

RevWind Exhibit 1

Application

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

In re Revolution Wind, LLC
(Revolution Wind Project)

Docket No.

**APPLICATION OF
REVOLUTION WIND, LLC
FOR LICENSE TO CONSTRUCT AND ALTER
MAJOR ENERGY FACILITIES**

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December 30, 2020

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INTRODUCTION

Revolution Wind, LLC (“Revolution Wind” or “Applicant”) submits this application to the Energy Facility Siting Board (the “Board” or “EFSB”) for a license to construct and alter major energy facilities within the State of Rhode Island, pursuant to the applicable provisions of Rhode Island General Laws §§ 42-98-1, et seq. and the EFSB Rules of Practice and Procedure, as amended (“EFSB Rules”). Revolution Wind plans to construct and operate an offshore wind farm that will deliver approximately 704 megawatts of renewable energy to Rhode Island and Connecticut (the “Revolution Wind Project”). The Revolution Wind Project will add a substantial new source of renewable wind energy for Rhode Island and Connecticut that will support the region’s energy goals and policies for a transition to renewable energy resources, and it also will provide significant economic and societal benefits to the community.

The wind turbine generators and offshore substation for the Revolution Wind Project will be constructed in federal waters on the outer continental shelf. The power generated by the Revolution Wind Project will be brought to shore and interconnected to the electric transmission system in Rhode Island. This application seeks approval from the EFSB for the facilities associated with the Revolution Wind Project specifically within the State of Rhode Island. The Applicant requests that the Board issue a license to construct and alter the following facilities of the Revolution Wind Project:

- Construction of the Revolution Wind Export Cable-Rhode Island (“RWEC-RI”), which consists of two new 23-mile submarine export cables co-located in a single corridor within Rhode Island State waters running from the federal waters to the Onshore Transmission Cable, including two transition joint bays;
- Construction of the Onshore Transmission Cable, which consists of two new underground, 1-mile 275-kV, high voltage alternating current transmission lines in a single duct bank between the Quonset Business Park Landing Location¹ and the new Onshore Substation;
- Construction of the Onshore Substation, located proximate to the existing Davisville Substation, which is owned and operated by The Narragansett Electric Company d/b/a National Grid (“TNEC”);
- Construction of two new underground, 519-foot (“ft”) long, 115-kV, high voltage transmission lines between the new Onshore Substation and the Interconnection Facility;
- Expansion of the 115kV side of TNEC’s Davisville Substation to a 115-kV six-breaker ring bus configuration (the “Interconnection Facility”); and

¹ Capitalized terms in this application document not otherwise defined within this application shall have the same meaning as set forth in the Rhode Island Energy Facility Siting Board Environmental Report; Revolution Wind Project; North Kingstown, Rhode Island (December 2020)) (the “Environmental Report”).

- Reconfiguration of 1,340 ft of the existing overhead, 115-kV, high voltage transmission lines to loop into the 115-kV six-breaker ring bus within the Interconnection Facility and the Davisville Substation.²

Applicant is filing herewith and incorporates herein an environmental report on the Revolution Wind Project ("Rhode Island Energy Facility Siting Board Environmental Report; Revolution Wind Project; North Kingstown, Rhode Island (December 2020)) (the "Environmental Report") in accordance with the procedures established by the Board.³ This application addresses each of the required elements set forth in § 1.6(B) of the EFSB Rules.

- 1. The exact legal name of the applicant, if the applicant is a corporation, trust, association or other organized group, the State or territory under the laws of which the applicant was created or organized, the location of applicant's principal place of business, and the names of all states where the applicant is authorized to do business.**

The Applicant is:

Revolution Wind, LLC (formerly known as DWW Rev I, LLC), a 50/50 joint venture partnership between Orsted North America Inc. and Eversource Investment LLC. Revolution Wind, LLC is organized under the laws of the State of Delaware.

Principal place of business:

56 Exchange Terrace, Suite 300,
Providence, RI 02903

Revolution Wind is in the process of obtaining authorization to do business in Rhode Island.

² After construction, TNEC will take ownership of the Interconnection Facility and the reconfigured overhead transmission lines.

³ See *In re AES/Riverside, Inc.*, Docket No. SB-88-1, Preliminary Decision and Order, pp. 12-14 (Order No. 8, March 13, 1989).

