DEPARTMENT OF THE ARMY PERMIT

Permittee: Kellen Ingalls, Orsted/Revolution Wind, LLC

Permit No. <u>NAE-2020-00707</u>

Issuing Office: New England District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

The construction and maintenance of a commercial-scale offshore wind energy facility within an 83,798 acre Bureau of Ocean Energy Management (BOEM) Renewable Energy Lease Area identified as OCS-A 0486. The project shall consist of the following elements: 1) Up to sixty-five (65) wind turbine generators (WTGs) and up to two (2) offshore substations (OSSs) with associated scour protection 2) Approximately 155 miles of inter-array cables (IACs) connecting WTGs and inter-link cables connecting the OSSs with associated secondary cable protection as needed and 3) Up to two (2) export transmission cables within a single forty-two (42) mile long offshore export cable corridor between the lease area and the landfall site with associated secondary cable protection and secondary cable protection will primarily consist of rock and/or concrete mattresses. The proposed burial depth for the cables will be 4 to 6 feet below the substrate.

Estimated impacts from the discharge of dredged and fill material regulated under Section 404 of the Clean Water Act within the three (3) nautical mile limit of the territorial seas include up to 0.95 acre of subtidal impacts associated with the HDD work and up to 32.9 acres of subtidal impacts associated with the placement of secondary cable protection over the export cables. Impacts regulated under Section 10 of the Rivers and Harbors Act (RHA) of 1899 for structures and work in navigable waters (within the 3 nautical mile limit of the territorial seas) are estimated to include up to 730 acres of subtidal impacts associated with boulder relocation, cable lay and burial trials, the pre-lay grapnel run, the installation of the two cables and cable joints, and the placement of secondary cable protection as needed. Estimated impacts regulated under Section 10 of the RHA for structures on the Outer Continental Shelf (OCS) include the following: 1) Approximately 46.9 acres of subtidal impacts associated with the WTG and OSS foundations and scour protection 2) Approximately 155 miles of IACs and 9 miles of OSS link cables with 78.5 acres of subtidal impacts associated with secondary cable protection. This DA permit authorizes Alternative G as described in the Revolution Wind Farm and Export Cable Project Final Environmental Impact Statement (FEIS) published on July 21, 2023.

The proposed work is shown on the following enclosed project plans: 1) "Revolution Wind DRAWINGS ISSUED FOR PERMIT REVIEW," on seventy-five (75) sheets, and dated "December 22, 2021 REVISED July 20, 2022" with the following exception: Sheet 69 has been replaced by the enclosed plan entitled "Revolution Wind Project Location and Components Under Alternative G" and dated 9/15/2023. 2) The Alternative G configurations are shown on the enclosed four sheets (Figures 2.1-22 through Figure 2.1-25) from the FEIS. 30 Additional details of the onshore locations for the HDD work are shown on the enclosed plans titled "Revolution Wind HDD Landfall Design" on six sheets with a final revision date of 06/18/21.

Project Location:

The majority of the work will occur in the Atlantic Ocean within BOEM Renewable Energy Lease Area OCS-A 0486, which is approximately fifteen (15) nautical miles (nm) southeast of Point Judith, Rhode Island (RI), approximately thirteen (13) nm east of Block Island, RI, approximately 7.5 nm south of Nomans Land Island National Wildlife Refuge, and between approximately ten (10) and 12.5 nm south-southwest of varying points of the RI and Massachusetts (MA) coastlines fifteen (15) miles east of Block Island, RI. Export cable work would occur within a forty-two (42) mile long offshore export cable corridor extending from

the lease area into Rhode Island Sound and the West Passage of Narragansett Bay, and making landfall near Quonset Point in North Kingstown, RI.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2028. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. A conditioned 401 water quality certification (WQC) was issued by the Rhode Island Department of Environmental Management (RIDEM) for your project on April 28, 2023 and two associated amendments were issued on July 7, 2023 and August 18, 2023. You must comply with the conditions specified in these documents as special conditions to this permit. For your convenience, a copy of the WQC and associated amendments are enclosed.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The Permittee shall ensure that a copy of this permit is at the work site (and the project office) authorized by this permit whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this permit. This shall be achieved by including the entire permit in the specifications for work. The term "entire permit" means this permit (including its drawings, plans, appendices and other attachments) and also includes permit modifications.

If the permit is issued after the construction specifications, but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. If the permit is issued after receipt of bids or quotes, the entire permit shall be included in the contract or sub-contract. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

2. The Permittee shall complete and return the enclosed Compliance Certification Form to this office within one month following completion of construction of the authorized work.

3. These permit conditions are binding unless the Permittee requests and receives in writing a modification to this permit.

4. The Permittee must contact USACE well in advance of proposed decommissioning to determine permitting requirements. Decommissioning is required at the end of the life of the project and is not authorized by this DA permit.

(continued on page 5)

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - (X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - () Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d, This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from Natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interested decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(Permittee)

9/29/2023

(Date)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

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Justin R. Pabis, P.E. Colonel, Corps of Engineers District Engineer

10/02/2023

(Date)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee)

(Date)

Special Conditions (continued from page 2):

5) <u>Annual Compliance Reporting</u>: The Permittee must submit an annual report to USACE detailing the work that has occurred to date and status of compliance with all of the conditions of this DA permit. Reports for each year are due by February 15th of the following year.

<u>6) USACE Submittals</u>: All plans and reports submitted to USACE in relation to this permit must have "Revolution Wind NAE-2020-00707" on the title page. Submittals must be sent to <u>cenae-r-ma@usace.army.mil</u> with a copy to <u>ruthann.a.brien@usace.army.mil</u>.

7) NMFS HESD Submittals: All plans and reports required to be submitted to the National Marine Fisheries Service Habitat and Ecosystems Services Division (NMFS HESD) must have "Revolution Wind" on the title page and must be sent to nmfs.gar.hesdoffshorewind@noaa.gov.

8) National Ocean Service (NOS) Office of Coast Survey: The permittee must notify the NOS when you begin cablelaying work and work on the Outer Continental Shelf (OCS) and when you complete the activities authorized by this permit. We have provided a copy of this DA permit authorization to the NOS. When construction of the offshore export cables and other offshore subprojects is complete, notify the NOS's Nautical Data Branch by email at ocs.ndb@noaa.gov, and provide as-built drawings with explicit geographic control, horizontal datum (WGS 84 or NAD83), survey unit, survey date and any other relevant information. Digital data is preferred (e.g., CAD, GIS, PDF, Excel spreadsheets for route position lists of cables, etc.). The notification of completion shall be done within 90 days of completion of the activities. The permittee shall send USACE a copy of this documentation as we may note the location on future survey drawings.

<u>9) Environmental Protection Measures:</u> The Permittee must comply with the enclosed environmental protection measures (EPMs) which are considered part of the proposed action authorized by this permit. The applicant voluntarily committed to these measures to avoid and minimize project impacts and were listed in the following documents.

- "Table F-1. Environmental Protection Measures (EPMs) Committed to by Revolution Wind, LLC (Applicant Proposed Measures)" in the Revolution Wind Farm and Revolution Wind Export Cable Project Final Environmental Impact Statement (FEIS).
- "Environmental Protection Measures" in Chapter 7 of the Biological Assessment submitted to U.S. Fish and Wildlife Service (USFWS) by BOEM on 08/09/22 during the Section 7 ESA consultation.
- "Table 3.18 EPMs Included as Part of the Proposed Action Relevant to Avoidance and Minimization of Adverse Impacts to ESA-listed Species and Habitats" in the Biological Assessment submitted to the National Marine Fisheries Service (NMFS) by the Bureau of Ocean Energy Management (BOEM) on 01/30/23 during the Section 7 Endangered Species Act (ESA) consultation.
- Section 6.1 "Avoidance and Minimization Measures (EPMs) in the EFH assessment submitted to NMFS by BOEM on 02/06/23 under the Magnuson-Stevens Fishery Conservation and Management Act.

In the case of a discrepancy between one of these listed EPMs and the Biological Opinions (BOs) issued by USFWS and NMFS during the Section 7 ESA consultations, the wording in the BOs will prevail. In the case of a discrepancy between one of these EPMs and a specific DA permit condition, the wording in the DA permit condition will prevail.

10) <u>COP Approval</u>: The Permittee must submit BOEM's Construction and Operations Plan (COP) approval to USACE within 30 days of receipt. As USACE also has jurisdiction on the OCS and BOEM was the lead for NEPA and several agency consultations, numerous DA permit conditions are analogous to BOEM's anticipated conditions of COP approval. USACE will review BOEM's final conditions of COP approval to determine if a permit modification will be required to align these DA permit conditions with the analogous conditions in the COP approval.

<u>11) Section 106 of the National Historic Preservation Act (NHPA)</u>: The Permittee shall comply with the enclosed Memorandum of Agreement (MOA) titled "Memorandum of Agreement Among the Bureau of Ocean Energy Management, Wampanoag Tribe of Gay Head (Aquinnah, Mashantucket (Western) Pequot Tribal Nation, Mashpee Wampanoag Tribe, the State Historic Preservation Officers of Connecticut, Massachusetts, New York and Rhode Island, Revolution Wind, LLC, and the Advisory Council on Historic Preservation Regarding the Revolution Wind Farm and Revolution Wind Export Cable Project" executed on August 18, 2023. The purpose of the MOA is to avoid, minimize, and mitigate adverse effects to historic properties as required under Section 106 of the NHPA.

