to make them lighter (and cheaper). And it has been a key participant in efforts to develop industry-wide norms and standards for a broad range of components that go into an offshore wind farm.

Procurement, construction and commissioning

The procurement of all necessary materials and components for our projects is managed in-house, calling upon Orsted's highly experienced procurement division and building on our mature relationships with suppliers. [REDACTED]

Due to Orsted's in-house construction expertise and resource base (over 1,400 employees within the construction division alone) we typically pursue a multi-contracting strategy in which Orsted acts as principal contractor, utilizing specialist contracts for discrete work packages and managing the interfaces ourselves.

Operations and maintenance

Orsted operates the majority of its projects across various global markets and Orsted's preference is to undertake all operations and maintenance activities in-house. This allows Orsted [REDACTED] as well as optimize the provision of operations and maintenance services across the portfolio, using shared infrastructure such as O&M hubs, Service Operations Vessels, helicopters and spare parts registers.

Orsted is constantly innovating its operations and maintenance activities, most recently introducing drones to undertake certain inspections. Orsted is experienced in designing O&M solutions which are capable of mitigating challenges including greater distances from O&M bases, increasing project scale and rougher conditions. Learnings from Orsted's projects currently under development and construction would be applied to the O&M solution for the offshore transmission solution [REDACTED]

Supply chain strategy

[REDACTED]

6. Financial statements of the entity or its affiliate, partner, or parent company for the most recent fiscal quarter, as well as the most recent three fiscal years, or the period of existence of the entity, if shorter, or such other evidence demonstrating an entity's or its affiliate's, partner's, or parent company's current and expected financial capability acceptable to the Office of the Interconnection

Orsted's first quarter 2021 financial report can be found here: [Interim financial report Q1 2021 v51.pub \(globenewswire.com\)](#)

Orsted's financial report for 2020 can be found here: <https://orstedcdn.azureedge.net/-/media/annual2020/annual-report-2020.ashx?la=en&rev=982c3382c2f0459486e16c7098dd5b57&hash=FEFF679F22C92424BB37037436E9C84A>

Orsted's financial report for 2019 can be found here: <https://orstedcdn.azureedge.net/-/media/annual2019/annual-report-2019.ashx?la=en&rev=334895b2e83e4266afb7e97cfa9024f2&hash=BA390050EDD075C9C7E514CF02BB8D6F>

Orsted's financial report for 2018 can be found here: https://orstedcdn.azureedge.net/-/media/annual_2018/orsted_annual_report_2018.ashx?la=en&rev=cec43e106d9a4ca58e0e3ffc8c3841c&hash=8B79943076695EEBF901C27F2A4C28BB

7. Commitment by the entity to execute the Consolidated Transmission Owners Agreement, if the entity becomes a Designated Entity

Orsted N.A. Transmission Holding, LLC commits to becoming a signatory to the Consolidated Transmission Owners Agreement if it becomes a Designated Entity in the PJM Region. Orsted N.A. Transmission Holding, LLC is prepared to take all necessary steps to ensure future transmission development is consistent and compliant with all state and federal law.

8. Evidence demonstrating the ability of the entity or its affiliate, partner, or parent company to address and timely remedy failure of facilities

As noted above, Orsted is the largest developer of offshore wind generation in the world. We have extensive experience building, operating and maintaining the related offshore transmission assets as well.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

9. Description of the experience of the entity or its affiliate, partner, or parent company in acquiring rights of way

Orsted is actively developing 5 offshore wind projects on the east coast (more detail on these projects can be found in Appendix 1). The following is a summary of our current efforts to obtain the necessary rights of way to bring this power to customers.

Revolution Wind: [REDACTED]

Southfork Wind: [REDACTED]

Sunrise Wind: [REDACTED]

Ocean Wind: [REDACTED]
[REDACTED]
[REDACTED]

Skipjack Wind: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Costal Virginia Offshore Wind: Dominion obtained the rights of way for this project.