2. The name, title and post office address of one person to whom correspondence or communication in regard to the application is to be addressed.

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and

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3. Identification of the proposed owner(s) of the facility, including identification of all affiliates of such proposed owners, as such term is defined in R.I.G.L. § 39-3-27.

Revolution Wind, LLC is the proposed owner of the Revolution Wind Project facilities, except for the Interconnection Facility and the reconfigured overhead transmission lines within the Interconnection Facility.

As defined in R.I. Gen. Laws § 39-3-27, the affiliates of Revolution Wind, LLC are:

- Orsted North America, Inc.;
- Eversource Investment LLC;
- DWW MARI Holdings, LLC;
- North East Offshore, LLC;

- Orsted US East Coast Offshore Wind Holdco, LLC;
- Eversource Holdco Corporation;
- Eversource Investment Service Company LLC; and
- Orsted Wind Power North America LLC

Once constructed, the proposed owner of the Interconnection Facility and the reconfigured overhead transmission lines within the Interconnection Facility is The Narragansett Electric Company, a Rhode Island chartered public utility, with its principal place of business at:

280 Melrose Street
Providence, RI 02907

The affiliates of The Narragansett Electric Company include its parent, National Grid USA and the National Grid (US) Holdings LTD companies (all subsidiaries of National Grid plc). The corporate relationships among the National Grid (US) Holdings LTD companies are shown on Exhibit 1, attached. A listing of non-US affiliates is available upon request.

- 4. A detailed description of the proposed facility, including its function and operating characteristics, and complete plans as to all structures, including where applicable, underground construction, transmission facilities, cooling systems, pollution control systems and fuel storage facilities associated with the proposed facility.**

The Revolution Wind Project is described in detail in § 4 of the Environmental Report.

- 5. Site plan for each proposed location for the facility.**

Project site plans are contained in Appendix A of the Environmental Report.⁴

- 6. Total land area involved.**

The Revolution Wind Project Area consists of a total of 751.4 acres (“ac”), including 730.0 ac of offshore, undersea land area, and 21.4 ac of onshore land area.

The RWEC-RI will traverse approximately 23 miles of undersea land area in Rhode Island State waters within an approximate 1,312-ft wide submarine Right-Of-Way (“ROW”), approximately 730 ac, inclusive of the 4.6 acres at the Landfall Work Area.

⁴ Certain of the site plans included in Appendix A to the Environmental Report consist of critical energy infrastructure information (“CEII”), for which Revolution Wind seeks confidential treatment and requests that the Board exclude from the public docket. Accordingly, Revolution Wind is providing both a confidential version of Appendix A to the Environmental Report, to be disclosed only to the Board, and a redacted public version. Revolution Wind has filed a Motion for Protective Treatment of Confidential Information seeking this protection contemporaneous with this application.

The Onshore Transmission Cables will be jointed with the RWEC-RI at the Landfall Work Area at Quonset Point, North Kingstown, Rhode Island. The Landfall Work Area is approximately 3.1 ac. At the Landfall Work Area, the Onshore Transmission Cable and Landfall Cable will require operational easements of approximately 1.3 ac. Construction of the approximately one mile long Onshore Transmission Cable will result in up to 3 ac of temporary ground disturbance.

The Onshore Substation will occupy an operational footprint measuring up to 4 ac . Additionally, the Onshore Substation will include a compacted gravel driveway, stormwater management features, and associated landscaped or managed vegetated areas totaling up to 7.1 ac inclusive of the up to 4 ac operational footprint of the facility.

The Onshore Substation will connect to the Interconnection Facility with two 115-kV underground transmission cables that are up to approximately 519-ft long in a 40-ft wide ROW, approximately 0.5 ac.

The Interconnection Facility will occupy an operational footprint measuring up to 1.4 ac. Additionally, the Interconnection Facility will include an asphalt paved driveway, stormwater management features, and associated landscaped or managed vegetated areas totaling up to 4.0 ac inclusive of the up to 1.6 ac operational footprint of the facility.

The Interconnection Facility will connect to the Davisville Substation with two 115-kV overhead transmission circuits totaling approximately 744 ft in length. The Revolution Wind Project will also rebuild an approximately 122-ft segment of the existing 115-kV Davisville Transmission tap lines. The two circuits will be combined on double circuit structures with a total of approximately 1,340 ft in length in a 120 ft wide ROW, approximately 3.7 ac.