12) Environmental Data Sharing with Federally Recognized Tribal Nations: No later than 90 days after BOEM issues a COP approval, the Permittee must make a request to the BSEE Tribal Liaison Officer and the Eastern Seaboard Tribal Liaison at tribalengagement@bsee.gov to coordinate with federally recognized Tribal Nations to: (1) solicit Tribal Nation interest in participating as an environmental liaison on board a small passenger vessel dedicated to environmental monitoring during construction and/or maintenance activities so they can safely monitor, and participate in postmortem examinations of mortality events as a result of these activities; and (2) provide open access to the following: reports generated as a result of the Fisheries Research and Monitoring Plan; reports of NARW sightings; injured or dead protected species reporting (sea turtles, NARW, sturgeon); NARW PAM monitoring; PSO reports (e.g., pile driving reports); pile driving schedules and schedule changes; and any interim and final SFV reports, and its associated data. If a federally recognized Tribal Nation expresses interest in participating as an environmental liaison, the Permittee must provide the federally recognized Tribal Nation information regarding training(s), certification(s), and safety measures, required for participation. At a minimum, the Permittee must offer access to the following federally recognized Tribal Nations: Delaware Nation. Delaware Tribe of Indians. Mashantucket Pequot Indian Tribe (Western), Mashpee Wampanoag Tribe, Mohegan Tribe of Indians of Connecticut, Narragansett Indian Tribe, Shinnecock Indian Nation, and Wampanoag Tribe of Gay Head (Aquinnah). The Permittee must provide to any federally recognized Tribal Nation, in a manner suitable to the Tribal Nation, access to all ESA reports, Post Review Discovery Plans, and other documents listed in this paragraph no later than 30 days after the information becomes available. The Permittee may redact or withhold documents listed in this paragraph when it is information that the Permittee would not generally make publicly available and considers that the disclosure may result contrary to the Permittee's commercial interests. The Permittee shall submit a justification for the redaction/withholding in writing to the BSEE Tribal Liaison Officer and the Eastern Seaboard Tribal Liaison at tribalengagement@bsee.gov.

13) USFWS Section 7 Consultation Under the Endangered Species Act (ESA): This DA permit does not authorize the Permittee to take any terrestrial endangered species. In order to legally take a listed species, the Permittee must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a Biological Opinion (BO) under ESA Section 7, with "incidental take" provisions with which the Permittee must comply). The enclosed United States Fish and Wildlife Service (USFWS) BO dated 05/30/23 contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. The Permittee's authorization under this DA permit is conditional upon their compliance with all of the mandatory terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of a listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with this DA permit. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

14) NMFS Section 7 Consultation Under the ESA: This DA permit does not authorize the Permittee to take any marine endangered species. In order to legally take a listed species, the Permittee must have separate authorization under the ESA (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which the Permittee must comply. The enclosed National Marine Fisheries Service (NMFS) BO dated 07/21/23 contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. The Permittee's authorization under this DA permit is conditional upon their compliance with all of the mandatory terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of a listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with this DA permit. The NMFS is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

The terms and conditions from the incidental take statement in the NMFS Section 7 BO include, but are not limited to, the following:

No later than March 1st of each year over the life of the project, the Permittee must report the number of vessel calls to the Paulsboro Marine Terminal in the previous year by month. The report must include the type of vessel used for each call and the vessel draft. The report must be submitted to USACE Philadelphia District at NAPRegulatory@usace.army.mil and NMFS Greater Atlantic Field Office (GARFO) at nmfs.gar.incidental-take@noaa.gov. This must also be included in any required monthly project reports submitted to NMFS GARFO over the life of the project.

- The Permittee must report any sturgeon observed with injuries or mortalities in the Paulsboro Marine Terminal Area to NMFS within 24 hours using the form available at: https://media.fisheries.noaa.gov/2021-07/Take%20Report%20Form%2007162021.pdf?null Submit the completed form to NMFS at nmfs.gar.incidental-take@noaa.gov within 24 hours.
- The Permittee must hold any dead sturgeon in cold storage until proper disposal procedures are discussed with NMFS GARFO.
- The Permittee must complete the procedures for genetic sampling of any dead Atlantic sturgeon that are over 75 centimeters in length. Fin clip samples are required to document the Distinct Population Segment (DPS) of origin. Instructions for fin clips and associated metadata are available at: https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-take-reporting-programmatics-greater-atlantic under the "Sturgeon Genetics Sampling" heading.
- The Permittee must submit NMFS' final Marine Mammal Protection Act (MMPA) Incidental Take Authorization (ITA) to this office within 30 days of receipt. The enclosed measures listed under Proposed Mitigation in the proposed MMPA ITA published by NMFS in the Federal Register on December 23, 2022 were incorporated into the proposed action considered under the Section 7 ESA consultation and authorized by this permit. USACE will compare the mitigation measures from the final MMPA ITA with those from the proposed MMPA ITA. If needed, USACE will amend this DA permit authorization to reflect changes or additions to the originally proposed mitigation measures that could affect ESA-listed whales.

CONDITIONS RELATED TO WORK WITHIN THE THREE (3) NAUTICAL MILE LIMIT OF THE TERRITORIAL SEAS:

<u>15)</u> <u>Seasonal Work Restrictions In Narragansett Bay</u>: The permittee shall comply with the following seasonal restrictions for in-water HDD and cable-laying and repair work in Narragansett Bay north of the COLREGS demarcation line, which is defined in 33 CFR §80.145 as "an east-west line drawn through Beavertail Light between Brenton Point and the Boston Neck shoreline".

a) In order to avoid impacts to winter flounder early life stages, no in-water bottom-disturbing work shall occur between February 1st and June 30th of any year.

b) In order to avoid impacts to anadromous fish during their upstream migration to their spawning grounds, no inwater bottom-disturbing work shall occur between February 15th and June 30th of any year.

c) In order to avoid impacts to horseshoe crab spawning along the beaches of the Western Passage of Narragansett Bay, no in-water bottom-disturbing work shall occur between April 1st and June 30th of any year.

d) In order to limit impacts to shellfish, no HDD work shall occur in Narragansett Bay between May 1st and July 31st of any year and no bottom-disturbing cable-laying work shall occur between May 1st and August 31st of any year.

e) To the extent practicable, any required bottom-disturbing cable maintenance work should be scheduled to avoid the time of year restrictions listed above.

<u>16) Anchoring Plan Within Narragansett Bay</u>: At least 45 days prior to commencement of work within the 3 nautical mile limit, the Permittee shall submit an anchoring plan for USACE and NMFS HESD review and USACE approval. The plan shall delineate areas of complex habitat, which are defined as coarse unconsolidated mineral substrates (i.e. substrates containing 5% or greater gravels), rock substrates (e.g. bedrock), and shell substrates (e.g. mussel reef) consistent with CMECS definitions as well as vegetated habitats (e.g. SAV) within or near the export cable corridor. The benthic habitat data with modifiers provided by Revolution Wind (Appendix X2 to the COP), as well as the crosswalk of these to the above NMFS definition of complex habitat (also in Appendix X2 of the COP), will be provided along with individual boulder pick data in maps prepared that also identify areas restricted for anchoring. USACE and NMFS will have 30 calendar days to review and comment. The Permittee must address any comments to USACE' satisfaction before construction activities can begin. For areas where complex habitats cannot be fully avoided, the anchoring plan should prioritize avoidance/minimization in order of decreasing density and size of boulders where they are present within areas of complex habitat (as defined above); e.g., the highest priority would be complex habitat with the highest density of large boulders and the lowest priority would be complex habitat with no large boulders. The final anchoring plan must be provided to all construction and support vessels to ensure no anchoring of vessels or other work occurs within these sensitive habitats.

<u>17) Vessel Mooring in Narragansett Bay</u>: In order to limit benthic impacts, the work within Narragansett Bay shall be performed such that vessels stay afloat at low tide to avoid grounding.

<u>18) SAV Survey</u>: At least 45 days prior to the commencement of the proposed HDD work, the Permittee will perform a submerged aquatic vegetation (SAV) survey to determine the location and extent of the SAV bed to the east of the landfall site. The SAV survey shall be performed in accordance with the enclosed "Joint Federal Agency Submerged Aquatic Vegetation Survey Guidance for the New England Region" updated on August 11, 2016. The survey results shall be submitted to USACE for review and approval at least 21 days prior to the commencement of work.

<u>19) SAV Avoidance</u>: The Permittee must provide both vessel operators and the contractor for the HDD work the final anchoring plan showing the updated SAV locations (from the survey completed in accordance with permit special condition 3 above) with instructions to maintain a 100-foot buffer from these areas during in-water and land-based construction, staging, and mooring activities.

20) Shellfish Survey within Narragansett Bay: Prior to the commencement of the HDD work, the Permittee shall conduct a shellfish survey of the proposed exit pits and submit the results to the Rhode Island Department of Environmental Management (RIDEM) for review. If deemed necessary by RIDEM, the Permittee will relocate shellfish from the area prior to the dredging of the pits in accordance with the process described in the Division of Marine Fisheries' document "Guidance for Conducting Shellfish Surveys for Dredging Projects", which was updated in August 2018.

<u>21) Inadvertent Release Plan</u>: At least 45 days prior to the commencement of the HDD work, the Permittee shall submit an inadvertent release contingency plan to USACE and NMFS HESD. These agencies will have 30 days to provide comments on the plan. The Permittee must consider and respond to any comments to USACE' satisfaction prior to commencing work. The HDD work must be performed in accordance with the approved plan.

<u>22) HDD Dredged Material Handling</u>: In order to limit turbidity and aquatic impacts from the excavation of the two HDD exit pits, the Permittee shall temporarily store the dredged material on a barge and keep it wet. Once the HDD work has been completed the dredged material shall be used to refill the two pits.

23) Post-HDD Report: Within 60 days of completion of the HDD work, the Permittee must submit a post-construction report to USACE and NMFS HESD detailing the following information. a) The HDD methods utilized for the landfall work (cofferdam, unconfined, etc.), b) The dates during which the HDD work occurred, c) The vessels utilized for the work, the method of anchoring, and the length they were anchored, d) For any mooring or staging work in SAV that could not be avoided, the date(s) the impacts occurred, the length of time of the impacts, and the specific activities within SAV resources. e) For any inadvertent releases that occurred during the HDD work, the date(s), the location, the proximity to the SAV beds, and the measures taken to mitigate the situation. f) If the initial HDD work was unsuccessful, indicate the size and location of the new entry and exit pits, whether the exit pits were located within the shellfish survey area, and whether the 100-foot buffer from SAV resources was maintained. g) If the second set of pits failed and trenching in isolation was performed, indicate the length, width, and depth of the trench, the distance from the trench and side slopes to the closest SAV resources, and the square footage of any direct impacts to SAV resources from this activity. USACE will have 90 days to review the report and to determine if a post-construction SAV survey will be required. If so, the Permittee will perform an SAV survey during the next SAV growing season in accordance with the guidelines mentioned in permit special condition 3 above. USACE will then review the SAV survey within 60 days of submission to determine if restoration and/or compensatory mitigation is required. Any required compensatory mitigation will comply with USACE's 2008 compensatory mitigation rule (33 CFR 332).

