



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

Ms. Rachel Pachter
Chief Development Officer
Vineyard Wind 1 LLC
700 Pleasant Street, Suite 510
New Bedford, Massachusetts 02740

Dear Ms. Pachter:

We are pleased to inform you that, pursuant to 30 C.F.R. § 585.634, the Bureau of Ocean Energy Management (BOEM) approves the Construction and Operations Plan (COP) revision that Vineyard Wind 1 LLC initially submitted on December 5, 2024, for activities associated with blade removal during the construction of the Vineyard Wind 1 Offshore Wind Energy Project on Commercial Lease OCS-A 0501 offshore Massachusetts.

This approval revises the COP that BOEM approved on July 15, 2021, and only covers work to be performed on the Outer Continental Shelf. Additionally, this approval:

- Is subject to the following new COP approval conditions: 1.4 (Variance Requests); 2.14 (Blade Installation); 2.15 (Post-Installation Blade Information); 2.16 (Currently Installed Blades); 2.17 (Post-Commissioning Power); 2.18 (Continued Installation and Power); and 2.19 (Blade Removal); and
- Remains subject to all other applicable terms and conditions from the original 2021 COP approval.

For Vineyard Wind 1's convenience, the full, amended set of Vineyard Wind 1 COP Approval Conditions is enclosed, including both the new conditions resulting from this COP revision approval and the original 2021 conditions. Note: the new conditions listed above constitute the only difference between this amended set of conditions and the original 2021 conditions; all the other conditions originally issued with the COP approval in 2021 remain unchanged.

To maintain compliance with the COP, as modified by this COP revision, pursuant to 30 C.F.R. § 285.633, Vineyard Wind 1 LLC must continue submitting annual reports certifying compliance with the original conditions of approval (issued on July 15, 2021), and also begin submitting annual reports certifying compliance with the above-listed new conditions (issued as of the date of this letter). These reports are due annually on December 31.

This letter constitutes a final BOEM decision that may be appealed pursuant to 30 C.F.R. § 585.118, 30 C.F.R. part 590, and 43 C.F.R. part 4, subpart E.

If you have any questions, please contact Meredith Lilley, Renewable Energy Program Specialist, Office of Renewable Energy Programs, at meredith.lilley@boem.gov.

Sincerely,

DAVID
DIAMOND

Digitally signed by DAVID
DIAMOND
Date: 2025.01.17
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David B. Diamond
Deputy Associate Director for Operations,
Atlantic Outer Continental Shelf
Office of Renewable Energy Programs

Enclosure

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT

Conditions of Construction and Operations Plan Approval
Lease Number OCS-A 0501
July 15, 2021
Amended on January 17, 2025[†]

The Lessee's right to conduct activities under the approved Construction and Operations Plan (COP) is subject to the following conditions. The Department of the Interior (DOI) reserves the right to amend these conditions or impose additional conditions authorized by law or regulation on any future approvals of COP revisions.

The Lessee must maintain a full copy of these terms and conditions on every project-related vessel and is responsible for the implementation of, or the failure to implement, each of these terms and conditions by the Lessee's contractors, consultants, operators, or designees.

Section:

1. [GENERAL PROVISIONS](#)
2. [TECHNICAL CONDITIONS](#)
3. [NAVIGATIONAL AND AVIATION SAFETY CONDITIONS](#)
4. [NATIONAL SECURITY CONDITIONS](#)
5. [CONDITIONS RELATED TO PROTECTED SPECIES AND HABITAT](#)
6. [CONDITIONS RELATED TO COMMERCIAL FISHERIES, FOR-HIRE RECREATIONAL FISHING, AND ENVIRONMENTAL JUSTICE](#)
7. [CONDITIONS RELATED TO CULTURAL RESOURCES](#)

Attachments:

1. [LIST OF ACRONYMS](#)
2. [RHODE ISLAND AND MASSACHUSETTS STRUCTURE LABELING PLOT](#)

[†] Per the Bureau of Ocean Energy Management's approval of Vineyard Wind 1 LLC's Blade Removal COP Revision on January 17, 2025, the following terms and conditions were added to the larger set of original conditions contained herein and issued with the COP approval on July 15, 2021: Condition 1.4, and Conditions 2.14 through 2.19.

1 GENERAL PROVISIONS

- 1.1 Adherence to the Approved COP, Statutes, Regulations, Permits, and Authorizations (Planning) (Construction) (Operations) (Decommissioning).¹ Vineyard Wind 1 LLC (Lessee)² must conduct all activities as proposed in its approved COP for the Vineyard Wind 1 Project (Project) and these associated terms and conditions. Additionally, the Lessee must comply with all applicable requirements in commercial lease OCS-A 0501 (Lease), statutes, regulations, and permits and authorizations issued by Federal and state agencies for the Project. The Bureau of Ocean Energy Management (BOEM) and/or the Bureau of Safety and Environmental Enforcement (BSEE), as applicable,³ may issue a notice of noncompliance, pursuant to 30 C.F.R. § 585.400(b), if it is determined that the Lessee failed to comply with any provision of its approved COP, the Lease, the Outer Continental Shelf Lands Act (OCSLA), or OCSLA's implementing regulations. BOEM and/or BSEE may also take additional actions pursuant to 30 C.F.R. § 585.400, where appropriate.
- 1.2 Effectiveness (Construction) (Operations). This COP approval becomes effective on the date BOEM notifies the Lessee that its COP has been approved, and will remain effective until the termination of the Lease, which has an operations term of 33 years from the date of COP approval. This COP approval does not authorize the commencement of Outer Continental Shelf (OCS) construction activities prior to June 1, 2022.
- 1.3 Consistency with Other Agreements and Authorizations (Planning) (Construction) (Operations) (Decommissioning). In the event that these terms and conditions are, or become, inconsistent with the terms and conditions of the Project's Biological Opinion (BiOp) issued on September 11, 2020, Incidental Harassment Authorizations (IHAs) issued for the Project, the Section 106 Memorandum of Agreement (Section 106 MOA) executed on May 7, 2021, or amendments thereto, the language in the BiOp, IHAs, Section 106 MOA, or amendments thereto, will prevail. Activities authorized herein will be subject to any terms and conditions and reasonable and prudent measures resulting from a BOEM-reinitiated consultation for the Project's BiOp.

¹ Parenthetical indicators of "(Planning) (Construction) (Operations) and/or (Decommissioning)" at the start of a condition denote the primary development stage(s) to which the condition is relevant.

² Throughout this document, the term "Lessee" includes the Lessee and its designated operator(s), as well as the Lessee's or designated operator's agents, which may include: contractors; sub-contractors; consultants; operators; designees; and any other entity, organization, or person who is directly or indirectly conducting activities associated with this COP approval on behalf of the Lessee.

³ At the time these terms and conditions were drafted, DOI's BOEM and BSEE were in the process of transferring enforcement authorities from BOEM to BSEE. These terms and conditions were drafted to best reflect the expected transfer of those authorities. When conditions describe Lessee submissions to DOI, the Lessee should coordinate with BOEM and confirm whether the submittal should be made to BOEM or BSEE.

1.4 Variance Requests (Planning) (Construction) (Operations) (Decommissioning). The Lessee may submit a written request via email to the BOEM Office of Renewable Energy Programs Deputy Associate Director for Operations, Atlantic Outer Continental Shelf, and to BSEE through TIMS Web (<https://timsweb.bsee.gov/>), requesting a variance from the requirements of these conditions. The request must explain why compliance with a particular requirement is not technically and economically practicable or feasible and any alternative actions the Lessee proposes to take. BSEE may require a Certified Verification Agent to review and make a recommendation to BSEE and/or BOEM on the technical acceptability and compliance with the COP of the Lessee's variance request and any alternative actions the Lessee proposes to take. To the extent not otherwise prohibited by law and after consideration of all relevant facts and applicable legal requirements, as well as after consultation or coordination with other federal agencies as the Bureaus deem appropriate, BOEM or BSEE, in consultation with the other Bureau, may grant a request for variance if the appropriate Bureau determines that the variance: (1) would not result in a change in the Project impact levels described in the Final Environmental Impact Statement (Final EIS) and ROD for the Project, (2) would not alter obligations or commitments resulting from consultations performed by BOEM and BSEE under federal law in connection with this COP approval in a manner that would require BOEM to reinitiate or perform additional consultations (e.g., under the Endangered Species Act, Coastal Zone Management Act, National Historic Preservation Act, Magnuson-Stevens Fishery Conservation and Management Act); and (3) would not alter BOEM's determination that the activities associated with the Project would be conducted in accordance with subsection 8(p)(4) of OCSLA. Variance requests that BOEM determines would require BOEM to reinitiate or to perform additional consultations are not appropriate for adjudication through the variance process and likely would require a COP revision pursuant to 30 C.F.R. § 585.634. After making a determination regarding a request for a variance, BOEM or BSEE will notify the Lessee in writing whether the appropriate Bureau(s) will allow the proposed variance from the identified requirements set forth in this COP approval. Approvals of variance requests will be made publicly available. This provision applies to the extent that it is not inconsistent with more specific provisions for variances or departures in these terms and conditions.

2 TECHNICAL CONDITIONS

2.1 Unexploded Ordnance and/or Discarded Military Munitions Investigation (Planning). The Lessee must investigate the areas of potential disturbance for the presence of unexploded ordnance (UXO) and/or discarded military munitions (DMM) and evaluate the risk in accordance with the As Low as Reasonably Practical (ALARP) risk mitigation principle. Implementation of the ALARP risk mitigation principle is achieved with the following steps: (i) desktop study (DTS); (ii) investigation surveys to determine the presence of objects; (iii) identification surveys to determine the nature of

the identified objects; (iv) UXO removal; (v) UXO relocation and/or construction re-routing; and (vi) installation.

2.1.1 UXO/DMM DTS (Planning). The Lessee must submit a DTS to DOI for review and concurrence no later than the date the Fabrication and Installation Report (FIR) is submitted to DOI. The DTS must include an evaluation of the installation risk based on: the proposed construction methodologies; the entire Project footprint; areas of potential disturbance (anchorage areas, turbine and scour protection, cable route, etc.); the probability of UXO/DMM presence; and the mobility of sediments and UXO/DMM. The DTS must also identify the specific types of UXO/DMM that qualify as munitions of concern, and potential mitigation strategies, such as removal and re-routing. Finally, the DTS must provide specific recommendations for the Investigation Survey, as appropriate, including:

2.1.1.1 The areas to be surveyed;

2.1.1.2 Survey line spacing and sensor heights;

2.1.1.3 The width of the survey corridor;

2.1.1.4 The minimum iron content for targets;

2.1.1.5 Details about the testing and proofing of survey methods; and

2.1.1.6 A request for a waiver of the requirements included in Sections 2.1.2 through 2.1.5 if the Lessee does not believe further UXO/DMM study is necessary to ensure safe construction and installation activities.

2.1.2 UXO/DMM Investigation Survey Plan (Planning). Unless a waiver request is approved pursuant to Section 2.1.1.6, the Lessee must submit an Investigation Survey Plan to DOI for review and concurrence prior to the installation of facilities in the Investigation Survey area. The Investigation Survey Plan must describe the areas that need further investigation as discussed in the DTS. The Investigation Survey Plan must include information on the proposed survey vessel, equipment, methodologies, and schedule for the Investigation Survey of the areas identified and must provide the anticipated date of submittal of its UXO/DMM Investigation Survey Report to DOI as described in Section 2.1.3 below.

If the Investigation Survey Plan is not consistent with the recommendations included in the DTS, the Investigation Survey Plan must discuss in detail the deviations and the associated rationale.

- 2.1.3 UXO/DMM Investigation Survey Report (Planning). Unless a waiver request is approved pursuant to Section 2.1.1.6, the Lessee must submit an Investigation Survey Report for DOI review and concurrence prior to the installation of facilities in the Investigation Survey area. This report must include the following:
- 2.1.3.1 A detailed discussion of utilized methodologies;
 - 2.1.3.2 A summary and detailed description of the findings;
 - 2.1.3.3 A separate list of those findings that identify any conditions different from those anticipated and discussed in the DTS;
 - 2.1.3.4 Recommendations for the Identification Survey methods and equipment, if appropriate;
 - 2.1.3.5 A statement attesting that the installation methods and UXO/DMM mitigation strategies discussed in the FIR and the DTS are suitable given the results of the Investigation Survey. Alternatively, the Lessee may submit a detailed discussion of alternative installation methods and/or UXO/DMM mitigation strategies the Lessee has determined to be appropriate given the results of the Investigation Survey; and
 - 2.1.3.6 A request for a waiver of the requirements included in Sections 2.1.4 and 2.1.5, if the Lessee does not believe further UXO/DMM study is necessary to ensure safe construction and installation activities in the Investigation Survey area.
- 2.1.4 UXO/DMM Identification Survey Plan (Planning). Unless a waiver request is approved pursuant to Section 2.1.1.6 or 2.1.3.6, the Lessee must submit an Identification Survey Plan to DOI for review and concurrence prior to the installation of facilities in the Identification Survey area. The Identification Survey Plan must describe the areas that need further investigation as discussed in the DTS and the Investigation Survey Report. The Identification Survey Plan must: include information on the proposed survey vessel, equipment, methodologies, and schedule for the Identification Survey of the areas identified; and provide the anticipated date of submittal of its UXO/DMM Identification Survey Report to DOI. As described in Section 2.1.5, the Identification Survey Report must be submitted to DOI prior to commencing installation activities in the Identification Survey area. If the Identification Survey Plan is not consistent with the recommendations included in the DTS and Investigation Survey Report, the Identification Survey Plan must discuss in detail the deviations and the associated rationale.

- 2.1.5 UXO/DMM Identification Survey Report (Planning). Unless a waiver request is approved pursuant to Section 2.1.1.6 or 2.1.3.6, the Lessee must submit an Identification Survey Report for DOI review and concurrence prior to the installation of facilities in the Identification Survey area. This report must include the following:
- 2.1.5.1 A detailed discussion of utilized methodologies;
 - 2.1.5.2 A summary and detailed description of the findings;
 - 2.1.5.3 A separate list of findings that identify conditions different from those anticipated and discussed in the DTS and the Investigation Survey Report; and
 - 2.1.5.4 A statement attesting that the installation methods and UXO/DMM mitigation strategies discussed in the FIR, DTS, and/or Investigation Survey Report are consistent with the results of the Identification Survey, accepted engineering practices, and applicable best management practices. Alternatively, the Lessee may submit a detailed discussion of alternative installation methods and/or UXO/DMM mitigation strategies that the Lessee has determined to be appropriate given the results of the Identification Survey, accepted engineering practices, and applicable best management practices.
- 2.1.6 UXO/DMM Survey Results Implementation (Construction). The Lessee 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 DOI. The Lessee must make the information on implementation and installation activities associated with Section 2.1 available to the approved Certified Verification Agent (CVA) and DOI for review as part of the FIR prior to commencing commercial activities.
- 2.2 Safety Management System (Planning) (Construction) (Operations) (Decommissioning). Pursuant to 30 C.F.R. § 585.810, a lessee, designated operator, contractor, or subcontractor constructing, operating, or decommissioning renewable energy facilities on the OCS must have a Safety Management System (SMS). The Lessee must provide a description of the SMS that will guide all activities described in the approved COP (hereafter the “Wind Development Area (WDA)’s Primary SMS”). BSEE will supply further guidance on the WDA’s Primary SMS content and process until DOI concurs that the SMS is fully functional.
- 2.2.1 The WDA’s Primary SMS must include a diving safety program or describe how it will ensure a contractor has a diving safety program that is in accordance with the U.S. Coast Guard (Coast Guard) regulations for

Commercial Diving Operations at 46 C.F.R. part 197, subpart B, or updated standards, as appropriate. In so providing a diving safety program, the Lessee is required to consult with the Coast Guard.

- 2.2.2 The WDA's Primary SMS must include a fall protection program, and, separately, describe how the WDA's Primary SMS will ensure that contractors working at height will have a fall protection program that complies with the American National Standards Institute (ANSI)/American Society of Safety Engineers (ASSE) Z-359.2 Minimum Requirements for a Comprehensive Managed Fall Protection Program, or an updated version of this standard or a related standard.
- 2.2.3 The WDA's Primary SMS must identify and assess risks to health, safety, and the environment associated with the offshore wind farm structures and operations, and must include an overview of the physical and procedural barrier(s) that will be used and maintained to mitigate the identified risks. The annual SMS reports (see Section 2.2.5) must discuss the operability and physical condition of the identified barriers and any changes made to the barrier systems.
- 2.2.4 The WDA's Primary SMS is expected to evolve as activities progress from site characterization through construction, operations, and eventually to decommissioning, typically, by acknowledging the new risks that will be faced by a shifting workforce, and by incorporating work practices and operating procedures specific to managing those risks. Pursuant to 30 C.F.R. § 585.811, the WDA's Primary SMS must be fully functional for all relevant activities prior to their commencement. The Lessee must demonstrate, to DOI's satisfaction, the functionality of the WDA's Primary SMS no later than 30 calendar days prior to beginning the relevant activities, as described in the approved COP. The Lessee can demonstrate the WDA's Primary SMS functionality through various means. The following list provides examples, neither exhaustive nor prescriptive, of ways the WDA's Primary SMS functionality can be demonstrated.
 - 2.2.4.1 If the Lessee has a similar SMS that is functioning elsewhere, the Lessee can demonstrate the proper functioning of the SMS by sharing certifications of that SMS from a recognized accreditation organization (e.g., International Organization for Standardization (ISO)/International Electric Code (IEC) 450001, ANSI Z10, API RP 75 4th or later edition) or by sharing reports of third-party or internal audits of the SMS. The Lessee must also share an explanation of how

the Lessee has adapted the audited SMS to become the WDA's Primary SMS.

2.2.4.2 If the Lessee does not have a similar SMS that is functioning elsewhere, demonstration of functionality should include at least one of the following activities:

- A desktop exercise in which the Lessee evaluates how the WDA's Primary SMS functions in response to different scenarios, including an evaluation of the strengths and weaknesses of Lessee's preparedness to control various risks;
- A description of the personnel who have been trained on the WDA's Primary SMS, an overview of the training content, and a description of controls the Lessee has put in place to ensure trained personnel's understanding of and adherence to the WDA's Primary SMS; or
- A detailed description of how the Lessee intends to monitor whether the implementation of the WDA's Primary SMS is achieving the desired goals, and an overview of how the SMS will be adjusted as necessary to control identified risks.

2.2.5 The Lessee is also required to provide BSEE with annual reports, by the anniversary date of DOI's initial concurrence with the WDA's Primary SMS, highlighting: (1) changes that have been made to the WDA's Primary SMS; (2) successes and challenges regarding the implementation of the WDA's Primary SMS; and (3) evidence of the functionality of the WDA's Primary SMS, specifically how the WDA's Primary SMS has driven continual improvement in safety and environmental performance. If DOI determines that changes to the WDA's Primary SMS were significant, DOI will review the changes and ask for any additional details or clarification as required. The Lessee must revise and resubmit its WDA's Primary SMS description if DOI does not concur with the Lessee's changes.

2.2.6 In addition to maintaining an acceptable and functional WDA Primary SMS, the Lessee, designated operator, contractor, and subcontractor constructing, or operating, or decommissioning renewable energy facilities on the OCS, are required to follow the policies and procedures of the specific SMS applicable to their activities, and to take corrective action whenever there is a failure to follow the specific SMS or the specific SMS failed to ensure safety.

2.3 Oil Spill Response Plan (Planning). Pursuant to 30 C.F.R. § 585.627(c), the Lessee must submit an Oil Spill Response Plan (OSRP) in compliance with 33 U.S.C. § 1321, including information identified in 30 C.F.R. part 254 that is applicable to the Lessee's activities. The Lessee must submit the OSRP directly to BSEE (at bseeosrd-gomr@bsee.gov). Before the installation of any component of the Lessee's facilities that may handle or store oil on the OCS, BSEE must review and accept the Lessee's OSRP. The Lessee's OSRP must be consistent with the National Contingency Plan and appropriate Area Contingency Plan(s), as defined in 30 C.F.R. § 254.6. In order to continue operating, the Lessee must operate in accordance with the OSRP accepted by BSEE.

The Lessee's OSRP must contain the following information:

2.3.1 Facility Information. The OSRP must describe the type and amounts of oil on the facilities covered under the Lessee's OSRP, and design parameters intended to monitor for oil spills.

2.3.1.1 As used herein, "Oil," as defined by Clean Water Act at 33 U.S.C. 1321(a), means oils of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. However, "oil," does not include animal fats, oils, and greases, and fish and marine mammal oils, or oils of vegetable origin, including oils from seeds, nuts, or kernels. Dielectric fluids, as an example, meets this definition of oil. "Facility," for the purposes of the Lessee's OSRP, is a facility as defined in 30 C.F.R. § 585.112 that contains or stores oil.

2.3.2 Copies of Safety Data Sheets. The OSRP must include copies of safety data sheets (SDS) for any oils present on any facility in quantities equal to or greater than 100 gallons.

2.3.3 The Worst-Case Discharge Volume. The OSRP must include the worst-case discharge (WCD) volume for each type of facility covered in the plan.

2.3.3.1 The "Worst-Case Discharge Volume" is the highest cumulative volume of oil and all other oil-based substances contained on a single facility, such as an electrical service platform (ESP) or wind turbine generator (WTG).

2.3.3.2 Calculating the Lessee's WCD volume(s):

- For all facilities (e.g., wind turbine generators (WTGs) or other support structures) other than ESPs and transmission lines, the WCD is the highest total volume of oil and oil-based substances

contained onboard or within the facility, including all cables containing oil that are connected to the facility, except for transmission lines.

- For an ESP, the WCD is the highest total volume of oil and oil-based substances contained within the facility, including all cables containing oil that are connected to the facility, except for transmission lines.
- For transmission lines that contain oil, the WCD is the maximum volume of oil and oil-based substances that can be contained within the transmission line with the highest oil storage capacity and any storage tanks that may supply oil to the cable.

2.3.4 Response Organization. The OSRP must identify a trained Qualified Individual (QI), and an alternate, who have full authority to implement removal actions and ensure immediate notification of appropriate Federal officials and response personnel. The OSRP must provide these individuals' 24-hour contact information, including phone numbers and e-mail addresses. In the OSRP that covers the ESP(s), the Lessee must also designate trained members of the Lessee's Incident Management Team (IMT), and provide their 24-hour contact information, including phone numbers and e-mail addresses. If a contract has been established with an IMT, evidence of such a contract must be provided in the Lessee's OSRP.

2.3.4.1 "Qualified Individual" means an English-speaking representative of the Lessee located in the United States, available on a 24-hour basis, and with full authority to obligate funds, carry out removal actions, and communicate with the appropriate Federal officials and the persons providing personnel and equipment in removal operations.

2.3.4.2 "Incident Management Team" means the group of personnel identified to staff the organizational structure to manage the overall response to an incident in accordance with the Lessee's OSRP. The IMT consists of the Incident Commander, Command and General Staff, and other personnel assigned to key Incident Command System positions designated in the Lessee's OSRP.

2.3.4.3 "Oil Spill Removal Organization" (OSRO) is an entity contracted by the Lessee to provide spill response equipment and/or manpower in the event of an oil spill.

- 2.3.4.4 “Spill Response Operating Team” (SROT) means the trained persons who respond to spills and deploy and operate oil-spill response equipment.
- 2.3.5 Notification Procedures. The OSRP must describe the procedures for spill notification. Notification procedures must include the 24-hour contact information for:
- 2.3.5.1 The QI and an alternate, including phone numbers and e-mail addresses;
 - 2.3.5.2 IMT members, if applicable;
 - 2.3.5.3 Federal, state, and local regulatory agencies that must be notified when a spill occurs, including but not limited to the National Response Center;
 - 2.3.5.4 An OSRO and SROT that are available to respond; and
 - 2.3.5.5 Other response organizations and subject matter experts that the Lessee will rely on for the Lessee’s response.
- 2.3.6 Spill Mitigation Procedures. The OSRP must describe the different discharge scenarios that could occur from the Lessee’s facilities and the mitigation procedures by which the offshore facility operator and any listed/contracted OSROs (if required) would respond to such discharges. The mitigation procedures must address responding to both smaller spills (with slow, low-volume leakage) and larger spills to include the largest WCD covered under the Lessee’s OSRP (refer to definition above).
- 2.3.7 Trajectory Analysis. The OSRP that covers the ESP(s) must include a stochastic spill trajectory analysis from the ESP(s). The trajectory analysis must:
- 2.3.7.1 Be based on the WCD volume from the ESP that is closest to shore;
 - 2.3.7.2 Be conducted for the longest period of time that the discharged oil would reasonably be expected to persist on the water’s surface, or 14 calendar days, whichever is shorter; and
 - 2.3.7.3 Identify the probabilities for oiling on the water’s surface and on shorelines, and minimum travel times for the transport of the oil over the duration of the model simulation. Oiling probabilities and minimum travel times must be calculated for exposure threshold concentrations reaching 10 grams per square meter. Stochastic

analysis must incorporate a minimum of 100 different trajectory simulations using random start dates selected over a multi-year period.

- 2.3.8 Resources at Risk. The OSRP must include a concise list of the sensitive resources that are located near the Lessee's offshore facility and could be oiled by a spill. In lieu of listing sensitive resources, the Lessee may identify the areas that could be oiled by a spill from the Lessee's facility and provide hyperlinks to corresponding Environmentally Sensitive Index Maps and/or Geographic Response Strategies for those areas from the appropriate Area Contingency Plans.
- 2.3.9 Contractual Agreements. The OSRP must include a list of OSROs and SROTs that are available to respond to the WCD of oil from the Lessee's offshore facilities and their contact information.
- 2.3.9.1 If the Lessee's OSRP covers only WTGs, the Lessee may provide a Letter of Intent (LOI) in lieu of a contract from each OSRO and SROT in the Lessee's plan acknowledging that it has agreed to be listed in the Lessee's OSRP.
- 2.3.9.2 In the OSRP that covers the ESP(s), the Lessee is required to ensure the availability of the OSRO and SROT resources necessary to respond through a contract or membership agreement. If a contract has been established with an OSRO and SROT, evidence of such contracts or membership agreements must be provided in the Lessee's plan. An LOI is not required from any OSRO or SROT that has been ensured to be available through a contract.
- 2.3.9.3 The OSRP must also include a map(s) that shows equipment storage sites and staging location(s) for the oil spill response equipment that would be deployed by the facility operators or the OSRO(s) listed in the plan in the event of a discharge.
- 2.3.10 Training. The OSRP must include a description of the annual training necessary to ensure that the QI, IMT, OSRO and SROT (as applicable) are sufficiently trained to perform their respective duties. The Lessee's OSRP must provide the most recent dates of applicable training(s). The Lessee must ensure that the Lessee's QI, IMT, OSRO, and SROT personnel receive annual training. The training must be sufficient for personnel to perform their duties. Training records must be maintained and retained for 3 years and must be provided to BSEE upon request.

- 2.3.11 Response Plan Exercise. The OSRP must include a triennial exercise plan for review and concurrence by BSEE to ensure that the Lessee is able to respond quickly and effectively whenever oil is discharged from the Lessee's facilities. The Lessee must conduct an annual scenario-based notification exercise, an annual scenario-based IMT tabletop exercise, and, during the triennial exercise period, at least one functional exercise. If the Lessee's plan includes an OSRO and/or SROT contract, an annual deployment exercise of the Lessee's contracted response equipment is required. BSEE will advise on the options the Lessee has to satisfy these requirements and may require changes in the type, frequency, or location of the required exercises, exercise objectives, equipment to be deployed and operated, or deployment procedures or strategies. BSEE may evaluate the results of the exercises and advise the Lessee of any needed changes in response equipment, procedures, tactics, or strategies. BSEE may periodically initiate unannounced exercises to test the Lessee's spill preparedness and response capabilities. Exercise records must be maintained and retained for 3 years and must be provided to DOI upon request.
- 2.3.12 Response Equipment. The OSRP that covers the ESP(s) must: include a list, or a hyperlink to a list, of the oil spill response equipment that is available to the Lessee through OSRO contracts; and identify the location of the equipment depots where the equipment is stored. The Lessee must: ensure that the Lessee's contracted response equipment is maintained in proper operating condition; further ensure that all maintenance, modification, and repair records are kept for a minimum of 3 years; and provide these records to BSEE upon request. The Lessee or the Lessee's OSRO must provide BSEE with physical access to the Lessee's equipment storage depots and perform functional testing of the Lessee's response equipment upon BSEE's request. BSEE may require maintenance, modifications, or repairs to response equipment or require the Lessee to remove response equipment from the Lessee's plan if it does not operate in accordance with its intended purpose.
- 2.3.13 OSRP Maintenance. If the Lessee makes a significant change to its OSRP that would reduce the Lessee's ability to respond to: a spill, a significant increase in the Lessee's WCD, removal of a contracted IMT, OSRO, or SROT from the Lessee's plan, or a significant change in the applicable area contingency plans, the Lessee must revise its OSRP to remedy these problems and provide notice to BSEE no more than 15 calendar days after said change for review and concurrence. The Lessee must review and update the entire OSRP as needed at intervals not to exceed once every 3 years, starting from the date the OSRP was initially accepted. The Lessee must send a written notification to BSEE upon completion of this review and submit any updates for concurrence. BSEE may require changes to the Lessee's OSRP if BSEE

determines that the OSRP is outdated or contains significant inadequacies through review of the Lessee's OSRP, information obtained during exercises or actual spill responses, or other relevant information obtained by BSEE.