7. Project cost.

Due to the competitive nature of offshore wind solicitations, the Revolution Wind Project costs are confidential and sensitive. Revolution Wind has included them in Appendix C of the Environmental Report.⁵

⁵ Revolution Wind seeks confidential treatment of this cost information and requests that the Board exclude this information from the public docket. Accordingly, Revolution Wind is providing both a confidential version of Appendix C to the Environmental Report, to be disclosed only to the Board, and a redacted public version. Revolution Wind has filed a Motion for Protective Treatment of Confidential Information seeking this protection contemporaneous with this application.

8. Proposed dates for beginning of construction, completion of construction and commencement of service.

The Revolution Wind Project construction schedule is contained in § 4.8.3 of the Environmental Report. Revolution Wind anticipates commencing construction in Fall 2022 and having the facilities in service by as early as Winter 2023.

9. Where applicable, estimated number of facility employees.

The Revolution Wind Project is expected to result in more than 3,000 estimated direct, indirect and induced jobs in Rhode Island during construction, and more than 200 direct, indirect and induced jobs during its operation. A more detailed discussion of the economic impact of the Revolution Wind Project is set forth in §§ 2.6, 7.2, and 8.12 of the Environmental Report.

10. Proposed financing for construction and operation of the facility.

Revolution Wind will be balance-sheet financed by the Orsted and Eversource joint venture throughout all phases of the Revolution Wind Project, including operation.

11. Where applicable, required support facilities, e.g., road, gas, electric, water, telephone and an analysis of the availability of the facilities and/or resources to the project.

Revolution Wind plans to provide many of the resources necessary for the construction of the Revolution Wind Project and does not anticipate that it will require any specific support facilities. Revolution Wind does anticipate that there will be some impacts on the local area in support of the Revolution Wind Project, including short-term population increases and traffic impacts. The full description of these impacts is set forth in the Environmental Report at §§ 8.12.1 and 8.16, respectively. The Revolution Wind Project also will involve the use of ports for support, and Revolution Wind's collaboration with those ports and port authorities is discussed in Table 4-11 and § 8 of the Environmental Report.

12. A detailed description and analysis of the impact, including cumulative impact for facilities other than transmission lines, of the proposed facility on the physical and social environment on and off site, together with a detailed description of all environmental characteristics of the proposed site and a summary of all studies prepared and relied upon in connection therewith. In the case of transmission facilities, such description and analysis shall include a review of the current independent scientific research pertaining to electromagnetic fields (EMF) and shall provide data on the anticipated levels of EMF exposure and potential health risks associated with this exposure.

The environmental characteristics of the Revolution Wind Project are described in §§ 6 (Natural Environment) and 7 (Social Environment) of the Environmental Report, and the

impacts of the Revolution Wind Project on these environments are described in § 8 of the Environmental Report. Data regarding the current and anticipated levels of EMF are presented in § 8.19 of the Environmental Report. A review of current independent scientific research pertaining to electromagnetic fields is contained in the report entitled "Extremely Low Frequency Electric and Magnetic Fields and Health- Review and Update of the Current Status 2018-2020" prepared by Exponent, Inc. (Appendix F to the Environmental Report, referred to as the "Exponent Report"). The studies relied upon for analysis of the impact, in addition to the Environmental Report, are listed in the Bibliography at § 11 of the Environmental Report.

13. All studies and forecasts on which the applicant intends to rely regarding the need for the proposed facility, under the statewide master construction plan submitted annually including all information, data, methodology and assumptions on which such studies and forecasts are based.

Revolution Wind developed its Revolution Wind Project in direct response to the expressed needs of the States of Rhode Island and Connecticut to increase the renewable energy load serving each state, consistent with statutory requirements for renewable energy procurement.⁶

Additionally, Revolution Wind significantly advances Rhode Island's renewable energy directives set forth in the State energy plan – Energy 2035 – which calls for Rhode Island to “increase sector fuel diversity, produce net economic benefits, and reduce greenhouse gas emissions by 45 percent by the year 2035” in part “through support for state and federal offshore wind projects.” Energy 2035 at 2. The Project also contributes approximately 400 MW of renewable energy toward Rhode Island's ambitious goal of procuring 1,000 MW of renewable energy by 2020 and converting Rhode Island to 100% renewable energy by 2030. Moreover, the Revolution Wind Project advances the State of Rhode Island's needs under the Resilient Rhode Island Act to reduce greenhouse gas emissions to eighty percent (80%) below 1990 levels by the year 2050.

