**Revolution Wind Farm Project**

**Project Description**

On July 21, 2022, Revolution Wind, LLC, submitted a revised construction and operations plan (COP) for the Revolution Wind Farm and Revolution Wind Export Cable (RWEC) Project (Project). The Project would consist of the following:

- Up to 100 wind turbine generators (WTGs) with a capacity to generate up to 880 megawatts (MW) of offshore wind energy
- A network of offshore inter-array cables measuring up to 155 statute miles (miles) in total length
- Up to two offshore substations (OSS) connected by an up to 9-mile-long OSS-link cable
- Up to two offshore export cables measuring up to 42 miles in length
- Up to two underground transmission circuits located onshore and measuring up to 1 mile
- An onshore substation, inclusive of up to two interconnection circuits measuring up to 800 feet in length and connecting an existing substation
- An onshore logistics or operations and maintenance (O&M) facility

The Lease Area is located approximately 18 miles southeast of the Rhode Island mainland coast in federal waters. The offshore export cables (i.e., the RWEC) would be generally co-located within a single corridor through both federal waters and state waters of Rhode Island. The RWEC would make landfall at Quonset Point in North Kingstown, Rhode Island, and would interconnect to the electric transmission system via the existing Davisville Substation, which is owned and operated by National Grid, located in North Kingstown, Rhode Island.

For more information on the proposed project, see the construction and operations plan available at: [https://www.boem.gov/renewable-energy/state-activities/revolution-wind](https://www.boem.gov/renewable-energy/state-activities/revolution-wind)

**Project Design Envelope**

**Definition:**

A project design envelope (PDE) approach is a permitting approach that allows a project proponent the option to submit a reasonable range of design parameters within its permit application, allows a permitting agency to then analyze the maximum impacts that could occur from the range of design parameters, and may result in the approval of a project that is constructed within that range.

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Project Design Envelopes Characteristics</th>
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<tbody>
<tr>
<td>RWEC Inter-Array Cables</td>
<td>Up to two 725 kV export cables (one per OSS)</td>
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<tr>
<td>RWEC OSS</td>
<td>Up to two OSSs connected by a target depth of 4 to 6 feet below seabed</td>
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<tr>
<td>RWEC OSS Link Cable</td>
<td>Maximum total length of up to 1.5 miles</td>
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<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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BOEM uses the PDE approach to assess potential impacts on key resources (e.g., marine mammals, fish, benthic habitats, commercial fisheries), focusing on the design parameters that represent the greatest potential impact to each resource—referred to as the "maximum design scenario."