## **APPENDIX D**

**Project Design Envelope and Maximum-Case Scenario** 

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Revolution Wind Farm and Revolution	Wind Export Cable Project Final Environmental Impact Statement
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## Introduction

This environmental impact statement (EIS) assesses the impacts of the reasonable range of Revolution Wind Farm (RWF) and Revolution Wind Export Cable (RWEC) Project (the Project) designs that are described in the Revolution Wind construction and operations plan (COP) (VHB 2023) by using the maximum-case scenario process. The maximum-case scenario analyzes the aspects of each design parameter that would result in the greatest impact for each physical, biological, and socioeconomic resource. This EIS considers the interrelationship among aspects of the project design envelope (PDE) rather than simply viewing each design parameter independently. Additional information and guidance related to the PDE concept can be found in Chapter 1 of the EIS and on BOEM's website available at https://www.boem.gov/Draft-Design-Envelope-Guidance/. Table D-1 details the full range of maximum-case design parameters for the proposed Project and which parameters are relevant to the analysis for each EIS resource section (denoted with an *X*) in Chapter 3 of the EIS. Table D-2 and Figure D-1 detail the wind turbine generator (WTG) identification numbers and locations for the maximum-case scenario.

Table D-1. Maximum-Case Scenario List of Parameter Specifications

Design Parameter	Minimum Design Size	Maximum Design Size	3.4 Air Quality	3.5 Bats	3.6 Benthic Habitat and Invertebrates		3.8 Coastal Habitats and Fauna	3.9 Commercial Fisheries and For-Hire Recreational Fishing	3.10 Cultural Resources	3.11 Demographics, Employment, and Economics	3.12 Environmental Justice	Finfish and Ess	3.14 Land Use and Coastal Infrastructure	3.15 Marine Mammals	3.16 Navigation and Vessel Traffic	3.17 Other Marine Uses	3.18 Recreation and Tourism	3.19 Sea Turtles	3.20 Visual Resources 3.21 Water Quality	3.22 Wetlands and Non-tidal Waters
WIND FARM																				
Wind farm capacity	704 megawatt (MW)	880 MW	Х	Χ	Х	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	х х	Х
WTG AND MONOPILE FOUNDATION																				
Turbine size	8 MW	12 MW	Х	Χ	Х	Х		Х	Χ			Х		Х	Х	Х	Х	Х	х х	
Number of WTG positions	59	100	Х	Χ	Х	Х		Х	Х			Х		Х	Х	Х	Х	Х	х х	
Distance between positions	1 nautical mile (nm) between WTGs on an east–west, north–south grid	1 nm between WTGs along north–south rows, and 0.7 mile between WTGs within east–west rows	Х	Х	Х	Х		Х	Х			Х		Х	Х	Х	Х	Х	Х	
Total tip height	647.6 feet (197.4 meters [m])	872.7 feet (266 m)		Х		Х		Х	Χ						Х	Х	Х		х	
Hub height	377 feet (115 m)	512 feet (156 m)		Х		Х		Х	Χ						Х	Х	Х		х	
Turbine height	646 feet (197 m)	873 feet (266 m)		Х		Х		Х	Х						Х	Х	Х		Х	
Rotor diameter	538 feet (164 m)	722 feet (220 m)		Х		Х		Х	Х						Х	Х	Х		Х	
Base height (foundation height-top of transition piece)	19.7 feet (6 m)	26 feet (8 m)		Х		Х		X	Х						Х	Х	Х		Х	
Base (tower) width (at the top)	13 feet (4 m)	21 feet (6.4 m)		Х		Х		Х	Χ						Х	Х	Х		х	
Nacelle dimensions (length × width × height)	46 × 23 × 20 feet (14 × 7 × 6 m)	72 × 33 × 39 feet (22 × 10 × 12 m)		Х		Х		Х	Х						Х	Х	Х		Х	
Rotor swept zone area	5.2 acres (21,100 square meters [m <sup>2</sup> ])*	9.7 acres (39,400 m <sup>2</sup> )*		Χ		Х		Χ	Х						Х	Х	Х		Х	