- 2.4 Cable Routings (Planning). The Lessee must submit the final Cable Burial Risk Assessment (CBRA) and engineered cable routings for all cable routes on the OCS to DOI for review prior to or with the submittal of the FDR. The final CBRA must include information on: (a) natural and man-made hazards; (b) sediment mobility, including high and low seabed levels expected over the Project lifetime; (c) feasibility and effort level information required to meet burial targets; and (d) profile drawings of the cable routings illustrating cable-burial targets along with the stable seabed depth. The Lessee must resolve any DOI-identified comments and concerns about the CBRA to DOI's satisfaction prior to the installation of cables and related facilities authorized in the Lessee's approved COP.
- 2.5 Cable Protection Measures (Planning) (Construction) (Operations). As described in the approved COP, the export and inter-link cable is expected to be installed using simultaneous lay and bury via jet plowing, or one of the other techniques listed in Section 4.2.3.3.2 of Volume I of the approved COP. Other methods may be needed in areas of coarser or more consolidated sediment, rocky bottom, or other difficult conditions to ensure a proper burial depth, and it is expected that achieving proper burial depth may be difficult in some areas. In these areas, where proper burial depth cannot be achieved, the Lessee will employ cable protection measures through techniques such as placing rocks or prefabricated flexible concrete coverings on top of the cable (referred to as concrete mattresses), or using half-shell pipes/similar products made from composite materials/cast iron with suitable corrosion protection.

As described in the approved COP, the use of cable protection measures will not exceed 10 percent of the total cable routing. This is in accordance with the initial CBRA's estimated length of cable protection of 3.4 miles (5.5 kilometers), or 8.4 percent of the cable route.

- 2.5.1 For the purpose of the approved COP, DOI has determined the proper burial depth to be a minimum of 4.9 feet (1.5 meters) along Federal sections of the export cable, inter-link, and inter-array cables, as measured from the stable seabed to the top of the cable. This depth is consistent with the approved COP and the cable burial performance assessment provided in the initial CBRA. The Lessee must employ cable protection measures when proper burial depth is not achieved and provide DOI with detailed drawings/information of the actual burial depths and locations where protective measures were used, when the post-installation reports are submitted.

- 2.5.2 If the Lessee cannot comply with the requirements in Section 2.5.1, the Lessee must provide for DOI's review information explaining any proposed alteration of the requirements in that Section, including the need for the proposed alteration,, and must resolve any DOI concerns and objections to such alteration to DOI's satisfaction prior to or with the FIR submission.
- 2.6 Crossing Agreements (Planning). The Lessee must provide final cable crossing agreements for active, in-service submarine cables, or other types of infrastructure, such as pipelines, to DOI no later than 30 calendar days prior to cable installation.
- 2.7 Post-Installation Cable Monitoring (Construction) (Operations). The Lessee must provide DOI with a cable monitoring report within 60 calendar days following each inter-array and export cable inspection to determine cable location, burial depths, the state of the cable, and site conditions. Inspections of the inter-array and export cables must: include high resolution geophysical (HRG) methods, involving, for example, multi-beam bathymetric survey equipment; and identify seabed features, natural and man-made hazards, and site conditions along Federal sections of the cable routing.
- 2.7.1 On the OCS, the Lessee must conduct the initial inter-array and export cable inspection within 6 months of commissioning, and subsequent inspections at Years 1 and 2, and every 3 years thereafter, and within 180 calendar days after a major storm event (as defined in the Post-Storm Monitoring Plan, described in Section 2.10). If DOI determines that conditions along the cable corridor warrant adjusting the frequency of inspections following the Year 2 survey (e.g., due to changes in cable burial or seabed conditions that may impact cable stability or other users of the seabed), then DOI may require the Lessee to submit a revised monitoring plan to DOI for review and concurrence.
- 2.7.2 In addition to required inspections, the Lessee must continuously monitor the export cable with the use of an as-built Distributed Temperature Sensing System. If DOI determines that the Distributed Temperature Sensing data indicates that burial conditions have deteriorated or changed significantly and remedial actions are warranted, then the Lessee must submit the following to BOEM (at renewable_reporting@boem.gov) and BSEE (at OSWsubmittals@bsee.gov) within 45 calendar days of the date DOI notifies the Lessee of its determination: the Distributed Temperature Sensing data, a seabed stability analysis, and a report of remedial actions taken or scheduled. All remedial actions must be consistent with those described in the approved COP and completed in accordance with the schedule provided in the remedial-action report. DOI will review the report of remedial actions and provide comments, if any, on the report within 60 calendar days of its submittal. The Lessee must resolve all comments on the report to DOI's satisfaction. If DOI

provides no comments on the report within 60 calendar days of its submittal, then the Lessee may conclusively presume DOI's concurrence with the report.

2.7.3 The Lessee must provide to DOI the Distributed Temperature Sensing data, cable monitoring survey data, and cable conditions analysis for each year as part of the Annual Certification of Compliance, as required by 30 C.F.R. § 585.633(b).

2.8 WTG and ESP Foundation Depths (Planning). Information on seabed conditions has been provided to depths of up to 131 feet (40 meters) at WTG locations and a depth of 246 feet (75 meters) at ESP locations. If foundation depths are anticipated to exceed these depths, the Lessee must provide for DOI's review with the FDR submission additional information on seabed conditions and geotechnical design parameters, as well as a pile drivability assessment for the additional depths, as requested by DOI.

In the event that the specific location of certain Project components differs from the 1 nautical mile x 1 nautical mile layout for which geotechnical investigations have been performed, the Lessee must perform additional borings and/or Cone Penetration Test (CPT) probes at any new locations not already covered by previous investigations extending to depths at least 33 feet (10 meters) below expected foundation tip elevation, along with a pile drivability assessment for each site. The Lessee must provide this data in the FDR along with final foundation designs.

2.9 Minimizing and Monitoring Foundation Scour Protection (Construction) (Operations) (Decommissioning). The Lessee must: minimize, to the maximum extent practicable based on design and engineering considerations, the footprint of scour protection measures at the WTG foundations; and inspect scour protection performance. The Lessee must submit an Inspection Plan to DOI and the National Marine Fisheries Service (NMFS) at least 60 calendar days prior to initiating the inspection program. DOI will review the Inspection Plan and provide comments, if any, on the plan within 60 calendar days of its submittal. The Lessee must resolve all comments on the Inspection Plan to DOI's satisfaction and receive DOI's written concurrence prior to initiating the inspection program. However, the Lessee may conclusively presume DOI's concurrence with the Inspection Plan if DOI provides no comments on the plan within 60 calendar days of its submittal.

2.9.1 The Lessee must carry out an initial foundation scour inspection within 6 months of installation completion of each foundation location, and subsequent inspections at a minimum of 20 percent of foundation locations at intervals of 3 years thereafter, and within 180 calendar days after a major storm event (as defined in the Post-Storm Monitoring Plan, described in Section 2.10).

- 2.9.2 The Lessee must provide DOI with a foundation scour monitoring report within 45 calendar days of completing each foundation scour inspection.
- 2.9.3 Should scour holes develop within 10 percent of the minimum local scour design values, or if spud depressions from installation affect scour protection stability, the Lessee must submit a plan for additional monitoring and/or mitigation to DOI for review and concurrence.
- 2.10 Post-Storm Monitoring Plan (Construction) (Operations) (Decommissioning). The Lessee must provide a plan for post-storm monitoring of the facility infrastructure, foundation scour protection, and cables to DOI for review and concurrence prior to commencing installation activities. This plan must: include a description of how the Lessee will measure or monitor environmental conditions; specify the condition thresholds for a major storm, and their associated technical justification(s), above which post-storm monitoring or mitigation is necessary; describe potential monitoring, mitigation, and damage identification methods; and state when the Lessee will notify DOI of post-storm related activities. DOI reserves the right to require post-storm mitigations to address conditions that could result in safety risks and/or impacts to the environment.
- 2.11 High-Frequency Radar Interference Analysis and Mitigation (Planning) (Construction) (Operations). The Project is within the line of sight (LOS) of seven oceanographic high-frequency (HF) radar systems (SeaSonde and Least Expensive Radar [LERA] types):

<u>Radar Name</u>	<u>Radar System</u>
SQUB	Short Range SeaSonde
LPWR	Medium Range LERA
HBSR	Medium Range LERA
NWTP	Medium Range LERA
MVCO	Long Range SeaSonde
NANT	Long Range SeaSonde
AMAG	Long Range SeaSonde

- 2.11.1 The Lessee must coordinate with the radar operators identified in the table above and the Surface Currents Program of the National Oceanic and Atmospheric Administration (NOAA) Integrated Ocean Observing System Office to assess if the Project causes radar interference to the degree that radar performance is no longer within the specific radar systems' operational parameters or fails to meet mission objectives.
- 2.11.2 If, after the above coordination, the radar operator or the Surface Currents Program determines that the Project causes a radar system to fall outside of its

operational parameters or fail to meet mission objectives, as soon as possible and no later than 30 calendar days from the date on which the determination was communicated, the Lessee must: (i) notify DOI of the determination; (ii) share time-series data of blade rotation rates, nacelle bearing angles, and other information about the operational state of each turbine in the WDA with the affected radar operator and the Surface Currents Program to aid interference mitigation; and (iii) if available, share real-time telemetry of surface currents and other oceanographic data measured at Project locations selected by the Lessee, in coordination with the affected radar operator and the Surface Currents Program.

2.11.3 If a mitigation measure other than that identified in Section 2.11.2 is agreed to by the Lessee, the affected radar operator, and the Surface Currents Program, then the Lessee must submit information on the proposed mitigation measure to DOI for its review and concurrence.

2.12 Commissioning Surveillance of Critical Safety Systems (Planning) (Construction). Prior to commencing commercial operations, the Lessee must provide to DOI qualified third-party verification of proper installation and commissioning of all critical safety systems and equipment designed to prevent or ameliorate major accidents that could result in harm to health, safety, or the environment (hereinafter “critical safety systems”). The documentation provided to DOI must demonstrate that the qualified third party verified that the critical safety systems for the Project and equipment to be used were commissioned in conformity with the Original Equipment Manufacturer (OEM)’s standards and the Project’s functional requirements, and are functioning properly prior to the start of commercial operations.

2.12.1 Qualified Third Party. A qualified third party must be a technical classification society, a licensed professional engineering firm, or a registered professional engineer capable of providing the necessary certifications, verifications, and reports. The qualified third party must not have been involved in the design of the Project.

2.12.2 Critical Safety Systems and Equipment Risk Assessment. The Lessee must conduct a risk assessment to identify the critical safety systems and equipment within its facility. The Lessee must submit the risk assessment to DOI and the qualified third party for review. The qualified third party must make a recommendation to DOI on the acceptability of the risk assessment and its associated conclusions. DOI must concur with the qualified third-party recommendation(s) prior to the Lessee beginning commissioning activities.

2.12.3 Commissioning Surveillance Requirements. The qualified third party must evaluate whether the commissioning of the wind farms’ critical safety systems and equipment, as identified in the risk assessment, are in

conformance with the instructions in OEM manuals and the Project's functional requirements. Other tests to be performed during commissioning may be agreed upon with the Lessee.

This evaluation requires the examination of commissioning records and witnessing of tests. The qualified third party must witness the commissioning of the critical safety systems and equipment of at least one WTG per every 50 WTGs in the Project, rounding up to the nearest 50 (e.g., if 62 WTGs are to be installed, the qualified third party must witness the commissioning of two WTGs). The qualified third party must, at a minimum, verify that:

2.12.3.1 The installation procedures and/or commissioning instructions supplied by the manufacturer and identified in the Project's functional requirements are adequate;

2.12.3.2 The instructions supplied by the manufacturer and identified in the Project's functional requirements are followed during commissioning;

2.12.3.3 The systems and equipment function as designed; and

2.12.3.4 The final commissioning records are complete.

2.12.4 Commissioning Surveillance Reporting. The Lessee must submit commissioning surveillance records (for example, the final results and acceptance of the commissioning test by the qualified third party) or a Conformity Statement and supporting documentation (prepared in accordance with International Electrotechnical Commission System for Certification to Standards relating to Equipment for use in Renewable Energy applications (IECRE OD-502)) for the critical safety systems identified in Section 2.12.2. DOI must concur with the commissioning surveillance records or Conformity Statement and supporting documentation prior to the Project initiating commercial operations. If DOI has not responded to the commissioning surveillance records or Conformity Statement and supporting documentation submitted by the qualified third party within 3 working days, then the Lessee may presume concurrence.

2.13 As-Built Drawings (Construction) (Operations) (Decommissioning). The Lessee must compile, retain, and make available to DOI the following drawings and documents, as provided in the chart below.

<u>Drawing Type</u>	<u>Time frame to make available issued for construction drawings</u>	<u>Time frame to make available post-fabrication drawings</u>	<u>Time frame to make available final, stamped as-built drawings</u>
Complete set of structural drawing(s) including major structural components and evacuation routes	With FDR submittal	N/A	Within 1 calendar year of the facility commencing commercial operations ⁴
Front, side, and plan view drawings	With FDR submittal	N/A	Within 1 calendar year of the facility commencing commercial operations
Location plat for all Project facilities	With FDR submittal	N/A	Within 1 calendar year of the facility commencing commercial operations
Complete set of cable drawing(s)	With FDR submittal	Prior to Final FIR Non-Objection as contemplated in 30 C.F.R. § 585.700(b) ⁵	Within 90 calendar days of the facility commencing commercial operations
Piping and instrumentation diagram(s)		N/A	Within 90 calendar days of the facility commencing commercial operations
Safety flow diagram(s) ⁶	With FDR submittal	N/A	Within 90 calendar days of the facility commencing commercial operations
Electrical one-line drawing(s)		Prior to Final FIR Non-Objection	Within 90 calendar days of the facility commencing commercial operations
Cause and Effect Chart		Prior to Final FIR Non-Objection	Within 90 calendar days of the facility commencing commercial operations
Schematics of the fire and gas-detection system(s)		Prior to Final FIR Non-Objection	Within 90 calendar days of the facility commencing commercial operations

2.14 Blade Installation (Construction). The Lessee must submit, or have submitted on its behalf, the following information via TIMSWeb (<https://timsweb.bsee.gov/>), to BSEE, and resolve BSEE’s comments to BSEE’s satisfaction, prior to installation of any blades at the Project.

⁴ “Commercial operations” is defined at 30 C.F.R. § 585.112.

⁵ As-installed location must be submitted with the final FIR.

⁶ Safety flow diagrams should depict the location of critical safety systems and equipment designed to prevent or ameliorate major accidents that could result in harm to health, safety, or the environment.

2.14.1 Blade-Specific Information

- 2.14.1.1 Evidence that all newly installed blades must meet the Category (Cat) 0 requirements, as defined below.
- 2.14.1.2 A comprehensive summary report documenting all the work completed, and associated results demonstrating that each blade set meets the original design life (e.g., information about repairs, and the results of ultrasound testing (UT), visual examination, and engineering analysis). The summary must include a statement that the UT and visual-inspection results demonstrate that there are no anomalies greater than Cat 0, as defined below, or that would impact the design life of the blades.
- 2.14.1.3 Results from UT completed after post-manufacturing repairs, if applicable, demonstrating that the blade meets the Cat 0 criteria.
 - 2.14.1.3.1 The documentation must include annotated UT images of anomalies that were repaired prior to leaving the manufacturing facility, if applicable.
 - 2.14.1.3.2 Results from a minimum of two different UT evaluations conducted by experts certified at SNT-TC-1A Level 2 or greater. At least one of the evaluations must be conducted by a UT expert independent of the manufacturing location. The reviews must include an enhanced examination of the 3rd web upwind and 0-20 m trailing edge to identify any escapement, or a separate enhanced review must be completed. Results from both reviews must demonstrate that the blade is Cat 0. Signatures from the UT experts conducting the evaluations must be included with their evaluation results.
 - 2.14.1.3.3 The results from the UT evaluations must include a statement that a minimum of two independent evaluations of the UT scans have been conducted covering the entire blade length, including an enhanced evaluation of the 3rd web upwind and 0-20 m trailing edge.
 - 2.14.1.3.4 Cat 0 is defined as “Use as-is” – Meets 25-year IEC certification requirements as-is. The table below defines the criteria for blades to be classified as Cat 0.

UT	Shear Webs	Adhesive width >85% of acceptance criteria, and 100% fill under the core
UT	Leading and Trailing Edge	Adhesive width > 85% of acceptance criteria
UT	C-stiffener	100% fill under the core
Visual		Meets factory acceptance criteria

2.14.1.4 Results from visual examination (internal and external).

2.14.1.4.1 The results of both an internal inspection of all accessible parts of the blade and an external visual inspection of the entire blade. If any anomalies and repairs occur, annotated images must also be included. The results must be submitted before the blade leaves the manufacturing facility.

2.14.1.4.2 Results from inspections that occur after transportation to the marshalling harbor. These inspections must include an external visual examination of the entire blade and an internal examination of the transportation tiedown areas and areas which will encounter the blade eagle. If any anomalies or repairs occur, annotated images thereof must be included.

2.14.1.4.3 If anomaly(ies) are observed, the Lessee must repair the anomaly(ies) and demonstrate to BSEE that the repair returns the blade(s) to Cat 0.

2.14.1.5 Documentation from UT and visual inspections, including identified anomalies and associated repairs, must be submitted to the CVA for review and verification that the final blade disposition meets the Cat 0 criteria.

2.14.1.6 The CVA must submit a verification report to BSEE covering the post-manufacturing and post-transportation repairs, if applicable, and UT and visual inspections results. The CVA verification report must detail the CVA's verification activities, make a final recommendation, and include a detailed justification demonstrating that the blade(s) meets the Cat 0 criteria and is acceptable for installation and operation for the full design life. The CVA verification report should not contain conditions pertaining to blade manufacturing and repair.

2.14.1.6.1 The CVA must witness manufacturing for all newly manufactured blades at the Cherbourg facility. The CVA must align with BSEE on what processes the CVA must witness, including but not limited to application of adhesive and blade closure.

2.14.1.6.2 A written site visit report must be submitted to BSEE every other week documenting findings, including but not limited to identification of components (e.g., serial number, part number) and operations observed, deviations from procedures, resolution of deviations, repairs completed, proof of appropriate repair, and other information required by BSEE.

2.14.1.7 Documentation of traceability for all blades (A, B, and C for a set), including the installation location (WTG identification), blade identification (full blade number), and list of any identified anomalies and associated repairs.

2.14.1.7.1 All anomaly(ies) and/or repairs must be documented and included as part of the Lessee's inspection program.

2.14.1.8 The lessee must submit additional information, as requested by BSEE, to demonstrate that the blades meet their intended design life.

2.14.2 WTG-Specific Information

2.14.2.1 Documentation of genset tiedowns, including photos, as deemed acceptable by BSEE.

2.14.2.2 Documentation of redundant power sources, including grid power and a functional yaw backup power system for the 24 currently installed WTGs.

2.14.2.2.1 For WTGs where the tower and rotor nacelle assembly (RNA) will be installed in the future, documentation of redundant power, including a generator and another source of power. There must also, at a minimum, be grid power available through the array cables at the location where the Lessee is installing the Tower and RNA. Grid power to the entire WTG must be available within 72 hours. The Lessee must contact BSEE if grid power to the entire WTG is delayed longer than 72 hours after blade installation.

2.14.2.3 WTG inspection reports for any WTGs where blades have been removed.

2.14.2.3.1 The inspection report(s) must be submitted to the CVA. The CVA must send BSEE a verification report verifying, and providing justification, that the WTG is fit for installation activities and future operations.

2.14.2.4 The lessee must submit any additional information, as requested by BSEE, to demonstrate that the WTGs are safe for installation.

2.15 Post-Installation Blade Information (Construction) (Operations). The Lessee must submit, or have submitted on its behalf, the following information via TIMSWeb (<https://timsweb.bsee.gov/>) to BSEE, and resolve BSEE's comments to BSEE's satisfaction, prior to hot commissioning (i.e., commissioning that requires the production of power) for any blade at the Project.

2.15.1 Documentation from a post-installation inspection, including:

2.15.1.1 An internal visual examination in the area where the blade eagle gripped the blade and an external visual examination using binoculars or other methods available during blade installation.

2.15.1.1.1 The documentation must include annotated images of anomalies, if applicable, and documentation demonstrating that the blades remain Cat 0. If anomaly(ies) are observed post-installation, the Lessee must repair the anomaly(ies) and demonstrate that the repair returns the blade(s) to a Cat 0.

2.15.1.1.2 Any new anomaly(ies) and/or repairs must be documented and included as part of the Lessee's inspection program.

2.15.1.2 Confirmation that the installation loads remained within the design limits, including the load measurements from the blade eagle. The documentation should specify the design loads for comparison.

2.15.1.3 The inspection reports and installation loads must also be submitted to the CVA. If repairs are made, documentation of the repairs must be submitted to the CVA.

2.15.1.3.1 The CVA must submit a verification report to BSEE. The verification report must detail the CVA's verification activities, make a final recommendation, and include a

detailed justification demonstrating that the installed blade(s) meets the Cat 0 criteria and is acceptable for installation and operation for the full design life. If repairs are made, the verification report must also include details of the CVA’s verification activities, make a final recommendation, and include a detailed justification that the repairs were completed per the repair procedures and return the blade to a Cat 0.

2.15.2 For the 6 currently installed blades manufactured at Cherbourg, the Lessee must meet all the blade-specific and WTG-specific requirements for blade installation noted under Sections 2.14.1 and 2.14.2.

2.16 Currently Installed Blades (Construction) (Operations). BSEE may allow currently installed blades manufactured at Cherbourg to remain in place with a Cat 1 anomaly, as defined below, if the Lessee can demonstrate to BSEE’s satisfaction:

2.16.1 That the anomaly will not impact the structural integrity of the blade for the expected lifetime of the blade,

2.16.2 That the difficulty of the repair will likely cause more damage than the anomaly,

2.16.3 That an inspection plan is in place to monitor the anomaly,

2.16.4 A commitment to make any repair that is necessary in the future if the anomaly changes.

2.16.5 That Cat 1 is defined as “reinforce” and meets 25-year IEC certification requirements as-is. The table below defines the criteria for blades to be classified as Cat 1.

UT	Shear Webs	Adhesive width < 85% if acceptance criteria
Visual		N/A

2.17 Post-Commissioning Power (Operations). The Lessee may produce power from any blades post-commissioning, provided that: verification of the proper functioning of the blade-monitoring system is submitted via TIMSWeb (<https://timsweb.bsee.gov/>) to BSEE within two weeks of completion of commissioning; and either all comments are resolved to BSEE’s satisfaction or, at BSEE’s discretion, the Lessee continues to work with BSEE to resolve BSEE’s comments to BSEE’s satisfaction.

2.18 Continued Installation and Power (Operations). Blade installation or power production may continue as long as the Lessee complies with the following:

- 2.18.1 The Lessee must submit information to the CVA consistent with the Lessee's commercial operations departure approval dated September 29, 2023.
- 2.18.2 The Lessee must arrange for Tuv Nord (the component certifier) or DNV (the type certifier), as appropriate, to make BSEE and the CVA aware of any changes to the LM 107.0P2 blade component certificate or the Lessee's type certificate within 96 hours of the change.
- 2.18.3 The Lessee, and GE Renewables US LLC (GEV), as the Lessee's contractor or subcontractor, must cooperate with any federal investigations of the LM 107.0P2 blade 17 incident.
- 2.18.4 At BSEE's request, the Lessee, and GEV, as the Lessee's contractor or subcontractor, must cooperate with any scientific study of the LM 107.0P2 blades.
- 2.18.5 The Lessee must make BSEE aware of any shutdown triggered by the blade-monitoring system within 2 hours, and confirm within 24 hours whether the alarm is or is not a false alarm. The Lessee must commence sending notifications within 2 hours after calibration and troubleshooting has been completed for the blade-monitoring system. The 24-hour notification must include the status of the turbine and all activities undertaken during the 24-hour period. Except for documented false alarms, the Lessee must not restart production following a shutdown without demonstrating to BSEE's satisfaction that the blade is safe for operation. BSEE will work with the Lessee to ensure that restarting production occurs as expeditiously as possible.
 - 2.18.5.1 Notification is to be made by phone to BSEE's Incident Reporting line at (703) 787-1050 with a follow-up email to oswincidentreporting@bsee.gov.
- 2.18.6 An external inspection, via drone or rope access, must be conducted within 6 months of the new blade installations.
- 2.18.7 Prior to removing the backup generator on any turbine location, the Lessee must verify that the WTG can operate in turbine-island mode.
- 2.19 Blade Removal (Construction) (Operations) (Decommissioning).
 - 2.19.1 The Lessee must remove all currently installed blades manufactured at Gaspe.
 - 2.19.2 If the Lessee cannot demonstrate to BSEE's satisfaction that, post-repairs, the blades manufactured at the Cherbourg facility and currently installed at AS 42

and AT 41 meet the original design criteria, BSEE may require them to be removed.

3 NAVIGATIONAL AND AVIATION SAFETY CONDITIONS

3.1 Design Conditions (Planning) (Construction) (Operations).

3.1.1 **Marking.** The Lessee must mark each WTG and ESP with private aids to navigation. No sooner than 30 and no less than 15 calendar days prior to installation, the Lessee must file an application (form CG-2554), either in paper form or electronically, with the Commander of the First Coast Guard District to establish Private Aids to Navigation (PATON), per 33 C.F.R. part 66. Approval must be obtained before installation of the Lessee's facilities begins. The Lessee must:

- 3.1.1.1 Provide a lighting, marking, and signaling plan for review and concurrence by DOI and the Coast Guard at least 120 calendar days prior to installation. The plan must conform to applicable Federal law and regulations, and guidelines established by: the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Recommendation R0139 (O-139) The Marking of Man-Made Offshore Structures; the Coast Guard's Local Notice to Mariners (D1 LNM: 33/20) on Ocean-Structure PATON Marking Guidance; and BOEM's Guidelines for Lighting and Marking of Structures Supporting Renewable Energy Development (April 28, 2021). Should any part of Recommendation O-139 conflict with Federal law or regulation, or if the Lessee seeks an alternative to Recommendation O-139, then the Lessee must consult with and gain approval from the Coast Guard;
- 3.1.1.2 Mark each individual WTG and ESP with clearly visible, unique, alpha-numeric identification characters consistent with the attached Rhode Island and Massachusetts Structure Labeling Plot;
- 3.1.1.3 Light each WTG and ESP in a manner that is visible by mariners in a 360-degree arc around the WTG and ESP;
- 3.1.1.4 Light each WTG with red obstruction lighting compatible with night-vision goggles and consistent with the Federal Aviation Administration (FAA) (Advisory Circular (AC) 70/7460-IM);
- 3.1.1.5 Provide signage, which is visible to mariners in a 360-degree arc around the structures, warning vessels of the air draft below the turbine blades as determined at highest astronomical tide;

- 3.1.1.6 Cooperate with the Coast Guard and NOAA to ensure that cable routes, ESPs, and WTGs are depicted on appropriate government-produced and commercially available nautical charts;
 - 3.1.1.7 Provide mariner information sheets on the Lessee's website, with details on the location of the WTGs and ESP(s) and specifics such as blade clearance above sea level; and
 - 3.1.1.8 Submit documentation to DOI within 90 calendar days of beginning commercial operations documenting compliance with Sections 3.1.1.1 through 3.1.1.7.
- 3.1.2 Blade/Nacelle Control. The Lessee must equip all WTG rotors (blade assemblies) with control mechanisms constantly operable from the Lessee's control center.
- 3.1.2.1 Control mechanisms must enable the Lessee to immediately initiate the shutdown of any requested WTGs upon notification from the Department of Defense (DoD) or the Coast Guard. The Lessee must include a formal shutdown procedure in its Emergency Response Plan's Standard Operating Procedures and test this procedure on a regular basis as outlined in the Lessee's annual inspection plan. The Lessee must submit the results of testing with the Project's annual inspection results.
 - 3.1.2.2 The DoD or Coast Guard may request rotor shutdown. The Lessee must immediately initiate emergency shutdown when ordered by the DoD or Coast Guard. Coast Guard-requested shutdowns will be limited to those WTGs in the immediate vicinity of an emergency and limited to the period of time the Coast Guard determines is needed to safely respond to the emergency triggering the emergency shutdown. The Lessee may resume operations only upon notification from the entity (DoD or Coast Guard) that initiated the shutdown. DOI will coordinate with the Lessee and DoD or Coast Guard to facilitate issuance of said notice as soon as resuming operation of the WTGs is not expected to interfere with the emergency that prompted the shutdown.
 - 3.1.2.3 The Lessee must work with the Coast Guard to establish the proper blade configuration during WTG shutdown for Coast Guard search and rescue air assets.
 - 3.1.2.4 The Lessee must participate in Coast Guard periodic coordinated training and exercises to test and refine notification and shutdown

procedures, and to provide search and rescue training opportunities for Coast Guard Command Centers, vessels, and aircraft.