The Revolution Wind Project also will improve energy system reliability and state and regional energy security. The Revolution Wind Project will enhance the economic competitiveness of the region by reducing energy costs, which will attract additional investment in the region – leading to new jobs and economic growth. Finally, by accelerating the transition to a renewable energy future that reduces greenhouse gas emissions, the Revolution Wind Project will support the sustainability of the natural environment and improve the quality of life in the region.

Additional detail on how the Revolution Wind Project meets the need for Rhode Island and the region's need for the type of energy it will produce is set forth in § 3 of the Environmental Report.

⁶ See R.I. Gen. Laws § 39-31-1 *et. seq.*, Conn. Gen. Stat. §§ 16a-3h and 16a-3m.

- 14. Complete detail as to the estimated construction costs of the proposed facility, the projected maintenance and operation costs, the estimated unit cost of energy to be produced by the proposed facility, where applicable, and the expected methods of financing the facility. For transmission lines, the applicant shall also provide estimated costs to the community such as safety and public health issues, storm damage and power outages, and estimated costs to businesses and homeowners due to power outages.**

The estimated construction cost of the Revolution Wind Project and the projected operation and maintenance costs are discussed in Appendix C of the Environmental Report.

Financing methods are discussed in item 10, above.

Safety and public health issues are discussed in §§ 4.6 and 8.18 of the Environmental Report.

The effect of the Revolution Wind Project on service and the costs to the community are discussed in § 8 of the Environmental Report.

The unit cost of the energy the Revolution Wind Project will generate is established by the Power Purchase Agreements approved by the Rhode Island Public Utilities Commission and the Connecticut Public Utilities Regulatory Authority, which are identified more specifically in § 3 of the Environmental Report.

- 15. A complete life cycle management plan for the proposed facility, including measures for protecting the public health and safety and the environment during the facility's operations and plans for the handling and disposal of wastes from the facility, at the end of its useful life.**

Measures for protecting the public health, safety and the environment during operation of the facilities are discussed in §§ 4.6 and 8.18 of the Environmental Report.

Plans for the handling and disposal of wastes during construction of the facilities are discussed in §§ 4.5, 8.13, and 9.2 of the Environmental Report.

At the end of the Revolution Wind Project's operational life, it is anticipated that the Project will be decommissioned in accordance with a detailed decommissioning plan that will be developed in compliance with applicable laws, regulations, and Best Management Practices at that time. All facilities will need to be removed to a depth of 15 ft (4.6 m) below the mudline, unless otherwise authorized by the Bureau of Ocean Energy Management ("BOEM").⁷ Care will be taken to handle waste in a hierarchy that prefers re-use or recycling and leaves waste disposal as the last option.

Revolution Wind will develop a final decommissioning and removal plan for the

⁷ See 30 CFR § 585.910(a)

Revolution Wind Project that complies with all relevant permitting requirements. This plan will account for changing circumstances during the operational phase of the Revolution Wind Project and will reflect new discoveries, particularly in the areas of marine environment, technological change, and any relevant amended legislation.

- 16. A study of alternatives to the proposed facility, including alternatives as to energy sources, methods of energy production and transmission and sites for the facility, together with reasons for the applicant's rejection of such alternatives. The study shall include estimates of facility costs and unit energy costs of each alternative considered.**

Alternatives to the proposed facilities in this application are discussed in § 5 of the Environmental Report, together with reasons for rejecting the alternatives.

Cost estimates are not provided for alternatives rejected for non-economic reasons. An estimate of the cost for an underground alternative is contained in § 5 of the Environmental Report. For the Revolution Wind Project, unit energy costs are set by the Power Purchase Agreements, as explained in section 14, above, and the alternatives considered did not impact unit energy costs.

- 17. Identification of Federal agencies which may exercise licensing authority over any aspect of the facility.**

As outlined in § 10 of the Environmental Report, the following federal agencies have licensing authority over the Revolution Wind Project:

- Bureau of Ocean Energy Management
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Coast Guard
- Federal Aviation Administration
- National Marine Fisheries Service

Please also see the response to item 20, below.