Design Parameter	Minimum Design Size	Maximum Design Size	3.4 Air Quality	3.5 Bats	3.6 Benthic Habitat and Invertebrates	3.7 Birds	Il Habitats and Fauna	3.9 Commercial Fisheries and For-Hire Recreational Fishing	3.10 Cultural Resources 3.11 Demographics, Employment, and Economics	3.12 Environmental Justice		3.14 Land Use and Coastal Infrastructure 3.15 Marine Mammals	Navigat	Other Marine Uses	3.18 Recreation and Tourism	3.19 Sea Turtles	Visual	3.21 Water Quality 3.22 Wetlands and Non-tidal Waters
Blade length	259 feet (79 m)	351 feet (107 m)		Χ		Х		Х	Х				Х	-	Х		Х	
Blade width	16 feet (5 m)	26 feet (8 m)		Х		Х		Х	Х				Х	Х	Х		Х	
Base height (foundation height-top of transition piece)	82 feet (25 m)	128 feet (39 m)		Χ		Х		Х	Х				Х	Х	Х		Х	
Air gap (mean sea level to bottom of blade tip)	93.5 feet (28.5 m)	151 feet (46 m)		Х		Х		Х	Х				Х	Х	Х		Х	
Foundation construction method	Pile driving	Pile driving	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х	Х	Х	Х	Х
Foundation and WTG vessel type	Jack-up vessel or derrick barge, vessel on dynamic positioning with feeder barges	Jack-up vessel or derrick barge, vessel on dynamic positioning with feeder barges	Х	Х	Х	Х		Х	Х		Х	Х	Х	Х	Х	Х	Х	х
Jack-up vessel seafloor penetration of spudcans (WTG and OSS)	52 feet	52 feet	Х		Х			Х	Х		Х	Х	Х	Х	Х	Х	Х	х
Jack-up radius around foundations (WTG and OSS)	656 feet	656 feet	Х		Х			Х	Х		Х	х	Х	Х	х	Х	Х	х
Jack-up seafloor preparation (WTG and OSS)	18.36 acres (assume all foundations need one jack up; 0.18 acre per jack up x 102 foundations = 18.36 acres)	21.14 acres (assume 15% of all foundations will need one additional jack up; 18.36 acres + 0.18*(0.15 x 102) = 21.14 acres)	Х		Х			Х	Х		Х	х	Х	х	Х	Х	Х	Х
WTG coloring	RAL 9010 Pure White	RAL 7035 Light Grey				Х			Х				Х	Х	Х		х	
Bureau of Ocean Energy Management (BOEM) aviation and navigation safety recommendations (BOEM 2021)	Two synchronized L-864 aviation medium-intensity red flashing obstruction lights mounted on the WTG nacelle at a height of approximately 530 feet (161.5 m); up to three L-810 low-intensity red flashing obstruction lights mounted on the WTG tower midsection at a height of approximately 312 feet (95 m); all lights would synchronize with 30 flashes per minute for air navigation lighting	Two synchronized L-864 aviation medium-intensity red flashing obstruction lights mounted on the WTG nacelle at a height of approximately 530 feet (161.5 m); up to three L-810 low-intensity red flashing obstruction lights mounted on the WTG tower midsection at a height of approximately 312 feet (95 m); all lights would synchronize with 30 flashes per minute for air navigation lighting		Х		Х		Х	X				X	Х	х		Х	

Design Parameter	Minimum Design Size	Maximum Design Size	3.4 Air Quality	3.5 Bats	3.6 Benthic Habitat and Invertebrates	3.7 Birds	3.8 Coastal Habitats and Fauna 3 9 Commercial Eisheries and For-Hire		3.10 Cultural Resources	3.11 Demographics, Employment, and Economics	3.12 Environmental Justice	d Es	3.14 Land Use and Coastal Infrastructure	2.15 Navigation and Vaccal Traffic	3.17 Other Marine Uses	Recreation an	3.19 Sea Turtles	3.20 Visual Resources	3.21 Water Quality 3.22 Wetlands and Non-tidal Waters	
BOEM aviation and navigation safety recommendations (BOEM 2021); U.S. Coast Guard (USCG) District 1 offshore structure marking guidance (USCG 2020a)	Two white flashing obstruction lights (color to be determined depending on structure classification) on each turbine approximately 20 to 23 meters above mean lower low water on opposite corners along the same horizontal plane, each visible from all approach directions to 3 nm	Two white flashing obstruction lights (color to be determined depending on structure classification) on each turbine approximately 20 to 23 meters above mean lower low water on opposite corners along the same horizontal plane, each visible from all approach directions to 3 nm		X		X		X	X					×	X	X		X		
BOEM aviation and navigation safety recommendations; USCG District 1 offshore structure Private Aids to Navigation (PATON) marking guidance (USCG 2020b)	Flashing white light visible to 1 nm for Class C structure (to be determined by USCG)	Flashing white light visible to 5 nm for Class A structure (to be determined by USCG)		X		Х		Х	Х					×	X	X		X		
WTG foundation coloring	RAL 1023 Yellow from water line to height of at least approximately 50 feet	RAL 1023 Yellow from water line to height of at least approximately 50 feet		Х		Х		Х	Х					X	x	Х		Х		
Nautical hazard prevention device	Foghorns audible to 2 nm and emit 134 decibels at 3 feet (1 m) and a tone at a frequency of 660 hertz (Hz)	Foghorns audible to 2 nm and emit 134 decibels at 3 feet (1 m) and a tone at a frequency of 660 Hz		Х	Х	Х		Х				Х	X	×	x	Х				
Number of monopile foundations	61	102	Х	Х	Х	Х		Х	Х			Х	Х	( X	Х	Х	Х	Х	Х	
Monopile diameter	20–39 feet (tapered)	20–39 feet (tapered)	Х	Х	Х	Х		Х	Х			Х	Х	×	Х	Х	Х	Х	Х	1
Number of piles per foundation	1	1	Х		Х			Х	Х			Х	>	×	Х	Х	Х	Х	Х	1
Seafloor disturbance—no scour protection—per monopile foundation	0.027 acre	0.027 acre	Х		Х			Х	Х			Х	×	×	X	Х	Х	Х	Х	
Monopole and scour protection area per foundation	0.7 acre	0.7 acre	Х		Х			Х	Х			Х	×	×	x	Х	х	Х	Х	
Scour protection depth	2.2–4.6 feet above seafloor	2.2–4.6 feet above seafloor	Х		Х			Х	Х			Х	Х	×	Х	Х	Х	Х	Х	
Seafloor preparation per foundation	31.1 acres	31.1 acres	Х		Х			Х	Х			Х	Х	( X	Х	Х	Х	Х	Х	
Vessel anchoring/mooring per foundation	Not provided	Not provided	Х		Х			Х	Х			Х	×	( X	Х	Х	Х	Х	Х	
Hammer size for monopile foundation	4,000 kilojoules (kJ)	4,000 kJ	Х		Х			Х	х			Х	Х	( X	Х	Х	Х	Х	Х	
Maximum penetration depth into seafloor	98 feet (monopile)	164 feet (monopile)	Х		Х			Х	Х			Х	X	×	X	Х	Х	Х	Х	