- 3.1.3 Helicopter Landing Platforms. If the Lessee's ESP(s) include helicopter landing platforms, the Lessee must design and build those platforms to accommodate Coast Guard HH60 rescue helicopters. The design must be verified by the DOI-approved CVA.
- 3.1.4 Structure Micrositing. The Lessee 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. The Lessee must submit the final as-built structure locations as part of the as-built documentation outlined in Section 2.13.
- 3.1.5 Emergency Response Plan. Prior to construction of the Project, the Lessee must submit an Emergency Response Plan to address non-routine events for review and concurrence by DOI and the Coast Guard. Annually, the Lessee must submit any revisions of the plan for review and concurrence by the Coast Guard. The Lessee must submit to DOI revisions to the Emergency Response Plan accepted by the Coast Guard. The Emergency Response Plan must demonstrate that the control center will be adequately staffed to execute the standard operating procedures, communications capabilities with the Coast Guard, and monitoring capabilities over the Project. The Emergency Response Plan must address the following, which the Lessee may modify with concurrence from the Coast Guard:
 - 3.1.5.1 Standard Operating Procedures. Methods for: (i) establishing and testing WTG rotor shutdown and braking; (ii) lighting control; (iii) notifying the Coast Guard of mariners in distress or potential/actual search and rescue incidents; (iv) notifying the Coast Guard of any events or incidents that may impact maritime safety or security; and (v) providing the Coast Guard with environmental data, imagery, communications and other information pertinent to search and rescue or marine pollution response.
 - 3.1.5.2 Staffing. The number of personnel intended to staff the control center to ensure continuous monitoring of WTG operations; communications and surveillance systems; hours of operation; job qualification requirements; and initial, on-the-job, and refresher training requirements.
 - 3.1.5.3 Communications. Description of the capabilities to be maintained by the control center to communicate with the Coast Guard and mariners within and in the vicinity of the WDA. Control center

communications capability must include, at a minimum, landline and wireless telephone for voice and data. Construction and operations vessel communications capability must include, at a minimum, Very High Frequency (VHF) marine radio.

3.1.5.4 Monitoring. The control center must maintain the capability to monitor the Lessee's installation and operations in real time, including at night and in periods of poor visibility, for: (i) determining the status of all PATONs, immediately reporting discrepancies to the local Coast Guard Sector Command Center (discrepancies must be corrected no later than 21 calendar days after detection); and (ii) searching for and locating mariners in distress upon notification of a maritime distress incident.

- The Lessee must test the monitoring systems to ensure functionality on a regular basis as outlined in the Lessee's annual inspection plan. The Lessee must submit the results of testing to DOI with the Project's annual inspection results.
- The Lessee must contact the Coast Guard immediately if real-time monitoring is unavailable for more than 1 hour. The Lessee must put in place an alternate monitoring plan(s) agreed to by the Coast Guard.
- The Lessee must notify DOI within 24 hours if real-time monitoring becomes unavailable for more than 1 hour.

3.1.5.5 Examples of Non-Routine Events. Non-routine events may include, but are not limited to, area oil spills, major storms, marine incidents, mariners taking refuge within and on the facility. As part of the coordination required under Section 3.1.5, the Lessee must consult with the Coast Guard on the events that must be covered within the Emergency Response Plan.

3.2 Installation Conditions (Planning) (Construction).

3.2.1 Schedule. At least 60 calendar days prior to commencing construction activities, the Lessee must provide DOI and the Coast Guard with a plan that describes the schedule and process for installing the WTGs and ESP(s), including all planned mitigations to be implemented to minimize any adverse impacts to navigation while installation is ongoing. No WTG or ESP installation work may commence at the project site (i.e., on or under the water), without prior review by DOI and the Coast Guard of the plan required under this provision. The Lessee must submit any significant revisions or

updates to the plan at least 60 calendar days prior to commencing the activities described in that update or revision. Appropriate Notice to Mariners submissions must accompany the plan.

- 3.2.2 Cable Burial. No later than 60 calendar days post-cable installation, the Lessee must submit to DOI and the Coast Guard a copy of the final submarine cable system route positioning list that depicts the precise location and burial depths of the entire cable system.
- 3.3 Reporting Conditions (Planning) (Construction) (Operations) (Decommissioning).
 - 3.3.1 Complaints. On a monthly basis, the Lessee must: (1) provide DOI 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; and (2) describe remedial action(s) taken in response to complaints received, if any. DOI reserves the right to require additional remedial action in accordance with 30 C.F.R. part 585.
 - 3.3.2 Correspondence. On a monthly basis, the Lessee must provide DOI and the Coast Guard with copies of any correspondence received from other Federal, state, or local agencies that mention or address navigation safety issues.
 - 3.3.3 Maintenance Schedule. On an annual basis, the Lessee must provide DOI and the Coast Guard with its maintenance schedule for any planned WTG or ESP maintenance. Appropriate Notice to Mariners submissions must accompany each maintenance schedule.
- 3.4 Meeting Attendance (Planning) (Construction) (Operations). As requested by DOI and the Coast Guard, the Lessee must attend meetings (e.g., Harbor Safety Committee, Area Committee) to provide briefs on the status of construction and operations, and on any problems or issues encountered with respect to navigation safety.
- 3.5 Area Oil Spill Contingency Planning (Planning) (Construction) (Operations). The Lessee must participate in any Coast Guard-supported efforts to develop area oil spill contingency plans.
- 3.6 Periodic Review (Planning) (Construction) (Operation). Throughout the life of the Project, the Coast Guard will continue to monitor the construction and operation of the Project for purposes of navigation safety and the execution of Coast Guard missions. To the extent it is technically and economically feasible, the Lessee must cooperate with the Coast Guard in this regard, including participation in Coast Guard exercises and evaluations.

4 NATIONAL SECURITY CONDITIONS

- 4.1 Confirmation that Structures Can Withstand Training Activities (Planning). To prevent interference with the 104th Fighter Wing's ability to train in Warning Area 105, the Lessee must confirm via letter to the United States Air Force (USAF) that the Lessee's structures in the WDA can withstand the daily sonic overpressures (sonic booms) and potential falling debris from chaff and flare dispensed by the USAF. The letter must be signed by an authorized representative of the Lessee and provided to USAF and BOEM no later than 15 calendar days after COP approval.
- 4.2 Hold and Save Harmless – United States Government. (Planning) (Construction) (Operation). Whether compensation for such damage or injury might be due under a theory of strict or absolute liability or otherwise, the Lessee assumes all risks of damage or injury to any person or property, which occur in, on, or above the OCS, in connection with any activities being performed by the Lessee in, on, or above the OCS, if the injury or damage to any person or property occurs by reason of the activities of any agency of the United States Government, its contractors, or subcontractors, or any of its officers, agents or employees, being conducted as a part of, or in connection with, the programs or activities of the individual military command headquarters (hereinafter "the appropriate command headquarters") listed below:

United States Fleet Forces (USFF) N46
1562 Mitscher Ave, Suite 250
Norfolk, VA 23551
(757) 836-6206

Notwithstanding any limitation of the Lessee's liability in Section 9 of the Lease, the Lessee assumes this risk whether such injury or damage is caused in whole or in part by any act or omission, regardless of negligence or fault, of the United States, its contractors or subcontractors, or any of its officers, agents, or employees. The Lessee further agrees to indemnify and save harmless the United States against all claims for loss, damage, or injury in connection with the programs or activities of the command headquarters, whether the same be caused in whole or in part by the negligence or fault of the United States, its contractors, or subcontractors, or any of its officers, agents, or employees and whether such claims might be sustained under a theory of strict or absolute liability or otherwise.

- 4.3 Falmouth Airport Surveillance Radar-8 and Nantucket Airport Surveillance Radar-9 Radar Systems. (Construction) (Operation). To mitigate impacts on the North American Aerospace Defense Command's (NORAD) operation of the Falmouth Airport Surveillance Radar-8 (ASR-8) and the Nantucket ASR-9 Radar, the Lessee must complete the following.
- 4.3.1 Mitigation Agreement. The Lessee must enter into a mitigation agreement with the DoD and the Department of the Air Force, for purposes of

implementing Sections 4.3.2 and 4.3.3 below. If there is any discrepancy between Sections 4.3.2. and 4.3.3 and the terms of the mitigation agreement, the terms of the mitigation agreement will prevail. Within 15 calendar days of entering into the mitigation agreement, the Lessee must provide BOEM with a copy of the executed mitigation agreement. Within 45 calendar days of completing the requirements in Sections 4.3.2 and 4.3.3, the Lessee must provide BOEM with evidence of compliance with those requirements.

- 4.3.2 NORAD Notification. At least 30, but no more than 60, calendar days prior to completion of construction or initiation of commercial operations (whichever is earlier), the Lessee must notify NORAD for Radar Adverse-impact Management (RAM) scheduling, which is required for the Falmouth ASR-8; and
- 4.3.3 Funding for RAM Execution. At least 30, but no more than 60, calendar days prior to completion of construction or initiation of commercial operations (whichever is earlier), the Lessee must contribute funds in the amount of \$80,000 to NORAD toward the execution of the RAM.
- 4.4 Distributed Acoustic Sensing Technology. (Planning) (Construction) (Operation). To mitigate potential impacts on the Department of the Navy's (DON) operations, the Lessee must coordinate with the DoD/DON on any proposal to utilize distributed acoustic sensing (DAS) technology as part of the Project or associated transmission cables.
- 4.5 Electromagnetic Emissions. (Planning) (Construction) (Operation). Before entering any designated defense operating area, warning area, or water test area for the purpose of carrying out any survey activities under the approved COP, the Lessee must enter into an agreement with the commander of the appropriate command headquarters to coordinate the electromagnetic emissions associated with such survey activities. The Lessee must ensure that all electromagnetic emissions associated with such survey activities are controlled as directed by the commander of the appropriate command headquarters. The Lessee must provide BOEM with a copy of the agreement within 15 calendar days of entering into it. The Lessee must include a summary of associated activities in the Lessee's annual self-inspection reports.

5 CONDITIONS RELATED TO PROTECTED SPECIES⁷ AND HABITAT

⁷ As used herein, the term "protected species" means species of fish, wildlife, or plant that have been determined to be endangered or threatened under Section 4 of the Endangered Species Act (ESA). ESA-listed species are provided in 50 C.F.R. 17.11-12. The term also includes marine mammals protected under the Marine Mammal Protection Act (MMPA).

5.1 General Environmental Conditions.

- 5.1.1 Aircraft Detection Lighting System (Construction) (Operations). The Lessee must use an FAA-approved Aircraft Detection Lighting System (ADLS), which will activate the FAA hazard lighting only when an aircraft is in the vicinity of the wind facility and will reduce the visibility of lighting at night and will reduce visual impacts at night. The Lessee must confirm the use of FAA-approved ADLS in the FIR.
- 5.1.2 Automated Information System on All Project Construction and Operations Vessels, Turbines, and ESPs (Construction) (Operations) (Decommissioning). The Lessee must ensure that an operational Automated Information System (AIS) is installed on all vessels associated with the construction, operation, and decommissioning of the Project. The Lessee must use AIS to mark the location of WTGs and ESPs as required by the Coast Guard. AIS is required to monitor the number of vessels and traffic patterns for analysis and compliance with vessel speed requirements and to make identification of infrastructure easier for non-Project vessels. The Lessee must submit to BOEM a report with the AIS data at the time it submits the certification of compliance required under 30 C.F.R. § 585.633(b).
- 5.1.3 Marine Debris⁸ Awareness and Elimination (Planning) (Construction) (Operations) (Decommissioning).
- 5.1.3.1 Marine Debris Awareness Training. The Lessee must ensure that vessel operators, employees, and contractors engaged in offshore activities pursuant to the approved COP complete marine trash and debris awareness training annually. The training consists of two parts: (1) viewing a marine trash and debris training video or slide show (described below); and (2) receiving an explanation from management personnel that emphasizes their commitment to the requirements. The marine trash and debris training videos, training slide packs, and other marine debris related educational material may be obtained at <https://www.bsee.gov/debris> or by contacting BSEE. The training videos, slides, and related material may be downloaded directly from the website. Operators engaged in marine survey activities must continue to develop and use a marine trash and debris awareness training and certification process that reasonably assures

⁸ Throughout this document, “marine debris” is defined as any object or fragment of wood, metal, glass, rubber, plastic, cloth, paper, or any other man-made item or material that is lost or discarded in the marine environment.

that their employees and contractors are in fact trained. The training process must include the following elements:

- Viewing of either a video or slide show by the personnel specified above;
- An explanation from management personnel that emphasizes their commitment to the requirements;
- Attendance measures (initial and annual); and
- Recordkeeping and the availability of records for inspection by DOI.

5.1.3.2 Training Compliance Report. By January 31 of each year, the Lessee must submit to DOI an annual report that describes its marine trash and debris awareness training process and certifies that the training process has been followed for the previous calendar year. The Lessee must send the reports via email to BOEM (at renewable_reporting@boem.gov) and to BSEE (at marinedebris@bsee.gov).

5.1.3.3 Marking. Materials, equipment, tools, containers, and other items used in OCS activities, which are of such shape or configuration that they are likely to snag or damage fishing devices, and could be lost or discarded overboard, must be clearly marked with the vessel or facility identification and properly secured to prevent loss overboard. All markings must clearly identify the owner and must be durable enough to resist the effects of the environmental conditions to which they may be exposed.

5.1.3.4 Recovery & Prevention. The Lessee must recover marine trash and debris that is lost or discarded in the marine environment while performing OCS activities when such incident is likely to: (a) cause undue harm or damage to natural resources, including their physical, atmospheric, and biological components, with particular attention to marine trash or debris that could entangle, or be ingested by, marine protected species; or (b) significantly interfere with OCS uses (e.g., because the marine trash or debris is likely to snag or damage fishing equipment, or presents a hazard to navigation). The Lessee must notify DOI within 48 hours when recovery activities are: (i) not possible because conditions are unsafe; or (ii) not practicable because the marine trash and debris released is not likely to result in any of the conditions listed in (a) or (b) above. Notwithstanding this

notification, DOI may still order the Lessee to recover the lost or discarded marine trash and debris if DOI finds the reasons provided by the Lessee in the notification unpersuasive. If the marine trash and debris is located within the boundaries of a potential archaeological resource/avoidance area, or a sensitive ecological/benthic resource area, the Lessee must contact DOI for approval prior to conducting any recovery efforts.

Recovery of the marine trash and debris should be completed as soon as practicable, but no later than 30 calendar days from the date on which the incident occurred. If the Lessee is not able to recover the marine trash or debris within 48 hours, the Lessee must submit a recovery plan to DOI explaining the recovery activities to recover the marine trash or debris (Recovery Plan). The Lessee must submit the Recovery Plan no later than 10 calendar days from the date on which the incident occurred. Unless DOI objects within 48 hours of the filing of the Recovery Plan, the Lessee can proceed with the activities described in the Recovery Plan. The Lessee must request and obtain approval of a time extension if recovery activities cannot be completed within 30 calendar days from the date on which the incident occurred. The Lessee must enact steps to prevent similar incidents and must submit a description of these actions to BOEM and BSEE within 30 calendar days from the date on which the incident occurred.

5.1.3.5 Reporting. The Lessee must report to DOI (using the email address listed on DOI's most recent incident reporting guidance) all lost or discarded marine trash and debris. This report must be made monthly, no later than the fifth day of the following month. The Lessee is not required to submit a report for those months in which no marine trash and debris was lost or discarded. The report must include the following:

- Project identification and contact information for the Lessee, operator, and/or contractor;
- The date and time of the incident;
- The lease number, OCS area and block, and coordinates of the object's location (latitude and longitude in decimal degrees);
- A detailed description of the dropped object, including dimensions (approximate length, width, height, and weight)

and composition (e.g., plastic, aluminum, steel, wood, paper, hazardous substances, or defined pollutants);

- Pictures, data imagery, data streams, and/or a schematic/illustration of the object, if available;
- An indication of whether the lost or discarded item could be: a magnetic anomaly of greater than 50 nanoTesla; a seafloor target of greater than 1.6 feet (0.5 meters); or a sub-bottom anomaly of greater than 1.6 feet (0.5 meters) when operating a magnetometer or gradiometer, side scan sonar, or sub-bottom profile in accordance with DOI's most recent, applicable guidance;
- An explanation of how the object was lost; and
- A description of immediate recovery efforts and results, including photos.

In addition to the foregoing, the Lessee must submit a report within 48 hours of the incident (48-hour Report) if the marine trash or debris could: (a) cause undue harm or damage to natural resources, including their physical, atmospheric, and biological components, with particular attention to marine trash or debris that could entangle, or be ingested by, marine protected species; or (b) significantly interfere with OCS uses (e.g., because the marine trash or debris is likely to snag or damage fishing equipment, or presents a hazard to navigation). The information in the 48-hour Report must be the same as that listed for the monthly report, but only for the incident that triggered the 48-hour Report. The Lessee must report to DOI if the object is recovered and, as applicable, describe any substantial variance from the activities described in the Recovery Plan that were required during the recovery efforts. The Lessee must include and address information on unrecovered marine trash and debris in the description of the site clearance activities provided in the decommissioning application required under 30 C.F.R. § 585.906.

- 5.1.4 As-Built Anchor Plats (Planning) (Construction) (Operations). The Lessee must ensure vessel operators use a state-of-the-art positioning system (e.g., a differential global positioning system (DGPS)) on their anchor handling vessel(s) and/or vessels deploying anchors for cable laying activities, dive support vessels, or other vessels used in construction and/or operation within the WDA to ensure that any seafloor disturbances resulting from their use of anchors, including that caused by the anchors, anchor chains, and/or wire

ropes, does not occur within the avoidance area for each seafloor feature and/or anomaly (i.e., magnetometer, side-scan sonar, sub-bottom profiler, and identified historic or pre-contact archaeological sites, biological habitat, UXO and other seafloor hazards). The Lessee must submit plats certified by a professional engineer showing the “as-placed” location of all anchors and any associated anchor chains and/or wire ropes on the seafloor for all seabed-disturbing activities. The plats must be at a scale of 1 inch = 1,000 feet (300 meters) with DGPS accuracy. Within 60 calendar days of completing any seabed-disturbing activity, the Lessee must submit the plats to BOEM (at renewable_reporting@boem.gov) and to BSEE (at env-compliance-arc@bsee.gov) to demonstrate that seabed-disturbing activities complied with avoidance requirements for seafloor features and/or anomalies.

- 5.1.5 Option to Comply with Most Current Measures (Planning) (Construction) (Operations) (Decommissioning). The Lessee may opt to comply with the most current measures related to protected species and habitat in place at the time an activity is undertaken under the Lease. At least 30 calendar days prior to undertaking an activity, the Lessee must notify DOI of its intention to comply with such measures in lieu of those required under the terms and conditions above in this Section 5. DOI reserves the right to object and/or request additional information on how the Lessee intends to comply with such measures. If DOI does not respond with objections within 15 calendar days of receipt of the Lessee’s notification, then the Lessee may conclusively presume DOI’s concurrence.

5.2 Avian and Bat Protection Conditions.

- 5.2.1 Bird Deterrent Devices (Construction) (Operations). To minimize bird attraction to operating turbines, the Lessee must install bird-deterrent devices on turbines and ESP(s). ~~OBJ OBJ~~. The location of bird-deterrent devices will be proposed by the Lessee based on best management practices applicable to the appropriate operation, and safe installation, of bird-deterrent devices. The Lessee must confirm the location(s) of bird-deterrent devices as part of the as-built documentation it must submit.
- 5.2.2 Piping Plover Protection Plan (Construction). The Lessee must implement the Piping Plover Protection (PPP) Plan, titled *Piping Plover Protection Plan, Vineyard Wind Connector-Covell’s Beach Landing Site, Barnstable, MA (NHESP File No.: 17-37398; Date: 17 April 2019)*. The Lessee must submit any updates to the PPP Plan to DOI and receive DOI concurrence for all plan amendments. DOI will review any PPP Plan amendments and provide comments, if any, on the amendments within 30 calendar days of their submittal. The Lessee must resolve all comments on the PPP Plan amendments to DOI’s satisfaction prior to implementing them. The Lessee

may conclusively presume DOI's concurrence with the PPP Plan amendments if DOI provides no comments on the amendments within 30 calendar days of their submittal. Following demobilization of construction equipment from the Covell's Beach parking area and by January 31, the Lessee must provide a copy of the summary report described in Section V of the PPP Plan to BOEM (at renewables_reporting@boem.gov).

- 5.2.3 Avian and Bat Monitoring Program (Construction) (Operations). At least 45 calendar days prior to the implementation of surveys, the Lessee must finalize, obtain concurrence from DOI, and implement the Monitoring Plan described in Appendix F.5 of the Final Environmental Impact Statement (FEIS) for the Project (*Vineyard Wind 1 Offshore Wind Farm: Framework for Avian and Bat Monitoring - Draft*) in coordination with interested stakeholders. DOI will review the Monitoring Plan and provide comments, if any, on the plan within 30 calendar days of its submittal. The Lessee must resolve all comments on the Monitoring Plan to DOI's satisfaction prior to implementing the plan. The Lessee may conclusively presume DOI's concurrence with the Monitoring Plan if DOI provides no comments on the plan within 30 calendar days of its submittal date.

The Monitoring Plan must include, at a minimum:

- 5.2.3.1 Monitoring. The installation of acoustic monitoring devices for birds and bats on the ESP(s); installation of Motus receivers on WTGs in the WDA and support with upgrades or maintenance of two onshore Motus receivers; up to 150 Motus tags per year for up to 3 years to track Roseate Terns, Common Terns, and/or nocturnal passerine migrants; pre- and post-construction boat surveys; and avian behavior point count surveys at the boat-based survey vessel or from turbine platforms.
- 5.2.3.2 Annual Monitoring Reports. The Lessee must submit to BOEM (at renewable_reporting@boem.gov) a comprehensive report after each full year of monitoring (pre- and post-construction) within 6 months of completion of the last boat-based avian survey. The report must include all data, analyses, and summaries regarding ESA-listed and non-ESA-listed birds and bats. DOI will use the annual monitoring reports to assess the need for reasonable revisions (based on subject matter expert analysis) to the Monitoring Plan. DOI reserves the right to require reasonable revisions to the Monitoring Plan and may require new technologies as they become available for use in offshore environments.

- 5.2.3.3 Post-Construction Quarterly Progress Reports. The Lessee must submit quarterly progress reports during the implementation of the Monitoring Plan to BOEM and the United States Fish and Wildlife Service (USFWS) by the 15th day of the month following the end of each quarter during the first full year that the Project is operational. The progress reports must include a summary of all work performed, an explanation of overall progress, and any technical problems encountered.
- 5.2.3.4 Monitoring Plan Revisions. Within 15 calendar days of submitting the annual monitoring report, the Lessee must meet with BOEM and USFWS to discuss the following: the monitoring results; the potential need for revisions to the Monitoring Plan, including technical refinements and/or additional monitoring; and the potential need for any additional efforts to reduce impacts. If DOI determines after this discussion that revisions to the Monitoring Plan are necessary, DOI may require the Lessee to modify the Monitoring Plan. If the reported monitoring results deviate substantially from the impact analysis included in the FEIS the Lessee must make recommendations for new mitigation measures or monitoring methods.
- 5.2.3.5 Raw Data. The Lessee must store the raw data from all avian and bat surveys and monitoring activities according to accepted archiving practices. Such data must remain accessible to DOI and USFWS, upon request, for the duration of the Lease. The Lessee must work with BOEM to ensure the data is publicly available.
- 5.2.4 Annual Bird Mortality Reporting (Construction) (Operations) (Decommissioning). By January 31 of each year, the Lessee must submit an annual report to BOEM (at renewable_reporting@boem.gov) and BSEE (at protectedspecies@bsee.gov) and USFWS documenting any dead (or injured) birds or bats found on vessels and structures during construction, operations, and decommissioning. The report must contain the following information: the name of species, date found, location, a picture to confirm species identity (if possible), and any other relevant information. Carcasses with Federal or research bands must be reported to the United States Geological Survey Bird Band Laboratory, at <https://www.pwrc.usgs.gov/bbl/>.
- 5.2.5 Tree Clearing Time-of-Year Restriction (Construction). The Lessee must not clear trees greater than 3 inches (7.6 centimeters) in diameter at breast height from June 1 to July 31 of any year to protect northern long-eared bats. The Lessee may choose to conduct presence/probable absence surveys pursuant to current USFWS protocols for purposes of requesting and obtaining a waiver from this time-of-year restriction on tree clearing. The Lessee must

submit any requests for waivers from this time-of-year restriction to DOI and such requests must be approved in writing by DOI.

5.3 Benthic Habitat and Ecosystem Monitoring Conditions.

- 5.3.1 Benthic Monitoring Plan (Planning). The Lessee must consider any new information obtained from 5.4.2 (below) and, when appropriate, revise the approved Benthic Monitoring Plan. The Lessee must submit any revisions to the approved benthic monitoring plan to BOEM (at renewable_reporting@boem.gov) and BSEE (at benthic.ecology@bsee.gov). The Lessee must consult with NMFS, the Massachusetts Department of Environmental Protection (MassDEP), and the Massachusetts Division of Marine Fisheries on revisions to the monitoring plan. DOI will review the Benthic Monitoring Plan revisions and provide comments, if any, on the revisions within 30 calendar days of their submittal. The Lessee must resolve all comments on the Benthic Monitoring Plan revisions to DOI's satisfaction prior to implementing them. The Lessee may conclusively presume DOI's concurrence with the Benthic Monitoring Plan revisions if DOI provides no comments on the revisions within 30 calendar days of their submittal. If recovery of impacted benthic habitat is not observed within 5 years, DOI, in consultation with NMFS, reserves the right to require additional monitoring.
- 5.3.2 Evaluation of Additional Benthic Habitat Data Prior to Cable Laying (Planning) (Construction). At least 90 calendar days prior to construction, the Lessee must collect and process a minimum of 75 benthic grabs over the entire length of the Offshore Export Cable Corridor (OECC) with no fewer than 42 of the processed samples drawn from the eastern Muskeget section. At least 90 calendar days prior to construction, the Lessee must also process 60 underwater video transects over the entire length of the OECC, with approximately 28 of the transects from the eastern Muskeget section. The Lessee must use the data collected from benthic grabs and video transects to avoid eelgrass, hard bottom, and structurally complex habitats – including juvenile cod Habitat Areas of Particular Concern (HAPC) – to the maximum extent practicable without deviating from the approved route corridor.
- 5.3.3 Optical Surveys of Benthic Invertebrates and Habitat (Operations). The Lessee must conduct optical drop camera surveys targeting benthic invertebrates and their habitat for durations of, at a minimum, 1 year during pre-construction, 1 year during construction, and 3 years post-construction. Stations must be established on a 0.9-mile (1.5-kilometer) grid, with four (4) samples taken at each station twice per year. The drop camera surveys must emulate the 2012 and 2013 drop camera surveys conducted in the WDA in order to support a Before-After-Control-Impact study design (University of Massachusetts Dartmouth's School for Marine Science and Technology Fishermen

Workshops Report & Studies Recommendations 26 Mar 2019).⁹ The Lessee may adapt the survey methodology over time based on the results obtained and feedback from stakeholders. The Lessee must submit any revisions to the Optical Survey Plan to NMFS and to BOEM at least 30 calendar days before conducting surveys. DOI will review the Optical Survey Plan revisions and provide comments, if any, on them within 30 calendar days of their submittal. The Lessee must resolve all comments on the Optical Survey Plan revisions to DOI's satisfaction before conducting surveys. The Lessee may conclusively presume DOI's concurrence with the Optical Survey Plan revisions if DOI provides no comments on the revisions within 30 calendar days of their submittal.

