

**STATE OF RHODE ISLAND
PUBLIC UTILITIES COMMISSION**

**IN RE: THE ISSUANCE OF AN ADVISORY OPINION :
TO THE ENERGY FACILITY SITING BOARD : DOCKET NO. 5151
REGARDING REVOLUTION WIND, LLC’S :
APPLICATION TO CONSTRUCT AND ALTER :
MAJOR ENERGY FACILITIES :**

ADVISORY OPINION

I. Overview

On December 30, 2020, Revolution Wind, LLC¹ (Revolution Wind or Applicant) filed with the Energy Facility Siting Board (EFSB or Board) an application for a license to construct and alter major energy facilities (Facilities) associated with the Revolution Wind Project, an offshore wind farm which is projected to generate approximately 704 megawatts (MW) of renewable power.² The proposed Facilities will bring the energy generated by the offshore wind farm to shore for Rhode Island and Connecticut customers, connecting to the onshore electric transmission system in Rhode Island.³

¹ Revolution Wind is a Delaware limited liability company formed to develop, own, operate, and maintain the project components identified in the Rhode Island Energy Facility Siting Board (EFSB), Docket No. SB-2021-01. Revolution Wind is a 50/50 joint venture between wholly-owned subsidiaries of Ørsted A/S (Ørsted) and Eversource Energy (Eversource). See Pre-Filed Direct Testimony of Kenneth Bowes and Kellen Ingalls at 4-5; <http://www.ripuc.ri.gov/eventsactions/docket/5151-Orsted-DirectTestimony> (5-24-21)(Public).pdf

² The application to construct and alter major energy facilities is pending before the EFSB, designated as Docket SB-2021-01; http://www.ripuc.ri.gov/efsb/2021_SB_01.html.

³ The wind farm will consist of wind turbines and an offshore substation located on the outer continental shelf in federal waters, which are outside of the jurisdiction of the Board. The Facilities necessary to connect the wind farm to the onshore electric transmission system are within the jurisdiction of the Board. The proposed Facilities constitute transmission lines greater than 69 kV and thus qualify as a major energy facility, defined by R.I. Gen. Laws§ 42-98-4.

The Facilities that are subject to EFSB jurisdiction include the following: (1) Revolution Wind Export Cable (RWEC) consisting of two submarine cables, each measuring up to 23 miles in Rhode Island State Waters; (2) the Landfall Work Area, which totals up to 3.1 acres and includes the onshore portion of the RWEC, two underground transmission joint bays for joining the RWEC to the Onshore Transmission Cable, a portion of the Onshore Transmission Cable, and temporary construction access; (3) an Onshore Transmission Cable that is approximately 1 mile long; (4) the onshore substation (OnSS) with an operational footprint of approximately 4 acres; (5) an interconnection right-of-way between the OnSS and interconnection facility (ICF) consisting of two underground transmission lines with a length of up to approximately 519 feet that will connect the OnSS to the proposed ICF; (6)

In response to the filing, the EFSB conducted a preliminary hearing on March 22, 2021, and issued a preliminary decision and order which, inter alia, directed the Rhode Island Public Utilities Commission (Commission or PUC) to provide the EFSB with an advisory opinion, taking into account the PUC's prior approval of the Power Purchase Agreement (PPA) in Docket No. 4929⁴, as to (i) the need for the proposed Facilities; and (ii) whether the Facilities are expected to transmit energy from the offshore generating source of the Revolution Wind Project to the mainland at the lowest reasonable cost to the consumer consistent with the objective of ensuring that the construction and operation of the proposed Facilities will be accomplished in compliance with all of the requirements of the laws, rules, and regulations. The EFSB also directed the PUC to determine the extent to which there is any additional cost impact to consumers related to the Facilities that would be incurred outside of the cost to consumers already embedded in the PPA, or whether any risks associated with the cost of the Facilities is borne exclusively by the Applicant. The Division of Planning, the Office of Energy Resources (OER), and the Division of Public Utilities and Carriers (Division) (collectively, State Agencies) were required to participate in the PUC proceeding pursuant to R.I. Gen. Laws § 42-98-9(d).⁵

an ICF that consists of a 115kV ring-bus with an operational footprint of 1.6 acres; and (7) the reconfiguration of overhead segments of the existing National Grid Davisville Transmission Tap lines (approximately 122 feet) and new overhead lines approximately 744 feet long between the ICF and National Grid's Davisville Substation on property owned by National Grid proximate to the Davisville Substation in North Kingstown, Rhode Island. Pre-Filed Direct Testimony of Kenneth Bowes and Kellen Ingalls at 8.