Design Parameter	Minimum Design Size	Maximum Design Size	Air Quality	3.5 Bats	3.6 Benthic Habitat and Invertebrates	3.7 Birds	3.8 Coastal Habitats and Fauna	S and	3.10 Cultural Resources 3.11 Demographics, Employment, and Economics	3.12 Environmental Justice	Finfish an	3.14 Land Use and Coastal Infrastructure	Navigation and Vessel Traffic	Other Marine Uses	Recreation and Tourism	Sea Turtles	3.20 Visual Resources	. Water Quality	: Wetlands and Non-tidal Waters
Duration of all 1111 (1111)	d. A become	C 42 haves	3.4 Air	3.5		3.7				3.1									3.22
Duration of pile driving (hours/pile)	1–4 hours	6–12 hours	X		X			X	X		X	×		+	X	X	X	X	
Duration of installation (per WTG)	36 hours	36 hours	X		X			X	X		X	X		+	X		X	Х	_
Duration of installation (foundations/day)	3	3	Х		Х			X	X		Х	×	X	X	Х	X	Х	Х	
Period of all WTG foundation pile driving	5 months	5 months	Х		Х			Х	Х		Х	Х	( X	X	Х	Х	Х	х	
OFFSHORE SUBSTATION (OSS)																			
Number of OSSs	1	2	Х	Х	Х	Х		Х	Х		Х	×	X	X	Х	Х	Х	х	
Period of installation and commissioning	8 months	8 months	Х		Х			Х	Х		Х	Х	X	X	х	Х	х	х	
OSS height, excluding lightning protection	82 + 108 feet = 190 feet	190 feet		Х		Х		Х	х				Х	X	Х		Х		
OSS height, including lightning protection	82 + 180 feet = 262 feet	262 feet		Х		Х		Х	Х				Х	X	Х		Х		
Topside length and width	321.5 × 216.5 feet	321.5 × 216.5 feet		Х		Х		Х	Х				Х	X	Х		Х		
USCG lighting	See monopile turbine requirements	See monopile turbine requirements		Χ		Х		Х	Х				Х	X	Х		Х		
OSS number of piles per foundation	1	1	Х		Х			Х	Х		Х	Х	X	X	х	Х	х	х	
Scour protection area (per monopile)	0.7 acre	0.7 acre	Χ		Х			Х	Х		Х	Х	X	X	Х	Х	Х	Х	
Seafloor preparation per foundation	31.1 acres	31.1 acres	Х		Х			Х	Х		Х	Х	X	X	х	Х	х	х	
OSS foundation construction method	Pile driving	Pile driving	Х		Х			Х	Х		Х	Х	X	X	Х	Х	Х	Х	
Diameter (minimum top to maximum bottom)	20–49 feet (tapered)	20–49 feet (tapered)	Х		Х			Х	х		Х	×	X	X	Х	Х	Х	Х	
Maximum hydraulic hammer energy	4,000 kJ	4,000 kJ	Х		Х			Х	Х		Х	Х	X	X	Х	Х	Х	Х	
INTER-ARRAY CABLE (IAC)			•	,	•	•	•	•		•	•	•			•				
IAC capacity	72 kilovolts (kV)	72 kV	Х		Х			Х	Х		Х	×	X	X	Х	Х		Х	
IAC diameter	8 inches	8 inches																	
IAC length	155 miles	155 miles	Х		Х			Х	Х		Х	Х	X	X	Х	Х		Х	
	<del>-</del>		-		-	-								•		•			