- 5.3.4 Plankton Surveys (Operations). The Lessee must conduct plankton surveys to estimate the relative abundance and distribution of planktonic species for durations of, at a minimum, 1 year during pre-construction, 1 year during construction, and 3 years post-construction. These surveys may be conducted in conjunction with other surveys (e.g., ventless trap surveys or bottom trawl surveys).
- 5.3.5 Passive Acoustic Monitoring (Planning) (Construction) (Operations). The Lessee must deploy moored or autonomous Passive Acoustic Monitoring (PAM) devices to record ambient noise and marine mammal species vocalizations in the WDA a minimum of 30 calendar days before construction activities begin, during all construction activities, and for at least 3 years of operation. The archival recorders must have a minimum capability of detecting and storing acoustic data on vessel noise, pile driving, WTG operation, and marine mammal vocalizations in the WDA. The Lessee must submit the results to BOEM (at renewable_reporting@boem.gov) and BSEE (at protectedspecies@bsee.gov) within 90 calendar days of recorder collection and annually within 90 calendar days of the anniversary of the initial recorder deployments. The underwater acoustic monitoring must follow: standardized measurement and processing methods and visualization metrics developed by the Atlantic Deepwater Ecosystem Observatory Network (ADEON) for the U.S. Mid- and South Atlantic Outer Continental Shelf (see <https://adeon.unh.edu/>); and NMFS requirements for marine mammal detections. At least one buoy must be independently deployed within the WDA, or one or more buoys must be deployed in coordination with other regional acoustic monitoring efforts within the Rhode Island and Massachusetts lease areas. No later than 30 calendar days prior to the first buoy deployment, the Lessee must submit its PAM Plan to BOEM (at renewable_reporting@boem.gov) and BSEE (at protectedspecies@bsee.gov),

⁹ Available at: <https://www.vineyardwind.com/fisheries-science>.

and receive DOI's concurrence on it. DOI will review the PAM Plan and provide comments, if any, on the plan within 30 calendar days of its submittal. The Lessee must resolve all comments on the PAM Plan to DOI's satisfaction prior to implementing the plan. The Lessee may conclusively presume DOI's concurrence with the PAM Plan if DOI provides no comments on the plan within 30 calendar days of its submittal.

- 5.3.6 Trawl Survey for Finfish and Squid (Construction) (Operations). The Lessee must conduct trawl surveys a minimum of 1 year before, 1 year during, and 3 years after construction. The surveys must not commence until BOEM has notified the Lessee that all necessary ESA section 7 consultations addressing this action have concluded. Specific post-construction protocols for the trawl survey must include:
- 5.3.6.1 Year 1 post-construction. The Lessee must conduct one year of post-construction trawl surveys, consisting of 40 tows (20 in the WDA, and 20 in control areas) four times during the year, with one survey conducted each season. The Lessee must sample a minimum subset of 3 tows in the spring and fall in both the WDA and control sites for biological parameters, including: weight; length to the nearest centimeter, consistent with the species-specific measurement type (e.g., total vs. fork) identified in the Northeast Observer Program Biological Sampling Guide; age through age-length keys; stomach contents; and sex and spawning condition (e.g., spent, ripe, ripe and running, etc.) consistent with Northeast Fisheries Science Center sex and maturity codes. If readily available and feasible to install on a survey vessel, the Lessee must also employ a conductivity, temperature, and depth instrument or similar device to measure environmental parameters. The Lessee must also, in conjunction with the spring and fall trawl surveys in the WDA, sample a minimum subset of 1 spring and 1 fall tow for zooplankton, ichthyoplankton, and fish eggs using a paired 23.6-inch (60 cm) Bongo and a paired 7.9-inch (20 cm) Bongo. Zooplankton, ichthyoplankton, and fish eggs must be processed following Northeast Fisheries Science Center protocols in terms of species identification, length measurements, and staging.
- 5.3.6.2 Years 2-3 post-construction. The Lessee must maintain the sampling protocols governing the Year 1 post-construction surveys; however, the survey frequency may be reduced to two times per year in the spring and fall.
- 5.3.7 Ventless Trap Surveys (Planning) (Construction) (Operations). The Lessee must conduct a ventless trap survey a minimum of 1 year before, 1 year during,

and 3 years after construction. The ventless trap survey must follow the protocols of the coast-wide ventless trap survey. The traps must use weak-link technology to minimize whale-entanglement risk, and no sampling may occur between November and early May. For lobsters (*Homarus americanus*) in all pots, the Lessee must record the following information: trap number and trap type; enumeration; carapace length (millimeters) measured with calipers; sex (determined by examining the first pair of swimmerets); cull status (claws missing, buds, or regenerated); V-notch status (presence or absence); mortality (alive or dead); incidence of shell disease (none, light, moderate, severe); presence or absence of eggs; and gross egg stage. For the sampling of all Jonah crabs (*Cancer borealis*), the Lessee must sample two (2) traps (1 vented, 1 ventless) selected randomly and record the following: enumeration; carapace width; sex; ovigery status; incidence of shell disease; cull status, mortality. For all non-sampled traps, the Lessee must enumerate individuals of each species, and record: the station number; start latitude and longitude; end latitude and longitude; start time/date; end time/date; bait type; trap type; and water depth. The ventless trap surveys must not commence until BOEM informs the Lessee that all necessary ESA consultations addressing this action have concluded.

- 5.3.8 Periodic Underwater Surveys, Reporting of Monofilament and Other Fishing Gear Around WTG Foundations (Operations) (Decommissioning). The Lessee must monitor indirect impacts associated with charter and recreational fishing gear lost from expected increases in fishing around WTG foundations by surveying 10 WTGs in the WDA annually. The Lessee may conduct surveys by remotely operated vehicles, divers, or other means to determine the frequency and locations of marine debris. The Lessee must report the results of the surveys to BOEM (at renewable_reporting@boem.gov) and BSEE (at marinedebris@bsee.gov) in an annual report, submitted by April 30, for the preceding calendar year. Annual reports must be submitted in Word format. Photographic and videographic materials must be provided on a portable drive in a lossless format such as TIFF or Motion JPEG 2000. Annual reports must include survey reports that include: the survey date; contact information of the operator; the location and pile identification number; photographic and/or video documentation of the survey and debris encountered; any animals sighted; and the disposition of any located debris (i.e., removed or left in place). Required data and reports may be archived, analyzed, published, and disseminated by BOEM.

5.4 Pre-Seabed Disturbance Conditions.

- 5.4.1 Cable Installation Timing (Construction). Non-Horizontal Directional Drilling (non-HDD) cable-laying operations in the northern part of the OECC within

Nantucket Sound must not occur between April 1 and June 30 of any year. Should non-HDD cable laying be required in the northern portion of the OECC within Nantucket Sound between April 1 and June 30 due to environmental or technical reasons, the Lessee must submit a justification to BOEM, MassDEP, the Massachusetts Division of Marine Fisheries, and NMFS, at least 30 days prior to March 1. BOEM will review the justification and provide comments, if any, on it within 30 calendar days of its submittal. The Lessee must resolve all comments on the justification to BOEM's satisfaction and receive BOEM's written concurrence before conducting any non-HDD activities between April 1 and June 30. However, the Lessee may conclusively presume BOEM's concurrence with the justification if BOEM provides no comments on the justification within 30 calendar days of its submittal.

- 5.4.2 Dredge Disposal Sites (Planning) (Construction). If dredging of sand waves is necessary in the OECC, the Lessee must clearly identify a limited number of dredge disposal sites within known sand-wave areas. The Lessee must use the benthic habitat data collected pursuant to Section 5.3 to confirm, to the maximum extent practicable, that these dredge disposal sites do not contain resources that may be damaged by sediment deposition. The Lessee must receive BOEM concurrence to dispose in the identified locations and also report the locations of dredge disposal sites to the United States Army Corps of Engineers (USACE), BOEM (at renewable_reporting@boem.gov), MassDEP, and the Massachusetts Office of Coastal Zone Management within 30 calendar days of disposal of materials. The Lessee must report these locations in latitude and longitude degrees to the nearest 10 thousandth of a decimal degree (roughly the nearest meter). DOI will review the proposed dredge-disposal locations and provide comments, if any, on the locations within 30 calendar days of receipt of the proposal. The Lessee must resolve all comments on the proposed locations to DOI's satisfaction. The Lessee may conclusively presume DOI's concurrence with the dredge-disposal locations if DOI provides no comments on them within 30 calendar days of their submittal.
- 5.4.3 Anchoring Plan (Planning) (Construction). At least 30 calendar days prior to conducting seabed-disturbing activities, the Lessee must submit to DOI for review and comment an Anchoring Plan for all areas where anchoring is being used within 1,640 feet (500 meters) of sensitive habitats, resources, and submerged infrastructure, including hard bottom and structurally complex habitats. If the Lessee receives new data on benthic habitats (see Section 5.3.2), then the Lessee must submit to DOI an updated Anchoring Plan that demonstrates how the Lessee will avoid and minimize impacts to benthic habitat. The Anchoring Plan must include the planned location of anchoring activities, sensitive habitats and their locations, seabed features, potential hazards, and any related facility-installation activities (such as cable, WTG,

and ESP installation). DOI will require all vessels deploying anchors to use mid-line anchor buoys to reduce the amount of anchor chain or line that touches the seafloor, unless the Lessee demonstrates, and DOI accepts, that (i) the use of mid-line anchor buoys to reduce the amount of anchor chain or line that touches the seafloor is not technically and economically practical or feasible; or (ii) a different alternative is as safe and provides the same or greater environmental protection. The Lessee must provide the Anchoring Plan for DOI and NOAA review and comment before construction begins. DOI will review the Anchoring Plan and provide comments, if any, on the plan within 30 calendar days of its submittal. Before construction may commence, the Lessee must resolve all comments on the Anchoring Plan. If DOI provides no comments on the Anchoring Plan within 45 calendar days of receiving it, then the Lessee may conclusively presume DOI's concurrence with the plan.

- 5.4.4 Final Cable Protection in Hard Bottom (Operations). No later than 3 months prior to the placement of cable protection equipment, the Lessee must submit to BOEM, BSEE, and NMFS a plan for monitoring the effectiveness of natural and engineered cable protection equipment in the OECC. The plan must include a section on monitoring the effects of cable protection equipment on juvenile cod HAPC. The Lessee must submit this plan to BOEM (at renewable_reporting@boem.gov) and BSEE (at benthic.ecology@bsee.gov) for review and comment at least 30 calendar days prior to implementation of provisions in the plan or 3 months prior to the placement of cable protection equipment, whichever is sooner.
- 5.4.5 Post-Installation Cable Monitoring (Operations). See Section 2.7.
- 5.4.6 Monitoring and Minimizing Foundation Scour Protection (Construction) (Operations). See Section 2.9.

5.5 Protected Species Detection and Vessel Strike Avoidance Conditions.

- 5.5.1 Vessel Crew Training Requirements (Planning) (Construction) (Operations) (Decommissioning). The Lessee must provide Project-specific training on the identification of sea turtles and marine mammals, the associated regulations, and best practices for avoiding vessel collisions to all vessel crew members prior to the start of in-water construction activities. Confirmation of the training and understanding of the requirements must be documented on a training course log sheet. The Lessee must provide the log sheets to BOEM upon request. Reference materials must be available aboard all Project vessels for the identification of sea turtles and marine mammals. The Lessee must communicate the process for reporting sea turtles and marine mammals (including live, entangled, and dead individuals) to the designated vessel contact and all crew members, and must post reporting instructions that include

the communication channel(s) in highly visible locations aboard all Project vessels. The Lessee must communicate its expectation for all crew members to report sightings of sea turtles and marine mammals to the designated vessel contacts.

5.5.2 Vessel Observer Requirements (Planning) (Construction) (Operations) (Decommissioning). The Lessee must ensure that vessel operators and crew members maintain a vigilant watch for marine mammals and sea turtles, and reduce vessel speed, alter the vessel's course, or stop the vessel as necessary to avoid striking marine mammals or sea turtles. Vessel personnel must be provided an Atlantic reference guide to help identify marine mammals and sea turtles that may be encountered in the WDA. Vessel personnel must also be provided BSEE-approved material regarding North Atlantic Right Whale (NARW) Seasonal Management Areas (SMAs), sightings information, and reporting. When not on active watch duty, members of the monitoring team must consult NMFS' NARW sightings for the presence of NARWs in the WDA. All vessels transiting to and from the WDA and traveling over 10 knots (18.5 kilometers per hour) must have a Visual Observer for NARW (Visual Observer) on duty at all times, during which the Visual Observer will monitor a vessel strike avoidance zone around the vessel. The Lessee must also have a Trained Lookout for sea turtles (Trained Lookout) on all vessels during all phases of the Project between June 1 and November 30 to observe for sea turtles and communicate with the captain to take required avoidance measures as soon as possible if one is sighted. If a vessel is carrying a Visual Observer for the purposes of maintaining watch for NARWs, a Trained Lookout for sea turtles is not required, and the Visual Observer must maintain watch for marine mammals and sea turtles. If the Trained Lookout is a vessel crew member, the aforementioned lookout obligations must be its designated role and primary responsibility while the vessel is transiting. Any designated crew observers should be trained in the identification of sea turtles and in regulations and best practices for avoiding vessel collisions. The Trained Lookout must check seaturtlesightings.org prior to each trip and report any detections of sea turtles in the vicinity of the planned transit to all vessel operators/captains and lookouts on duty that day.

5.5.3 Vessel Communication of Threatened and Endangered Species Sightings (Planning) (Construction) (Operations) (Decommissioning). The Lessee must ensure that whenever multiple Project vessels are operating, any visual detections of ESA-listed species (marine mammals and sea turtles) are communicated, in near real time, to a third-party Protected Species Observer (hereafter, PSO) and/or vessel captains associated with other Project vessels.

5.5.4 Vessel Speed Requirements November 1 through May 14 (Planning) (Construction) (Operations) (Decommissioning).

5.5.4.1 The Lessee must ensure that from November 1 through May 14, all vessels travel at 10 knots (18.5 kilometers per hour) or less when transiting to, from, or within the WDA, except within Nantucket Sound (unless an active Dynamic Management Area (DMA) is in place) and except for crew transfer vessels as described below in 5.5.5.

5.5.4.2 From November 1 through May 14, crew transfer vessels may travel at more than 10 knots (18.5 kilometers per hour) if: (i) there is at least one Visual Observer on duty at all times aboard the vessel to visually monitor for whales; and (ii) simultaneous real-time PAM is conducted. If a NARW is detected via visual observation or PAM within or approaching the transit route, all crew transfer vessels must travel at 10 knots (18.5 kilometers per hour) or less for the remainder of that day.

5.5.5 Crew Transfer Vessel Speed Requirements in DMAs (Planning) (Construction) (Operations) (Decommissioning). The Lessee must ensure that all vessels, regardless of length, travel at 10 knots (18.5 kilometers per hour) or less within any NMFS-designated DMA, with the following exception for crew transfer vessels, as described in the approved COP. The Lessee must submit a NARW Strike Management Plan to BOEM and NMFS at least 90 calendar days prior to implementation in order for crew transfer vessels to travel greater than 10 knots (18.5 kilometers per hour) between May 15 and October 31 for periods when DMAs are established. The plan must provide details on how the required vessel and/or aerial-based surveys, and PAM, will be conducted to clear the transit corridor of NARW presence during a DMA. The plan must also provide details on the vessel-based observer protocol on transiting vessels and PAM required between November 1 and May 14, as well as any further efforts to minimize potential impacts. DOI will review the NARW Strike Management Plan and provide comments, if any, on the plan within 30 calendar days of its submittal. The Lessee must resolve all comments on the NARW Strike Management Plan to DOI's satisfaction and receive DOI's written concurrence prior to implementing the plan. The Lessee may conclusively presume DOI's concurrence with the NARW Strike Management Plan if DOI provides no comments on the plan within 90 calendar days of its submittal.

Crew transfer vessels traveling within any designated DMA must travel at 10 knots (18.5 kilometers per hour) or less, unless DOI has concurred with the NARW Strike Management Plan and a lead PSO confirms that NARWs are

clear of the transit route and WDA for 2 consecutive calendar days, as confirmed by a lack of detections of NARW vocalizations by PAM and by vessel-based surveys conducted during daylight hours. Alternatively, an aerial survey may be completed under the NARW strike management plan once the lead aerial observer determines adequate visibility to complete the survey. If the vessel transit route is confirmed clear of NARW by one of these measures, vessels may transit within a DMA if they have at least two Trained Lookouts and/or PSOs on duty to monitor for NARWs. If a NARW is observed within or approaching the transit route, vessels must operate at 10 knots (18.5 kilometers per hour) or less until clearance of the transit route for 2 consecutive calendar days is confirmed by the procedures described above.

- 5.5.6 Vessel Speed Requirements in SMAs (Planning) (Construction) (Operations) (Decommissioning). The Lessee must ensure that from November 1 through May 14, all vessels must travel at 10 knots (18.5 kilometers per hour) or less when transiting to, from, or within the WDA, except within Nantucket Sound (unless an active DMA is in place) and except for crew transfer vessels as described below. From November 1 through May 14, crew transfer vessels may travel at more than 10 knots (18.5 kilometers per hour) if there is at least one Visual Observer on duty at all times aboard the vessel to visually monitor for whales, and if simultaneous real-time PAM is conducted. If a NARW is detected via visual observation or PAM within or approaching the transit route, all crew transfer vessels must travel at 10 knots (18.5 kilometers per hour) or less for the remainder of that day. For all other vessels traveling outside the WDA, all vessels greater than or equal to 65 feet (19.8 meters) in overall length must comply with the 10-knot (18.5 kilometers per hour) speed restriction in any SMA (see <https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-ship-strikes-north-atlantic-right-whales>).
- 5.5.7 Reporting of All NARW Sightings (Planning) (Construction) (Operations) (Decommissioning). The Lessee must immediately report all NARWs observed at any time by PSOs or vessel personnel on any Project vessels, during any Project-related activity, or during vessel transit to: BOEM (at renewable_reporting@boem.gov); the NOAA Fisheries 24-hour Stranding Hotline number (866-755-6622); the Coast Guard (via channel 16); and WhaleAlert (through the WhaleAlert app at <http://www.whalealert.org/>). The report must include the time, location, and number of animals.
- 5.5.8 Vessel Strike Avoidance of Marine Mammals (Non-Geophysical Survey Vessels) (Planning) (Construction) (Operations) (Decommissioning). The Lessee must ensure that all vessel operators and crews maintain a vigilant watch for all marine mammals and reduce vessel speed, stop the vessel, or alter

the vessel's course, regardless of vessel size, to avoid striking any marine mammal except when taking such measures would threaten the safety of the vessel or crew. Vessel operators must reduce vessel speeds to 10 knots (18.5 kilometers per hour) or less when mother/calf pairs, pods, or large assemblages of cetaceans are observed within the path of the vessel.

5.5.8.1 Whales: The vessel operator must implement vessel strike avoidance measures when any whale is sighted within a 180-degree radius of the forward path of the vessel (90 degrees port to 90 degrees starboard) at a distance of 1,640 feet (500 meters) or less from a survey vessel. Trained crew or PSOs must notify the vessel captain of any whale observed or detected within 1,640 feet (500 meters) of the survey vessel within 180 degrees. Upon notification, the vessel captain must immediately implement vessel strike avoidance procedures to maintain a separation distance of 1,640 feet (500 meters) or to reduce vessel speed to allow the animal to travel away from the vessel. The vessel must come to a full stop when an ESA-listed whale is within 656 feet (200 meters) of an underway vessel, except when taking such a measure would threaten the safety of the vessel or crew. If a whale is observed but cannot be confirmed as a species other than a NARW, the vessel operator must assume that it is a NARW and execute the required vessel strike avoidance measures to avoid the animal.

5.5.8.2 Small cetaceans and seals: For small cetaceans and seals, all vessels must maintain a minimum separation distance of 164 feet (50 meters) to the maximum extent practicable, except when those animals voluntarily approach the vessel. When marine mammals are sighted while a vessel is underway, the vessel operator must take the following actions to avoid violating the 164-foot (50-meter) separation distance: attempt to remain parallel to the animal's course, and avoid excessive speed or abrupt changes in vessel direction until the animal has left the area, except when taking such measures would threaten the safety of the vessel or crew. If marine mammals are sighted within the 164-foot separation distance, the vessel operator must reduce vessel speed and shift the engine to neutral, not engaging the engines until animals are beyond 164 feet (50 meters) from the vessel.

5.5.9 Vessel Strike Avoidance of Sea Turtles (Non-Geophysical Survey Vessels) (Planning) (Construction) (Operations) (Decommissioning). The Lessee must ensure that, during all phases of the Project, vessel operators and crew members are maintaining a vigilant watch for all sea turtles, and reducing vessel speed, stopping the vessel, or altering the vessel's course, regardless of

vessel size, to avoid striking any sea turtles, except when taking such measures would threaten the safety of the vessel or crew. All vessels must maintain a minimum separation distance of 328 feet (100 meters) from sea turtles. Trained crew lookouts must monitor seaturtlesightings.org daily and prior to each trip, and must report any detections of sea turtles in the vicinity of the planned transit route to all vessel operators, captains, and lookouts on duty that day. If a sea turtle is sighted within 328 feet (100 meters) of the operating vessels' forward path, the vessel operator must safely slow down to 4 knots (7.4 kilometers per hour) and may resume normal vessel operations once the vessel has passed the sea turtle. If a sea turtle is sighted within 164 feet (50 meters) of the forward path of the operating vessel, the vessel operator must shift to neutral when safe to do so, and then proceed away from the turtle at a speed of 4 knots (7.4 kilometers per hour) or less until there is a separation distance of at least 328 feet (100 meters), at which time normal vessel operations may be resumed. Between June 1 and November 30, vessels must avoid transiting through areas of visible jellyfish aggregations or floating vegetation lines or mats. In the event that operational safety prevents avoidance of such areas, vessels must slow to 4 knots (7.4 kilometers per hour) while transiting through such areas.

5.6 Detected or Injured Protected Species and Non-Protected Fish Reporting Requirements.

- 5.6.1 Detected or Impacted Protected Species Reporting (Planning) (Construction) (Operations) (Decommissioning). The Lessee is responsible for reporting dead or injured protected species, regardless of whether they were observed during operations or due to Project activities. The Lessee must report any potential take, strikes, or dead/injured protected species caused by Project vessels to the NMFS Protected Resources Division (at incidental.take@noaa.gov), NOAA Fisheries 24-hour Stranding Hotline number (866-755-6622), BOEM (at renewable_reporting@boem.gov), and BSEE (at protectedspecies@bsee.gov) as soon as practicable, but no later than 24 hours from the time the incident took place (Detected or Impacted Protected Species Report). In the event that an injured or dead marine mammal or sea turtle is sighted, regardless of the cause, the Lessee must report the incident to the NMFS Protected Resources Division (at incidental.take@noaa.gov), NOAA Fisheries 24-hour Stranding Hotline number (866-755-6622), BOEM (at renewable_reporting@boem.gov), and BSEE (at protectedspecies@bsee.gov) as soon as practicable (taking into account crew and vessel safety), but no later than 24 hours from the sighting (Protected Species Incident Report). Staff responding to the hotline call will provide any instructions for the handling or disposing of any injured or dead protected species by individuals authorized to collect, possess, and transport sea turtles.

5.6.1.1 The Detected or Impacted Protected Species Report must include the following information:

- Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
- Species identification (if known) or a description of the animal(s) involved;
- Condition of the animal(s) (including carcass condition if the animal is dead);
- Observed behaviors of the animal(s), if alive;
- If available, photographs or video footage of the animal(s); and
- General circumstances under which the animal was discovered.

5.6.1.2 The Protected Species Incident Report must include the following information:

- Time, date, and location (latitude/longitude) of the incident;
- Species identification (if known) or description of the animal(s) involved;
- Lessee and vessel(s) information;
- Vessel's speed during and leading up to the incident;
- Vessel's course/heading and what operations were being conducted (if applicable);
- Status of all sound sources in use (if applicable);
- Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid the strike;
- Environmental conditions (e.g., wind speed and direction, Beaufort scale, cloud cover, visibility) immediately preceding the strike;
- Estimated size and length of animal that was struck;

- Description of the behavior of the animal immediately preceding and following the strike;
- Estimated fate of the animal (e.g., dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and
- To the extent practicable, photographs or video footage of the animal(s).

5.6.2 Detected and/or Impacted Dead Non-ESA-Listed Fish (Planning) (Construction) (Operations) (Decommissioning). In addition, any occurrence of dead non-ESA-listed fish of 10 or more individual fish within established shutdown and/or monitoring zones must also be reported to BOEM (at renewable_reporting@boem.gov) as soon as practicable (taking into account crew and vessel safety), but no later than 24 hours after the sighting.

5.7 Pile Driving/Impact Hammer Activity Conditions.

5.7.1 Pile-Driving Time-of-Year Restriction (Construction). The Lessee must not conduct any pile-driving activities between December 1 and April 30. Pile driving must not occur in December unless unanticipated delays due to weather or technical problems arise that necessitate extending pile driving through December, and the pile driving is approved by BOEM in accordance with the following procedures. The Lessee must notify BOEM in writing by November 1 that the Lessee believes that circumstances require pile driving in December. The Lessee must submit to BOEM (at renewable_reporting@boem.gov) for written concurrence an enhanced survey plan for December 1 through December 31 to minimize the risk of exposure of NARWs to pile-driving noise, including noise from daily pre-construction surveys. BOEM will review the enhanced survey plan and provide comments, if any, on the plan within 30 calendar days of its submittal. The Lessee must resolve all comments on the enhanced survey plan to BOEM's satisfaction and receive BOEM's written concurrence before any pile driving occurs. However, the Lessee may conclusively presume BOEM's concurrence with the enhanced survey plan if BOEM provides no comments on the plan within 90 calendar days of its submittal. The Lessee must also follow the time-of-year enhanced mitigation measures specified in the applicable BiOp. The Lessee must confirm adherence to this time-of-year restriction on pile driving in the pile-driving reports submitted with the FIR.

5.7.2 Pile-Driving Weather and Time Restrictions (Construction). The Lessee must ensure effective visual monitoring in all cardinal directions and must not commence pile driving until at least 1 hour after civil sunrise to minimize

the effects of sun glare on visibility. The Lessee must not commence pile driving within 1.5 hours of civil sunset to minimize the potential for pile driving to continue after civil sunset when visibility will be impaired. Additionally, pile driving must only commence when all clearance zones are fully visible (i.e., not obscured by darkness, rain, fog, etc.) for at least 30 minutes between civil sunrise and civil sunset. The lead PSO must determine when sufficient light exists to allow effective visual monitoring in all cardinal directions. The lead PSO must call for a delay until the clearance zone is visible in all directions or must implement the Alternative Monitoring Plan. If conditions (e.g., darkness, rain, fog, etc.) prevent the visual detection of marine mammals in the clearance zones, the Lessee must not initiate construction activities until the full extent of all clearance zones are fully visible as determined by the lead PSO. The Lessee must develop and implement measures for enhanced monitoring in the event that poor visibility conditions unexpectedly arise and stopping pile driving would risk human safety or pile instability. The Lessee must prepare and submit an Alternative Monitoring Plan to NMFS and BOEM at least 90 calendar days prior to commencing the first pile-driving activities for the Project. DOI will review the Alternative Monitoring Plan and must provide comments, if any, on the plan within 30 calendar days of its submittal. The Lessee must resolve all comments on the Alternative Monitoring Plan to DOI's satisfaction prior to implementing the plan. If BOEM provides no comments on the Alternative Monitoring Plan within 90 calendar days of its submittal, then the Lessee may conclusively presume BOEM's concurrence with the plan. The Alternative Monitoring Plan proposed by the Lessee may include deploying additional observers, employing alternative monitoring technologies such as night vision, thermal, infrared, and/or using of PAM technologies, with the goal of ensuring the ability to maintain all clearance and shutdown zones for all ESA-listed species in the event of unexpected poor-visibility conditions.

- 5.7.3 PSO Requirements (Planning) (Construction) (Operations) (Decommissioning). The Lessee must use PSOs provided by a third party. PSOs must have no Project-related tasks other than to observe, collect and report data, and communicate with and instruct relevant vessel crew regarding the presence of protected species and mitigation requirements (including brief alerts regarding maritime hazards). PSOs and/or PAM operators must have completed a commercial PSO training program for the Atlantic with an overall examination score of 80 percent or greater (Baker et. al 2013). The Lessee must provide training certificates for individual PSOs to BOEM upon request. PSOs and PAM operators must be approved by NMFS prior to the start of a survey. Application requirements to become a NMFS-approved PSO for construction activities can be found at <https://www.fisheries.noaa.gov/new-england-mid-atlantic/careers-and-opportunities/protected-species-observers>, or

for geological and geophysical surveys by sending an inquiry to nmfs.psoreview@noaa.gov.

5.7.3.1 PSOs:

- 5.7.3.1.1 At least one lead PSO must be on duty at all times as the lead PSO or as the PSO monitoring coordinator during pile driving.
- 5.7.3.1.2 At least one lead PSO must be present on each HRG survey vessel.
- 5.7.3.1.3 PSOs on transit vessels must be approved by NMFS, but need not be authorized as a lead or unconditionally approved PSO.
- 5.7.3.1.4 Lead PSOs must have prior approval from NMFS as an unconditionally approved PSO.
- 5.7.3.1.5 All PSOs on duty must be clearly listed and the lead PSO identified on daily data logs for each shift.
- 5.7.3.1.6 A sufficient number of PSOs, consistent with the BiOp and as prescribed in the final IHA, must be deployed to record data in real time and effectively monitor the required clearance, shutdown, or monitoring zone for the Project, including: visual surveys in all directions around a pile; PAM; and continuous monitoring of sighted NARWs. Where applicable, the number of PSOs deployed must meet the NARW enhanced seasonal monitoring requirements.
- 5.7.3.1.7 A PSO must not be on watch for more than 4 consecutive hours, and must be granted a break of no fewer than 2 hours after a 4-hour watch.
- 5.7.3.1.8 A PSO must not work for more than 12 hours in any 24- hour period (NMFS 2013) unless an alternative schedule is authorized in writing by BOEM.