24) Boulder Relocation Within Narragansett Bay: The Permittee shall submit a plan for boulder relocation within the 3 nautical mile limit to RIDEM, USACE, and NMFS HESD for review. The plan shall ensure sensitive benthic habitats are adequately preserved and that when moved, boulders do not negatively impact essential fish habitat (EFH), impede scientific monitoring and research, or adversely affect commercial fishing activities. This plan shall be submitted at least ninety (90) days prior to boulder relocation work for review and approval prior to implementation. A boulder shall be defined as > 25 .6 centimeters in diameter. Boulders shall be relocated to areas with similar bottom types within the fifty (50) meter surveyed corridor, where technically practicable. Boulders shall not be placed in areas with submerged aquatic vegetation (SAV), on mussel beds, on complex hard bottom habitats, or where they would impede RIDEM's scientific monitoring and research. The Permittee shall also consult with RIDEM regarding the relocation of boulders to ensure boulder movement does not adversely affect commercial fishing activity. The boulder relocation plan must be approved by RIDEM and any comments from USACE and NMFS must be addressed prior to implementation.

Monitoring via video or still image (e.g., drop camera) will be required in selected areas (i.e., sampling stations) along the export cable corridor where boulder movement is conducted. Boulder and seabed disturbance monitoring, including monitoring of installed cable mattresses, will align with methodology described in the Revolution Wind Fisheries and Benthic Monitoring Plan submitted to RIDEM. The monitoring will occur shortly after installation of the cable and sampling will be repeated annually for five (5) years post construction. Monitoring reports will be submitted annually, with a summary report assessing the status of habitat recovery following the initial five-year monitoring period. Based on findings and results from the monitoring surveys through year five, CRMC, RIDEM, NMFS, USACE, and the Permittee will jointly determine if further surveys are required during the lifecycle of the project.

Sampling stations within the 3 nautical mile limit will be determined post construction and will be distributed across areas where boulder relocation activities occurred, including four sections of particular concern along the export cable route: (1) southwest of Dutch Island, (2) the western shore of Conanicut Island, (3) northeast of Point Judith and South of Beavertail, and (4) approaching the 3 mile limit of the territorial seas. Targeted areas and sampling locations within these areas of interest will be identified in the boulder relocation plan and approved by RIDEM and NMFS prior to implementation. Within thirty (30) days of completion of boulder relocation, the Permittee must notify the National Oceanic and Atmospheric Administration's (NOAA) Office of Coast Survey, the CRMC, RIDEM, and NMFS HESD of all locations of relocated boulders.

25) Munitions and Explosives of Concern (MECs) and Unexploded Ordnance (UXOs) in Narragansett Bay: The Permittee has identified sixteen UXOs within the offshore export cable corridor within the 3 nautical mile limit of the territorial seas and plans to microsite the cable to avoid these objects. However, the Permittee must immediately notify the Rhode Island Department of Environmental Management (RIDEM), the Rhode Island Coastal Resources Management Council (CRMC), USACE, and NMFS HESD of the discovery of any potential MECs/UXOs during cable burial operations. The Permittee must coordinate the preferred method of mitigation with RIDEM, CRMC, USACE, NMFS HESD, and any other appropriate agencies in consultation with an MEC/UXO specialist.

<u>26) Cable Siting Plan Within Narragansett Bay</u>: At least 60 days prior to the commencement of cable-laying work within the 3 nautical mile limit, the Permittee shall provide a draft cable siting plan for USACE and NMFS HESD review and USACE approval. The plan shall delineate areas of complex habitat, which are defined as coarse unconsolidated mineral substrates (i.e. substrates containing 5% or greater gravels), rock substrates (e.g. bedrock), and shell substrates (e.g. mussel reef) consistent with Coastal and Marine Ecological Classification System (CMECS) definitions as well as vegetated habitats (e.g. SAV) within or near the export cable corridor.

The benthic habitat data with modifiers provided by Revolution Wind (Appendix X2 to the COP), as well as the crosswalk of these to the above NMFS definition of complex habitat (also in Appendix X2 of the COP), will be provided along with individual boulder pick data in maps prepared for the cable siting plan. The Permittee shall avoid complex habitat to the maximum extent practicable while also considering engineering and other siting constraints. The Permittee shall clearly identify any areas of complex habitat that cannot be avoided and provide an explanation. USACE and NMFS will have 30 days to review the plan and provide comments. The Permittee must respond to all comments prior to the commencement of work. For areas where complex habitats cannot be fully avoided, the cable siting plan should prioritize avoidance/minimization in order of decreasing density and size of boulders where they are present within areas of complex habitat (as defined above); e.g., the highest priority would be complex habitat with no large boulders.

<u>27) Secondary Cable Protection in Narragansett Bay</u>: The Permittee shall limit secondary cable protection within the 3 nautical mile limit of the territorial seas to the extent shown on the approved plans. Secondary cable protection will only be installed in locations where the cable presents a risk to marine users, the cable crosses other submerged cables or utilities, and/or cable burial is not possible (e.g., cable joints). Where possible any necessary secondary cable protection shall be constructed of biologically friendly materials (i.e., that allow epifaunal colonization) that mimic as closely as possible the existing surrounding habitat and be trawlable. The Permittee shall avoid the use of plastics/recycled polyesters/net material (i.e., rock-filled mesh bags, fronded mattresses) for cable protection.

28) As-Built Cable Location in Narragansett Bay: Within ninety (90) days of completing the installation of the export cables within the 3 nautical mile limit of the territorial seas, the Permittee shall submit a post-construction survey of the actual cable location and the proposed cable easement with State Plane Coordinate System and Lat/Long coordinates for the cable angle points, easement corners/angle points of all secondary cable protection (e.g., concrete mattress, rock berm, rock bags, and fronded mattresses), and an ArcGIS feature class of the installed cables to the CRMC, RIDEM, USACE, and NMFS HESD. The lists of coordinates and the feature class overlaid on a NOAA nautical chart shall also be made available to the CRMC and DEM, as well as the fishing industry within thirty

(30) days of installation. All information shall be provided promptly to NOAA's Office of Coast Survey. The Permittee shall provide measurements to the CRMC, RIDEM, USACE, and NMFS HESD with a map(s) of all measurement station locations. Measurement stations shall include cable portions that achieved the target cable burial depth and cable portions that include secondary protection that did not meet target cable burial depths. Secondary cable protection methods shall be identified on said map(s).

29) Cable Route Inspection and Post-Construction Monitoring in Narragansett Bay: The Permittee shall submit a Cable Route Inspection and Post-Construction Monitoring Plan for RIDEM, CRMC, USACE, and NMFS HESD review and RIDEM and CRMC approval at least 120-days prior to start of construction. This plan shall include a duringconstruction inspection using a multi-beam survey and cable tracking survey (either electromagnetic pulse induction, or tone induction, which via advance signal processing determines accurate range or depth to the cable), coincident with the submerged cable installation to ensure cable burial depth is achieved and inform placement of any secondary cable protection (if necessary) within the 3 nautical mile limit of the territorial seas. Ideally, the entire length of the export cables should be inspected, including on the Outer Continental Shelf (OCS). This plan shall also include a post-construction inspection to verify cable burial depth, trench reconstitution, and measure and assess electromagnetic field (EMF) levels along the cable route within the 3 nautical mile limit and ideally the entire cable length, including the OCS. The EMF survey shall be used to assess potential effects of EMF on the composition, life cycle functions, uses, process and activities of fish and wildlife. Within ninety (90) days of the post-construction assessment (even if required by another agency), the results of the EMF survey will be provided to RIDEM, CRMC, USACE and NMFS HESD in a public report. If it is determined by RIDEM that, pursuant to Rule 8.D of the Water Quality Regulations, there is an adverse impact to the composition, life cycle functions, uses, process and activities of fish and wildlife, the Permittee's EMF expert shall submit a recommendation to address such impact to RIDEM, USACE, and NMFS HESD for review and comment and for RIDEM approval based on the best available science. Any comments from USACE and NMFS HESD must be addressed before implementation. All approved recommendations shall be implemented within a reasonable period of time.

<u>30) Long-Term Cable Monitoring Plan in Narragansett Bay</u>: Within six months of the completion of construction, the Permittee shall submit a long-term monitoring and operations and maintenance plan for the transmission cables for CRMC, RIDEM, USACE, and NMFs review and CRMC and RIDEM approval. This plan shall include details to satisfy at minimum the following actions. 1) The entire cable route within state waters will be resurveyed using a multi-beam survey approach following the first and second years of operation. Criteria for additional cable route surveys following a severe weather event will also be developed and included in the plan. 2) The results of the Post-Construction, Year 1 and Year 2 multi-beam cable surveys shall be provided to the CRMC, RIDEM, USACE, and NMFS HESD for review within ninety (90) days of survey completion and include any remedial actions taken or scheduled to occur. If the three consecutive post-construction surveys show that the cable does not pose a hazard to public safety, navigation, or marine resources, additional monitoring survey frequency may be decreased at RIDEM and CRMC discretion to every five (5) years thereafter for the operational life of the project. If any survey shows that the cable poses a hazard to public safety, navigation, or marine resources, annual surveys will be performed after corrective action is completed, if required, and until three consecutive surveys show there is no such risk, after which surveys will return to a 5-year cycle.

<u>31) Exposed Cable in Narragansett Bay</u>: In the event that cable inspection and/or monitoring shows an installed cable has become exposed, the cable presents a risk to other marine users or resources, or is at risk of being damaged, the Permittee shall promptly submit a corrective action report to CRMC, RIDEM, USACE, and NMFS HESD for review and receive approval from CRMC before implementing corrective measures. Comments from USACE and NMFS HESD should be addressed before performing the corrective action.