- 10. Other supporting information that the Office of Interconnection requires to make the pre-qualification determinations consistent with this Operating Agreement, Schedule 6, section 1.5.8(a).

Innovation is key for Orsted. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

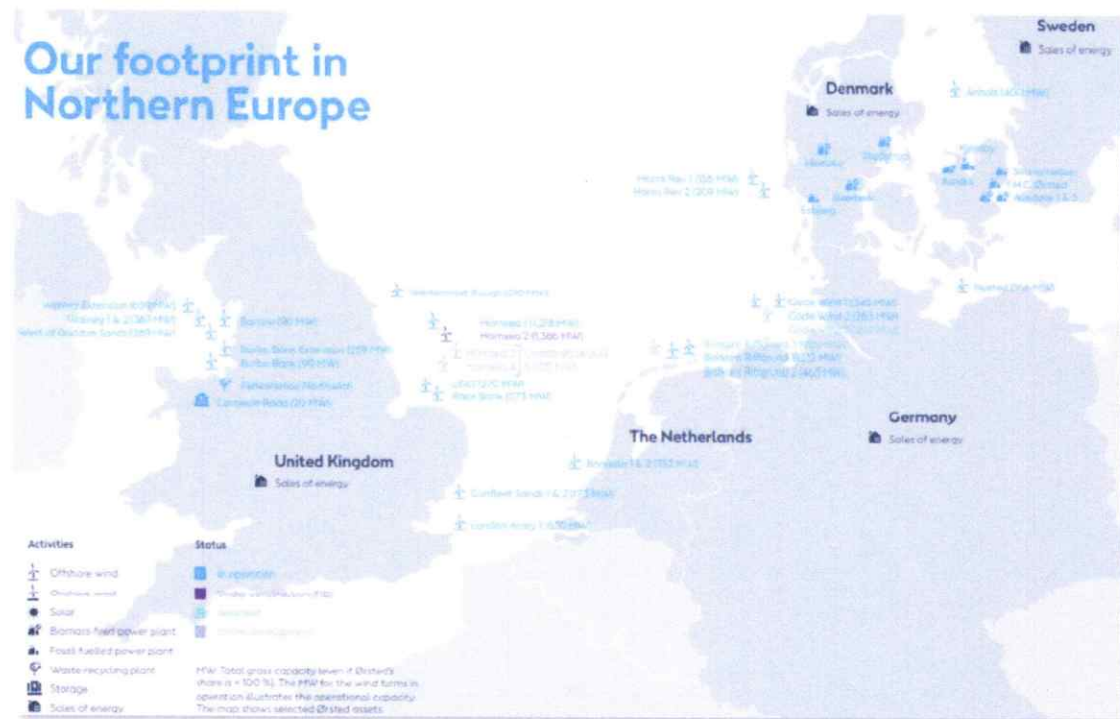
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]


Orsted strives to find innovative solutions to all of our generation and transmission projects.

Appendix 1: Orsted's portfolio



A closer look at Orsted North American Inc.'s offshore wind projects and related transmission:
Operational:

Block Island Wind Farm
America's first offshore wind farm



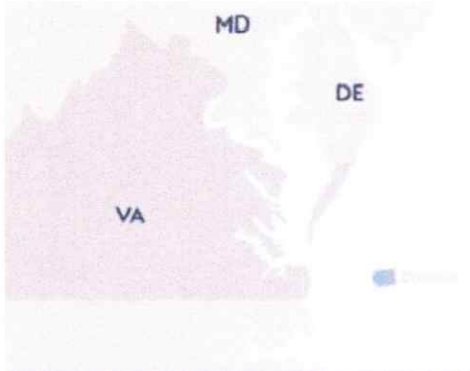
The infographic features a blue background on the left with three white icons: a wind turbine, a house, and a sun. To the right is a photograph of five offshore wind turbines in the ocean under a blue sky.