5.7.3.2 Visual monitoring must occur from the vantage point on the associated operational platforms that allows for 360-degree visual coverage around a vessel.

- 5.7.3.3 The Lessee must ensure that suitable equipment is available to PSOs, including binoculars, range-finding equipment, a digital camera, and electronic data recording devices (e.g., a tablet) to adequately monitor the distance of the watch and shutdown zones, to determine the distance to protected species during surveys, to record sightings and verify species identification, and to record data.
- 5.7.3.4 PSO observations must be conducted while free from distractions and in a consistent, systematic, and diligent manner.
- 5.7.4 Daily Pre-Construction Surveys (Planning) (Construction) (Operations) (Decommissioning). To establish the numbers, surface presence, behavior, and travel directions of protected species in the area, the Lessee must conduct daily PAM and visual surveys before pile driving begins. These surveys must follow standard protocols and data collection requirements specified by BOEM. In addition to standard daily surveys, the Lessee must submit to BOEM (at renewable_reporting@boem.gov) an enhanced survey plan for May 1 through May 31 to minimize the risk of exposure of NARWs to pile-driving noise. BOEM will review the enhanced survey plan and provide comments, if any, on the plan within 30 calendar days of its submittal. The Lessee must resolve all comments on the enhanced survey plan to BOEM's satisfaction prior to implementing the plan. If BOEM provides no comments on the enhanced survey plan within 90 calendar days of its submittal, then the Lessee may conclusively presume BOEM's concurrence with the plan.
- 5.7.5 Pile-Driving Monitoring Plan Requirements (Construction). At least 90 calendar days prior to commencing the first pile-driving activities for the Project, the Lessee must submit a Pile-Driving Monitoring (PDM) Plan to BOEM (at renewable_reporting@boem.gov), BSEE (at protectedspecies@bsee.gov), and NMFS for review. DOI will review the PDM Plan and provide comments, if any, on the plan within 30 calendar days of its submittal. The Lessee must resolve all comments on the PDM Plan to DOI's satisfaction prior to implementing the plan. If DOI provides no comments on the PDM Plan within 90 calendar days of its submittal, then the Lessee may conclusively presume DOI's concurrence with the plan.
- 5.7.5.1 The PDM Plan must:
- 5.7.5.1.1 Contain information on the visual and PAM components of monitoring, describing all equipment, procedures, and protocols;

- 5.7.5.1.2 Demonstrate a near-real-time capability of detection capability to 6.21 miles (10 kilometers) from the pile-driving location;
- 5.7.5.1.3 Ensure that the full extent of the distance over which harassment may occur from piles is monitored for marine mammals (160 dB RMS) and sea turtles (175 dB RMS) to document all potential take;
- 5.7.5.1.4 Include a PAM Plan with a 75-percent detection confidence by the PAM operator to determine that a possible NARW vocalization originated from within the clearance and shutdown zones. Any possible NARW vocalization must be reported as a detection if it is determined by the PSO to be within the clearance and shutdown zones;
- 5.7.5.1.5 Include the number of NMFS-approved PSOs and/or monitors that will be employed, the platforms and/or vessels upon which they will be deployed, and contact information for the PSO provider(s);
- 5.7.5.1.6 Include an Alternative Monitoring Plan that includes measures for enhanced monitoring capabilities in the event that poor visibility conditions unexpectedly arise, and pile driving cannot be stopped. The Alternative Monitoring Plan must also include measures for deploying additional observers, using night vision goggles (for all marine mammals and sea turtles), or using PAM (for marine mammals) with the goal of ensuring the ability to maintain all clearance and shutdown zones in the event of unexpected poor visibility conditions; and
- 5.7.5.1.7 Describe a communication plan detailing the chain of command, mode of communication, and decision authority. PSOs must be previously approved by NMFS to conduct mitigation and monitoring duties for pile-driving activity. In accordance with the PDM Plan, the Lessee must use an adequate number of PSOs, as determined by NMFS and BOEM, to monitor the area of the clearance and shutdown zones. The PDM Plan must also describe seasonal and species-specific clearance and shutdown zones, including time-of-year requirements for NARWs.

- 5.7.5.2 A copy of the PDM Plan must be in the possession of the Lessee representative, the PSOs, impact-hammer operators, and/or any other relevant designees operating under the authority of the approved COP and carrying out the requirements of the PDM Plan on site.
- 5.7.6 Soft Start for Pile Driving (Construction). The Lessee must implement soft-start techniques for impact pile driving. The soft start must include an initial set of three strikes from the impact hammer at reduced energy, followed by a 1-minute waiting period. This process must be repeated a total of three times prior to the initiation of pile driving. Soft start is required for any impact driving, including at the beginning of the day, for each new pile or pile segment started, and at any time following a cessation of impact pile driving of 30 minutes or longer. The Lessee must confirm the use of a soft-start technique for pile driving and document the timing of each application in PSO reports and in pile-driving reports submitted with the FIR.
- 5.7.7 Pile-Driving Sound Source Verification Plan (Construction). The Lessee must ensure that the required 6 dB re 1 μ Pa noise attenuation is met by conducting field verification during pile driving. At least 90 calendar days prior to commencing the first pile-driving activities for the Project, the Lessee must submit a Sound Source Verification (SSV) Plan to the USACE, BOEM (at renewable_reporting@boem.gov), and NMFS (at incidental.take@noaa.gov) for review and comment. DOI will review the SSV Plan and provide comments, if any, on the plan within 30 calendar days of its submittal. The Lessee must resolve all comments on the SSV Plan to DOI's satisfaction prior to implementing the plan. The Lessee may conclusively presume DOI's concurrence with the SSV Plan if DOI provides no comments on the plan within 90 calendar days of its submittal. The Lessee must execute the SSV and report the associated findings to BOEM for at least 1 monopile and 1 jacket foundation. The Lessee must conduct additional field measurements if installing piles with a diameter greater than the initial piles or if using a greater hammer size or energy, or if additional foundations will be measured to support any request to decrease the distance of the clearance and shutdown zones. The Lessee must complete SSV on at least 3 foundations for BOEM to consider reducing zone distances. The Lessee will ensure that the location selected for any SSV for each pile type is representative of the rest of the piles of that type to be installed and that the SSV results are representative to predict actual installation noise propagation for subsequent piles. The SSV plan must describe how the effectiveness of the sound attenuation methodology will be evaluated. The SSV plan must be sufficient to document sound propagation from the pile and distances to isopleths for potential injury and harassment. The measurements must be compared to the Level A and

Level B harassment zones for marine mammals and to the injury and behavioral disturbance zones for sea turtles and Atlantic sturgeon.

5.7.8 Adaptive Refinement of Clearance Zones, Shutdown Zones, and Monitoring Protocols (Construction). The Lessee must reduce unanticipated impacts on marine mammals and sea turtles through near-term refinement of clearance and shutdown zones by refining pile-driving monitoring protocols based on monthly and/or annual monitoring results. Any modifications to monitoring protocols must be approved by DOI and NMFS prior to executing the modified protocols. Any reduction in the size of the clearance and shutdown zones for each foundation type must be based on at least 3 SSV measurements submitted to BOEM for review.

5.7.9 Pile-Driving Clearance Zones (No-go Zones) for Sea Turtles (Construction). The Lessee must minimize the exposure of ESA-listed sea turtles to noise that may result in injury or behavioral disturbance during pile-driving operations by tasking the PSOs to establish a minimum of 1,640-foot (500-meter) clearance and shutdown zone for sea turtles during all pile-driving activities. Adherence to the 1,640-foot (500-meter) clearance and shutdown zones must be reflected in the PSO reports.

5.7.10 Pile-Driving Clearance Zones (No-go Zones) for Marine Mammals (Construction). The Lessee must use PAM and visual monitoring by PSOs during pile-driving activities following the standard protocols and data collection requirements specified in Section 5.7.17.3 . The Lessee must ensure that PSOs establish the following clearance zones for NARWs to be used between 60 minutes prior to pile-driving activities and 30 minutes post-completion of pile-driving activity:

5.7.10.1 At all times of the year, any unidentified whale sighted by a PSO within 3,281 feet (1,000 meters) of the pile must be treated as if it were a NARW. If the PAM operator has 75-percent or greater confidence that a vocalization originated from a NARW located within 6.2 miles (10 kilometers) of the pile-driving location, the detection will be treated as a NARW detection.

5.7.10.2 The PSO must treat a NARW visually detected at any distance from the pile-driving vessel as a detection that triggers the required pre-construction delay or shutdowns during pile installation, regardless of the minimum distance from the clearance or shutdown zone, as follows:

5.7.10.2.1 May 1 to May 14. The Lessee must establish a PAM and visual clearance (and monitoring) zone of 6.21 miles (10

kilometers) for NARWs for all foundation types *before* pile driving occurs. The Lessee may choose to use either aerial or vessel-based surveys for visual clearance from May 1 to May 14. Upon detection of a NARW within the 6.21-mile (10- kilometer) clearance zone, pile driving must be postponed and must not commence until the following day or a follow-up aerial or vessel-based survey confirms that all NARWs have departed the 6.21-mile (10-kilometer) extended PAM and visual clearance zones (as determined by the lead PSO). The Lessee also must establish a PAM and visual shutdown zone of 1.99 miles (3.20 kilometers) and must employ either visual or PAM detection *during* pile driving. Once pile driving has commenced, pile driving must cease upon detection of a NARW within the PAM or visual shutdown zone for the appropriate pile type, and may not resume until the animal has voluntarily left and been visually confirmed beyond the relevant zone or when 30 minutes have elapsed without redetection.

5.7.10.2.2 May 15 to May 31. The Lessee must establish a PAM monitoring zone of 6.21 miles (10 kilometers) to raise awareness of NARW presence in the area. The Lessee must establish a PAM clearance zone of 3.11 miles (5 kilometers within the monitoring distance) for monopiles and a PAM clearance zone of 1.99 miles (3.2 kilometers) for jacket piles *before* pile driving occurs. The Lessee must establish a visual clearance zone of 1.24- miles (2 kilometers) for monopiles, and a visual clearance zone of 1 mile (1.6 kilometers) for jacket piles for NARWs. No pile driving may commence unless all clearance zones for the appropriate pile type have been free of NARW for 30 minutes immediately prior to pile driving. The Lessee also must establish a PAM and visual shutdown zone of 1.99 miles (3.2 kilometers) for all types of foundation piles *during* pile driving. Once pile driving has commenced, pile driving must cease upon detection of a NARW within the PAM or visual shutdown zone for the appropriate pile type, and may not resume until the animal has voluntarily left and been visually confirmed beyond the relevant zone or when 30 minutes have elapsed without redetection.

5.7.10.2.3 June 1 to October 31. The Lessee must establish a PAM clearance zone of 3.11 miles (5 kilometers within the monitoring distance) for monopiles and a PAM clearance zone of 1.99 miles (3.2 kilometers) for jacket piles *before* pile driving occurs. The Lessee must establish a visual clearance zone of 1.24 miles (2 kilometers) for monopiles, and a visual clearance zone of 1 mile (1.6 kilometers) for jacket piles for NARWs. No pile driving may commence unless all clearance zones for the appropriate pile type have been free of NARW for 30 minutes immediately prior to pile driving. The Lessee also must establish a PAM and visual shutdown zone of 1.99 miles (3.2 kilometers) for all types of foundation piles *during* pile driving. Once pile driving has commenced, pile driving must cease upon detection of a NARW within the PAM or visual shutdown zone for the appropriate pile type, and may not resume until the animal has voluntarily left and been visually confirmed beyond the relevant zone or when 30 minutes have elapsed without redetection.

5.7.10.2.4 November 1 to December 31 (if pile driving authorized in December). The Lessee must establish a 6.21-mile (10 kilometer) PAM clearance (and monitoring) zone for all foundation types *before* pile driving occurs. The Lessee must establish a visual clearance zone of 1.24 miles (2 kilometers) for monopiles, and a visual clearance zone of 1 mile (1.6 kilometers) for jacket piles for NARWs *before* pile driving occurs. The Lessee may choose to use either aerial or vessel-based surveys for visual clearance from November 1 to December 31. Upon detection of a NARW within the 6.21-mile (10-kilometer) clearance zone, pile driving must be postponed and not commence until the following day or a follow-up aerial or vessel-based survey confirms that all NARWs have departed the 6.21-mile (10- kilometer) extended PAM and 1.24 miles (2 kilometers) visual clearance zones (as determined by the lead PSO). The Lessee must establish a shutdown zone of 1.99 miles (3.2 kilometers) with either a visual or PAM detection. Once pile driving has commenced, pile driving must cease upon detection of a NARW within the PAM or visual shutdown zone for the appropriate pile type, and may not resume until the animal has voluntarily left and

been visually confirmed beyond the relevant zone or when 30 minutes have elapsed without redetection.

5.7.10.3 For all pile-driving activity, the Lessee must monitor for all marine mammals over the entire Level B distance and document impacts and any potential take. The Lessee must designate shutdown zones with radial distances as follows:

5.7.10.3.1 All other mysticete whales (including humpback, fin, sei, and minke whales): 1,640-foot (500-meter) shutdown zone at all times;

5.7.10.3.2 Harbor porpoises: 394-foot (120-meter) shutdown zone at all times; and

5.7.10.3.3 All other marine mammals not listed above (including dolphin and pinnipeds): 164-foot (50-meter) shutdown zone at all times.

5.7.11 Pile-Driving Noise Reporting and Clearance or Shutdown Zone

Adjustment (Construction). The Lessee must complete and review the initial field-measurement results of at least 3 monopile foundations. The Lessee may request modification of the clearance and shutdown zones based on the field measurements of 3 foundations, but must meet or exceed minimum seasonal distances for threatened and endangered species specified in the BiOp. If the field measurements indicate that the isopleths of concern are larger than those considered in the approved COP, the Lessee, in coordination with BOEM, NMFS, and USACE, must implement additional sound attenuation measures and/or enhanced clearance and/or shutdown zones before driving any additional piles. The Lessee must submit the initial results of the field measurements to NMFS, USACE, and BOEM (at renewable_reporting@boem.gov) as soon as they are available. NMFS, USACE, and BOEM will discuss the results as soon as feasible. BOEM and NMFS will provide direction to the Lessee on the requirements for any additional modifications to the sound attenuation system or for changes to the clearance and shutdown zones.

5.7.12 Pile-Driving Work within a Designated DMA or Right Whale Slow Zone (Construction). Between June 1 and October 31, if a designated DMA or Right Whale Slow Zone is within 2.56 miles (4.12 kilometers) from pile-driving work for monopiles or 2.0 miles (3.22 kilometers) for jacket foundations (the predicted Level B harassment zones), the PAM system detection must extend to the largest practicable detection zone. The PSO must treat any PAM

detection of NARW(s) in the clearance and shutdown zones the same as a visual detection and trigger the required delays or shutdowns in pile installation.

5.7.13 Protocols for Shutdown and Power-Down when Marine Mammals/Sea Turtles are Sighted During Pile Driving (Construction). The PAM operator must notify the visual PSO of all marine mammal detections. Any PAM or visual detection of marine mammals or sea turtles within the shutdown zones during pile-driving activities trigger the required delays in pile installation. Upon a PAM or visual detection of a marine mammal, or visual detection of a sea turtle, entering or within the relevant shutdown zone during pile driving, the Lessee must shut down the pile-driving hammer (unless stopping pile-driving activities would risk human safety or pile instability, in which case reduced hammer energy must be used where practicable). The Lessee must report the decision not to shut down pile-driving equipment to BOEM and NMFS within 24 hours of the decision, with a detailed explanation of the imminent risk presented and the animals potentially impacted.

5.7.14 Pile Driving Restart Procedures for Marine Mammal/Sea Turtle Detections (Construction). The Lessee must delay pile-driving activity and/or cease hammer use when marine mammals or sea turtles are observed entering or within the relevant clearance or shutdown zones prior to the initiation of pile driving or during active hammer use (unless activities would risk human safety or pile instability). Impact hammer use must not resume until:

5.7.14.1 The PSO maintains an active track of the animal(s) during the entire detection period and verifies that the animal(s) voluntarily exited the clearance or shutdown zone and that the animal(s) headed away from the clearance or shutdown area;

5.7.14.2 A 30-minute clearance time has elapsed after the PSO lost track of any mysticetes, sperm whales, Risso's dolphins, and pilot whales – without re-detection; or

5.7.14.3 A 15-minute clearance time has elapsed after the PSO lost track of a sea turtle or any other marine mammals – without re-detection.

5.7.15 Enhanced Time-of-Year Pile-Driving Restart Procedures for NARW Detections (Construction). The Lessee must stop pile-driving activities (unless activities would risk human safety or pile instability) any time a NARW is observed or detected within the 1.99-mile (3.2-kilometer) shutdown zone, and must not resume:

- 5.7.15.1 Between May 1 to 14. Until the following day or a follow-up aerial or vessel-based survey confirms that all NARW(s) have departed the 6.21-mile (10-kilometer) extended PAM and visual clearance zones for any foundation type (as determined by the lead PSO); or
- 5.7.15.2 Between May 15 to October 31. Until 30 minutes of monitoring confirms that all NARW(s) have left the 1.24-mile (2-kilometer) clearance zone (monopiles) or the 1.0-mile (3.2 kilometer) clearance zone (jacket piles); or
- 5.7.15.3 November 1 to November 30. Until the following day, or after a vessel-based survey confirms that NARWs have left the 6.21-mile (10-kilometer) extended PAM and visual clearance zones for any foundation type (as determined by the lead PSO).
- 5.7.16 Submittal of Raw Field Data Collection of Marine Mammals and Sea Turtles in the Pile-Driving Shutdown Zone (Construction). Within 24 hours of detection, the Lessee must report to BOEM (at renewable_reporting@boem.gov) the sighting of all marine mammals and/or sea turtles in the shutdown zone that results in a shutdown or a power-down. In addition, the PSO provider must submit the data report (raw data collected in the field) and must include the daily form with the date, time, species, pile identification number, GPS coordinates, time and distance of the animal when sighted, time the shutdown or power-down occurred, behavior of the animal, direction of travel, time the animal left the shutdown zone, time the pile driver was restarted or powered back up, and any photographs that may have been taken.
- 5.7.17 Weekly Pile-Driving Reports (Construction). Weekly PSO and PAM monitoring reports must be submitted to NMFS and DOI during the pile-driving and construction period of the Project. Weekly reports must document the daily start and stop times of all pile-driving activities, the daily start and stop times of associated observation periods by the PSOs, details on the deployment of PSOs, and a record of all detections of marine mammals and sea turtles. DOI will work with the Lessee to ensure that no confidential business information is released in the monitoring reports.
- 5.7.17.1 The third-party PSO providers must submit the weekly monitoring reports to BOEM (at renewable_reporting@boem.gov) and NMFS (at incidental.take@noaa.gov) every Wednesday during construction for the previous week (Sunday through Saturday) of monitoring of pile-driving activity. Weekly reports can consist of raw data. Required data and reports provided to DOI may be archived, analyzed, published, and disseminated by BOEM. PSO data must be reported

weekly (Sunday through Saturday) from the start of visual monitoring and/or PAM efforts during pile-driving activities, and every week thereafter until the final reporting period, upon the conclusion of pile-driving activity. Any editing, review, and quality assurance checks must be completed only by the PSO provider prior to submission to NMFS and DOI.

5.7.17.2 The Lessee must submit to BOEM (at renewable_reporting@boem.gov) and BSEE (at protectedspecies@bsee.gov) a final report of PSO monitoring 90 calendar days following the completion of pile driving.

5.7.17.3 Reporting Instructions for Pile-Driving PSO Monitoring Reports.

5.7.17.3.1 Weekly summary monitoring reports must include: summaries of pile-driving activities (5.7.17.3.3); vessel operations (including port departures, number of vessels, type of vessel(s), and route); protected species sightings; vessel strike-avoidance measures taken; and any equipment shutdowns or takes that may have occurred. PSO providers must submit PSO data in Excel format every 7 calendar days. The data must be collected in accordance with standard reporting forms, software tools, or electronic data forms authorized by BOEM for the particular activity. The forms must be filled out for each vessel with PSOs aboard. Unfilled cells must be left empty and must not contain "NA." The reports must be submitted in Word and Excel formats (not as a pdf). All dates must be entered as YYYY-MM-DD. All times must be entered in 24 Hour UTC as HH:MM. New entries should be made on the Effort form each time a pile segment changes or weather conditions change, and at least once an hour as a minimum. Before submittal, the forms must always be checked for completeness and have any problems resolved. The file name must follow this format: Lease#_ProjectName_PSOData_YearMonthDay to YearMonthDay.xls

5.7.17.3.2 Data fields must be reported in Excel format as weekly reports during construction. Data categories must include Project, Operations, Monitoring Effort, and Detection. Data must be generated through software applications or otherwise recorded electronically by PSOs. Applications

developed to record PSO data are encouraged as long as the data fields listed below can be recorded and exported to Excel. Alternatively, BOEM has developed an Excel spreadsheet, with all the necessary data fields, that is available upon request.

5.7.17.3.3 Required data fields include:

Project Information:

- Project Name
- Lease Number
- State Coastal Zones
- PSO Contractor(s)
- Vessel Name(s)
- Reporting Date(s)
- Visual monitoring equipment used (e.g., bionics, magnification, IR cameras, etc.)
- Distance finding method used
- PSO names (last, first) and training
- Observation height above sea surface

Operations Information:

- Date (YYYY-MM-DD)
- Hammer type used (make and model)
- Greatest hammer power used for each pile
- Pile identifier and pile number for the day (e.g., pile 2 of 3 for the day)
- Pile diameters
- Pile length

- Pile locations (latitude and longitude)

Monitoring Effort Information:

- Date (YYYY-MM-DD)
- Noise Source (ON=Hammer On; OFF=Hammer Off)
- PSO name(s) (Last, First)
- If visual, how many PSOs on watch at one time?
- Time pre-clearance visual monitoring began in UTC (HH:MM)
- Time pre-clearance monitoring ended in UTC (HH:MM)
- Time pre-clearance PAM monitoring began in UTC (HH:MM)
- Time PAM monitoring ended in UTC (HH:MM)
- Duration of pre-clearance PAM and visual monitoring
- Time power-up/ramp-up began
- Time equipment full power was reached
- Duration of power-up/ramp-up
- Time pile driving began (hammer on)
- Time pile-driving activity ended (hammer off)
- Duration of activity
- Duration of visual detection
- Wind speed (knots), from direction
- Swell height (meters)
- Water depth (meters)
- Visibility (km)

- Glare severity
- Latitude (decimal degrees), longitude (decimal degrees)
- Compass heading of vessel (degrees)
- Beaufort scale
- Precipitation
- Cloud coverage (%)
- Did a shutdown/power-down occur?
- Time shutdown was called for (UTC)
- Time equipment was shut down (UTC)
- Habitat or prey observations
- Marine debris sighted

Detection Information:

- Date (YYYY-MM-DD)
- Sighting ID (V01, V02, or sequential sighting number for that day) (multiple sightings of the same animal or group should use the same ID)
- Date and time at first detection in UTC (YY-MM-DDT HH:MM)
- Time at last detection in UTC (YY-MM-DDT HH:MM)
- PSO name(s) (Last, First)
- Effort (ON=Hammer On; OFF=Hammer Off)
- If visual, how many PSOs on watch at one time?
- Start time of observations
- End time of observations

- Duration of visual observation
- Wind speed (knots), from direction
- Swell height (meters)
- Water depth (meters)
- Visibility (km)
- Glare severity
- Latitude (decimal degrees), longitude (decimal degrees)
- Compass heading of vessel (degrees)
- Beaufort scale
- Precipitation
- Cloud coverage (%)
- Sightings including common name, scientific name, or family
- Certainty of identification
- Number of adults
- Number of juveniles
- Total number of animals
- Bearing to animal(s) when first detected (ship heading + clock face)
- Range from vessel (reticle distance in meters)
- Description (include features such as overall size; shape of head; color and pattern; size, shape, and position of dorsal fin; height, direction, and shape of blow, etc.)
- Detection narrative (note behavior, especially changes in relation to survey activity and distance from source vessel)

- Direction of travel/first approach (relative to vessel)
- Behaviors observed: indicate behaviors and behavioral changes observed in sequential order (use behavioral codes)
- If any bow-riding behavior observed, record total duration during detection (HH:MM)
- Initial heading of animal(s) (degrees) Final heading of animal(s) (degrees)
- Shutdown zone size during detection (meters)
- Was the animal inside the shutdown zone?
- Closest distance to vessel (reticle distance in meters)
- Time at closest approach (UTC HH:MM)
- Time animal entered shutdown zone (UTC HH:MM)
- Time animal left shutdown zone (UTC HH:MM)
- If observed/detected during ramp-up/power-up: first distance (reticle distance in meters), closest distance (reticle distance in meters), last distance (reticle distance in meters), behavior at final detection
- Did a shutdown/power-down occur?
 - Time shutdown was called for (UTC)
 - Time equipment was shut down (UTC)
- Detections with PAM

5.8 Geophysical Survey Conditions.

- 5.8.1 Marine Mammal and Sea Turtle Geophysical Survey Clearance and Shutdown Zones (Planning) (Construction) (Operations) (Decommissioning). The Lessee must ensure that all vessels that operate sub-bottom survey equipment (e.g., boomer, sparker, and bubble-gun categories) below 180 kiloHertz (kHz) can establish minimum clearance and shutdown zone distances for ESA-listed species of marine mammals and sea turtles. For situational awareness, a monitoring zone (500 meters in all directions) for ESA-listed species must be

monitored around all vessels operating boomer, sparker, or bubble-gun equipment. The clearance and shutdown zones must be monitored by approved PSOs at all times.

5.8.1.1 The Lessee must implement clearance zones of 1,640 feet (500 meters) for NARWs and 656 feet (200 meters) for all other ESA-listed whales and sea turtles. Lessee must comply with any applicable Incidental Take Authorizations (ITAs) as required by NMFS for non-ESA listed marine mammals. Unless otherwise required by an ITA, the Lessee must monitor default clearance and shutdown zones of 328 feet (100 meters) for all non-ESA-listed marine mammals. The clearance and shutdown zones must be established with accurate distance finding methods (e.g., reticle binoculars, range-finding sticks, calibrated video cameras, and software). If the shutdown zones cannot be adequately monitored for animal presence (i.e., the lead PSO determines conditions are such that marine mammals cannot be reliably sighted within the shutdown zones), then the survey must be stopped until such time that the shutdown zones can be reliably monitored. For marine mammals, these requirements are for sound sources that are operating within the hearing range of marine mammals (below 180 kHz).

5.8.2 Geophysical Survey Off-Effort PSO Monitoring (Planning) (Construction) (Operations) (Decommissioning). During daylight hours when survey equipment is not operating, the Lessee must ensure that visual PSOs conduct, as rotation schedules allow, observations for comparison of sighting rates and behavior with and without use of the acoustic source and between acquisition periods. Off-effort PSO monitoring must be reflected in the monthly PSO monitoring reports.

5.8.3 Geophysical Survey Vessel Strike-Avoidance and Equipment Shutdown Protocols (Planning) (Construction) (Operations) (Decommissioning). Anytime a survey vessel is underway (transiting or surveying), a PSO must monitor a Vessel Strike Avoidance Zone (500 meters or greater from any sighted ESA-listed whale or other unidentified large marine mammal and 200 meters or greater from any other ESA-listed species visible at the surface) to ensure detection of that animal in time to take necessary measures to avoid striking the animal. If the survey vessel does not require a PSO for the type of survey equipment used, a trained crew lookout or PSO must be used.

5.8.3.1 If any whale is identified within 656-1,640 feet (200-500 meters) of the forward path of any vessel (defined as 90 degrees port to 90 degrees starboard), the vessel operator must steer a course away from the whale at 10 knots (18.5 kilometers/hour) or less until the

1,640 -foot (500-meter) minimum separation distance has been established. If an ESA-listed whale or other unidentified marine mammal is sighted within 656 feet (200 meters) of the forward path of a vessel, the vessel operator must reduce speed by immediately shifting the engine to neutral. Engines must not be engaged until the whale has moved outside of the vessel's path and beyond 1,640 feet (500 meters). If stationary, the vessel must not engage engines until the ESA-listed whale or other large unidentified whale has moved beyond 1,640 feet (500 meters).