⁴ On June 7, 2019, the Commission approved the Power Purchase Agreement (PPA) between DWW Rev 1, LLC ("DWW") and The Narragansett Electric Company d/b/a National Grid (National Grid) pursuant to the Affordable Clean Energy Act ("ACES"), R. I. Gen. Laws § 39-31-1 et seq. (DWW Rev I, LLC served notice of its name change to Revolution Wind, LLC in October 2020.) Under the PPA, National Grid will purchase 100% of the energy and environmental attributes associated with DWW's 400 MW offshore wind facility. The price of the energy, renewable energy certificates and transmission related to the offshore wind facilities is \$.098425 per kWh. The PPA is a fixed price for the duration of the 20 years of the PPA. See Report and Order No. 23609 issued to National Grid on its request for review of Power Purchase Agreement Pursuant to R.I. Gen Law Sections 39-3-1 to 9; http://www.ripuc.ri.gov/eventsactions/docket/4929-NGrid-Ord23609_6-7-19.pdf.

⁵ EFSB Preliminary Order (149) at 14-15; http://www.ripuc.ri.gov/efsb/2021_SB-01/SB-2021-01_Preliminary_Order_149_sealed.pdf.

After a review of the record in this matter including written testimony, data responses, and live testimony, the Commission is of the opinion that the Facilities are needed to connect the proposed Revolution Wind Project to the New England electric system should Revolution Wind receive federal approval to site and construct the wind farm.⁶ Additionally, we are of the opinion that based on the evidence presented, and taking into account the PUC's prior approval of the Power Purchase Agreement in Docket No. 4929, the proposed Facilities are expected to transmit energy from the offshore generating source of the Revolution Wind Project to the mainland at the lowest reasonable cost to the consumer. Finally, we are of the opinion that the risks associated with the cost of the Facilities are borne exclusively by Revolution Wind. However, it is possible that there could be additional cost impacts to consumers related to the Facilities outside of the cost to consumers already embedded in the PPA as described below.

II. Need

The issue of the specific need for the Facilities was an uncontested subject in this matter. Revolution Wind submitted the pre-filed testimony of Kenneth Bowes, employed by Eversource as the Vice President for Offshore Wind Siting and Permitting, and Kellen Ingalls, employed by Ørsted as the Project Development Director for Revolution Wind, LLC. Revolution Wind stated that it developed the 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 and that the proposed transmission and interconnection Facilities are necessary to transfer the electricity generated by the project to existing onshore electrical transmission facilities associated

⁶ The Commission comprised of Commissioners Anthony and Revens, conducted a hearing on July 26, 2021. Chairman Gerwatowski, as Chairman of the EFSB, recused himself from participation in the Commission review

with the project.⁷ Mr. Bowes testified at hearing and stated that the onshore project components are integral to the wind farm being able to deliver its energy to the New England grid and to facilitate a safe and reliable interconnection.⁸

The State Agencies that submitted advisory opinions to the Commission both concluded that there was a need for the Facilities.⁹ The Division concluded that the Commission's previous approval of the PPA in Docket 4929 was tantamount to a determination that there is a need for the generating facility which in turn creates the need for the proposed transmission facilities to transmit the power from the offshore windfarm to the regional electric transmission system.¹⁰ OER submitted the pre-filed testimony of Nicholas Ucci, the Commissioner of OER, who testified that the facilities are necessary to deliver the zero-emission electricity and associated market products, including environmental attributes, from the offshore wind generating units to the mainland electrical grid.¹¹

III. Cost Justification and Impact

Revolution Wind asserts that it is responsible for all costs to develop the Facilities. In its pre-filed testimony, Revolution Wind testified that it was unaware of any potential costs that Rhode Island customers will incur beyond the cost of the power under the PPA and that the risks associated with the costs of developing the project are borne exclusively by Revolution Wind.¹²

⁷ Pre-Filed Direct Testimony of Kenneth Bowes and Kellen Ingalls at 9-10. At hearing, Mr. Ingalls testified that the project would meet the needs of the State of Rhode Island in two ways. First it would provide electricity that is going to be demanded by customers in Rhode Island, and second, it provides clean, renewable energy that will help to meet Rhode Island's state goals. Hr'g Tr. At 17-18 (July 26, 2021)

⁸ Hr'g Tr. at 18.

⁹ The Division of Planning of the Department of Administration did not submit an advisory opinion to the Commission.