Design Parameter  Maximum disturbance depth	Minimum Design Size  10 feet	Maximum Design Size  10 feet	× 3.4 Air Quality	3.5 Bats	3.7 Birds	3.8 Coastal Habitats and Fauna	3.9 Commercial Fisheries and For-Hire Recreational Fishing	× 3.10 Cultural Resources	3.11 Demographics, Employment, and Economics	3.12 Environmental Justice	Finfish and Es	3.15 Marine Mammals	21.0	3.17 Other Mari	3.18 Recreation an	Sea Turtles		3.22 Wetlands and Non-tidal Waters
Target burial depth	4 feet	6 feet	X				X	\ \ \ \ \ \			X	X	_			X		×
Disturbance corridor-cable only (width)	131 feet	131 feet	X	\ \ \ \ \ \ \			X	\ \ \ \ \ \			x	X	-		+	X		x
Period of installation of the complete IAC system		5 months	Х	) )			Х	X			Х	X		_		X	_	x
IAC installation rate	400 m/hour	400 m/hour	Х	Χ	(		Х	Х			Х	Х	: <b>&gt;</b>	( X	Х	Х		x
IAC general disturbance corridor	2,471 acres	2,471 acres	Х	Χ	(		Х	Х			Х	Х	· >	X	Х	Х		х
IAC seafloor disturbance due to boulder clearance (80% of total length)	1,976.8 acres	1,976.8 acres	Х	×	(		Х	Х			Х	Х	· ·	X	Х	Х		x
IAC secondary cable protection (10% of total length)	74.1 acres	74.1 acres	Х	×	(		Х	X			Х	X	: >	X	х	х		×
OFFSHORE SUBSTATION-LINK CABLE (OSS-LINK CABLE)																		
OSS-link cable capacity	275 kV	275 kV	Х	Χ	(		Х	Х			Х	Х	· ·	( X	Х	Х		x
OSS-link cable length	9 miles	9 miles	Х	×	(		Х	Х			Х	Х	· ·	X	Х	Х		X
Number of OSS-link cables	1	1	Х	X	(		Х	Х			Х	Х	: <b>&gt;</b>	( X	Х	Х		x
Cable diameter	11.8 inches	11.8 inches	Х	X	(		Х	Х			Х	Х	: <b>&gt;</b>	( X	Х	Х		x
Target burial depth	4 feet	6 feet	Х	X	(		Х	Х			Х	Х	· >	( X	Х	Х		x
Disturbance corridor (width)	131 feet	131 feet	Х	×	(		Х	Х			Х	Х	: >	( X	Х	Х		X
Maximum disturbance depth	10 feet	10 feet	Х	×	(		Х	Х			Х	Х	: >	X	Х	Х		X
OSS-link cable installation rate	400 m/hour	400 m/hour	Х	X	(		Х	Х			Х	Х	( <b>)</b>	( X	Х	Х		X
OSS-link cable general disturbance corridor	148.0 acres	148.0 acres	Х	×	(		Х	Х			Х	Х	: >	X	Х	х		x
OSS-link cable seafloor disturbance due to boulder clearance (60% of total length)	89 acres	89 acres	Х	X	(		Х	Х			Х	X	<b>( )</b>	X	Х	Х		X