5.8.3.2 If a sea turtle or manta ray is sighted within 656 feet (200 meters) of the operating vessel's forward path, the vessel operator must slow down to 4 knots (unless doing so would put the safety of the vessel or crew at risk) and may resume normal vessel operations once the vessel has passed the sea turtle or manta ray. If a sea turtle or manta ray is sighted within 656 feet (200 meters) of the forward path of the operating vessel, the vessel operator must shift to neutral (unless doing so would put the safety of the vessel or crew at risk) and then proceed away from the sea turtle or manta ray at a speed of 4 knots (7.4 kilometers per hour) or less until there is a separation distance of at least 565 feet (200 meters), at which time normal vessel speeds may be resumed.

5.8.3.3 During summer and fall, when sea turtles are most likely to be present in the survey area, vessels must avoid transiting through areas of visible jellyfish aggregations or floating vegetation (e.g., sargassum lines or mats). In the event that doing so would put the safety of the vessel or crew at risk, vessels must slow to 4 knots while transiting through such areas.

5.8.4 Geophysical Survey Clearance of Shutdown Zone and Restart Protocols Following Shutdowns (Planning) (Construction) (Operations) (Decommissioning). The Lessee must comply with the following requirements for geophysical survey shutdown zone monitoring, survey equipment powerup, and post-shutdown shutdown protocols for all ESA-listed species, in addition to any applicable ITA requirements under the MMPA for marine mammals.

5.8.4.1 For threatened and endangered marine mammals and sea turtles, a 1,640-foot (500-meter) clearance zone for NARWs, 656 feet (200 meters) for other ESA-listed whales, 328 feet (100 meters) for non-listed marine mammals, and 164 feet (50 meters) for sea turtles must be established around each vessel operating boomer, sparker, or bubble-gun equipment. Before any noise-producing survey equipment is deployed, the clearance zones must be monitored for

30 minutes. If any ESA-listed species is observed within the clearance zone during the 30-minute pre-clearance period, the 30-minute clock must be paused. If the PSO confirms that the animal has exited the zone and headed away from the survey vessel, the 30-minute clock that was paused may resume. The pre-clearance clock will reset to 30 minutes if the animal dives or visual contact is otherwise lost during the clearance period.

- 5.8.4.2 For non-ESA-listed marine mammals, Lessee must comply with NMFS Project-specific mitigation and any applicable ITAs. If an ITA is not obtained, the Lessee must adhere to the following measures for non-ESA-listed species. Prior to powering up survey equipment, a 328-foot (100-meter) clearance zone must be clear of all: non-ESA-listed small cetaceans and seals for 15 minutes; and humpback whales, *Kogia*, and beaked whales for 30 minutes. If any non-ESA-listed marine mammal is observed within the clearance zone during the monitoring period, the clock must be paused for 15 or 30 minutes depending on the species sighted. If the PSO confirms that the animal has exited the shutdown zone and is headed away from the survey vessel, the clock that was paused may resume. The clock will reset to 15 minutes for small cetaceans and seals or 30 minutes for humpback whales, *Kogia*, and beaked whales if an observed marine mammal dives and is not resighted by the PSO.
- 5.8.4.3 Following pre-clearance and commencement of equipment operation, any time any marine mammal is sighted by a PSO within the applicable shutdown zone, the PSO must immediately notify the resident engineer or other authorized individual, who must shut down the survey equipment. Geophysical survey equipment may be allowed to continue operating if small cetaceans or seals voluntarily approach the vessel to bow ride, as determined by the PSO on duty, when the sound sources are at full operating power. Following a shutdown, the survey equipment may resume operating immediately only if visual monitoring of the shutdown zone continues throughout the shutdown, the animals causing the shutdown were visually followed and confirmed by PSOs to be outside of the shutdown zone and heading away from the vessel, and the shutdown zone remains clear of all protected species. The clock will reset to 15 minutes for small cetaceans and seals or 30 minutes for humpback whales, *Kogia*, and beaked whales if an observed marine mammal dives and is not resighted by the PSO.

5.8.4.4 Following a shutdown due to protected species sightings or any other reason, power-up of the equipment may begin immediately if: (a) the shutdown is less than 30 minutes; (b) visual monitoring of the shutdown zones continued throughout the shutdown; (c) any animal(s) causing a shutdown were visually followed and confirmed by PSOs to be outside of the shutdown zones and heading away from the vessel; and (d) the shutdown zones remain clear of all threatened and endangered species. If all these conditions (a, b, c, and d) are not met, then, before survey equipment can be turned back on, the clearance of the shutdown zone must be completed for threatened and endangered species, humpback whales, *Kogia*, and beaked whales for 30 minutes of observation, and 15 minutes for all other marine mammals.

5.8.5 Monthly HRG Survey Reporting for Protected Species (Planning) (Construction) (Operations) (Decommissioning). The Lessee must ensure that monthly reporting of survey activities is submitted to BOEM (at renewable_reporting@boem.gov) by the PSO provider on the 15th of each month for each vessel conducting survey work. Any editing, review, and quality assurance checks must be completed only by the PSO provider prior to submission to BOEM. The PSOs may record data electronically, but the data fields listed below must be recorded and exported to an Excel file. Alternatively, BOEM has developed an Excel spreadsheet with all the necessary data fields that is available upon request. The Lessee must submit final monthly reports to BOEM in coordination with PSO Providers within 90 calendar days following completion of a survey. Final monthly reports must contain vessel departure and return ports, PSO names and training certifications, the PSO provider contact information, dates of the survey, a vessel track, a summary of all PSO documented sightings of protected species, survey equipment shutdowns that occurred, any vessel strike-avoidance measures taken, takes of protected species that occurred, and any observed injured or dead protected species. PSOs must be approved by NMFS prior to the start of a survey, and the Lessee must submit documentation of NMFS' approval upon request to BOEM (at renewable_reporting@boem.gov). Application requirements to become a NMFS-approved PSO for geological and geophysical surveys can be obtained by sending an inquiry to nmfs.psoreview@noaa.gov. DOI will work with the Lessee to ensure that DOI does not release confidential business information found in the monitoring reports.

5.8.5.1 Instructions for HRG Survey Reports. The following data fields for PSO reports of geological and geophysical surveys must be reported in Excel format (.xml file):

Project Information:

- Project Name
- Lease Number
- State Coastal Zones
- Survey Contractor
- Vessel Name(s)
- Survey Type (typically HRG)
- Reporting start and end dates
- Visual monitoring equipment used (e.g., bionics, magnification, IR cameras, etc.)
- Distance finding method used
- PSO names (last, first) and training
- Observation height above sea surface

Operations Information:

- Vessel name(s)
- Sound sources, including equipment type, power levels, and frequencies used
- Greatest RMS source Level

Monitoring Effort Information:

- Date (YYYY-MM-DD)
- Noise source (ON=source on; OFF=source off)
- If visual, how many PSOs on watch at one time?
- PSOs (Last, First)
- Start time of observations
- End time of observations

- Duration of visual observation
- Wind speed (knots), from direction
- Swell (meters)
- Water depth (meters)
- Visibility (km)
- Glare severity
- Block name and number
- Location: Latitude and Longitude;
- Time pre-clearance visual monitoring began in UTC (HH:MM)
- Time pre-clearance monitoring ended in UTC (HH:MM)
- Duration of pre-clearance visual monitoring
- Was pre-clearance conducted during day or night?
- Time power-up/ramp-up began
- Time equipment full power was reached
- Duration of power-up/ramp-up
- Time survey activity began (equipment on)
- Time survey activity ended (equipment off)
- Survey Duration
- Did a shutdown/power-down occur?
 - Time shutdown was called for (UTC)
 - Time equipment was shut down (UTC)
- Vessel positions (logged every 30 seconds)
- Habitat or prey observations
- Marine debris sighted

Detection Information:

- Date (YYYY-MM-DD)
- Sighting ID (V01, V02, or sequential sighting number for that day) (multiple sightings of the same animal or group should use the same ID)
- Date and time at first detection in UTC (YY-MM-DDT HH:MM)
- Time at last detection in UTC (YY-MM-DDT HH:MM)
- PSO name(s) (Last, First)
- Effort (ON=Source On; OFF=Source Off)
- Latitude (decimal degrees dd.ddddd), longitude (decimal degrees dd.ddddd) dd.ddddd), longitude (decimal degrees dd.ddddd)
- Compass heading of vessel (degrees)
- Water depth (meters)
- Swell height (meters)
- Beaufort scale
- Precipitation
- Visibility (km)
- Cloud coverage (%)
- Glare
- Sightings including common name, scientific name, or family
- Certainty of identification
- Number of adults
- Number of juveniles
- Total number of animals
- Bearing to animal(s) when first detected (ship heading + clock face)
- Range from vessel (reticle distance in meters)

- Description (include features such as overall size; shape of head; color and pattern; size, shape, and position of dorsal fin; height, direction, and shape of blow, etc.)
- Detection narrative (note behavior, especially changes in relation to survey activity and distance from source vessel)
- Direction of travel/first approach (relative to vessel)
- Behaviors observed: indicate behaviors and behavioral changes observed in sequential order (use behavioral codes)
- If any bow-riding behavior observed, record total duration during detection (HH:MM)
- Initial heading of animal(s) (degrees)
- Final heading of animal(s) (degrees)
- Source activity at initial detection
- Source activity at final detection (on or off)
- Shutdown zone size during detection (meters)
- Was the animal inside the shutdown zone?
- Closest distance to vessel (reticle distance in meters)
- Time at closest approach (UTC HH:MM)
- Time animal entered shutdown zone (UTC HH:MM)
- Time animal left shutdown zone (UTC HH:MM)
- If observed/detected during ramp-up/power-up: first distance (reticle distance in meters), closest distance (reticle distance in meters), last distance (reticle distance in meters), behavior at final detection
- Shutdown or power-down occurrences
 - Time shutdown was called for (UTC)
 - Time equipment was shut down (UTC)
- Detections with IR? (Y/N)

6 CONDITIONS RELATED TO COMMERCIAL FISHERIES, FOR-HIRE RECREATIONAL FISHING, AND ENVIRONMENTAL JUSTICE

- 6.1 Communication with the Fishing Community (Planning) (Construction) (Operations) (Decommissioning). The Lessee must establish clear daily two-way communication channels among fishermen and the Project construction vessel operators during construction activities in the WDA and ports utilized by Project vessels. The Lessee is responsible for ensuring that this communication is executed by all contractors and sub-contractors.
- 6.2 Data Sharing with the Fishing Community (Operations). The Lessee must make available to the fishing community electronic chart information showing the as-built location of Project infrastructure – including the cables, cable protection measures, turbine foundations, turbine foundation scour protection, and ESP(s) – no later than 1 year after the date on which the Project commences commercial operations (Commercial Operations Date or COD).
- 6.3 Fisheries Compensation and Mitigation Funds (Planning) (Construction) (Operations) (Decommissioning).
- 6.3.1 No later than 1 year after the approval of the COP, the Lessee must establish the following compensation/mitigation funds to compensate commercial fishermen for losses directly related to the Project and mitigate other impacts:
- 6.3.1.1 Rhode Island Compensation Fund - \$4,200,000 (Record of Decision, Appendix A, Mitigation Measure No. 75);
- 6.3.1.2 Massachusetts Compensation Fund - \$19,185,016 (Record of Decision, Appendix A, Mitigation Measure No. 76);
- 6.3.1.3 Other States' Compensation Fund - \$3,000,000 (Record of Decision, Appendix A, Mitigation Measure No. 77) Rhode Island Fisherman's Future Viability Trust - \$12,500,000 (Record of Decision, Appendix A, Mitigation No. 78); and
- 6.3.1.4 Massachusetts Fisheries Innovation Fund - \$1,750,000 (Record of Decision, Appendix A, Mitigation No. 79).
- 6.3.2 The Lessee must establish the compensation/mitigation funds listed in Section 6.3.1 in accordance with consistency certifications issued for the Project under the Coastal Zone Management Act. The Lessee must require the administrator of each compensation/mitigation fund (Administrator/Trustee) to notify BOEM that the compensation/mitigation fund has been established and is processing claims to mitigate impacts to fisheries. Notification can be accomplished by the Administrator/Trustee transmitting to BOEM an annual

financial statement of the trust/fund. The Administrator/Trustee submit the required notification by December 31 of each year, beginning on the second anniversary of the Project's COD. The notification must be signed by the Administrator/Trustee.

6.3.3 No later than 1 year after the approval of the COP, the Lessee must host at least 1 outreach event, held virtually or in person, with the federally recognized tribes that are interested in and could be eligible for the funds listed in Section 6.3.1, based on geographic location. The following federally recognized tribes must be invited to the outreach event at least 28 calendar days in advance of the event: the Mashpee Wampanoag Tribe, the Wampanoag of Gay Head (Aquinnah); the Mashantucket Pequot Indian Tribe; the Mohegan Tribe of Indians of Connecticut; the Shinnecock Indian Nation; the Narraganset Indian Tribe; and the Delaware Tribe of Indians. In advance of sending an invitation, the Lessee must solicit input from the Tribes about their availability to meet and must make reasonable efforts to maximize participation of tribal representatives. If a Tribe informs the Lessee that it is not able or does not wish to participate, the Lessee must make available to that Tribe any materials from the event along with a recording of the event or a summary.

6.4 Survey Monitoring Program (Planning) (Construction) (Operations) (Decommissioning). The Lessee must participate in good faith with the establishment of the Federal Survey Monitoring Program. Participation includes, but is not limited to, the sharing of information and engagement in scientific studies needed to understand the impact of wind energy development on: (I) marine ecosystems and the human communities that use these marine ecosystems; and (II) the following surveys: (a) NOAA Spring and Autumn Bottom Trawl surveys; (b) NOAA Ecosystem Monitoring surveys; (c) NOAA NARW aerial surveys; (d) NOAA aerial and shipboard marine mammal and sea turtle surveys; (e) NOAA Atlantic surfclam and ocean quahog surveys; (f) NOAA and industry-based Atlantic sea scallop surveys; and (g) any other surveys in the region impacted by wind energy development.

6.5 Environmental Data Sharing with Federally Recognized Tribes (Planning) (Construction) (Operations) (Decommissioning). No later than 90 calendar days after COP approval, the Lessee must contact the federally recognized tribes participating in government-to-government consultations with BOEM for the Project in order to solicit their interest in receiving access to the results of non-proprietary/non-business confidential reports or portions of reports generated as a result of: the Benthic Monitoring Plan; optical surveys of benthic invertebrates and habitat; evaluation of additional benthic habitat data in Muskeget Channel prior to cable lay operations; trawl survey for finfish and squid; reporting of all NARW sightings; injured or dead protected species reporting (turtles and NARW); NARW PAM monitoring; PSO

reports (e.g., weekly pile-driving reports); and pile-driving schedule and changes thereto. At a minimum, the Lessee must contact and offer this access to the following federally recognized tribes: the Mashpee Wampanoag Tribe; the Wampanoag of Gay Head (Aquinnah); the Mashantucket Pequot Indian Tribe; the Mohegan Tribe of Indians of Connecticut; the Shinnecock Indian Nation; the Narraganset Indian Tribe; and the Delaware Tribe of Indians. For any of these federally recognized tribes confirming interest in receiving the results of these non-proprietary/non-business confidential reports or portions of reports, the Lessee must provide such materials no later than 30 calendar days after the information becomes available.

- 6.6 Coordination with Federally Recognized Tribes in Local Hiring Plan (Planning) (Construction) (Operations) (Decommissioning). No later than 6 months after COP approval, the Lessee must prepare and implement a local hiring plan to maximize Vineyard Wind's direct hiring of southeastern Massachusetts residents. Components of the plan must include coordination with unions, training facilities, schools, the Mashpee Wampanoag Tribe, and the Wampanoag Tribe of Gay Head (Aquinnah).

7 CONDITIONS RELATED TO CULTURAL RESOURCES

- 7.1 Remove Six Northeastern Turbine Placement Locations (Planning) (Construction). The Lessee must not construct wind turbines in the 6 northeastern-most turbine placement locations depicted in the proposed layout closest to Martha's Vineyard, Nantucket, and adjacent islands, as shown in Figure 2.1-2 of the FEIS. The Lessee must provide as-built documents showing turbine locations within 1 year of installation.
- 7.2 Apply Paint Color No Lighter than RAL (Reichs-Ausschuß für Lieferbedingungen und Gütesicherung) 9010 Pure White and No Darker than RAL 7035 Light Grey to the Turbines (Planning) (Construction) (Operations). The Lessee must paint the wind turbines an off white/grey color (no lighter than RAL 9010 Pure White and no darker than RAL 7035 Light Grey) prior to commencing commercial operations. The BOEM-approved CVA or the Lessee must confirm the paint color as part of the FIR.
- 7.3 Fund a Restoration and Stabilization Project at Gay Head Light (Planning) (Construction). The Lessee must fund and conduct, at a cost not to exceed \$137,500, a restoration and stabilization project for the Gay Head Light to address the advanced state of corrosion of the lantern curtain wall in accordance with both the Section 106 MOA and the Gay Head Light Treatment Plan (Attachment 4 of the Section 106 MOA), and in a manner acceptable to BOEM. The Lessee must fund and commence the restoration and stabilization project prior to initiating construction of any offshore Project elements within the WDA on the OCS included as part of this undertaking. Prior to initiating such construction, the Lessee must provide BOEM with documentation demonstrating that the Massachusetts Historical Commission has approved the restoration and stabilization project plans.

- 7.4 Fund an Ethnographic Study and Prepare a National Register of Historic Places Nomination Package for the Chappaquiddick Island Traditional Cultural Property (Planning) (Construction). The Lessee must fund and conduct, at a cost not to exceed \$150,000, an ethnographic study of and prepare a National Register of Historic Places (NRHP) nomination package for the Chappaquiddick Island Traditional Cultural Property (TCP) in accordance with both the Section 106 MOA and the Chappaquiddick Island Traditional Cultural Property Treatment Plan (Attachment 5 of the Section 106 MOA), and in a manner acceptable to BOEM. The Lessee must fund and commence the study prior to initiating construction of any offshore Project elements within the WDA on the OCS included as part of this undertaking. Documentation confirming the funding and commencement of the study must be submitted to BOEM prior to the initiation of such construction.
- 7.5 Fund an Ethnographic Study and Prepare an NRHP Nomination Package for the Vineyard Sound and Moshup's Bridge TCP (Planning) (Construction). The Lessee must fund and conduct, at a cost not to exceed \$150,000, an ethnographic study of and prepare an NRHP nomination package for the Vineyard Sound and Moshup's Bridge TCP in accordance with both the Section 106 MOA and the Vineyard Sound and Moshup's Bridge Traditional Cultural Property Treatment Plan (Attachment 6 of the Section 106 MOA), and in a manner acceptable to BOEM. The Lessee must fund and commence the study prior to initiating construction of any offshore Project elements within the WDA on the OCS included as part of this undertaking. Documentation confirming the funding and commencement of the study must be submitted to BOEM prior to the initiation of such construction.
- 7.6 Avoid Identified Shipwrecks, Debris Fields, and Submerged Landform Features that Can be Avoided (Planning) (Construction) (Operations) (Decommissioning). The Lessee must avoid all identified potential shipwrecks and potentially significant debris fields—as well as the following submerged ancient landform features identified during marine archaeological surveys of the WDA and OECC—by a distance no less than that required under Stipulations II.A and II.B of the Section 106 MOA: Channel Group 18; Channel Group 19; Channel Group 20; PSW-1/OECC KP 25.45; PSW-2/OECC KP 27.5; PSW-3/NHAL KP 1.0; PSW-4/NHAL KP 2.9; PSW-5/NHAL KP 3.5; Channel Group 23; Channel Group 26; Channel Group 27; Channel Group 28; Channel Group 30; Channel Group 31; Channel Group 33; Channel Group 34; and Channel Group 46. If the Lessee determines that it cannot avoid any of the listed submerged ancient landform features, the potential shipwrecks, or potentially significant debris fields as required under Stipulations II.A and II.B of the Section 106 MOA, the Lessee must notify BOEM prior to entering or disturbing the seabed in the excluded area. BOEM will notify the Lessee of any additional requirements, which may include additional investigations to confirm the nature of the resource, additional investigations to determine the resource's eligibility for the National Register of Historic Places, and data recovery excavations. If any vessel conducting work on behalf of the Lessee

enters or impacts the seafloor within the avoidance areas noted above, the Lessee must submit an incident report to BOEM within 24 hours.

- 7.7 Conduct Mitigation Investigations of 19 Previously Identified Submerged Landform Features that Cannot be Avoided (Planning) (Construction). The Lessee must fund mitigation investigations of the 19 submerged ancient landform features identified during marine archaeological surveys of the WDA and OECC that remain in the Area of Potential Effects (APE) and cannot be avoided due to the undertaking's design constraints. The Lessee must execute all aspects of this condition of COP approval in accordance with the Section 106 MOA and the Treatment Plan for Submerged Ancient Landform Features (Attachment 8 of the Section 106 MOA), and in a manner acceptable to BOEM. The Lessee must fund and commence these measures prior to the initiation of any offshore, seabed-disturbing Project elements included as part of this undertaking, and the core samples described in the Treatment plan for Ancient Submerged Landform Features (Attachment 8 of the Section 106 MOA) must be collected prior to any construction disturbance within 1,640 feet (500 meters) of the 19 unavoidable submerged ancient landform features. All aspects of the Treatment Plan for Submerged Ancient Landform Features (Attachment 8 of the Section 106 MOA) and associated reports and training, must be completed within 5 years of the date of execution of the Section 106 MOA. The report(s) prepared must be submitted to BOEM (at renewable_reporting@boem.gov) and to BSEE (at env-compliance-arc@bsee.gov).
- 7.8 Archaeological Survey Required (Planning). In accordance with the provisions of the MOA implementing 36 C.F.R. § 800.4(b)(2), the Lessee must provide to BOEM the results of a marine archaeological resources assessment, and supporting data, in accordance with BOEM's *Guidelines for Providing Archaeological and Historic Property Information Pursuant to 30 C.F.R. Part 585*, for all portions of the marine archaeological APE that were not previously available for BOEM's Section 106 review of the approved COP. The Lessee must provide these materials at least 90 calendar days prior to any intended seafloor disturbance within 1,640 feet (500 meters) of this portion of the APE.
- 7.8.1 The Lessee must ensure that the analysis of archaeological survey data collected in support of this assessment and the preparation of archaeological reports created in support of this assessment are conducted by a Qualified Marine Archaeologist. A Qualified Marine Archaeologist must meet the Secretary of the Interior's Professional Qualifications Standards (48 Fed. Reg. 44738- 44739) and possess experience in conducting HRG surveys and in processing and interpreting the resulting data for archaeological potential.
- 7.8.2 The Lessee must inform the Qualified Marine Archaeologist that they may be present during data collection and seabed-disturbing activities performed in support of this assessment. In the event that this Qualified Marine

Archaeologist indicates that they wish to be present, the Lessee must facilitate the Qualified Marine Archaeologist's presence, as requested by the Qualified Marine Archaeologist, and provide the Qualified Marine Archaeologist the opportunity to inspect data quality.

7.9 Avoid or Investigate and Mitigate Submerged Potential Historic Properties Identified as a Result of Future Marine Archaeological Resources Identification Surveys (Planning) (Construction) (Operations) (Decommissioning). The Lessee must avoid or investigate any potential archaeological resources or submerged ancient landform features identified as a result of the completion of marine archaeological resource identification surveys that will be performed in all portions of the marine archaeological resources APE not previously surveyed, as required under Section 7.8, above. Avoidance or additional investigations will be performed according to the following:

7.9.1 Avoidance of Potential Archaeological Resources. Where feasible, the Lessee will avoid any potential archaeological resource (i.e., one or more geophysical survey anomalies or targets with the potential to be an archaeological resource, as determined by BOEM) identified as a result of marine archaeological resource identification surveys performed under Section 7.8, above, by a distance of no less than 984 feet (300 meters) from the known extent of the resource, unless the buffer would preclude the installation of facilities at their engineered locations, but in no event may the buffer be less than 328 feet (100 meters) from the known extent of the resource.

7.9.2 Additional Investigation of Potential Archaeological Resources. If the Lessee determines that avoidance of the potential archaeological resource is not possible, the Lessee must investigate and assess the potential resource to BOEM's and Massachusetts State Historic Preservation Officer's satisfaction using acceptable methodologies that meet industry standard ground truthing techniques to determine whether it constitutes an identified archaeological resource. The Lessee must perform the additional investigations in accordance with Stipulation III.B.2 of the Section 106 MOA.

7.9.3 Avoidance of Submerged Ancient Landform Features. The Lessee must evaluate and determine the feasibility of avoiding submerged ancient landform features with the potential to contain archaeological resources identified as a result of future marine archaeological resource identification surveys performed under Section 7.8, above, and must avoid as many features as possible unless the avoidance would preclude the installation of facilities at their engineered locations. The Lessee must report its evaluation(s) and determination(s) in accordance with Stipulation III.A. of the Section 106 MOA.

- 7.9.4 Mitigation of Unavoidable Submerged Ancient Landform Features. If the Lessee determines that avoidance of the identified submerged ancient landform features with the potential to contain archaeological resources is not possible, the Lessee must conduct additional mitigation investigations to resolve the adverse effect pursuant to 36 C.F.R. § 800.6. The Lessee will perform the same mitigation that will be used to resolve effects to the known 19 unavoidable submerged landform features, including conducting additional investigations and development of educational and documentary materials, in accordance with Stipulation II.C, Stipulation III.B.4, and the Treatment Plan for Submerged Ancient Landform Features with the Potential to Contain Pre-Contact Period Archaeological Sites (Attachment 8) of the Section 106 MOA and referenced in Section 7.7. The Lessee must fund and commence these measures prior to the initiation of any offshore seabed-disturbing Project elements included as part of this undertaking, and all core samples must be collected prior to any construction disturbance within 1,640 feet (500 meters) of the 19 unavoidable submerged ancient landform features and any other identified submerged ancient landform features determined by the Lessee to be unavoidable pursuant to Section 7.9.3. All aspects of the Treatment Plan for Submerged Ancient Landform Features (Attachment 8) of the Section 106 MOA, and associated reports and training must be completed within 5 years of the date of execution of that Agreement. The report(s) prepared must be submitted to BOEM (at renewable_reporting@boem.gov) and to BSEE (at env-compliance-arc@bsee.gov).
- 7.9.5 Mitigation of Unavoidable National Register Eligible Archaeological Resources. For any archaeological resources determined eligible for listing on the National Register (i.e., historic properties) under Stipulation III.A of the MOA, the Lessee will complete a Phase III Archaeological Data Recovery mitigation, pursuant to 36 C.F.R. § 800.6. The Lessee will fund and complete these measures prior to the initiation of construction of any Project elements within 1,640 feet (500) meters of the identified resource.
- 7.9.6 Archaeological Monitoring of Onshore Cable Route Corridor Construction (Construction). The Lessee must ensure that a qualified archaeologist performs terrestrial archaeological monitoring during all ground disturbing activities in areas of moderate to high archaeological sensitivity, to include construction activities within the staging areas for the horizontal directional drill or open trenching in the landfall area and during installation of upland cable within the identified zones of high and moderate archaeological sensitivity along existing roads, as defined by the Vineyard Wind's cultural resource consultant. The Lessee must perform the archaeological monitoring in accordance with Stipulation IV of the Section 106 MOA.

7.10 Post-Review Discoveries (Planning) (Construction) (Operations) (Decommissioning).

If, while conducting activities under the approved COP, the Lessee discovers a potential archaeological resource, such as the presence of a shipwreck (e.g., a sonar image or visual confirmation of an iron, steel, or wooden hull, wooden timbers, anchors, concentration of historic objects, piles of ballast rock), prehistoric artifacts, relict landforms, or other items potentially of an archaeological nature within the WDA, then the Lessee must:

- 7.10.1 Immediately halt seabed-disturbing activities within the area of discovery;
- 7.10.2 As soon as practicable and no later than 24 hours after the discovery, notify BOEM (at renewable_reporting@boem.gov) and BSEE (at 504-388-3464 and env-compliance-arc@bsee.gov) for additional instructions;
- 7.10.3 Notify DOI in writing via written report, describing the discovery in detail, including a narrative description of the manner of discovery (e.g., date, time, heading, weather, information from logs); a narrative description of the potential resource, including measurements; images of the potential resource that may have been captured; portions of raw and processed datasets relevant to the discovery area; and any other information considered by the Lessee to be relevant to DOI's understanding of the potential resource. Provide the notification to BOEM (at renewable_reporting@boem.gov) and to BSEE (at env-compliance-arc@bsee.gov) within 72 hours of its discovery. DOI may request additional information and/or request revisions to the report;
- 7.10.4 Keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until DOI has made an evaluation and instructs the Lessee on how to proceed, including when activities may recommence; and
- 7.10.5 Conduct any additional investigations and submit documentation as directed by DOI to determine if the resource is eligible for listing in the National Register of Historic Places (30 C.F.R. § 585.802(b)). The Lessee must satisfy this requirement only if: (1) the site has been impacted by the Lessee's Project activities; and/or (2) impacts to the site or to the APE cannot be avoided. If investigations indicate that the resource is potentially eligible for listing in the National Register of Historic Places, DOI will instruct the Lessee how to protect the resource or how to mitigate adverse effects to the site. If DOI incurs costs in protecting the resource, then DOI may charge, under Section 110(g) of the National Historic Preservation Act, the Lessee reasonable costs for carrying out preservation responsibilities under OCSLA (30 C.F.R. § 585.802(c-d)).