32) Fisheries Monitoring Plan Within Narragansett Bay: The Permittee shall submit a Fisheries Monitoring Plan for work within the 3 nautical mile limit of the territorial seas and consult the RIDEM Division of Marine Fisheries and NMFS HESD for the appropriate inclusion of species, gear methods and sampling protocols. The Permittee shall submit the fisheries monitoring plan to RIDEM, CRMC, USACE, and NMFS for review and must obtain RIDEM and CRMC approval. Any comments from USACE and NMFS HESD must be addressed before implementing the plan. The Permittee shall implement the fisheries monitoring plan to obtain the specified fisheries monitoring data for a minimum of one (1) full year prior to cable installation, through the entirety of the construction period, and for two (2) years following commencement of cable activation and operation. The Permittee's fisheries monitoring plan may include data the state of Rhode Island has obtained as part of ongoing state monitoring activities as a supplement to the Permittee's required monitoring data. The Permittee shall provide all necessary support to RIDEM and potential collaborators to develop and implement an electromagnetic field fishery survey following installation of the cable. The

cable effects study approach shall follow the requirements outlined in the Memorandum of Understanding between the CRMC, the Fishermen's Advisory Board, and Revolution Wind dated December 13, 2022.

<u>33) Boulder and Seabed Disturbance Monitoring Plan in Narragansett Bay</u>: The Permittee shall provide a boulder and seabed disturbance monitoring plan to RIDEM, USACE, and NMFS HESD for review that will be used to assess cable mattress habitat following installation; this plan shall be submitted at least six (6) months prior to cable installation. This plan shall include visual monitoring (video or photography) and a means of recording observations of any coverage of invasive species. The schedule of monitoring habitats along the cable route shall conform to the timeline for monitoring boulder movement operations. The plan must be approved by RIDEM and any comments from NMFS HESD and USACE must be addressed prior to implementation. The monitoring reports shall be provided to RIDEM, USACE, and NMFS HESD for review and comment.

CONDITIONS RELATED TO WORK ON THE OUTER CONTINENTAL SHELF (OCS):

34) Anchoring Plan on the OCS: The Permittee must prepare and implement Anchoring Plans/Plats for all areas where anchoring or buoy placement occurs during construction, operations/maintenance, or decommissioning and include avoidances of complex habitats which are defined as coarse unconsolidated mineral substrates (i.e. substrates containing 5% or greater gravels), rock substrates (e.g. bedrock), and shell substrates (e.g. mussel reef) consistent with CMECS definitions; boulders ≥ 0.5 meters; Ancient Submerged Landform Features (ASLF); known and potential shipwrecks; potentially significant debris fields; potential hazards; and any related facility installation activities (such as cable, WTG, and OSS installation). Any required avoidance buffers shall be consistent with state and federal permits, authorizations, and agreements. For areas where complex habitats cannot be fully avoided, the anchoring plan should prioritize avoidance or minimization in order of decreasing density and size of boulders where they are present within areas of complex habitat (as defined above); e.g., the highest priority would be complex habitat with the highest density of large boulders and the lowest priority would be complex habitat with no large boulders. The Permittee must provide to all construction and support vessels the locations where anchoring or buoy placement must be avoided according to the plan, including complex habitat; boulders ≥ 0.5 meters; ancient submerged landform features; known and potential shipwrecks; potentially significant debris fields; potential hazards; and any related facility installation activities (such as cable, WTG, and OSS installation), during operations, and decommissioning. If anchoring is necessary at these locations, then all vessels deploying anchors must extend the anchor lines to the extent practicable to minimize the number of times the anchors must be raised and lowered to reduce the amount of habitat disturbance, unless the anchor chain sweep area includes complex habitat that may be impacted by the chain sweep. On all vessels deploying anchors, the Permittee must use mid-line anchor buoys to reduce the amount of anchor chain or line that touches the seabed, unless the Permittee demonstrates, and BOEM and BSEE accept, that (1) the use of mid-line anchor buoys to reduce the amount of anchor chain or line that touches the seabed is not technically practical or feasible; or (2) a different alternative is as safe and provides the same or greater environmental protection.

The Permittee must provide the Anchoring Plan to BOEM and BSEE with a notification email sent to NMFS GARFO HESD for a 60-day review at least 120 days before anchoring activities and construction begins for export and interarray cables. The Permittee must resolve all comments on the Anchoring Plan to BOEM's and BSEE's satisfaction before conducting any OCS seabed-disturbing activities that require anchoring. If there are less than 120 days between anchoring activities and this COP approval, the Permittee must submit the plan as soon as practicable and no later than 60 days prior to commencing activities.

<u>35) Use of Jack-up Barges on the OCS</u>: Jack-up barge locations on the OCS must avoid and minimize deployment in complex habitats. Where full avoidance is not feasible, the Permittee must avoid locations for the jack-up barge in order of the following priority: 1) Complex habitats (i.e., areas of medium to high backscatter) with high density large boulders, 2) Complex habitats (i.e., areas of medium to high backscatter) with medium density large boulders, 3) Complex habitats (i.e., areas of medium to high backscatter) with low density large boulders, 4) Complex habitats (i.e., areas of medium to high backscatter) with scattered large boulders, and 5) Complex habitats (i.e., areas of medium to high backscatter) with no large boulders.

<u>36) Jack-up Barge Post-Completion Report on the OCS</u>: The Permittee must provide a Jack-up Barge Post-Completion Report to BOEM, BSEE, and NMFS HESD within 90 days of construction or repair of a major facility component (e.g., export cable installation; WTG or OSS installation; inter array cable installation) to demonstrate that seabed-disturbing activities complied with avoidance requirements. The report must include "as-placed" plats depicting the locations in which jack-up barge legs contacted the seabed. The report must include a summary of how impacts to complex habitats were avoided and/or minimized and include documentation of technical feasibility issues encountered. The plats must be at a scale of 1 inch = 1,000 feet (300 meters) with Differential Global Positioning System (DGPS) accuracy.

<u>37) As-Placed Anchor Plats for Work on the OCS</u>: The Permittee must provide as-placed anchor plats to BOEM, BSEE, USACE, and NMFS within 90 days of completion of an activity or construction of a major facility component (e.g., buoys; export cable installation; WTG or OSS installation; and inter array cable installation) to demonstrate that seabed-disturbing activities complied with avoidance requirements for seabed features and hazards, complex habitat, archaeological resources, and/or anomalies. As-placed plats must be certified by a professional land surveyor showing the "as-placed" location of all anchors and any associated anchor chains and/or wire ropes and relevant locations of interest or avoidance on the seabed for all seabed disturbing activities. The plats must be at a scale of 1 inch = 1,000 feet (300 meters) with Differential Global Positioning System (DGPS) accuracy.

<u>38) Micrositing Plan for Work on the OCS</u>: The Permittee must prepare and implement a Micrositing Plan that describes how WTG locations, inter-array cables, and export cable routes will be microsited to avoid or minimize impacts to complex habitat, boulders, and confirmed MEC/UXO. The plan must specifically describe how WTG_38, WTG_39, WTG_40, WTG_41, WTG_44, WTG_45, WTG_47, WTG_48, WTG_49, WTG_53, WTG_56, WTG_58, WTG_62, WTG_63, WTG_64, WTG_65, WTG_72, WTG_73, WTG_81, and WTG_82 and inter-array and export cable routes will be microsited to avoid or minimize impacts to complex benthic habitat and boulders \geq 0.5 meters. The Permittee must not microsite structure locations in a way that narrows any WTG corridors to less than the distance required in the Micrositing Structures on the OCS condition. The Micrositing Plan must be consistent with conditions on MEC/UXO ALARP Certification, Cable Routings, and Boulder Identification and Relocation. The Micrositing Plan must include a figure for each microsited WTG or cable segment, including benthic habitat delineations showing complex habitat and locations of boulders \geq 0.5 meters. The plan must include a figure depicting large boulder locations, multibeam backscatter returns, and the proposed microsited locations for cables and WTGs.

For WTGs and cables that cannot be microsited to avoid impacts to complex habitat or boulders \geq 0.5 meters, the micrositing plan must identify technically and economically practical or feasible impact minimization measures and use the following, prioritized list of complex habitat sub-types to avoid during micrositing: 1) Complex habitats (i.e., areas of medium to high backscatter) with high density large boulders; 2) Complex habitats (i.e., areas of medium to high backscatter) with medium density large boulders; 3) Complex habitats (i.e., areas of medium to high backscatter) with low density large boulders; 4) Complex habitats (i.e., areas of medium to high backscatter) with scattered large boulders; and 5) Complex habitats (i.e., areas of medium to high backscatter) with no large boulders.

The Micrositing Plan must be submitted to BOEM and BSEE to coordinate with NMFS GARFO HESD for a 60-day review, 120 days prior to site preparation activities for cables and WTGs. The Permittee must resolve all comments on the Micrositing Plan to BOEM's and BSEE's satisfaction prior to implementation of the plan. If there are less than 120 days between site preparation activities and this COP approval, the Permittee must submit the plan as soon as practicable and no later than 60 days prior to commencing activities.

<u>39) Structure Micrositing on the OCS</u>: The Permittee must not adjust approved structure locations in a way that narrows any northwest-southeast or northeast-southwest transit corridors to less than 0.6 nautical miles, nor to a layout that eliminates two distinct lines of orientation in a grid pattern. The Permittee must submit the final as-built structure locations.

<u>40) Micrositing Report on the OCS</u>: The Permittee must provide BOEM, BSEE, USACE, and NMFS HESD with a post-installation Micrositing Report. The report must include a summary of the micrositing activities for WTGs, interarray cables, and the export cable and demonstrate (i.e., figures of as-built locations overlaid on multibeam echosounder backscatter survey data) how impacts to complex habitats and benthic features were avoided and/or minimized within the lease area and export cable corridors (i.e., RWEC-OCS and RWEC-RI). The report must also identify and depict (i.e., figures) areas in which WTGs or cables could not be microsited to avoid complex habitats with a description of the complex habitat sub-types impacted (see prioritized list of complex habitat sub-types listed under the Micrositing Plan Section 5.5.3) and include documentation of technical feasibility issues encountered. The report must be submitted within 60 days of completion of all WTG and cable installations. The Permittee must also provide BOEM, BSEE, and NMFS HESD a shapefile of as-built WTGs, inter-array cables, and the export cables, as well as best-available multibeam echosounder backscatter survey data (i.e., as a raster file for use in ArcGIS).