- 18. Identification of state and local governmental agencies which may exercise licensing authority over any aspect of the facility or which could exercise licensing authority over any aspect of the facility absent the Act.**

As outlined in § 10 of the Environmental Report, the following state and local agencies have licensing authority over the Revolution Wind Project:

- Energy Facility Siting Board
- Rhode Island Coastal Resources Management Council
- Rhode Island Department of Environmental Management
- Quonset Development Corporation

- Town of North Kingstown

Please also see the response to item 20, below.

19. Identification of foreign governmental agencies which must issue licenses that may affect any aspect of the facility.

There are no foreign licenses required for the Revolution Wind Project.

20. All pertinent information regarding filings for licenses made with federal, state, local and foreign governmental agencies including the nature of the license sought, copies of the applicable statutes or regulations and copies of all documents filed in compliance with the National Environmental Policy Act, the date of filing and the expected date of decision.

Revolution Wind has prepared and submitted a Construction and Operations Plan (“COP”) to BOEM for review.⁸ The COP sets forth the detailed descriptions for the construction and operation of all proposed offshore and onshore facilities and the detailed analyses of potential environmental and socioeconomic impacts that will support BOEM’s review of the Revolution Wind Project under the National Environmental Policy Act (“NEPA”). The applicable statutes and regulations, and the COP, are voluminous and will be provided to the EFSB upon request.⁹

Additionally, Revolution Wind will make the following applications for licensing and permitting for the Revolution Wind Project, as described in § 11 of the Environmental Report, each of which Revolution Wind expects to file in the second quarter of 2021 and to receive a decision in late 2022:

AGENCY	PERMITS/AUTHORIZATIONS
RI Coastal Resources Management Council (“CRMC”)	Federal Consistency Certification Category B Assent Freshwater Wetlands Permit
Rhode Island Department of Environmental Management (“RIDEM”)	Water Quality Authorization/Certification (including Dredge approval)

⁸ Revolution Wind made its initial submission to BOEM on March 13, 2020 and submitted a revised COP to BOEM on October 30, 2020.

⁹ BOEM’s review of the Revolution Wind Project’s COP is currently in progress and the document is not yet available for review by the public or other agencies. The COP will become available for review by the public and other agencies upon BOEM’s issuance of their Notice of Intent to prepare an Environmental Impact Statement and review the Project under NEPA (“NOI”). Revolution Wind does not have an expected date on which it expects to receive the NOI, but will update the EFSB once it receives further information from BOEM.

AGENCY	PERMITS/AUTHORIZATIONS
Quonset Development Corporation (“QDC”)	Development Plan Review for Onshore Substation and Interconnection Facility Utility Permit for portions of the Onshore Transmission Cable
Town of North Kingstown	Zoning review Special use permits Site plan review Building permits Street opening permits Easements
United States Coast Guard	Private Aids to Navigation Permit
United States Environmental Protection Agency	Air quality certification
United States Army Corps of Engineers	Wetlands permit
Federal Aviation Administration	Determination of No Hazard to Air Navigation
National Marine Fisheries Service	Consultation If necessary, Incidental Take Authorization

For the State filings, the CRMC submissions, the CRMC and RIDEM authorizations, as well as the building permits, street opening permits, and easements to be obtained from the Town of North Kingstown are outside EFSB jurisdiction and will be obtained separately. The QDC and other Town of North Kingstown permissions are pre-empted by the EFSB and subsumed by the EFSB’s licensing authority. The applicable statutes or regulations for each of these agencies are voluminous. Revolution Wind will provide copies of any particular statutes and regulations the EFSB seeks to review upon request.

CONCLUSION

Revolution Wind's application and the Environmental Report, which is filed herewith and incorporated herein, demonstrate that the Revolution Wind Project meets the requirements set forth in the EFSA for approval of its proposal to construct and alter major energy facilities. Specifically, the Revolution Wind Project is:

- necessary to meet the needs of the region for the renewable wind energy it will produce;
- cost justified in consideration of the needs it will fulfill; and
- an enhancement to the socio-economic fabric of the State, which will not cause unacceptable harm to the environment.

Revolution Wind, LLC, therefore, respectfully requests that the Energy Facility Siting Board grant to it, pursuant to R.I.G.L. § 42 -98-1, *et seq.*, a license to construct the Revolution Wind Project.

Respectfully submitted,
Revolution Wind, LLC,
By its attorneys,



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