Design Parameter	Minimum Design Size	Maximum Design Size	3.4 Air Quality	3.5 Bats	3.6 Benthic Habitat and Invertebrates	3.8 Coastal Habitats and Fauna	3.9 Commercial Fisheries and For-Hire Recreational Fishing	3.10 Cultural	3.11 Demographics, Employment, and Economics	3.12 Environmental Justice	3.13 Finfish and Essential Fish Habitat 3.14 Land Use and Coastal Infrastructure	3.15 Marine Mamr	3.16 Navigat	3.17 Other Mari	3.18 Recreation and Tourism	3.19 Sea Turtles	3.20 Visual Resources 3.21 Water Quality	3.22 Wetlands and Non-tidal Waters
OSS-link cable protection (10% of total length)	4.4 acres	4.4 acres	Х		Х		Х	Х			Х	Х	Х	Х	Х	Х	X	
SUMMARY OF RWEC SEGMENT LENGTHS OFFSHORE				L						<u>                                       </u>	l		I	1		<u> </u>		
RWEC: OCS	Up to 19 miles (per cable)	N/A	Х	Х	Х			Х	Х		Х		Х	Х	Х	X	х	Х
RWEC: Rhode Island	23 miles (per cable)	N/A	Х	Х	Х			Х	Х		х		Х	Х	Х	x :	х	Х
Total RWEC segment lengths offshore	Approximately 42 miles (per cable)	N/A	Х	Х	х	X	Х	Х	Х	Х	х х	Х	Х	Х	Х	X :	х	Х
RWEC OFFSHORE																		
RWEC capacity	275 kV	275 kV	Х		Х		Х	Х			Х	Х	Х	Х	Х	х	Х	
Number of RWECs	1	2	Χ		Х		Х	Х			х	Х	Х	Х	Х	Х	Х	
RWEC diameter	11.8 inches	11.8 inches	Х		Х		Х	Х			Х	Х	Х	Х	Х	Х	Х	
Disturbance corridor (width)	131 feet, up to 673 feet at joint locations	131 feet, up to 673 feet at joint locations	Х		Х		Х	Х			Х	Х	Х	Х	Х	х	Х	
Operational right-of-way (ROW)	1,640 feet	1,640 feet	Х		Х		Х	Х			Х	Х	Х	Х	Х	Х	Х	
Target burial depth (offshore)	4 feet	6 feet	Х		Х		Χ	Х			Х	Х	Х	Х	Х	Х	Х	
RWEC installation rate	400 m/hour	400 m/hour	Х		Х		Χ	Х			Х	Х	Х	Х	Х	Х	Х	
Period of installation	8 months	8 months	Х		Х		Х	Х			Х	Х	Х	Х	Х	Х	Х	
RWEC: trench width	up to 43 feet	up to 43 feet	Х		Х		Х	Х			Х	Х	Х	Х	Х	Х	Х	
RWEC: Outer Continental Shelf (OCS) submarine cable general disturbance corridor	593.1 acres	593.1 acres	Х		X		Х	Х			X	X	Х	X	Х	X	X	
RWEC: OCS boulder clearance (40% of route, included in general disturbance corridor amount)	237.2 acres	237.2 acres	х		Х		Х	Х			Х	Х	х	Х	Х	Х	х	
RWEC: OCS cable protection (10% of route for each cable)	17.8 acres	17.8 acres	Х		Х		Х	Х			Х	Х	Х	Х	Х	Х	х	

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RWEC: OCS cable omega joints (two total)	20.4 acre	20.4 acre	Х		Х		Х	Х			Х		Х	X >	κ x	Х		Х	
RWEC: Rhode Island (RI) submarine cable general disturbance corridor	731.4 acres	731.4 acres	х		Х		Х	Х			Х		х	x >	< x	Х		Х	
RWEC: RI boulder clearance (70% of route, included in general disturbance corridor amount)	512 acres	512 acres	х		Х		Х	Х			Х		Х	X >	( X	Х		Х	
RWEC: RI cable protection (5% of route for each cable)	11.0 acres	11.0 acres	Х		Х		Х	Х			Х		Х	X >	κ x	Х		Х	
RWEC: RI cable protection per crossing (7 existing submarine assets, all located within RI state waters)	21.9 acres	21.9 acres	х		Х		Х	Х			Х		Х	X >	¢ χ	Х		Х	
Vessel anchoring corridor	1,640 feet	1,640 feet	Х		Х		Х	Х			Х		х	X >	<b>х</b>	Х		Х	
RWEC AT LANDFALL																			
Landfall work area	3.1 acres	3.1 acres	Х	Х	Х	х х	Х	Х	Х	Х	Х	Х	Х	X >	<b>С</b> Х	Х	Х	Х	Х
Transition joint bays (located within the landfall work area)	1,340 square feet	1,340 square feet	х			х		Х				х			х			Х	Х
Temporary cofferdam exit pits (2X) for horizontal directional drilling (HDD) construction (located within landfall work area)	0.24 acre	0.94 acre	Х			X		Х				X			Х			X	Х
ONSHORE TRANSMISSION CABLE AND PROJECT COMPONENTS																			
Landfall sites	Multiple landfall sites are currently being evaluated within the approximate 20-acre landfall envelope, located at Quonset Point in North Kingstown, Rhode Island.		Х	Х	х	Х	Х		Х	Х	Х		Х			Х		Х	X
Landfall work area	3.1 acres within the landfall envelope, located at Quonset Point in North Kingstown, Rhode Island		Х	Х	Х	Х	Х		Х	Х	Х		Х			Х		Х	Х
Landfall transition method	HDD with possible cofferdam		Х	Х	Х	Х	Х		Х	Х	Х		Х			Х		Х	Х