<u>41) Boulder Identification and Relocation Plan on the OCS</u>: The Permittee must submit a Boulder Identification and Relocation Plan to BSEE for review and concurrence. The plan must detail how the Permittee will relocate boulders as close as practicable to areas immediately adjacent to existing similar habitat. The plan must be submitted to

BOEM, BSEE, and NMFS GARFO HESD for a 60-day review, 120 days prior to boulder relocation activities. If there are less than 120 days between boulder relocation activities and this COP approval, the Permittee must submit the plan as soon as practicable and no later than 60 days prior to commencing activities. The Permittee must resolve all comments on the Boulder Relocation Plan to BOEM's and BSEE's satisfaction prior to implementation of the plan. If BOEM or BSEE do not provide comments on the plan within 60 days of its submittal, then the Permittee may presume concurrence with the plan. The plan must include sufficient scope to mitigate boulders for facility installation and operation risks. The plan must include the following for boulders that are planned to be relocated.

- A summary and detailed description of surface boulders > 0.5 meters in diameter, locations of areas with subsurface boulders and locations along the cable routes and wind turbine areas.
- A detailed summary of utilized methodologies in boulder identification, including geological and geophysical survey results.
- A clear depiction (i.e., figures) of the location of boulder relocation activities specified by activity type (e.g., pick or plow, removal, or placement). Separate submissions of these depictions overlaid on multibeam bathymetry and backscatter data must also be submitted.
- A description of boulder removal and/or relocation methods for each type of boulder relocation activity and technical feasibility constraints, including capacity of crane used in grab systems, vessel specifications and metocean limits on operation, etc.
- A comprehensive list and shapefile of boulder locations that would be relocated (latitude, longitude), boulder dimensions (meters), areas of active (within last 5 years) bottom trawl fishing (latitude, longitude), areas where boulders > 2 meters in diameter are anticipated to occur (latitude, longitude), and identification of approximate areas where boulder would be relocated (latitude, longitude).
- The measures taken to minimize the quantity of seafloor obstructions from relocated boulders in areas of active bottom trawl fishing.
- A description of safety distances or zones to limit boulder relocation activities near third-party assets.
- A summary of any consultation and outreach conducted with resource agencies and the fishing industry in development of the plan (e.g., notifications to mariners).
- A statement of consistency with the Micrositing Plan.

The Permittee must provide USCG, NOAA, and the local harbormaster with a comprehensive list and shapefile of positions and areas where boulders would be relocated (latitude, longitude) at least 60 days prior to boulder relocation activities.

<u>42) Boulder Relocation on the OCS</u>: The Permittee must implement methods identified in the COP and described in the Boulder Identification and Relocation Plan for boulder relocation activities. The Permittee must consider the spatial extent of boulder relocation in the micrositing of WTGs and OSS foundations and inter-array and export cables for this project and must relocate boulders as close as practicable in areas immediately adjacent to existing similar habitat. The relocation of boulders must be consistent with the project easement.

<u>43) Boulder Relocation Report on the OCS</u>: The Permittee must provide to BSEE, USACE, and NMFS a Boulder Relocation Report. The report must include a post-relocation summary of the Boulder Relocation activities and information to certify boulder risks related to the installation and operation of the facility have been properly mitigated. The report must also identify boulders that could not be relocated with documentation of technical feasibility concerns, including information on how, if at all, the final boulder placement differs from the Boulder Relocation Plan and why such changes were necessary. The report must be submitted within 60 days of completion of the Boulder Relocation Implementation campaign. The Permittee must also provide BOEM and BSEE a comprehensive list and shapefile of boulder locations that were relocated (latitude, longitude), boulder dimensions (meters), any safety distances or zones to limit boulder relocation activities near third-party assets (meters), and areas of active (within last 5 years) bottom trawl fishing (i.e., as a raster file for use in ArcGIS).

<u>44) Cable Routings on the OCS</u>: The Permittee must submit the final Cable Burial Risk Assessment (CBRA) package and engineered cable routings for all cable routes on the OCS to BSEE for review and concurrence. The final CBRA package must include a summary of final information on (1) natural and man-made hazards; (2) sediment mobility, including high and low seabed levels from both mobile and stable seabed, expected over the project lifetime; (3) feasibility and effort level information required to meet burial targets; (4) profile drawings of the cable routings illustrating cable burial target depths; and (5) minimum burial depths from seabed to address threats to the cable including, but not limited to, anchoring risk, military activity, third-party cable crossings, and fishing gear interaction. Detailed supporting data and analysis may be incorporated by reference or attachments, including relevant geospatial data. <u>45) Cable Burial Plan on the OCS</u>: A detailed submarine cable system burial plan must be submitted to the USCG and BSEE for BSEE review. No later than 90 days post-cable installation of all cable lines on the OCS (export, interconnector, and array), the Permittee must submit to BSEE, BOEM, and the USCG a copy of the final submarine cable system route positioning list that depicts the precise location and burial depths of the entire cable system.

<u>46) Cable Burial on the OCS</u>: The export, interconnector, and inter-array cables are expected to be installed using jetting, vertical injection, control flow excavation, trenching, and plowing. BOEM has determined the proper burial depth to be a minimum of 1.2 meters (4 feet) below seabed along federal sections of the export, interconnector, and inter-array cables. This depth is consistent with the COP and the cable burial performance assessment. Unless otherwise authorized by BSEE, the Permittee must comply with cable burial conditions described in the COP by demonstrating proper burial depth of the installed submarine cables along at least 90 percent of the total export cable length on the OCS and at least 90 percent of the inter-array cable routing, excluding cable crossings and approaches to foundations. The Permittee must demonstrate proper burial depth by providing cable monitoring reports and final, as-built information.

<u>47) Cable Protection Measures on the OCS</u>: The export, interconnector, and inter-array cables are expected to be installed using jetting, vertical injection, control flow excavation, trenching, and plowing. In areas where final cable burial depth is less than 1.2 meters below seabed, excluding within the vicinity of WTG/OSS foundations where cables are enclosed within a cable protection system, the Permittee must install secondary protection such as concrete mattresses, fronded mattresses, rock bags or rock placement.

The use of cable protection measures shall not exceed 10 percent of the total export cable length on the OCS or 10 percent of the interconnector and inter-array cable routing, excluding cable crossings and approaches to foundations. The Permittee must employ cable protection measures when proper burial depth is not achieved. The Permittee must provide BSEE with detailed drawings/information of the actual burial depths and locations where protective measures were used, no later than when the final, as-built cable drawings are submitted. The Permittee must ensure notice of locations where target burial depths were not achieved and where cable protection measures were used, including accessible graphic/geo-referenced repository for this information, are made available.

<u>48) Scour and Cable Protection Plan on the OCS</u>: The Permittee must prepare and implement a Scour and Cable Protection Plan that includes descriptions and specifications for all scour and cable protection materials. The plan must include a depiction of the location and extent of proposed scour or cable protection, the habitat delineations for the areas of proposed scour and cable protection, detailed information on the proposed scour or cable protection materials for each area and habitat type.

The Permittee must avoid the use of engineered stone or concrete mattresses in complex habitat or demonstrate, to BSEE and BOEM's satisfaction, technical or economic infeasibility or impracticability within the plan. The Permittee must ensure that all materials used for scour and cable protection measures consist of natural or engineered stone that does not inhibit epibenthic growth and provides three-dimensional complexity in height and in interstitial spaces. The Permittee must minimize the use of scour protection to the minimum amount necessary to accomplish the purpose.

Cable protection measures must have tapered or sloped edges to reduce hangs for mobile fishing gear. The Permittee must avoid the use of plastics/recycled polyesters/net material (i.e., rock-filled mesh bags, fronded mattresses) for scour protection.

The Permittee must submit the plan to BOEM and BSEE with notification to NMFS GARFO HESD for a 60-day review at least 120 days before placement of scour and cable protection. The Permittee must resolve all comments on the plan for a 60-day review at least 120 days before placement of scour and cable protection. The Permittee must resolve all comments on the plan to BOEM's and BSEE's satisfaction before placement of the scour and cable protection materials.

<u>49) Post-Installation Cable Monitoring on the OCS</u>: The Permittee must conduct an inspection of each inter-array, interconnector, and export cable to determine cable location, burial depths, the state of the cable, and site conditions within: 6 months, 1 year, and 2 years of commissioning, and every 5 years thereafter (e.g., years 7, 12, 17, 22 after commissioning). These surveys must also be conducted within 180 days of a storm event. The Permittee must provide BSEE, BOEM, and USACE with a cable monitoring report within 90 days following each inspection. Inspections of the inter-array and export cables must include high resolution geophysical (HRG) methods involving, for example, multibeam bathymetric survey equipment; and identify seabed features, natural and man-made hazards, and site conditions along Federal sections of the cable routing.

- If BSEE determines that conditions along the cable corridor warrant adjusting the frequency of inspections (e.g., due to changes in cable burial or seabed conditions that may impact cable stability or other users of the seabed), then BSEE may require the Permittee to submit a revised inspection schedule for review and concurrence.
- If BSEE determines that burial conditions have deteriorated or changed significantly and remedial actions are warranted, BSEE will notify the Permittee that the Permittee must submit the following via TIMSWeb within 90 days of being notified: a seabed stability analysis, a remedial action plan, and a schedule for completing remedial actions. All remedial actions must be consistent with the COP. BSEE will review the plan and schedule and provide any comments within 60 days of receiving the plan. The Permittee must resolve all comments to BSEE's satisfaction.
- If the Permittee determines that burial conditions have deteriorated or changed significantly and remedial
 actions are warranted, the Permittee must submit the following to BSEE via TIMSWeb within 90 days of
 making the determination: the data used to make the determination, a seabed stability analysis, a plan for
 remedial actions, and a schedule for the proposed work. The Permittee will also provide this remedial plan
 and schedule to USACE and NMFS. BSEE will review the plan and schedule and provide comments within
 60 days, if applicable. The Permittee must resolve all comments to BSEE's satisfaction.