- 7.11 No Impact without Approval (Planning) (Construction) (Operations) (Decommissioning). The Lessee must not knowingly impact a potential archaeological resource without DOI's prior authorization. If a possible impact to a potential archaeological resource occurs, the Lessee must: immediately halt operations; report the incident with 24 hours to BOEM (at renewable_reporting@boem.gov) and BSEE (at 504-388-3464 and env-compliance-arc@bsee.gov); and provide a written report to BOEM (at renewable_reporting@boem.gov) and BSEE (at env-compliance-arc@bsee.gov) within 72 hours.
- 7.12 PAM Placement Review (Construction) (Operations) (Decommissioning). The Lessee may only place PAMs in locations where an analysis of the results of geophysical surveys has been completed. This analysis must include a determination by a Qualified Marine Archaeologist as to whether any potential archaeological resources are present in the area. This activity may have been performed already as part of the Lessee's submission of archaeological resources reports in support of its approved COP. Except as allowed by DOI under Stipulation 4.2.6 of the Lease and Section 7.11 above, the PAM placement activities must avoid potential archaeological resources by a minimum of 328 feet (100 meters), and the avoidance distance must be calculated from the maximum discernible extent of the archaeological resource. If the placement area was not previously reviewed and certified by a Qualified Marine Archaeologist in support of the Lessee's approved COP, a Qualified Marine Archaeologist must certify, in an annual letter to DOI, that the Lessee's PAM placement activities did not impact potential historic properties identified as a result of the Qualified Marine Archaeologist's determination, except as follows: in the event that the PAM placement activities did impact potential historic properties identified in the archaeological surveys without the DOI's prior authorization, the Lessee and the Qualified Marine Archaeologist who prepared the report must instead provide to DOI a statement documenting the extent of these impacts. This statement must be made to DOI in accordance with Stipulation 4.2.7 of the Lease and Section 7.10, above. BOEM reserves the right to require additional mitigation measures based on a review of the results and supporting information.

ATTACHMENT 1: LIST OF ACRONYMS

AC	Advisory Circular
ADEON	Atlantic Deepwater Ecosystem Observatory Network
ADLS	Aircraft Detection Lighting System
AIS	Automated Information System
ALARP	As Low as Reasonably Practical
ANSI	American National Standards Institute
APE	Area of Potential Effects
ASR	Airport Surveillance Radar
ASSE	American Society of Safety Engineers
BiOp	Biological Opinion
BOEM	Bureau of Ocean Energy Management
BSEE	Bureau of Safety and Environmental Enforcement
CBRA	Cable Burial Risk Assessment
COD	Commercial Operations Date
COP	Construction and Operations Plan
CPT	Cone Penetration Testing or Cone Penetration Test
CVA	Certified Verification Agents
CZM	Coastal Zone Management
DAS	Distributed Acoustic Sensing
DGPS	Differential Global Positioning System
DMA	Dynamic Management Area
DMM	Discarded Military Munitions
DoD	Department of Defense
DOI	Department of the Interior
DON	Department of the Navy
DTS	Desktop Study
ESA	Endangered Species Act
ESP	Electrical Service Platform
FAA	Federal Aviation Administration
FDR	Facility Design Report
FEIS	Final Environmental Impact Statement
FIR	Fabrication and Installation Report
HAPC	Habitat Areas of Particular Concern
HD	High Definition
HDD	Horizontal Directional Drilling
HF	High Frequency
HRG	High Resolution Geophysical
IALA	International Association of Marine Aids to Navigations and Lighthouse Authorities

IEC	International Electric Code
IHA	Incidental Harassment Authorization
IMT	Incident Management Team
ISO	International Organization for Standardization
ITA	Incidental Take Authorization
LERA	Least Expensive Radar
LOI	Letter of Intent
LOS	Line of Sight
MassDEP	Massachusetts Department of Environmental Protection
MOA	Memorandum of Agreement
NARW	North Atlantic Right Whale
NMFS	NOAA National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NORAD	North American Aerospace Defense Command
NRHP	National Register of Historic Places
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
OECC	Offshores Export Cable Corridor
OEM	Original Equipment Manufacturer
OSRO	Oil Spill Removal Organization
OSRP	Oil Spill Response Plan
PAM	Passive Acoustic Monitoring or Passive Acoustic Monitor(s)
PATON	Private Aids to Navigation
PDM	Pile-Driving Monitoring
PPP	Piping Plover Protection
PSO	Protected Species Observer
QI	Qualified Individual
RAL	Reichs-Ausschuß für Lieferbedingungen und Gütesicherung
RAM	Radar Adverse-impact Management
SDS	Safety Data Sheets
SMA	Seasonal Management Area
SMS	Safety Management System
SROT	Spill Response Operating Team
SSV	Sound Source Verification
TCP	Traditional Cultural Property
USACE	United States Army Corps of Engineers
USAF	United States Air Force
USFF	United States Fleet Forces
USFWS	United States Fish and Wildlife Service
UXO	Unexploded Ordnance
VHF	Very High Frequency

WCD	Worst-Case Discharge
WDA	Wind Development Area
WTG	Wind Turbine Generator

ATTACHMENT 2: RHODE ISLAND AND MASSACHUSETTS STRUCTURE LABELING PLOT (COORDINATES)

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0520	Equinor	-70.39488769	41.00441358	AU	41
OCS-A 0520	Equinor	-70.37287161	41.00467794	AU	42
OCS-A 0520	Equinor	-70.41654634	40.98746685	AV	40
OCS-A 0520	Equinor	-70.3945361	40.98773526	AV	41
OCS-A 0520	Equinor	-70.37252557	40.98799947	AV	42
OCS-A 0520	Equinor	-70.4381939	40.97051619	AW	39
OCS-A 0520	Equinor	-70.4161895	40.97078864	AW	40
OCS-A 0520	Equinor	-70.3941848	40.97105689	AW	41
OCS-A 0520	Equinor	-70.37217981	40.97132095	AW	42
OCS-A 0520	Equinor	-70.43783183	40.95383809	AX	39
OCS-A 0520	Equinor	-70.41583296	40.95411038	AX	40
OCS-A 0520	Equinor	-70.3938338	40.95437848	AX	41
OCS-A 0520	Equinor	-70.37183434	40.95464237	AX	42
OCS-A 0520	Equinor	-70.45983039	40.95356161	AX	38
OCS-A 0520	Equinor	-70.43747006	40.93715994	AY	39
OCS-A 0520	Equinor	-70.41547672	40.93743207	AY	40
OCS-A 0520	Equinor	-70.39348309	40.93770001	AY	41
OCS-A 0520	Equinor	-70.37148917	40.93796375	AY	42
OCS-A 0520	Equinor	-70.45946308	40.93688361	AY	38
OCS-A 0520	Equinor	-70.48145581	40.9366031	AY	37
OCS-A 0520	Equinor	-70.43710859	40.92048173	AZ	39
OCS-A 0520	Equinor	-70.41512078	40.9207537	AZ	40
OCS-A 0520	Equinor	-70.39313268	40.92102149	AZ	41
OCS-A 0520	Equinor	-70.37114428	40.92128508	AZ	42
OCS-A 0520	Equinor	-70.34915559	40.92154447	AZ	43
OCS-A 0520	Equinor	-70.32716662	40.92179968	AZ	44
OCS-A 0520	Equinor	-70.30517736	40.9220507	AZ	45
OCS-A 0520	Equinor	-70.45909609	40.92020557	AZ	38
OCS-A 0520	Equinor	-70.48108329	40.91992522	AZ	37
OCS-A 0520	Equinor	-70.50307017	40.91964067	AZ	36
OCS-A 0520	Equinor	-70.43674742	40.90380348	BA	39
OCS-A 0520	Equinor	-70.41476514	40.90407529	BA	40
OCS-A 0520	Equinor	-70.39278256	40.90434291	BA	41
OCS-A 0520	Equinor	-70.37079968	40.90460635	BA	42
OCS-A 0520	Equinor	-70.34881651	40.9048656	BA	43
OCS-A 0520	Equinor	-70.32683306	40.90512065	BA	44
OCS-A 0520	Equinor	-70.45872941	40.90352748	BA	38
OCS-A 0520	Equinor	-70.48071108	40.90324729	BA	37
OCS-A 0520	Equinor	-70.50269245	40.90296291	BA	36
OCS-A 0520	Equinor	-70.43638656	40.88712517	BB	39

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0520	Equinor	-70.41440979	40.88739682	BB	40
OCS-A 0520	Equinor	-70.39243273	40.88766429	BB	41
OCS-A 0520	Equinor	-70.37045537	40.88792757	BB	42
OCS-A 0520	Equinor	-70.34847772	40.88818667	BB	43
OCS-A 0520	Equinor	-70.45836303	40.88684933	BB	38
OCS-A 0520	Equinor	-70.48033919	40.8865693	BB	37
OCS-A 0520	Equinor	-70.50231504	40.88628509	BB	36
OCS-A 0520	Equinor	-70.52429057	40.8859967	BB	35
OCS-A 0520	Equinor	-70.54626578	40.88570411	BB	34
OCS-A 0520	Equinor	-70.43602601	40.87044681	BC	39
OCS-A 0520	Equinor	-70.41405475	40.87071831	BC	40
OCS-A 0520	Equinor	-70.39208319	40.87098562	BC	41
OCS-A 0520	Equinor	-70.37011135	40.87124875	BC	42
OCS-A 0520	Equinor	-70.45799696	40.87017113	BC	38
OCS-A 0520	Equinor	-70.47996761	40.86989127	BC	37
OCS-A 0520	Equinor	-70.50193795	40.86960723	BC	36
OCS-A 0520	Equinor	-70.52390797	40.869319	BC	35
OCS-A 0520	Equinor	-70.54587767	40.86902659	BC	34
OCS-A 0520	Equinor	-70.43566575	40.8537684	BD	39
OCS-A 0520	Equinor	-70.4137	40.85403974	BD	40
OCS-A 0520	Equinor	-70.39173395	40.8543069	BD	41
OCS-A 0520	Equinor	-70.4576312	40.85349288	BD	38
OCS-A 0520	Equinor	-70.47959634	40.85321319	BD	37
OCS-A 0520	Equinor	-70.50156117	40.85292931	BD	36
OCS-A 0520	Equinor	-70.52352568	40.85264125	BD	35
OCS-A 0520	Equinor	-70.54548988	40.85234901	BD	34
OCS-A 0520	Equinor	-70.56745375	40.85205259	BD	33
OCS-A 0520	Equinor	-70.58941729	40.85175198	BD	32
OCS-A 0520	Equinor	-70.43530579	40.83708994	BE	39
OCS-A 0520	Equinor	-70.41334555	40.83736112	BE	40
OCS-A 0520	Equinor	-70.45726574	40.83681459	BE	38
OCS-A 0520	Equinor	-70.47922538	40.83653505	BE	37
OCS-A 0520	Equinor	-70.50118471	40.83625134	BE	36
OCS-A 0520	Equinor	-70.52314372	40.83596344	BE	35
OCS-A 0520	Equinor	-70.54510241	40.83567138	BE	34
OCS-A 0520	Equinor	-70.56706078	40.83537513	BE	33
OCS-A 0520	Equinor	-70.58901882	40.8350747	BE	32
OCS-A 0520	Equinor	-70.43494614	40.82041143	BF	39
OCS-A 0520	Equinor	-70.45690059	40.82013624	BF	38
OCS-A 0520	Equinor	-70.47885473	40.81985686	BF	37
OCS-A 0520	Equinor	-70.50080856	40.81957332	BF	36
OCS-A 0520	Equinor	-70.52276208	40.81928559	BF	35
OCS-A 0520	Equinor	-70.54471527	40.81899369	BF	34

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0520	Equinor	-70.56666814	40.81869762	BF	33
OCS-A 0520	Equinor	-70.58862069	40.81839737	BF	32
OCS-A 0520	Equinor	-70.6105729	40.81809294	BF	31
OCS-A 0520	Equinor	-70.63252477	40.81778435	BF	30
OCS-A 0520	Equinor	-70.45653574	40.80345783	BG	38
OCS-A 0520	Equinor	-70.47848439	40.80317863	BG	37
OCS-A 0520	Equinor	-70.50043273	40.80289524	BG	36
OCS-A 0520	Equinor	-70.52238075	40.80260769	BG	35
OCS-A 0520	Equinor	-70.54432846	40.80231596	BG	34
OCS-A 0520	Equinor	-70.56627584	40.80202006	BG	33
OCS-A 0520	Equinor	-70.58822289	40.80171998	BG	32
OCS-A 0520	Equinor	-70.61016961	40.80141574	BG	31
OCS-A 0520	Equinor	-70.63211599	40.80110732	BG	30
OCS-A 0520	Equinor	-70.65406203	40.80079473	BG	29
OCS-A 0520	Equinor	-70.47811436	40.78650034	BH	37
OCS-A 0520	Equinor	-70.50005721	40.78621712	BH	36
OCS-A 0520	Equinor	-70.52199975	40.78592973	BH	35
OCS-A 0520	Equinor	-70.54394197	40.78563817	BH	34
OCS-A 0520	Equinor	-70.56588386	40.78534245	BH	33
OCS-A 0520	Equinor	-70.58782542	40.78504255	BH	32
OCS-A 0520	Equinor	-70.60976666	40.78473848	BH	31
OCS-A 0520	Equinor	-70.63170755	40.78443024	BH	30
OCS-A 0520	Equinor	-70.6536481	40.78411783	BH	29
OCS-A 0520	Equinor	-70.67558831	40.78380125	BH	28
OCS-A 0520	Equinor	-70.49968201	40.76953895	BJ	36
OCS-A 0520	Equinor	-70.52161906	40.76925173	BJ	35
OCS-A 0520	Equinor	-70.5435558	40.76896034	BJ	34
OCS-A 0520	Equinor	-70.56549221	40.76866478	BJ	33
OCS-A 0520	Equinor	-70.58742829	40.76836506	BJ	32
OCS-A 0520	Equinor	-70.60936404	40.76806117	BJ	31
OCS-A 0520	Equinor	-70.63129945	40.76775311	BJ	30
OCS-A 0520	Equinor	-70.65323452	40.76744088	BJ	29
OCS-A 0520	Equinor	-70.67516925	40.76712449	BJ	28
OCS-A 0520	Equinor	-70.69710362	40.76680393	BJ	27
OCS-A 0520	Equinor	-70.5212387	40.75257367	BK	35
OCS-A 0520	Equinor	-70.54316995	40.75228245	BK	34
OCS-A 0520	Equinor	-70.56510089	40.75198707	BK	33
OCS-A 0520	Equinor	-70.58703149	40.75168752	BK	32
OCS-A 0520	Equinor	-70.60896176	40.75138381	BK	31
OCS-A 0520	Equinor	-70.6308917	40.75107593	BK	30
OCS-A 0520	Equinor	-70.65282129	40.75076389	BK	29
OCS-A 0520	Equinor	-70.67475054	40.75044768	BK	28
OCS-A 0520	Equinor	-70.69667944	40.7501273	BK	27

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0520	Equinor	-70.71860798	40.74980277	BK	26
OCS-A 0520	Equinor	-70.54278443	40.73560451	BL	34
OCS-A 0520	Equinor	-70.56470989	40.7353093	BL	33
OCS-A 0520	Equinor	-70.58663502	40.73500993	BL	32
OCS-A 0520	Equinor	-70.60855982	40.73470639	BL	31
OCS-A 0520	Equinor	-70.63048428	40.73439869	BL	30
OCS-A 0520	Equinor	-70.65240841	40.73408683	BL	29
OCS-A 0520	Equinor	-70.67433218	40.73377081	BL	28
OCS-A 0520	Equinor	-70.69625561	40.73345063	BL	27
OCS-A 0520	Equinor	-70.56431922	40.71863148	BM	33
OCS-A 0520	Equinor	-70.58623889	40.71833229	BM	32
OCS-A 0520	Equinor	-70.60815822	40.71802893	BM	31
OCS-A 0520	Equinor	-70.63007721	40.71772141	BM	30
OCS-A 0520	Equinor	-70.65199587	40.71740973	BM	29
OCS-A 0520	Equinor	-70.67391418	40.71709389	BM	28
OCS-A 0520	Equinor	-70.69583213	40.71677389	BM	27
OCS-A 0520	Equinor	-70.58584308	40.70165459	BN	32
OCS-A 0520	Equinor	-70.60775695	40.70135141	BN	31
OCS-A 0520	Equinor	-70.62967048	40.70104407	BN	30
OCS-A 0520	Equinor	-70.65158367	40.70073258	BN	29
OCS-A 0520	Equinor	-70.67349652	40.70041692	BN	28
OCS-A 0520	Equinor	-70.69540901	40.70009711	BN	27
OCS-A 0520	Equinor	-70.60735602	40.68467384	BP	31
OCS-A 0520	Equinor	-70.62926409	40.68436668	BP	30
OCS-A 0520	Equinor	-70.65117182	40.68405537	BP	29
OCS-A 0520	Equinor	-70.67307921	40.6837399	BP	28
OCS-A 0520	Equinor	-70.69498625	40.68342028	BP	27
OCS-A 0520	Equinor	-70.62885804	40.66768924	BQ	30
OCS-A 0520	Equinor	-70.65076032	40.66737811	BQ	29
OCS-A 0520	Equinor	-70.67266225	40.66706283	BQ	28
OCS-A 0520	Equinor	-70.69456384	40.66674339	BQ	27
OCS-A 0521	Mayflower Wind Energy	-70.28318784	40.92229752	AZ	46
OCS-A 0521	Mayflower Wind Energy	-70.26119804	40.92254015	AZ	47
OCS-A 0521	Mayflower Wind Energy	-70.30484933	40.90537152	BA	45
OCS-A 0521	Mayflower Wind Energy	-70.28286533	40.9056182	BA	46
OCS-A 0521	Mayflower Wind Energy	-70.26088105	40.90586069	BA	47
OCS-A 0521	Mayflower Wind Energy	-70.32649979	40.88844158	BB	44

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	Mayflower Wind Energy	-70.30452158	40.8886923	BB	45
OCS-A 0521	Mayflower Wind Energy	-70.28254309	40.88893884	BB	46
OCS-A 0521	Mayflower Wind Energy	-70.26056433	40.88918118	BB	47
OCS-A 0521	Mayflower Wind Energy	-70.34813921	40.87150769	BC	43
OCS-A 0521	Mayflower Wind Energy	-70.32616679	40.87176245	BC	44
OCS-A 0521	Mayflower Wind Energy	-70.30419409	40.87201303	BC	45
OCS-A 0521	Mayflower Wind Energy	-70.28222112	40.87225942	BC	46
OCS-A 0521	Mayflower Wind Energy	-70.26024788	40.87250162	BC	47
OCS-A 0521	Mayflower Wind Energy	-70.36976761	40.85456987	BD	42
OCS-A 0521	Mayflower Wind Energy	-70.34780099	40.85482866	BD	43
OCS-A 0521	Mayflower Wind Energy	-70.32583408	40.85508327	BD	44
OCS-A 0521	Mayflower Wind Energy	-70.30386689	40.85533337	BD	45
OCS-A 0521	Mayflower Wind Energy	-70.28189942	40.85557995	BD	46
OCS-A 0521	Mayflower Wind Energy	-70.25993169	40.85582201	BD	47
OCS-A 0521	Mayflower Wind Energy	-70.391385	40.83762812	BE	41
OCS-A 0521	Mayflower Wind Energy	-70.36942417	40.83789094	BE	42
OCS-A 0521	Mayflower Wind Energy	-70.34746304	40.83814958	BE	43
OCS-A 0521	Mayflower Wind Energy	-70.32550164	40.83840404	BE	44
OCS-A 0521	Mayflower Wind Energy	-70.30353995	40.83865433	BE	45
OCS-A 0521	Mayflower Wind Energy	-70.28157799	40.83890043	BE	46
OCS-A 0521	Mayflower Wind Energy	-70.25961576	40.83914235	BE	47
OCS-A 0521	Mayflower Wind Energy	-70.41299139	40.82068245	BF	40

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	Mayflower Wind Energy	-70.39103635	40.82094929	BF	41
OCS-A 0521	Mayflower Wind Energy	-70.36908101	40.82121196	BF	42
OCS-A 0521	Mayflower Wind Energy	-70.34712539	40.82147045	BF	43
OCS-A 0521	Mayflower Wind Energy	-70.32516948	40.82172477	BF	44
OCS-A 0521	Mayflower Wind Energy	-70.30321329	40.8219749	BF	45
OCS-A 0521	Mayflower Wind Energy	-70.28125683	40.82222086	BF	46
OCS-A 0521	Mayflower Wind Energy	-70.2593001	40.82246264	BF	47
OCS-A 0521	Mayflower Wind Energy	-70.23734311	40.82270025	BF	48
OCS-A 0521	Mayflower Wind Energy	-70.21538586	40.82293368	BF	49
OCS-A 0521	Mayflower Wind Energy	-70.43458679	40.80373287	BG	39
OCS-A 0521	Mayflower Wind Energy	-70.41263753	40.80400373	BG	40
OCS-A 0521	Mayflower Wind Energy	-70.39068798	40.80427042	BG	41
OCS-A 0521	Mayflower Wind Energy	-70.36873814	40.80453293	BG	42
OCS-A 0521	Mayflower Wind Energy	-70.34678801	40.80479127	BG	43
OCS-A 0521	Mayflower Wind Energy	-70.3248376	40.80504544	BG	44
OCS-A 0521	Mayflower Wind Energy	-70.30288691	40.80529543	BG	45
OCS-A 0521	Mayflower Wind Energy	-70.28093594	40.80554124	BG	46
OCS-A 0521	Mayflower Wind Energy	-70.25898471	40.80578288	BG	47
OCS-A 0521	Mayflower Wind Energy	-70.43422774	40.78705426	BH	39
OCS-A 0521	Mayflower Wind Energy	-70.41228397	40.78732496	BH	40
OCS-A 0521	Mayflower Wind Energy	-70.39033991	40.78759149	BH	41
OCS-A 0521	Mayflower Wind Energy	-70.36839556	40.78785385	BH	42

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	Mayflower Wind Energy	-70.34645092	40.78811204	BH	43
OCS-A 0521	Mayflower Wind Energy	-70.32450599	40.78836606	BH	44
OCS-A 0521	Mayflower Wind Energy	-70.30256079	40.7886159	BH	45
OCS-A 0521	Mayflower Wind Energy	-70.28061532	40.78886157	BH	46
OCS-A 0521	Mayflower Wind Energy	-70.25866958	40.78910307	BH	47
OCS-A 0521	Mayflower Wind Energy	-70.4561712	40.78677938	BH	38
OCS-A 0521	Mayflower Wind Energy	-70.43386899	40.77037559	BJ	39
OCS-A 0521	Mayflower Wind Energy	-70.41193071	40.77064614	BJ	40
OCS-A 0521	Mayflower Wind Energy	-70.38999213	40.77091251	BJ	41
OCS-A 0521	Mayflower Wind Energy	-70.36805326	40.77117472	BJ	42
OCS-A 0521	Mayflower Wind Energy	-70.34611411	40.77143276	BJ	43
OCS-A 0521	Mayflower Wind Energy	-70.32417467	40.77168662	BJ	44
OCS-A 0521	Mayflower Wind Energy	-70.30223495	40.77193632	BJ	45
OCS-A 0521	Mayflower Wind Energy	-70.28029497	40.77218185	BJ	46
OCS-A 0521	Mayflower Wind Energy	-70.45580697	40.77010088	BJ	38
OCS-A 0521	Mayflower Wind Energy	-70.47774465	40.769822	BJ	37
OCS-A 0521	Mayflower Wind Energy	-70.43351054	40.75369688	BK	39
OCS-A 0521	Mayflower Wind Energy	-70.41157774	40.75396726	BK	40
OCS-A 0521	Mayflower Wind Energy	-70.38964464	40.75423348	BK	41
OCS-A 0521	Mayflower Wind Energy	-70.36771125	40.75449554	BK	42
OCS-A 0521	Mayflower Wind Energy	-70.34577758	40.75475342	BK	43
OCS-A 0521	Mayflower Wind Energy	-70.32384362	40.75500714	BK	44

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	Mayflower Wind Energy	-70.30190939	40.7552567	BK	45
OCS-A 0521	Mayflower Wind Energy	-70.45544304	40.75342232	BK	38
OCS-A 0521	Mayflower Wind Energy	-70.47737524	40.7531436	BK	37
OCS-A 0521	Mayflower Wind Energy	-70.49930712	40.75286072	BK	36
OCS-A 0521	Mayflower Wind Energy	-70.43315239	40.73701811	BL	39
OCS-A 0521	Mayflower Wind Energy	-70.41122506	40.73728834	BL	40
OCS-A 0521	Mayflower Wind Energy	-70.38929744	40.7375544	BL	41
OCS-A 0521	Mayflower Wind Energy	-70.36736953	40.7378163	BL	42
OCS-A 0521	Mayflower Wind Energy	-70.34544133	40.73807404	BL	43
OCS-A 0521	Mayflower Wind Energy	-70.32351285	40.73832761	BL	44
OCS-A 0521	Mayflower Wind Energy	-70.45507941	40.73674372	BL	38
OCS-A 0521	Mayflower Wind Energy	-70.47700614	40.73646516	BL	37
OCS-A 0521	Mayflower Wind Energy	-70.49893255	40.73618244	BL	36
OCS-A 0521	Mayflower Wind Energy	-70.52085865	40.73589556	BL	35
OCS-A 0521	Mayflower Wind Energy	-70.43279454	40.72033929	BM	39
OCS-A 0521	Mayflower Wind Energy	-70.41087268	40.72060937	BM	40
OCS-A 0521	Mayflower Wind Energy	-70.38895053	40.72087527	BM	41
OCS-A 0521	Mayflower Wind Energy	-70.36702809	40.72113702	BM	42
OCS-A 0521	Mayflower Wind Energy	-70.34510536	40.72139461	BM	43
OCS-A 0521	Mayflower Wind Energy	-70.45471609	40.72006506	BM	38
OCS-A 0521	Mayflower Wind Energy	-70.47663735	40.71978667	BM	37
OCS-A 0521	Mayflower Wind Energy	-70.49855829	40.71950411	BM	36

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	Mayflower Wind Energy	-70.52047892	40.7192174	BM	35
OCS-A 0521	Mayflower Wind Energy	-70.54239923	40.71892652	BM	34
OCS-A 0521	Mayflower Wind Energy	-70.43243699	40.70366043	BN	39
OCS-A 0521	Mayflower Wind Energy	-70.4105206	40.70393034	BN	40
OCS-A 0521	Mayflower Wind Energy	-70.38860391	40.70419609	BN	41
OCS-A 0521	Mayflower Wind Energy	-70.36668694	40.70445769	BN	42
OCS-A 0521	Mayflower Wind Energy	-70.45435308	40.70338635	BN	38
OCS-A 0521	Mayflower Wind Energy	-70.47626886	40.70310812	BN	37
OCS-A 0521	Mayflower Wind Energy	-70.49818434	40.70282573	BN	36
OCS-A 0521	Mayflower Wind Energy	-70.52009951	40.70253919	BN	35
OCS-A 0521	Mayflower Wind Energy	-70.54201436	40.70224848	BN	34
OCS-A 0521	Mayflower Wind Energy	-70.56392888	40.70195361	BN	33
OCS-A 0521	Mayflower Wind Energy	-70.43207974	40.68698151	BP	39
OCS-A 0521	Mayflower Wind Energy	-70.41016881	40.68725126	BP	40
OCS-A 0521	Mayflower Wind Energy	-70.38825759	40.68751686	BP	41
OCS-A 0521	Mayflower Wind Energy	-70.45399037	40.6867076	BP	38
OCS-A 0521	Mayflower Wind Energy	-70.47590069	40.68642953	BP	37
OCS-A 0521	Mayflower Wind Energy	-70.49781071	40.6861473	BP	36
OCS-A 0521	Mayflower Wind Energy	-70.51972041	40.68586092	BP	35
OCS-A 0521	Mayflower Wind Energy	-70.5416298	40.68557039	BP	34
OCS-A 0521	Mayflower Wind Energy	-70.56353887	40.68527569	BP	33
OCS-A 0521	Mayflower Wind Energy	-70.58544761	40.68497685	BP	32