¹⁰ Advisory Opinion of the Division of Public Utilities and Carriers at 3; [http://www.ripuc.ri.gov/eventsactions/docket/5151-DIV-AdvisoryOpinion\(6-24-21\).pdf](http://www.ripuc.ri.gov/eventsactions/docket/5151-DIV-AdvisoryOpinion(6-24-21).pdf).

¹¹ Pre-Filed Direct Testimony of Commissioner Nicholas S. Ucci at 3; [http://www.ripuc.ri.gov/eventsactions/docket/5151-OER-Ucci\(06-24-2021\).pdf](http://www.ripuc.ri.gov/eventsactions/docket/5151-OER-Ucci(06-24-2021).pdf).

¹² Pre-Filed Direct Testimony of Kenneth Bowes and Kellen Ingalls at 11-12.

At hearing, Mr. Bowes testified that “[a]ll of the costs to be incurred” will be the responsibility of Revolution Wind and that there will be “no additional costs to National Grid or the Rhode Island ratepayers” other than what was in the PPA that was competitively bid and selected.¹³ These costs included construction and operation and maintenance costs after construction.¹⁴

Similarly, National Grid represented that National Grid will not incur any construction costs related to the Facilities that are not paid for by Revolution Wind.¹⁵ National Grid explained that Revolution Wind will construct, and National Grid will own the portions of the Facilities that are located adjacent to its existing Davisville Substation.¹⁶ National Grid will be responsible for maintenance and repairs on the new facilities located adjacent to the existing Davisville Substation; however, Revolution Wind will reimburse National Grid for those costs.¹⁷

The Division also concluded that the cost of the Facilities will be borne by Revolution Wind through the PPA and that it was unaware of any additional ratepayer impact beyond what was previously approved in Docket 4929.¹⁸ Mr. Ucci testified that to OER’s knowledge, the Facilities are cost justified as Rhode Island ratepayers will not be charged any new costs for the construction of the proposed Facilities absent those which are already embedded in the PPA.¹⁹

¹³ Hr’g Tr. at 19.

¹⁴ *Id.*

¹⁵ National Grid Response PUC 1-2; [http://www.ripuc.ri.gov/eventsactions/docket/5151-NGrid-Responses to PUC Set 1.pdf](http://www.ripuc.ri.gov/eventsactions/docket/5151-NGrid-Responses%20to%20PUC%20Set%201.pdf). The Commission granted National Grid’s Motion for Intervention in this matter at hearing on July 26, 2021.

¹⁶ National Grid Response PUC 1-3(a).

¹⁷ National Grid Response PUC 1-3(b).

¹⁸ Advisory Opinion of the Division of Public Utilities and Carriers at 3; [http://www.ripuc.ri.gov/eventsactions/docket/5151-DIV-AdvisoryOpinion\(6-24-21\).pdf](http://www.ripuc.ri.gov/eventsactions/docket/5151-DIV-AdvisoryOpinion(6-24-21).pdf).

¹⁹ Pre-Filed Direct Testimony of Commissioner Nicholas S. Ucci at 4; [http://www.ripuc.ri.gov/eventsactions/docket/5151-OER-Ucci\(06-24-2021\).pdf](http://www.ripuc.ri.gov/eventsactions/docket/5151-OER-Ucci(06-24-2021).pdf).

At hearing, the Commission inquired into several areas, including responsibility for ongoing operation and maintenance costs (O&M) of the Facilities and potential decommissioning costs.

Mr. Bowes testified that the interconnection facility substation and the connection from that facility to National Grid's Davisville substation would be owned by National Grid.²⁰ National Grid is responsible for the ongoing operations and maintenance (O&M) of those facilities, and Revolution Wind is responsible for those costs pursuant to the large generator interconnection agreement (LGIA). Mr. Bowes testified that the LGIA is a three-party agreement between Revolution Wind, National Grid, and ISO New England. The LGIA however, has not yet been executed by the three entities.²¹

Mr. Bowes testified that the O&M costs would be composed of actual costs, such as property taxes paid, and imputed costs which are based upon the asset values that are included in the LGIA.²² In response to a record request made by the Commission, Revolution Wind stated that it must pay to National Grid an ongoing annual Direct Assignment Facilities Charge (DAF Charge) that is calculated in accordance with the formula set forth in Schedule 21 – NEP, Attachment DAF of the ISO-NE Open Access Transmission Tariff. The DAF Charge assigns a representative portion of National Grid's annual transmission expenses to the Project.²³

²⁰ Hr'g Tr. at 22.