50) Structural Integrity Monitoring on the OCS: The Permittee must conduct annual above-water inspections to ensure structural integrity is maintained. The Permittee must inspect the condition of cathodic protection system(s) and for indications of obvious overloading; deteriorating coating systems; excessive corrosion; and bent, missing, and/or damaged members of the structure in the splash zone and above the water line.

51) Foundation Scour Protection Monitoring on the OCS: The Permittee must minimize the footprint of scour protection measures at the WTG foundations and must inspect scour protection performance. The Permittee must submit an Inspection Plan to BSEE at least 60 days prior to initiating inspection activities described in the Inspection Plan. BSEE will review the Inspection Plan and provide comments, if any, on the plan within 60 days of its submittal. The Permittee must resolve all comments on the Inspection Plan to BSEE's satisfaction and receive concurrence prior to initiating the inspection program. If BSEE does not send comments within 60 days, the Permittee may presume concurrence.

- The Permittee must carry out an initial foundation scour inspection within 6 months of completing installation of each foundation location, thereafter at intervals not greater than 5 years, and within 180 days after a storm event.
- The Permittee must provide BSEE with a foundation scour monitoring report within 90 days of completing each foundation scour inspection. If multiple foundation locations are inspected within a single survey effort, the foundation scour monitoring reports for those locations may be combined into a single foundation scour monitoring report provided within 90 days of completing the last foundation scour inspection. The schedule of reporting must be included in the Inspection Plan for BSEE review and concurrence.
- The Permittee must submit a plan for additional monitoring and/or mitigation to BSEE for review and concurrence if scour protection losses develop within 10 percent of the maximum loss allowance, edge scour develops within 10 percent of the maximum allowance, or spud depressions from installation affect scour protection stability.

52) Post-Storm Event Monitoring Plan on the OCS: The Permittee must provide a plan for post-storm event condition monitoring of the facility infrastructure, foundation scour protection, and cables to BSEE for review at least 60-days prior to commencing installation activities. The Permittee must address BSEE's comments to BSEE's satisfaction and receive BSEE's concurrence prior to commencing installation activities. Plans may be submitted separately for the cables (including cable protection), WTG, and OSS. The plan must describe how the Permittee will measure and monitor environmental conditions and duration of storm events; specify the environmental condition thresholds (and their associated technical justification) above which post-storm event monitoring or mitigation is necessary; describe potential monitoring, mitigation, and damage identification methods; and state when the Permittee must notify BSEE of post-storm event related activities. At a minimum, post-storm event inspections must be conducted following a storm where conditions must be inspected following a storm event with 25-year environmental conditions.

53) Pre-lay Grapnel Run Plan for Work on the OCS: The Permittee must submit a Pre-lay Grapnel Run Plan for BSEE review and concurrence and USACE and NMFS review. The plan must be submitted at least 60 days prior to pre-lay grapnel run activities. BSEE, USACE, and NMFS will review the plan within 60 days of submittal. If BSEE,

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USACE, and NMFS do not provide comments on the plan within 60 days of its submittal, then the Permittee may presume concurrence with the plan.

The plan must include the following:

- A clear depiction (i.e., figures) of the location of pre-lay grapnel run activities, including Permittee proposed safety zones associated with third-party assets.
- A description of pre-lay grapnel run methods, including expected grapnel penetration depth, vessel specifications, and metocean limits on operation, etc.
- A description of debris removal and disposal methods, and applicable environmental regulations.
- A description of safety distances or zones to limit pre-lay grapnel activities near third-party assets.
- The environmental footprint of disturbance activities and measures taken to avoid further adverse impacts to archaeological resources, seafloor hazards, complex habitat, and fishing operations.
- A summary of any consultation and outreach with resource agencies and the fishing industry in development of the plan (e.g., notifications to mariners).

The Permittee must submit a letter to BSEE, USACE, and NMFS outlining any deviations from the Pre-lay Grapnel Run Plan within 90 days following pre-lay grapnel run activities.

54) Berm Survey and Report on the OCS: Where plows, jets, grapnel runs, or other similar methods are used, postconstruction surveys capable of detecting bathymetry changes of 1 foot or less must be completed to determine the height and width of any created berms. The Permittee must capture bathymetry changes greater than 3 feet during the Year 1 and Year 2 multi-beam echosounder (MBES) bathymetry surveys along the cable routes. If there are bathymetric changes in berm height greater than 3 feet above grade after the Year 2 survey, the Permittee must develop and implement a Berm Remediation Plan to restore created berms to match adjacent natural bathymetric contours (isobaths). The Permittee must submit the Berm Remediation Plan to BOEM, BSEE, and USACE to coordinate with NMFS for a 60-day review within 90 days of completion of the Year 1 MBES bathymetry survey. BOEM, BSEE, and USACE will also review the plan to determine if the scope of activities (e.g., methods, disturbance area, vessel trips, emissions) is within the already completed National Environmental Policy Act analysis and ESA and Essential Fish Habitat (EFH) consultations and, if not, will complete additional environmental review and consultations. The Permittee must resolve all comments on the Berm Remediation Plan to BOEM's and BSEE's satisfaction prior to initiating restoration activities.

55) Sequencing Plan on the OCS: The Permittee must prepare and implement a Sequencing Plan that describes how construction activities will be sequenced to avoid or minimize impacts to Atlantic cod spawning. The plan must specifically describe how construction activities (e.g., sea-bed prep, inter-array cable installation and burial, scour protection installation, boulder relocation, foundation site preparation, WTG or OSS installation including pile driving, and other construction-related bottom disturbing activities) will occur such that construction activities in the center portion of the lease area are avoided between November 1 to March 31. The Sequencing Plan must be consistent with the MEC/UXO ALARP Certification condition and Cable Routing condition, the Boulder Identification and Relocation Plan, and seasonal restrictions for the North Atlantic Right Whale (NARW). All pile driving must also comply with requirements for noise abatement.

The Sequencing Plan must describe, to BSEE and BOEM's satisfaction, how the construction schedule is designed to the extent technically feasible to avoid any pile driving in the lease area between November 1 and December 31 each year (in addition to the January 1 to April 30 restriction on pile driving for NARW). If pile driving is necessary during this time, the Permittee must prioritize limiting pile driving to Priority Area 3a. Priority Area 3a is defined in Appendix K of the Final EIS for Revolution Wind, depicted in Figure K-1 of the Final EIS, and includes WTG positions WTG_64 to WTG_68 and WTG_75 to WTG_79.

If full avoidance is not feasible and pile driving beyond Priority Area 3a during November and December is deemed necessary, the Permittee must prioritize avoiding pile driving in Priority Area 1 from November 1 to December 31, followed in priority order by the areas radiating out of Priority Area 1 moving north and east within the lease area. Priority Area 1 encompasses 7 WTG positions in the center portion of the Lease Area. This Area is defined in Appendix K of the FEIS for Revolution Wind, depicted in Figure K-1 of the FEIS, and includes WTG positions WTG_39, WTG_40, WTG_47, WTG_48, WTG_49, WTG_56, and WTG_58.

The Sequencing Plan must describe how the construction schedule for activities other than pile driving is designed to avoid and minimize potential impacts to spawning cod from construction-related bottom-disturbing activities from November 1 to March 31 by sequencing construction activities other than pile driving that must occur during this time

so that they are limited to the northernmost and easternmost portions of the lease area between November 1 and March 31. The Permittee must prioritize avoiding construction activities during this time in the following areas in order of priority: Priority Area 1, followed by the areas radiating north and east from Priority Area 1, with priority given to those areas immediately adjacent to Priority Area 1.

The Sequencing Plan must provide a detailed construction schedule that includes installation timeframes and locations for inter-array cable, and foundation construction.

The Permittee must submit the Sequencing Plan to BOEM and BSEE with notification to NMFS GARFO HESD for a 60-day review, 120 days prior to site preparation activities for inter-array cables and WTGs. The Permittee must resolve all comments on the Sequencing Plan to BOEM's and BSEE's satisfaction prior to implementation of the plan. If there are less than 120 days between site preparation activities and this COP approval, the Permittee must submit the plan as soon as practicable and no later than 60 days prior to commencing activities.

<u>56) Cod Spawning Monitoring Plan on the OCS</u>: Prior to OCS sea-bed prep, inter-array cable installation, foundation site preparation, and other construction-related bottom disturbing activities (e.g., boulder relocation, cable lay and burial, scour protection installation), the Permittee must prepare and implement a Cod Spawning Monitoring Plan to monitor for Atlantic cod aggregations in the lease area between November 1 and March 31 of each year during which construction activities are planned.

The Permittee must submit the plan to BOEM and BSEE to coordinate with NMFS GARFO HESD for a 60-day review at least 120 days before the commencement of in-water construction on the OCS. The Permittee must resolve all comments on the plan to BOEM's and BSEE's satisfaction prior to implementation of the Plan. If there are less than 120 days between commencement of in-water construction on the OCS and this COP approval, the Permittee must submit the plan as soon as practicable and no later than 60 days prior to commencing activities.

The Permittee must submit an annual Cod Spawning Monitoring Report within 90 days of the completion of each survey season to BOEM, BSEE, and NMFS GARFO HESD. The report must include documentation of any cod detections and contain information on all survey activities that took place during the season, including location of equipment and location, time, and date of detections. The report on survey activities must be comprehensive of all activities, regardless of whether cod were detected.

57) Spare WTG Locations: If the Permittee determines that any of the "spare" WTG positions (as defined in Chapter 2 of the Revolution Wind FEIS in the description of Alternative G) are necessary to be constructed, the Permittee must prioritize the use of spare locations that would have the least impacts on complex habitats and areas of cod spawning to the extent it is technically and/or economically practical or feasible for the Permittee. Namely, the Permittee must avoid the use of spare WTG positions from the project layout in the following order of priority:

1) WTG positions WTG_47, WTG_48, and WTG_56; 2) WTG positions WTG_53, WTG_62, WTG_63, and WTG_73; 3) WTG position WTG_64; 4) WTG positions within complex habitats and impacts cannot be minimized through micrositing; and 5) Locations where impacts to complex habitats from inter array cables connecting the turbines would be reduced.