Design Parameter	Minimum Design Size	Maximum Design Size	3.4 Air Quality	3.5 Bats	3.6 Benthic Habitat and Invertebrates	3.7 Birds	tats and Faur	3.9 Commercial Fisheries and For-Hire Recreational Fishing	3.10 Cultural Resources 3.11 Demographics, Employment, and Economics	3.12 Environmental Justice	3.13 Finfish and Essential Fish Habitat	3.14 Land Use and Coastal Infrastructure	3.15 Marine Mammals	3.16 Navigation and Vessel Traffic 3.17 Other Marine Uses	3.18 Recreation and Tourism	3.19 Sea Turtles	3.20 Visual Resources	3.21 Water Quality	3.22 Wetlands and Non-tidal Waters
Temporary anchor wall driven depth	20 feet		Х	Χ	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
HDD cable duct diameter	3 feet		Х	Χ	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
HDD cable duct length	0.6 mile		Х	Χ	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
Landfall transition	Underground concrete transition vault		Х	Χ	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
Onshore construction location	Single thermal concrete duct bank and splice vaults		Х	Х	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
Onshore construction method	Open trench (8-foot-wide trench within 25-foot-wide temporary disturbance corridor that expands to $30 \times 75$ feet at splice vaults) with HDD or other trenchless technology as needed		X	Х	Х		х	X	Х	Х	Х		Х			X		Х	х
Onshore cable route	Landfall work area to The Narragansett Electric Company d/b/a National Grid (TNEC) Davisville Substation		Х	Х	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
Splice vaults	30 × 10 × 8 feet	30 × 70 × 16 feet	Х	Х	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
Onshore transmission cable corridor length	Approximately 1 mile		Х	Х	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
Onshore interconnection facility location	Immediately adjacent to the existing Davisville Substation in North Kingstown, Rhode Island		Х	Х	Х		Х	Х	Х	Х	Х		Х			Х		Х	Х
Length of underground ROW connecting the onshore substation (OnSS) to the interconnection facility	527 feet		Х	X	Х		х	Х	Х	х	Х		х			Х		Х	х
Length of overhead ROW connecting the interconnection facility to the Davisville Substation	474 feet		Х	X	Х		х	Х	Х	х	Х		х			Х		Х	х
Onshore interconnection facility limit of work size	Property size = 6 acres  Limit of work = up to 4 acres  Operational footprint = approximately 1.6 acres		Х	Х	х		Х	Х	Х	Х	х		Х			Х		Х	х
OnSS (property size)	Property size = 15.7 acres  Limit of work = up to 7 acres  Operational footprint = approximately 4 acres		Х	Х	Х		Х	Х	Х	Х	х		Х			Х		Х	х

Design Parameter	Minimum Design Size	Maximum Design Size	3.4 Air Quality	3.5 Bats	3.6 Benthic Habitat and Invertebrates	Birds	3.8 Coastal Habitats and Fauna	Selles Selles	3.10 Cultural Resources	3.11 Demographics, Employment, and Economics	3.12 Environmental Justice	3.13 Finfish and Essential Fish Habitat	3.14 Land Use and Coastal Intrastructure	Marine Mammais		Otner Marine L	3.19 Sea Turtles	Visu	3.21 Water Quality	3.22 Wetlands and Non-tidal Waters
OPERATIONS AND MAINTENANCE (O&M) FACILITY																				
Port of Montauk	A new building with up to 1,000 square feet of office space and up to 6,000 square feet of equipment storage space would be constructed at the Port of Montauk.	A new building with up to 1,000 square feet) of office space and up to 6,000 square feet of equipment storage space would be constructed at the Port of Montauk.	Х	Х	Х	x   :	x	Х	X	Х	Х	X	x   >	x	x x	×	κ x	X	X	X
Port of Davisville at Quonset Point	A new building with up to 1,000 square feet of office space and up to 11,000 square feet of equipment storage space would be constructed at the Port of Davisville at Quonset Point.	A new building with up to 1,000 square feet of office space and up to 11,000 square feet of equipment storage space would be constructed at the Port of Davisville at Quonset Point.	х	Х	Х	<b>x</b> :	х	Х	Х	х	Х	<b>x</b> :	X >	X	X )	X >	κ x	Х	X	х
Port of Brooklyn	There are no plans to establish an O&M building at, or otherwise implement improvements to, the Port of Brooklyn, and use of this port is assumed to be limited to existing facilities maintained by the port.	There are no plans to establish an O&M building at, or otherwise implement improvements to, the Port of Brooklyn, and use of this port is assumed to be limited to existing facilities maintained by the port.	Х	Х	Х	<b>x</b> :	х	Х	Х	х	Х	<b>X</b>	X >	x	X )	X >	K X	Х	X	х
Port of Galilee	There are no plans to establish an O&M building at, or otherwise implement improvements to, the Port of Galilee, and use of this port is assumed to be limited to existing facilities maintained by the port.	There are no plans to establish an O&M building at, or otherwise implement improvements to, the Port of Galilee, and use of this port is assumed to be limited to existing facilities maintained by the port.	Х	Х	Х	<b>x</b> :	х	Х	Х	Х	Х	X	X >	X	X )	X >	K X	Х	X	х
Port Jefferson	An existing upland building within an office park located approximately 6 miles from Port Jefferson. This building would serve as a regional O&M hub and headquarters for Orsted and multiple offshore wind projects. The building was recently purchased by Northeast Offshore, LLC, and has internal upgrades planned to establish office and warehouse space.	An existing upland building within an office park located approximately 6 miles from Port Jefferson. This building would serve as a regional O&M hub and headquarters for Orsted and multiple offshore wind projects. The building was recently purchased by Northeast Offshore, LLC, and has internal upgrades planned to establish office and warehouse space.		X	Х	X	X	Х	Х	х	X	X	X	x	X	×	X	X	X	X