- 30MW project
- 17,000 homes
- First in the nation

The 30 MW, 5-turbine project began commercial operations in December 2016.

Transmission cable information: approximately [REDACTED] of submarine export cable, plus submarine array cables.

Coastal Virginia Offshore Wind (CVOW)
EPC contract



The map shows the coastline of Virginia (VA), Maryland (MD), and Delaware (DE). A small blue rectangle indicates the location of the CVOW project in the Atlantic Ocean off the coast of Virginia.

Project overview

- Orsted completed work on the Coastal Virginia Offshore Wind (CVOW) project for Dominion Energy in 2020
- 12MW demonstration project – enough to power 3,000 homes
- Located in a BOEM research lease held by the Department of Mines, Minerals and Energy approximately 27 miles from the City of Virginia Beach
- The two turbines are the first ever to be installed in federal waters

Transmission cable information: approximately [REDACTED] of submarine export cable, plus submarine array cables.

Under development¹ in PJM:

Ocean Wind Awarded



Project overview

- Ocean Wind is a 75/25 JV with PSEG
- 1,100 MW – one of the largest offshore wind farms in the U.S. to date
- 15 miles off the coast of Southern New Jersey to minimize visual impacts
- Will power over half a million NJ homes
- Commercial operations expected by the end of 2024

Transmission cable information: Approximately [REDACTED] of submarine export cable, plus submarine array cables.

Skipjack Wind Farm Awarded



Project overview

- 19 miles off the coast of Delaware
- Awarded 120 MW ORECs by State of Maryland
- Clean energy will be delivered to the Delmarva peninsula at a new onshore substation
- Will power over 35,000 homes in the Delmarva region
- Commercial operations expected by the second half of 2026

Transmission cable information: approximately [REDACTED] of submarine export cable, plus submarine array cables.

¹ Note: Orsted's projects that are currently under development are projects that have been awarded state-sponsored contracts. They are in various stages of design and permitting, and the details of the exact generation and transmission elements are subject to change.

Under development outside of PJM:

Revolution Wind Awarded

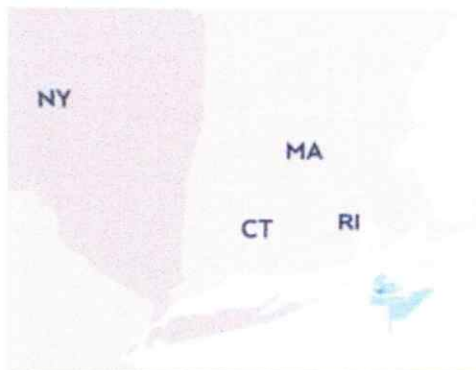


Project overview

- 50/50 JV with Eversource
- Three power contracts to date
 - CT 200MW - awarded in 2018
 - RI 400MW - awarded in 2018
 - CT 104MW - awarded in 2019
- Will power over 350,000 CT and RI homes
- Construction expected to start as early as 2023

Transmission cable information: approximately [REDACTED] of submarine export cable, plus submarine array cables.

South Fork Wind Awarded



Project overview

- 50/50 JV with Eversource
- Approximately 132 MW
- 35 miles east of Montauk Point
- Will power 70,000 Long Island homes
- The South Fork Export Cable will deliver power to the substation located off Cove Hollow Rd in the Town of East Hampton
- Commercial operations expected 2023

Transmission cable information: approximately [REDACTED] submarine export cable, plus submarine array cables

Sunrise Wind Awarded



Project overview

- 50/50 JV with Eversource
- Approximately 924 MW
- 30 miles east of Montauk Point
- Will power nearly 600,000 homes
- The Sunrise Export Cable will deliver power to the Holbrook substation in the Town of Brookhaven
- Commercial operations expected as early as 2024

Transmission cable information: approximately [REDACTED] submarine export cable plus submarine array cables.