²¹ Hr'g Tr. at 23-24. Mr. Bowes testified that, although the LGIA has not yet been executed, there was "little chance of a generator shifting any costs to Rhode Island ratepayers from the large generator interconnection agreement process." *Id.* at 25. The Commission made a record request for a copy of the LGIA once it is executed. However, as of the date of this Advisory Opinion, the executed LGIA has not been provided by Revolution Wind or National Grid.

²² Hr'g Tr. at 28-29.

²³ Revolution Wind response to RR-2; <http://www.ripuc.ri.gov/eventsactions/docket/5151-RevWind-RR%208-2-21.pdf>. Revolution Wind explained that this ongoing annual DAF Charge is calculated by multiplying: (A) The gross transmission investment amount associated with the Project by (B) A carrying charge percentage. The carrying charge percentage is the ratio of National Grid's applicable actual revenue requirements divided by the balance of gross transmission plant. The revenue requirements are currently primarily composed of (1) O&M

In regard to responsibility for decommissioning costs, Mr. Bowes testified that Revolution Wind is responsible for all decommissioning costs of the portions of the Facilities owned by Revolution Wind, and that as part of the Bureau of Ocean Energy Management (BOEM) permitting process, Revolution Wind needs to submit a decommissioning plan and also post surety as necessary to accomplish that plan.²⁴

In response to a record request made by the Commission, National Grid averred that, pursuant to the LGIA, Revolution Wind is responsible for removal costs associated with assets owned by National Grid which were constructed and installed per the LGIA.²⁵ National Grid emphasized that it would not be responsible for any potential decommissioning costs.²⁶

The Commission, taking into account its prior approval of the PPA, is of the opinion that the proposed Facilities are expected to transmit energy from the offshore generating source of the Revolution Wind Project to the mainland at the lowest reasonable cost to the consumer. Similarly, we are of the opinion that the risks associated with the cost of the Facilities are borne exclusively by Revolution Wind. Based on the facts presented and the representation of Revolution Wind and National Grid, all costs related to the construction, and potential decommissioning, of the Facilities are the responsibility of Revolution Wind. However, the Commission urges the EFSB to review the LGIA, once executed, and the decommissioning plan and surety, once prepared and approved by the BOEM, to ensure that the final agreements and documents conform to the representations.

expenses, (2) administrative and general expense, and (3) municipal taxes. These balances are taken from the FERC Form No. 1. *Id.*

²⁴ Hr'g Tr. at 33. Mr. Bowes testified that Revolution Wind had not yet prepared a decommissioning plan and was currently working on that plan with the BOEM. However, the BOEM permitting process may not be completed until April 2023. *Id.* at 33-34.

²⁵ National Grid response to RR-3a; <http://www.ripuc.ri.gov/eventsactions/docket/5151-NGrid-RR> 8-2-21.pdf.

²⁶ National Grid response to RR-3b.

In regard to the ongoing O&M expenses, the Commission also finds that these costs are the responsibility of Revolution Wind in accordance with the DAF Charge of the ISO-NE Open Access Transmission Tariff. However, it is *possible* that there could be additional cost impacts to consumers related to the Facilities outside of the cost to consumers already embedded in the PPA. As the DAF Charge is based on a formula and not the actual O&M expenses incurred by National Grid, the formula may calculate an amount that in a given year is higher or lower than the actual O&M expenses.

IV. Conclusion

There is a need for the proposed Facilities for the specific purpose of connecting the proposed Revolution Wind project to the electric transmission system should its application to BOEM to site and construct the wind farm be approved. The Facilities are expected to transmit energy from the offshore generating source of the Revolution Wind Project to the mainland at the lowest reasonable cost to the consumer, and thus the proposal represents the lowest reasonable cost to meet the need. The Commission urges the EFSB, however, to review the executed LGIA once it has been executed, to ensure that the agreement embodies Revolution Wind's and National Grid's representations. Finally, the Commission wishes to emphasize to the EFSB that because the O&M charges that Revolution Wind will pay to National Grid are based on the DAF charge and not the actual O&M charges that National Grid expends in a given year, there is the likelihood that there could be cost impacts to ratepayers as the actual charges may be more or less than the recovered formulaic charges.

(24121)* Advisory Opinion

PUBLIC UTILITIES COMMISSION



Abigail Anthony, Commissioner



John C. Revens, Jr., Commissioner

Dated: August 26, 2021

*This number is being assigned for administrative purposes only and does not constitute an order or decision of the Commission.