Notes: In this appendix, distances in miles are in statute miles (miles used in the traditional sense) or nautical miles (miles used specifically for marine navigation). Statute miles are more commonly used and are referred to simply as miles, whereas nautical miles are referred to by name or by their abbreviation "nm." Numbers that were calculated are rounded to the closest whole number.

<sup>\*</sup> This value was calculated based on information provided.

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Table D-2. Wind Turbine Generator Identification Numbers and Locations for the Maximum-Case Scenario as depicted in the Geophysical and Habitat Survey Viewer (Viewer) prepared by INSPIRE Environmental for the RWF and RWEC

COP Appendix H ID - Label not Identified in the Viewer	L045 ID - Identified as 'WTG and OSS Labels (L045)' Label in the Viewer	L085 ID - Identified as 'WTG and OSS Labels (L085)' Label in the Viewer	USCG - Label not Identified in the Viewer
WTG_01	1	-	AB08
WTG_02	2	B01	AC08
WTG_03	3	B02	AD07
WTG_04	4	B03	AD08
WTG_05	5	B04	AD09
WTG_06	6	B05	AD10
WTG_07	7	B06	AD11
WTG_08	8	B07	AE06
WTG_09	9	B08	AE07
WTG_10	10	B09	AE08
WTG_11	11	B10	AE09
WTG_12	12	B11	AE10
WTG_13	13	B12	AE11
WTG_14	14	B13	AF05
WTG_15	15	B14	AF06
WTG_16	16	-	AF07
OSS_2	OSS2	Z02	AF08
WTG_17	17	B15	AF09
WTG_18	18	B16	AF10

COP Appendix H ID - Label not Identified in the Viewer	L045 ID - Identified as 'WTG and OSS Labels (L045)' Label in the Viewer	L085 ID - Identified as 'WTG and OSS Labels (L085)' Label in the Viewer	USCG - Label not Identified in the Viewer
WTG_19	19	B17	AF11
WTG_20	20	B18	AG04
WTG_21	21	B19	AG05
WTG_22	22	B20	AG06
WTG_23	23	B21	AG07
WTG_24	24	B22	AG08
WTG_25	25	B23	AG09
WTG_26	26	B24	AH04
WTG_27	27	B25	AH05
WTG_28	28	B26	AH06
WTG_29	29	B27	AH07
WTG_30	30	B28	AH08
WTG_31	31	B29	AH09
WTG_32	32	B30	AJ02
WTG_33	33	B31	AJ03
WTG_34	34	B32	AJ04
WTG_35	35M	B33	AJ05
WTG_36	36	B34	AJ06
WTG_37	37	B35	AJ07
WTG_38	38	B36	AJ08

COP Appendix H ID - Label not Identified in the Viewer	L045 ID - Identified as 'WTG and OSS Labels (L045)' Label in the Viewer	L085 ID - Identified as 'WTG and OSS Labels (L085)' Label in the Viewer	USCG - Label not Identified in the Viewer
WTG_39	39	B37	AJ09
WTG_40	40	B38	AJ10
WTG_41	41	B39	AJ11
WTG_42	42	B40	AJ12
WTG_43	43	B41	AJ13
WTG_44	44	B42	AJ14
WTG_45	45M	B43	AJ15
WTG_46	46	-	AJ16
WTG_47	47	B44	AK08
WTG_48	48	B45	AK09
WTG_49	49	B46	AK10
WTG_50	50	-	AK11
WTG_51	51	B47	AK12
WTG_52	52	-	AK13
WTG_53	53M	B48	AK14
WTG_54	54	-	AK15
WTG_55	55	-	AK16
WTG_92	92	-	AL02
WTG_93	-	-	-
WTG_94	-	-	-