58) Aircraft Detection Lighting System: The Permittee must use an FAA-approved vendor for the Aircraft Detection Lighting System (ADLS), which will activate the FAA hazard lighting only when an aircraft is in the vicinity of the wind facility to reduce visual impacts at night. The Permittee must confirm the use of and submit to BOEM (via renewable_reporting@boem.gov) and BSEE (via TIMSWeb), the information about the FAA-approved vendor for ADLSs on WTGs and the OSS.

59) Avoid Zinc Anodes: The Permittee must avoid using Zinc sacrificial anodes in WTG foundations to reduce the release of metal contaminants in the water column.

<u>60) Fisheries Research and Monitoring Plan on the OCS</u>: The Permittee must conduct fisheries monitoring according to the Revolution Wind Fisheries Research and Monitoring Plan found in Appendix Y of the COP to assess fisheries status in the Project area pre-, during, and post- construction.

The Permittee must submit an annual report to BOEM, BSEE, and NMFS GARFO's Protected Resources Division (nmfs.gar.incidental-take@noaa.gov) for benthic habitat and fisheries monitoring activities in the preceding calendar year by February 15 (i.e., the report of 2023 activities is due by February 15, 2024). The report must include a summary of all activities conducted, the dates and locations of all ventless trap surveys and otter trawl surveys, number of sets and soak duration for all ventless trap surveys and tows and duration for all trawl surveys summarized

by month, number of vessel transits, and a summary table of any observations and captures of ESA listed species during these surveys. The report must also summarize all acoustic telemetry and benthic monitoring activities that occurred, inclusive of vessel transits. The Permittee must share data consistent with its data sharing plan and upon BOEM's or BSEE's request. All resulting data and metadata must be provided to GARFO HESD. The Permittee must share data consistent with its data sharing plan and upon BOEM's or BSEE's request.

61) Federal Survey Mitigation Program: There are 14 NMFS scientific surveys that overlap with wind energy development in the northeast region. Nine of these surveys overlap with the Project. Consistent with NMFS and BOEM survey mitigation strategy actions 1.3.1, 1.3.2, 2.1.1, and 2.1.2 in the NOAA Fisheries and BOEM Federal Survey Mitigation Implementation Strategy - Northeast US Region 1 within 120 days of BOEM issuing a COP approval, the Permittee must submit to BOEM a survey mitigation agreement between NMFS and the Permittee. The survey mitigation agreement must describe how the Permittee will mitigate the Project impacts on the nine NMFS surveys. The Permittee must conduct activities in accordance with such agreement.

If the Permittee and NMFS fail to reach a survey mitigation agreement, then the Permittee must submit a Survey Mitigation Plan to BOEM and NMFS within 180 days of BOEM issuing a COP approval. BOEM will review the Survey Mitigation Plan in consultation with NMFS Northeast Fisheries Science Center (NEFSC), and the Permittee must resolve comments to BOEM's satisfaction and must conduct activities in accordance with the plan.

As soon as reasonably practicable, but no later than 30 days after BOEM's issuance of COP approval, the Permittee must initiate coordination with NMFS NEFSC to develop the survey mitigation agreement described above. Mitigation activities specified under the agreement must be designed to mitigate the Project impacts on the following NMFS NEFSC surveys: (a) Spring Bottom Trawl survey; (b) Autumn Multi-species Bottom Trawl survey; (c) Ecosystem Monitoring survey; (d) NARW aerial survey; (e) Aerial marine mammal and sea turtle survey; (f) Shipboard marine mammal and sea turtle survey; (g) Atlantic surf clam and ocean quahog survey; (h) Atlantic sea scallop survey; and (i) Seal survey. At a minimum, the survey mitigation agreement must describe actions and the means to address impacts on the affected surveys due to the preclusion of sampling platforms and impacts on statistical designs. NMFS has determined that the project area is a discrete stratum for surveys that use a random stratified design. This agreement may also consider other anticipated Project impacts on NMFS surveys, such as changes in habitat and increased operational costs due to loss of sampling efficiencies.

The survey mitigation agreement must identify activities that will result in the generation of data equivalent to data generated by NMFS's affected surveys for the duration of the Project. The survey mitigation agreement must describe the implementation procedures by which the Permittee will work with NEFSC to generate, share, and manage the data required by NEFSC for each of the surveys impacted by the Project, as mutually agreed upon between the Permittee and NMFS NEFSC. The survey mitigation agreement must also describe the Permittee's participation in the NMFS NEFSC Northeast Survey Mitigation Program to support activities that address regional-level impacts for the surveys listed above.

62) Munitions and Explosives of Concern (MEC) and Unexploded Ordnances (UXO) Survey Results Implementation on the OCS: The Permittee must implement the "as low as reasonably practical" (ALARP) risk mitigation principle with the following steps: (1) a desktop study (DTS); (2) an investigation survey to determine the presence of objects; (3) an identification survey to determine the nature of the identified objects; (4) MEC/UXO mitigation (avoidance, in situ disposal, or relocation); and (5) a certification that MEC/UXO risks from installation and operation of the facility have been reduced to ALARP levels. The Permittee must implement the mitigation methods identified in the approved COP, DTS, and the subsequent survey report(s) following the resolution of all comments provided by BOEM and BSEE. As part of the Fabrication and Installation Report (FIR) and prior to commencing installation activities, the Permittee must make available to the approved Certified Verification Agent (CVA), BOEM, and BSEE for review the complete and final versions of information on implementation and installation activities associated with the ALARP mitigation process, including the: (1) DTS; (2) investigation surveys to determine the presence of objects; (3) identification surveys to determine the nature of the identified objects; and (4) MEC/UXO relocation, disposition, and/or construction re-routing.

<u>63) MEC/UXO Discovery Notification on the OCS</u>: In the event of a confirmed MEC/UXO on the OCS, the Permittee must coordinate with the U.S. Coast Guard (USCG) to ensure the MEC/UXO discovery is published in the next version of the LNM for the specified area and provide BOEM and BSEE a copy of the LNM once it is available. The

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Permittee must also provide the following information to BOEM (<u>BOEM_MEC_Reporting@boem.gov</u>), BSEE, USACE, and NMFS within 24 hours of discovery for seabed clearance activities, construction, and operations:

- Narrative describing activities that resulted in the identification of confirmed MEC/UXO;
- Activity at the time of discovery (e.g., survey, seabed clearance, cable installation);
- Location (latitude [DDD°MM.MMM'], longitude [DDD°MM.MMM]), lease area, and block;
- Water depth (meters);
- MEC/UXO type, dimensions, and weight;
- MEC/UXO vertical position (description of exposure or estimated depth of burial).

64) Detonation Notification on the OCS: The Permittee must provide BSEE and NMFS GARFO with notification of planned UXO/MEC detonation as soon as possible, but at least 48 hours prior to the planned detonation, unless this 48-hour notification creates delays to the detonation that result in imminent risk of human life or safety. This notification must include the coordinates of the planned detonation, the estimated charge size, and any other information available on the characteristics of the UXO/MEC. NMFS GARFO will provide alerts to NMFS sea turtle and marine mammal stranding network partners consistent with best practices. The Permittee must provide notification to NMFS GARFO via email to <u>nmfs.gar.incidental-take@noaa.gov</u>, NMFS GARFO Protected Resources Division by phone (978-281-9328), and BSEE via TIMSWeb with email notification to protectedspecies@bsee.gov. See Section 5.14.3(a) for requirements associated with reporting of UXO detonations.

<u>65) UXO/MEC Noise Abatement on the OCS</u>: The Permittee must use a dual noise abatement system during all UXO/MEC detonation events and operate that system in a manner that achieves maximum noise attenuation levels practicable, but, at minimum, results in noise levels equal or less than those modeled assuming 10 dB attenuation.

<u>66) Munitions Response Plan for Confirmed MEC/UXO on the OCS</u>: The Permittee must implement methods identified in the Construction and Operations Plan and described in the MEC/UXO Survey Results Implementation for MEC/UXO mitigation activities. Under all circumstances of confirmed MEC/UXO, the Permittee must demonstrate to BSEE, BOEM, USACE, and NMFS that avoidance through micrositing of planned infrastructure (e.g., wind turbines, offshore substations, inter-array cables, or export cables) of confirmed MEC/UXO is not feasible. For confirmed MEC/UXO on the OCS where avoidance through micrositing is not feasible, the Permittee must provide a Munitions Response Plan. The Munitions Response Plan must include the following:

- Method of munitions response (in situ disposal, or relocation through "lift and shift") and an analysis
 describing the identification and determination of the method chosen for each confirmed MEC/UXO;
- Hazard analysis of the response;
- Type and designation of work vessels, remotely operated vehicles, unmanned surface vehicles, or craft planned to be used in proximity to the MEC/UXO;
- Contact information of the identified munitions response contractor;
- Contractor qualifications and competencies to safely carry out the response work;
- Proposed timeline of activities;
- Position of confirmed MEC/UXO and, if applicable, planned relocation position;
- Potential impact of weather and sea state on munitions response operations;
- Potential for human exposure;
- Medical emergency procedures plan;
- Protective measures to be implemented to reduce risk and/or monitor effects to protected species and habitats or other ocean users;
- Plan for accidental detonation.

<u>67) Munitions Response After Action Report on the OCS</u>: The Permittee must submit a Munitions Response After Action Report detailing the activity and outcome to BOEM, BSEE, USACE, and NMFS. The report must include the following information:

Narrative describing the activities that were undertaken by the Permittee, including the following: 1) As Found Location and, if applicable, As Left Location (latitude [DDD°MM.MMM'], longitude [DDD°MM.MMM]), lease area, and block; 2) Water depth (meters); 3) Weather and sea state at the time of munitions response;
 A) Number and detailed characteristics (e.g., type, size, classification) of MEC items subject to response efforts; 5) Duration of the munitions response activities, including start and stop times;

- Summary describing how the Permittee followed its Munitions Response Plan and any deviations from the plan;
- Description of safety measures used, including but not limited to the presence of a USCG safety-zone, notices to mariners, other USCG safety actions in place prior to taking any munitions response actions, and how security call protocols were used;
- Results of the munitions response;
- Description of any threats and effects to health, safety, or the marine environment;
- Description of any effects on protected species and marine mammals and measures implemented to reduce risk and monitor effects;
- Details and results of any geophysical surveys conducted after the completion of the munitions response activities; and
- If applicable, a description of anticipated future munitions response activities.