COP Appendix H ID - Label not Identified in the Viewer	L045 ID - Identified as 'WTG and OSS Labels (L045)' Label in the Viewer	L085 ID - Identified as 'WTG and OSS Labels (L085)' Label in the Viewer	USCG - Label not Identified in the Viewer
WTG_95	95	-	AL05
WTG_56	56M	B49	AL08
WTG_57	57	-	AL09
WTG_58	58M	B50	AL10
OSS_1	OSS1	Z01	AL11
WTG_59	59M	B51	AL12
WTG_60	60	-	AL13
WTG_61	61	-	AL14
WTG_62	62M	B52	AL15
WTG_63	63M	B53	AL16
WTG_64	64M	B54	AL17
WTG_65	65	B55	AL18
WTG_66	66	B56	AL19
WTG_67	67	B57	AL20
WTG_68	68M	B58	AL21
WTG_96	96	-	AM02
WTG_97	97	-	AM03
WTG_98	98	-	AM04
WTG_69	69	B59	AM11
WTG_70	70	B60	AM12

COP Appendix H ID - Label not Identified in the Viewer	L045 ID - Identified as 'WTG and OSS Labels (L045)' Label in the Viewer	L085 ID - Identified as 'WTG and OSS Labels (L085)' Label in the Viewer	USCG - Label not Identified in the Viewer
WTG_71	71	-	AM13
WTG_72	72M	B61	AM14
WTG_73	73	B62	AM15
WTG_74	74	-	AM16
WTG_75	75	B63	AM17
WTG_76	76	B64	AM18
WTG_77	77	B65	AM19
WTG_78	78	B66	AM20
WTG_79	79	B67	AM21
WTG_99	99	-	AN04
WTG_80	80	B68	AN11
WTG_81	81M	B69	AN12
WTG_82	82M	B70	AN13
WTG_83	83M	B71	AN14
WTG_84	84	B72	AN15
WTG_85	85	B73	AN16
WTG_100	100	-	AP04
WTG_86	86	B74	AP11
WTG_87	87	B75	AP12
WTG_88	88M	B76	AP13

COP Appendix H ID - Label not Identified in the Viewer	L045 ID - Identified as 'WTG and OSS Labels (L045)' Label in the Viewer	L085 ID - Identified as 'WTG and OSS Labels (L085)' Label in the Viewer	USCG - Label not Identified in the Viewer
WTG_89	89M	B77	AP14
WTG_90	90	B78	AP15
WTG_91	91	B79	AP16

Source: Revolution Wind (2023).

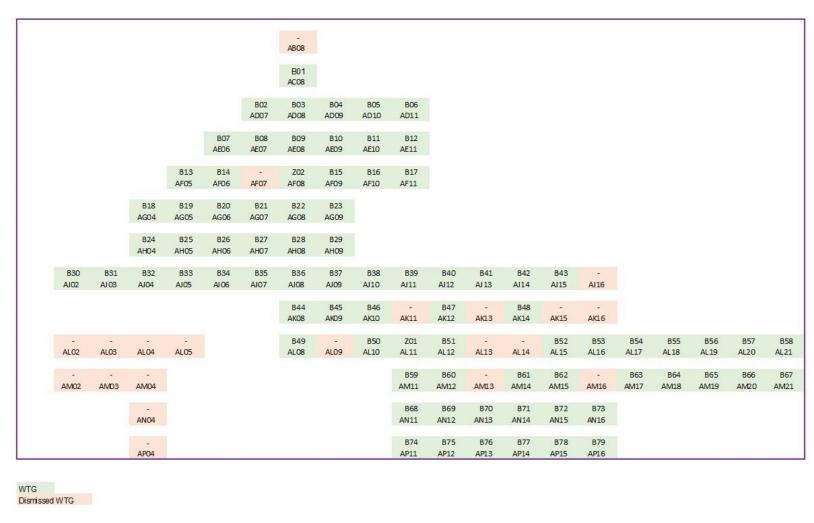


Figure D-1. Wind turbine generator identification numbers and locations for the maximum-case scenario (Revolution Wind 2023).

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- Revolution Wind, LLC. 2023. Wind turbine generator identification numbers and locations for the maximum-case scenario. Written submittal to BOEM in response to Request for Information #57 dated July 7, 2023. Written communication (email).
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