68) U.S. Committee on Marine Transportation Systems (USCMTS) Guidance: If the USCMTS' proposed "National Guidance for Industry on Responding to Munitions and Explosives of Concern in U.S. Federal Waters" becomes final, that guidance will supplant the MEC/UXO Discovery Notification on the OCS condition, the Munitions Response Plan for Confirmed MEC/UXO on the OCS condition, and the Munitions Response After Action Report on the OCS condition, and the Permittee shall follow the USCMTS guidance instead.

SPECIAL CONDITIONS ON THE OCS RELATED TO NAVIGATION SAFETY:

<u>69) Emergency Response Procedure on the OCS:</u> Prior to construction of the project, the Permittee must submit an Emergency Response Procedure addressing non-routine events for review and concurrence by BSEE. The Permittee must submit any revisions of the procedure once every 3 years or upon BSEE's request. The Emergency Response Procedure must address the following:

- Standard Operating Procedures. The Permittee must describe the procedures and systems that will be used at project facilities in the case of emergencies, accidents, or non-routine conditions, regardless of whether they are man-made or natural. The Permittee must include, as a part of the standard operating procedures for non-routine conditions, descriptions of high-consequence and low probability events, including methods for: (1) establishing and testing WTG rotor shutdown, braking, and locking; (2) lighting control; (3) notifying the USCG of mariners in distress or potential/actual search and rescue incidents; (4) notifying BSEE and the USCG of any events or incidents that may impact maritime safety or security; and (5) providing the USCG with environmental data, imagery, communications, and other information pertinent to search and rescue or marine pollution response.
- Communications. The pemittee must describe the capabilities to be maintained by the control center to communicate with the USCG.
- Monitoring. The control center must maintain the capability to monitor (e.g., using cameras) the Permittee's installation and operations in real time, including at night and in periods of poor visibility.

<u>70) Marking of WTGs and OSSs on the OCS</u>: The Permittee must mark each WTG and OSS with private aids to navigation (PATON). No sooner than 60 and no fewer than 30 days before foundation installation, the Permittee must file an application (form CG-2554), either in paper form or electronically at this website:

(<u>http://www.usharbormaster.com</u>), with the Commander of the First Coast Guard District to establish PATON, as provided in 33 C.F.R. part 66. USCG approval of the application must be obtained before the Permittee begins installation of the facilities. The lighting, marking, and signaling plan and design specifications for maritime navigation lighting must be included in the PATON application. The Permittee must:

- Provide a lighting, marking, and signaling plan for review by BOEM, BSEE, and the USCG at least 180 days before installation. The Permittee must obtain BOEM's and BSEE's concurrence with this plan. The plan must conform to applicable Federal law and regulations, and guidelines, e.g., International Association of Marine Aids to Navigation and Lighthouse Authorities Recommendation G1162, The Marking of Man-Made Offshore Structures; USCG's LNM (D1 LNM: 19/23) or the most recent version on Ocean-Structure PATON Marking Guidance; and BOEM's Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development (April 28, 2021).
- Mark each individual WTG and OSS with clearly visible, unique, alpha-numeric identification characters consistent with the Rhode Island and Massachusetts Structure Labeling Plot in the Lease Area. The Permittee must additionally display this label on each WTG nacelle, visible from above. If the Permittee's OSS includes helicopter landing platforms, the Permittee must also display this label on the platforms.

- For each WTG, the Permittee must install red obstruction lighting that is compatible with night vision goggles and consistent with the Federal Aviation Administration (FAA) Advisory Circular 70/7460-IM and 150/5345-43.
- Provide signage that is visible to mariners in a 360-degree arc around the structures to inform vessels of the vertical blade-tip clearance air draft below the turbine blades as determined at Highest Astronomical Tide (HAT).
- Cooperate with the USCG and NOAA to ensure that cable routes, OSS, and WTGs are depicted on appropriate government-produced and commercially available nautical charts.
- Provide mariner information sheets on the Permittee's website within 90 days of installation of WTGs and OSS foundations, with details on the location of the WTGs and OSS and specifics, such as blade-tip clearance above sea level. If multiple structures are being installed in a short timeframe, the information sheets may be combined into a single update to be posted within 90 days of completing the last foundation installation.
- Submit summary documentation of mariner information to BSEE via TIMSWeb, within 90 days of the completion of commissioning activities.
- Immediately report discrepancies in the status of all PATONs to the local USCG Sector Command Center (a timeline of when discrepancies can be resolved must be sent to USCG within 14 days of identifying the discrepancy).

<u>71) Blade/Nacelle Control on the OCS</u>: The Permittee must equip all WTG rotors (blade assemblies) with control mechanisms constantly operable from the Permittee's control center.

Control mechanisms must enable the Permittee to immediately initiate the shutdown of any WTG upon emergency order from the Department of Defense (DOD) or the USCG. The Permittee must initiate braking and shut down of each requested WTG after the shutdown order. The Permittee may resume operations only upon notification from the entity (DOD or USCG) that initiated the shutdown.

The Permittee must include a shutdown procedure in its Emergency Response Procedure and test the shutdown capability (functioning) of at least one WTG within the field at least annually.

The Permittee must work with the USCG to establish the proper blade configuration during WTG shutdown for USCG air assets conducting search and rescue operations.

The Permittee must notify the USCG and BSEE in advance of trainings and exercises to test and refine notification and shutdown procedures and allow USCG and BSEE to participate in these trainings and exercises.

<u>72) Installation Schedule on the OCS</u>: As early as possible, but not less than 60 days prior to commencing offshore construction activities, the Permittee must provide BSEE and the USCG with a plan that describes the schedule and process for seabed preparation; export, substation interconnector, and inter-array cable installation; and WTGs and OSS installation. This plan must include all planned mitigations to be implemented to minimize any adverse impacts to navigation while installation is ongoing. No WTG or OSS installation work may begin at the Project site (i.e., on or under the water) without prior review by BOEM, BSEE, and the USCG of the plan as required under this provision. The Permittee must submit any significant revisions or updates to the plan at least 60 days before commencing the activities described in that update or revision. Appropriate LNM submissions must accompany the plan and its revisions.

<u>73) Design Modifications on the OCS</u>: Any changes or modification in the design of the Lease Area that may impact navigation safety (including, but not limited to, a change in number, size, or location of WTGs, or change in construction materials or construction method), require written approval by BSEE.

74) Navigation Complaints on the OCS: On a monthly basis, the Permittee must do the following:

- Provide BSEE with a description of any complaints received (written or oral) by boaters, fishermen, commercial vessel operators, or other mariners regarding impacts to navigation safety allegedly caused by construction or operations vessels, crew transfer vessels, barges, or other equipment.
- Describe remedial actions taken in response to complaints received, if any. BSEE may require additional remedial action consistent with 30 C.F.R. § 285. The monthly report must be submitted via TIMSWeb.

<u>75) Navigation Safety Correspondence for Work on the OCS</u>: On a monthly basis, the Permittee must provide BSEE, BOEM, and the USCG with copies of any correspondence received from other Federal, state, or local agencies

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regarding navigation safety issues. Monthly reports must be submitted to BSEE via TIMSWeb and monthly reports must go to BOEM at <u>renewable reporting@boem.gov</u>.

<u>76) Navigation Safety Briefing Meetings</u>: As requested by BSEE, BOEM, and the USCG, the Permittee must attend meetings (i.e., Harbor Safety Committee, Area Committee) to provide briefings on the status of construction and operations, and on any problems or issues encountered with respect to navigation safety.

SPECIAL CONDITIONS RELATED TO NATIONAL SECURITY:

<u>77) Falmouth Airport Surveillance Radar-8 System</u>: To mitigate impacts on the North American Aerospace Defense Command's (NORAD's) operation of the Falmouth, MA, Air Surveillance Radar-8 (ASR-8), the Permittee must complete the following:

- The Permittee must enter into a mitigation agreement with the DOD for purposes of implementing the requirements below. If there is any discrepancy between the requirements in this condition and the terms of the mitigation agreement, the terms of the mitigation agreement will prevail. Within 15 days of entering into the mitigation agreement, the Permittee must provide BOEM with a copy of the executed mitigation agreement. Within 45 days of completing the requirements in this condition, the Permittee must provide BOEM with evidence of compliance with those requirements. The NORAD point of contact for development of the agreement is John Rowe; John.Rowe.14@us.af.mil.
- At least 30, but no more than 60, days prior to the completion of commissioning of the last WTG (meaning every WTG in the Project is installed with potential for blade rotation), the Permittee must notify NORAD for Radar Adverse Impact Management (RAM) scheduling, which is required for the Falmouth ASR-8.
- At least 30, but no more than 60, days prior to the completion of commissioning of the last WTG (meaning every WTG in the Project is installed with potential for blade rotation), the Permittee must contribute funds in the amount of \$80,000 to NORAD toward the execution of the RAM.

<u>78) Distributed Fiber-Optic Sensing Technology</u>: To mitigate potential impacts on the Department of the Navy's (DON's) operations, the Permittee must coordinate with the DOD/DON on any proposal to use distributed fiber-optic sensing technology as part of the Project or associated transmission cables. The DON point-of-contact for coordination is Matthew Senska: matthew.senska@navy.mil; 571-970-8400.

<u>79) Electromagnetic Emissions</u>: Before entering any designated defense operating area, warning area, or water test area for the purpose of carrying out any survey activities under the COP, the Permittee must enter into an agreement with the commander of the appropriate command headquarters to coordinate the electromagnetic emissions associated with such survey activities. The Permittee must ensure that all electromagnetic emissions associated with such survey activities are controlled as directed by the commander of the appropriate command headquarters. The Permittee must provide BOEM with a copy of the agreement within 15 days of entering into the agreement.