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	Mayflower Wind Energy	-70.43172278	40.67030254	BQ	39
OCS-A 0521	Mayflower Wind Energy	-70.40981731	40.67057214	BQ	40
OCS-A 0521	Mayflower Wind Energy	-70.45362796	40.67002879	BQ	38
OCS-A 0521	Mayflower Wind Energy	-70.47553283	40.66975088	BQ	37
OCS-A 0521	Mayflower Wind Energy	-70.49743739	40.66946882	BQ	36
OCS-A 0521	Mayflower Wind Energy	-70.51934164	40.66918261	BQ	35
OCS-A 0521	Mayflower Wind Energy	-70.54124557	40.66889224	BQ	34
OCS-A 0521	Mayflower Wind Energy	-70.56314918	40.66859772	BQ	33
OCS-A 0521	Mayflower Wind Energy	-70.58505246	40.66829905	BQ	32
OCS-A 0521	Mayflower Wind Energy	-70.60695542	40.66799622	BQ	31
OCS-A 0521	Mayflower Wind Energy	-70.43136613	40.65362352	BR	39
OCS-A 0521	Mayflower Wind Energy	-70.45326585	40.65334993	BR	38
OCS-A 0521	Mayflower Wind Energy	-70.47516527	40.65307218	BR	37
OCS-A 0521	Mayflower Wind Energy	-70.49706438	40.65279029	BR	36
OCS-A 0521	Mayflower Wind Energy	-70.51896318	40.65250424	BR	35
OCS-A 0521	Mayflower Wind Energy	-70.54086166	40.65221405	BR	34
OCS-A 0521	Mayflower Wind Energy	-70.56275982	40.6519197	BR	33
OCS-A 0521	Mayflower Wind Energy	-70.58465765	40.6516212	BR	32
OCS-A 0521	Mayflower Wind Energy	-70.60655516	40.65131855	BR	31
OCS-A 0521	Mayflower Wind Energy	-70.62845233	40.65101175	BR	30
OCS-A 0521	Mayflower Wind Energy	-70.45290405	40.63667101	BS	38
OCS-A 0521	Mayflower Wind Energy	-70.47479802	40.63639343	BS	37

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0521	Mayflower Wind Energy	-70.49669168	40.6361117	BS	36
OCS-A 0521	Mayflower Wind Energy	-70.51858503	40.63582583	BS	35
OCS-A 0521	Mayflower Wind Energy	-70.54047807	40.6355358	BS	34
OCS-A 0521	Mayflower Wind Energy	-70.56237078	40.63524162	BS	33
OCS-A 0521	Mayflower Wind Energy	-70.58426317	40.6349433	BS	32
OCS-A 0521	Mayflower Wind Energy	-70.60615523	40.63464083	BS	31
OCS-A 0521	Mayflower Wind Energy	-70.62804695	40.63433421	BS	30
OCS-A 0521	Mayflower Wind Energy	-70.4963193	40.61943307	BT	36
OCS-A 0521	Mayflower Wind Energy	-70.51820721	40.61914736	BT	35
OCS-A 0521	Mayflower Wind Energy	-70.49594722	40.60275438	BU	36
OCS-A 0521	Mayflower Wind Energy	-70.51782969	40.60246884	BU	35
OCS-A 0522	Vineyard Wind	-70.23703321	40.80602035	BG	48
OCS-A 0522	Vineyard Wind	-70.21508146	40.80625364	BG	49
OCS-A 0522	Vineyard Wind	-70.23672357	40.7893404	BH	48
OCS-A 0522	Vineyard Wind	-70.21477731	40.78957355	BH	49
OCS-A 0522	Vineyard Wind	-70.25835471	40.77242321	BJ	47
OCS-A 0522	Vineyard Wind	-70.23641419	40.7726604	BJ	48
OCS-A 0522	Vineyard Wind	-70.21447341	40.77289342	BJ	49
OCS-A 0522	Vineyard Wind	-70.27997488	40.75550208	BK	46
OCS-A 0522	Vineyard Wind	-70.25804011	40.7557433	BK	47
OCS-A 0522	Vineyard Wind	-70.23610507	40.75598035	BK	48
OCS-A 0522	Vineyard Wind	-70.21416977	40.75621323	BK	49
OCS-A 0522	Vineyard Wind	-70.30158409	40.73857702	BL	45
OCS-A 0522	Vineyard Wind	-70.27965506	40.73882226	BL	46
OCS-A 0522	Vineyard Wind	-70.25772577	40.73906334	BL	47
OCS-A 0522	Vineyard Wind	-70.23579621	40.73930025	BL	48
OCS-A 0522	Vineyard Wind	-70.21386639	40.73953299	BL	49
OCS-A 0522	Vineyard Wind	-70.19193632	40.73976157	BL	50
OCS-A 0522	Vineyard Wind	-70.17000599	40.73998599	BL	51
OCS-A 0522	Vineyard Wind	-70.14807543	40.74020624	BL	52
OCS-A 0522	Vineyard Wind	-70.12614462	40.74042232	BL	53
OCS-A 0522	Vineyard Wind	-70.10421358	40.74063423	BL	54

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0522	Vineyard Wind	-70.0822823	40.74084199	BL	55
OCS-A 0522	Vineyard Wind	-70.0603508	40.74104557	BL	56
OCS-A 0522	Vineyard Wind	-70.03841908	40.74124499	BL	57
OCS-A 0522	Vineyard Wind	-70.32318236	40.72164803	BM	44
OCS-A 0522	Vineyard Wind	-70.30125907	40.72189729	BM	45
OCS-A 0522	Vineyard Wind	-70.27933551	40.72214239	BM	46
OCS-A 0522	Vineyard Wind	-70.25741169	40.72238332	BM	47
OCS-A 0522	Vineyard Wind	-70.2354876	40.7226201	BM	48
OCS-A 0522	Vineyard Wind	-70.21356326	40.7228527	BM	49
OCS-A 0522	Vineyard Wind	-70.19163866	40.72308115	BM	50
OCS-A 0522	Vineyard Wind	-70.16971381	40.72330543	BM	51
OCS-A 0522	Vineyard Wind	-70.14778872	40.72352555	BM	52
OCS-A 0522	Vineyard Wind	-70.12586338	40.72374151	BM	53
OCS-A 0522	Vineyard Wind	-70.10393781	40.7239533	BM	54
OCS-A 0522	Vineyard Wind	-70.08201201	40.72416093	BM	55
OCS-A 0522	Vineyard Wind	-70.06008599	40.7243644	BM	56
OCS-A 0522	Vineyard Wind	-70.03815974	40.7245637	BM	57
OCS-A 0522	Vineyard Wind	-70.34476968	40.70471512	BN	43
OCS-A 0522	Vineyard Wind	-70.32285214	40.7049684	BN	44
OCS-A 0522	Vineyard Wind	-70.30093432	40.70521751	BN	45
OCS-A 0522	Vineyard Wind	-70.27901623	40.70546246	BN	46
OCS-A 0522	Vineyard Wind	-70.25709788	40.70570326	BN	47
OCS-A 0522	Vineyard Wind	-70.23517926	40.70593989	BN	48
OCS-A 0522	Vineyard Wind	-70.21326038	40.70617237	BN	49
OCS-A 0522	Vineyard Wind	-70.19134125	40.70640068	BN	50
OCS-A 0522	Vineyard Wind	-70.16942187	40.70662483	BN	51
OCS-A 0522	Vineyard Wind	-70.14750225	40.70684482	BN	52
OCS-A 0522	Vineyard Wind	-70.12558238	40.70706065	BN	53
OCS-A 0522	Vineyard Wind	-70.10366228	40.70727232	BN	54
OCS-A 0522	Vineyard Wind	-70.08174195	40.70747983	BN	55
OCS-A 0522	Vineyard Wind	-70.0598214	40.70768318	BN	56
OCS-A 0522	Vineyard Wind	-70.03790062	40.70788236	BN	57
OCS-A 0522	Vineyard Wind	-70.36634607	40.6877783	BP	42
OCS-A 0522	Vineyard Wind	-70.34443428	40.68803559	BP	43
OCS-A 0522	Vineyard Wind	-70.3225222	40.68828871	BP	44
OCS-A 0522	Vineyard Wind	-70.30060984	40.68853768	BP	45
OCS-A 0522	Vineyard Wind	-70.27869722	40.68878249	BP	46
OCS-A 0522	Vineyard Wind	-70.25678432	40.68902315	BP	47
OCS-A 0522	Vineyard Wind	-70.23487117	40.68925964	BP	48
OCS-A 0522	Vineyard Wind	-70.21295776	40.68949198	BP	49
OCS-A 0522	Vineyard Wind	-70.19104409	40.68972016	BP	50
OCS-A 0522	Vineyard Wind	-70.16913017	40.68994418	BP	51
OCS-A 0522	Vineyard Wind	-70.14721601	40.69016404	BP	52

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0522	Vineyard Wind	-70.12530162	40.69037975	BP	53
OCS-A 0522	Vineyard Wind	-70.10338698	40.69059129	BP	54
OCS-A 0522	Vineyard Wind	-70.08147212	40.69079868	BP	55
OCS-A 0522	Vineyard Wind	-70.05955703	40.6910019	BP	56
OCS-A 0522	Vineyard Wind	-70.03764172	40.69120097	BP	57
OCS-A 0522	Vineyard Wind	-70.38791155	40.67083758	BQ	41
OCS-A 0522	Vineyard Wind	-70.36600549	40.67109887	BQ	42
OCS-A 0522	Vineyard Wind	-70.34409915	40.671356	BQ	43
OCS-A 0522	Vineyard Wind	-70.32219253	40.67160898	BQ	44
OCS-A 0522	Vineyard Wind	-70.30028564	40.6718578	BQ	45
OCS-A 0522	Vineyard Wind	-70.27837847	40.67210247	BQ	46
OCS-A 0522	Vineyard Wind	-70.25647104	40.67234298	BQ	47
OCS-A 0522	Vineyard Wind	-70.23456334	40.67257934	BQ	48
OCS-A 0522	Vineyard Wind	-70.21265538	40.67281154	BQ	49
OCS-A 0522	Vineyard Wind	-70.19074718	40.67303959	BQ	50
OCS-A 0522	Vineyard Wind	-70.16883872	40.67326348	BQ	51
OCS-A 0522	Vineyard Wind	-70.14693002	40.67348321	BQ	52
OCS-A 0522	Vineyard Wind	-70.12502108	40.67369879	BQ	53
OCS-A 0522	Vineyard Wind	-70.10311191	40.67391021	BQ	54
OCS-A 0522	Vineyard Wind	-70.08120251	40.67411748	BQ	55
OCS-A 0522	Vineyard Wind	-70.05929288	40.67432058	BQ	56
OCS-A 0522	Vineyard Wind	-70.03738303	40.67451954	BQ	57
OCS-A 0522	Vineyard Wind	-70.40946611	40.65389296	BR	40
OCS-A 0522	Vineyard Wind	-70.3875658	40.65415824	BR	41
OCS-A 0522	Vineyard Wind	-70.3656652	40.65441938	BR	42
OCS-A 0522	Vineyard Wind	-70.34376431	40.65467636	BR	43
OCS-A 0522	Vineyard Wind	-70.32186314	40.65492919	BR	44
OCS-A 0522	Vineyard Wind	-70.2999617	40.65517787	BR	45
OCS-A 0522	Vineyard Wind	-70.27805999	40.6554224	BR	46
OCS-A 0522	Vineyard Wind	-70.25615801	40.65566277	BR	47
OCS-A 0522	Vineyard Wind	-70.23425577	40.65589899	BR	48
OCS-A 0522	Vineyard Wind	-70.21235327	40.65613105	BR	49
OCS-A 0522	Vineyard Wind	-70.19045052	40.65635897	BR	50
OCS-A 0522	Vineyard Wind	-70.16854752	40.65658272	BR	51
OCS-A 0522	Vineyard Wind	-70.14664427	40.65680233	BR	52
OCS-A 0522	Vineyard Wind	-70.12474079	40.65701778	BR	53
OCS-A 0522	Vineyard Wind	-70.10283707	40.65722908	BR	54
OCS-A 0522	Vineyard Wind	-70.08093312	40.65743622	BR	55
OCS-A 0522	Vineyard Wind	-70.05902895	40.65763921	BR	56
OCS-A 0522	Vineyard Wind	-70.03712456	40.65783805	BR	57
OCS-A 0522	Vineyard Wind	-70.43100978	40.63694445	BS	39
OCS-A 0522	Vineyard Wind	-70.4091152	40.63721373	BS	40
OCS-A 0522	Vineyard Wind	-70.38722034	40.63747886	BS	41

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0522	Vineyard Wind	-70.36532519	40.63773984	BS	42
OCS-A 0522	Vineyard Wind	-70.34342975	40.63799667	BS	43
OCS-A 0522	Vineyard Wind	-70.32153403	40.63824936	BS	44
OCS-A 0522	Vineyard Wind	-70.29963804	40.63849789	BS	45
OCS-A 0522	Vineyard Wind	-70.27774177	40.63874227	BS	46
OCS-A 0522	Vineyard Wind	-70.25584524	40.6389825	BS	47
OCS-A 0522	Vineyard Wind	-70.23394845	40.63921858	BS	48
OCS-A 0522	Vineyard Wind	-70.2120514	40.63945051	BS	49
OCS-A 0522	Vineyard Wind	-70.1901541	40.63967829	BS	50
OCS-A 0522	Vineyard Wind	-70.16825655	40.63990192	BS	51
OCS-A 0522	Vineyard Wind	-70.14635876	40.6401214	BS	52
OCS-A 0522	Vineyard Wind	-70.12446073	40.64033672	BS	53
OCS-A 0522	Vineyard Wind	-70.10256246	40.6405479	BS	54
OCS-A 0522	Vineyard Wind	-70.08066396	40.64075492	BS	55
OCS-A 0522	Vineyard Wind	-70.05876524	40.64095779	BS	56
OCS-A 0522	Vineyard Wind	-70.0368663	40.64115651	BS	57
OCS-A 0522	Vineyard Wind	-70.43065372	40.62026532	BT	39
OCS-A 0522	Vineyard Wind	-70.40876459	40.62053445	BT	40
OCS-A 0522	Vineyard Wind	-70.38687517	40.62079942	BT	41
OCS-A 0522	Vineyard Wind	-70.36498546	40.62106025	BT	42
OCS-A 0522	Vineyard Wind	-70.34309547	40.62131694	BT	43
OCS-A 0522	Vineyard Wind	-70.32120519	40.62156947	BT	44
OCS-A 0522	Vineyard Wind	-70.45254255	40.61999205	BT	38
OCS-A 0522	Vineyard Wind	-70.47443108	40.61971463	BT	37
OCS-A 0522	Vineyard Wind	-70.43029796	40.60358615	BU	39
OCS-A 0522	Vineyard Wind	-70.40841427	40.60385512	BU	40
OCS-A 0522	Vineyard Wind	-70.38653029	40.60411994	BU	41
OCS-A 0522	Vineyard Wind	-70.36464602	40.60438062	BU	42
OCS-A 0522	Vineyard Wind	-70.34276146	40.60463715	BU	43
OCS-A 0522	Vineyard Wind	-70.32087663	40.60488954	BU	44
OCS-A 0522	Vineyard Wind	-70.45218135	40.60331304	BU	38
OCS-A 0522	Vineyard Wind	-70.47406444	40.60303578	BU	37
OCS-A 0501		-70.44183139	41.13729442	AL	39
OCS-A 0501		-70.46389109	41.13701615	AL	38
OCS-A 0501		-70.48595048	41.13673366	AL	37
OCS-A 0501		-70.44146627	41.12061682	AM	39
OCS-A 0501		-70.46352039	41.12033872	AM	38
OCS-A 0501		-70.48557419	41.12005639	AM	37
OCS-A 0501		-70.44110145	41.10393918	AN	39
OCS-A 0501		-70.46314999	41.10366124	AN	38
OCS-A 0501		-70.48519822	41.10337908	AN	37
OCS-A 0501		-70.50724614	41.1030927	AN	36
OCS-A 0501		-70.44073694	41.08726149	AP	39

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0501		-70.41869366	41.08753505	AP	40
OCS-A 0501		-70.39665009	41.0878044	AP	41
OCS-A 0501		-70.37460621	41.08806953	AP	42
OCS-A 0501		-70.46277991	41.08698371	AP	38
OCS-A 0501		-70.48482256	41.08670171	AP	37
OCS-A 0501		-70.50686491	41.0864155	AP	36
OCS-A 0501		-70.52890693	41.08612507	AP	35
OCS-A 0501		-70.44037273	41.07058374	AQ	39
OCS-A 0501		-70.41833502	41.07085715	AQ	40
OCS-A 0501		-70.39629701	41.07112634	AQ	41
OCS-A 0501		-70.37425871	41.07139132	AQ	42
OCS-A 0501		-70.46241013	41.07030612	AQ	38
OCS-A 0501		-70.48444722	41.07002429	AQ	37
OCS-A 0501		-70.506484	41.06973825	AQ	36
OCS-A 0501		-70.52852046	41.06944799	AQ	35
OCS-A 0501		-70.55055659	41.06915352	AQ	34
OCS-A 0501		-70.44000883	41.05390594	AR	39
OCS-A 0501		-70.41797669	41.05417919	AR	40
OCS-A 0501		-70.39594424	41.05444822	AR	41
OCS-A 0501		-70.3739115	41.05471305	AR	42
OCS-A 0501		-70.46204067	41.05362849	AR	38
OCS-A 0501		-70.4840722	41.05334682	AR	37
OCS-A 0501		-70.50610341	41.05306095	AR	36
OCS-A 0501		-70.52813431	41.05277086	AR	35
OCS-A 0501		-70.55016488	41.05247656	AR	34
OCS-A 0501		-70.57219512	41.05217806	AR	33
OCS-A 0501		-70.43964523	41.0372281	AS	39
OCS-A 0501		-70.41761865	41.03750118	AS	40
OCS-A 0501		-70.39559176	41.03777006	AS	41
OCS-A 0501		-70.37356458	41.03803473	AS	42
OCS-A 0501		-70.46167151	41.0369508	AS	38
OCS-A 0501		-70.48369749	41.0366693	AS	37
OCS-A 0501		-70.50572314	41.03638359	AS	36
OCS-A 0501		-70.52774848	41.03609367	AS	35
OCS-A 0501		-70.54977349	41.03579955	AS	34
OCS-A 0501		-70.57179818	41.03550122	AS	33
OCS-A 0501		-70.59382253	41.03519868	AS	32
OCS-A 0501		-70.43928194	41.0205502	AT	39
OCS-A 0501		-70.41726091	41.02082312	AT	40
OCS-A 0501		-70.39523958	41.02109185	AT	41
OCS-A 0501		-70.37321795	41.02135636	AT	42
OCS-A 0501		-70.46130267	41.02027307	AT	38
OCS-A 0501		-70.48332309	41.01999173	AT	37

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0501		-70.50534319	41.01970618	AT	36
OCS-A 0501		-70.52736298	41.01941644	AT	35
OCS-A 0501		-70.54938244	41.01912248	AT	34
OCS-A 0501		-70.57140157	41.01882433	AT	33
OCS-A 0501		-70.59342038	41.01852197	AT	32
OCS-A 0501		-70.61543884	41.0182154	AT	31
OCS-A 0501		-70.43891896	41.00387225	AU	39
OCS-A 0501		-70.41690347	41.00414502	AU	40
OCS-A 0501		-70.46093414	41.00359528	AU	38
OCS-A 0501		-70.48294901	41.0033141	AU	37
OCS-A 0501		-70.50496356	41.00302873	AU	36
OCS-A 0501		-70.5269778	41.00273915	AU	35
OCS-A 0501		-70.54899171	41.00244537	AU	34
OCS-A 0501		-70.5710053	41.00214738	AU	33
OCS-A 0501		-70.59301855	41.0018452	AU	32
OCS-A 0501		-70.61503147	41.00153881	AU	31
OCS-A 0501		-70.63704405	41.00122822	AU	30
OCS-A 0501		-70.43855628	40.98719425	AV	39
OCS-A 0501		-70.46056591	40.98691744	AV	38
OCS-A 0501		-70.48257524	40.98663643	AV	37
OCS-A 0501		-70.50458425	40.98635122	AV	36
OCS-A 0501		-70.52659294	40.98606181	AV	35
OCS-A 0501		-70.54860131	40.9857682	AV	34
OCS-A 0501		-70.57060936	40.98547039	AV	33
OCS-A 0501		-70.59261707	40.98516838	AV	32
OCS-A 0501		-70.61462444	40.98486217	AV	31
OCS-A 0501		-70.63663148	40.98455177	AV	30
OCS-A 0501		-70.65863817	40.98423716	AV	29
OCS-A 0501		-70.6806445	40.98391835	AV	28
OCS-A 0501		-70.46019799	40.97023955	AW	38
OCS-A 0501		-70.48220178	40.9699587	AW	37
OCS-A 0501		-70.50420525	40.96967366	AW	36
OCS-A 0501		-70.52620841	40.96938442	AW	35
OCS-A 0501		-70.54821124	40.96909098	AW	34
OCS-A 0501		-70.57021375	40.96879335	AW	33
OCS-A 0501		-70.59221592	40.96849151	AW	32
OCS-A 0501		-70.61421776	40.96818548	AW	31
OCS-A 0501		-70.63621926	40.96787526	AW	30
OCS-A 0501		-70.65822041	40.96756083	AW	29
OCS-A 0501		-70.68022121	40.96724222	AW	28
OCS-A 0501		-70.48182864	40.95328093	AX	37
OCS-A 0501		-70.50382658	40.95299605	AX	36
OCS-A 0501		-70.5258242	40.95270698	AX	35

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0501		-70.5478215	40.95241371	AX	34
OCS-A 0501		-70.56981847	40.95211625	AX	33
OCS-A 0501		-70.59181511	40.95181459	AX	32
OCS-A 0501		-70.61381142	40.95150874	AX	31
OCS-A 0501		-70.63580738	40.9511987	AX	30
OCS-A 0501		-70.657803	40.95088446	AX	29
OCS-A 0501		-70.67979827	40.95056602	AX	28
OCS-A 0501		-70.70179318	40.9502434	AX	27
OCS-A 0501		-70.72378774	40.94991658	AX	26
OCS-A 0501		-70.50344822	40.93631839	AY	36
OCS-A 0501		-70.52544031	40.93602948	AY	35
OCS-A 0501		-70.54743208	40.93573639	AY	34
OCS-A 0501		-70.56942352	40.9354391	AY	33
OCS-A 0501		-70.59141463	40.93513762	AY	32
OCS-A 0501		-70.61340541	40.93483195	AY	31
OCS-A 0501		-70.63539585	40.93452208	AY	30
OCS-A 0501		-70.65738594	40.93420803	AY	29
OCS-A 0501		-70.67937568	40.93388978	AY	28
OCS-A 0501		-70.70136507	40.93356734	AY	27
OCS-A 0501		-70.7233541	40.93324071	AY	26
OCS-A 0501		-70.52505674	40.91935194	AZ	35
OCS-A 0501		-70.54704299	40.91905901	AZ	34
OCS-A 0501		-70.56902891	40.9187619	AZ	33
OCS-A 0501		-70.59101449	40.9184606	AZ	32
OCS-A 0501		-70.61299975	40.9181551	AZ	31
OCS-A 0501		-70.63498466	40.91784542	AZ	30
OCS-A 0501		-70.65696923	40.91753155	AZ	29
OCS-A 0501		-70.67895345	40.91721349	AZ	28
OCS-A 0501		-70.70093732	40.91689124	AZ	27
OCS-A 0501		-70.72292082	40.9165648	AZ	26
OCS-A 0501		-70.74490397	40.91623417	AZ	25
OCS-A 0501		-70.76688675	40.91589935	AZ	24
OCS-A 0501		-70.52467349	40.90267434	BA	35
OCS-A 0501		-70.54665422	40.90238159	BA	34
OCS-A 0501		-70.56863462	40.90208465	BA	33
OCS-A 0501		-70.59061469	40.90178352	BA	32
OCS-A 0501		-70.61259443	40.90147821	BA	31
OCS-A 0501		-70.63457382	40.9011687	BA	30
OCS-A 0501		-70.65655287	40.90085501	BA	29
OCS-A 0501		-70.67853157	40.90053714	BA	28
OCS-A 0501		-70.70050992	40.90021508	BA	27
OCS-A 0501		-70.72248791	40.89988883	BA	26
OCS-A 0501		-70.74446554	40.89955839	BA	25

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0501		-70.7664428	40.89922377	BA	24
OCS-A 0501		-70.56824067	40.88540735	BB	33
OCS-A 0501		-70.59021522	40.88510639	BB	32
OCS-A 0501		-70.61218944	40.88480126	BB	31
OCS-A 0501		-70.63416332	40.88449194	BB	30
OCS-A 0501		-70.65613686	40.88417843	BB	29
OCS-A 0501		-70.67811005	40.88386074	BB	28
OCS-A 0501		-70.70008288	40.88353887	BB	27
OCS-A 0501		-70.72205536	40.88321281	BB	26
OCS-A 0501		-70.74402748	40.88288257	BB	25
OCS-A 0501		-70.76599923	40.88254814	BB	24
OCS-A 0501		-70.7879706	40.88220953	BB	23
OCS-A 0501		-70.56784704	40.86872999	BC	33
OCS-A 0501		-70.58981609	40.86842922	BC	32
OCS-A 0501		-70.6117848	40.86812426	BC	31
OCS-A 0501		-70.63375317	40.86781512	BC	30
OCS-A 0501		-70.6557212	40.86750179	BC	29
OCS-A 0501		-70.67768888	40.86718429	BC	28
OCS-A 0501		-70.6996562	40.8668626	BC	27
OCS-A 0501		-70.72162317	40.86653674	BC	26
OCS-A 0501		-70.74358978	40.86620669	BC	25
OCS-A 0501		-70.76555602	40.86587246	BC	24
OCS-A 0501		-70.78752189	40.86553405	BC	23
OCS-A 0501		-70.80948739	40.86519146	BC	22
OCS-A 0501		-70.61138049	40.8514472	BD	31
OCS-A 0501		-70.63334336	40.85113824	BD	30
OCS-A 0501		-70.65530588	40.8508251	BD	29
OCS-A 0501		-70.67726806	40.85050779	BD	28
OCS-A 0501		-70.69922988	40.85018629	BD	27
OCS-A 0501		-70.72119135	40.84986061	BD	26
OCS-A 0501		-70.74315245	40.84953076	BD	25
OCS-A 0501		-70.76511319	40.84919672	BD	24
OCS-A 0501		-70.78707356	40.84885851	BD	23
OCS-A 0501		-70.80903355	40.84851612	BD	22
OCS-A 0501		-70.83099316	40.84816955	BD	21
OCS-A 0501		-70.61097653	40.8347701	BE	31
OCS-A 0501		-70.63293389	40.83446132	BE	30
OCS-A 0501		-70.65489092	40.83414836	BE	29
OCS-A 0501		-70.67684759	40.83383123	BE	28
OCS-A 0501		-70.69880392	40.83350992	BE	27
OCS-A 0501		-70.72075989	40.83318443	BE	26
OCS-A 0501		-70.74271549	40.83285477	BE	25
OCS-A 0501		-70.6544763	40.81747157	BF	29

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0501		-70.67642748	40.81715462	BF	28
OCS-A 0501		-70.69837831	40.8168335	BF	27
OCS-A 0501		-70.72032878	40.81650821	BF	26
OCS-A 0501		-70.7422789	40.81617874	BF	25
OCS-A 0501		-70.67600772	40.80047797	BG	28
OCS-A 0501		-70.69795306	40.80015703	BG	27
OCS-A 0501		-70.71989804	40.79983192	BG	26
OCS-A 0501		-70.74184267	40.79950265	BG	25
OCS-A 0501		-70.69752816	40.78348051	BH	27
OCS-A 0501		-70.71946766	40.78315559	BH	26
OCS-A 0501		-70.7414068	40.78282651	BH	25
OCS-A 0501		-70.71903764	40.76647921	BJ	26
OCS-A 0501		-70.7409713	40.76615031	BJ	25
OCS-A 0501		-70.74053616	40.74947407	BK	25
OCS-A 0500	Orsted US	-70.50800955	41.13644695	AL	36
OCS-A 0500	Orsted US	-70.5300683	41.13615601	AL	35
OCS-A 0500	Orsted US	-70.55212673	41.13586086	AL	34
OCS-A 0500	Orsted US	-70.57418483	41.13556148	AL	33
OCS-A 0500	Orsted US	-70.59624259	41.13525788	AL	32
OCS-A 0500	Orsted US	-70.50762768	41.11976985	AM	36
OCS-A 0500	Orsted US	-70.52968086	41.11947908	AM	35
OCS-A 0500	Orsted US	-70.5517337	41.1191841	AM	34
OCS-A 0500	Orsted US	-70.57378622	41.1188849	AM	33
OCS-A 0500	Orsted US	-70.5958384	41.11858147	AM	32
OCS-A 0500	Orsted US	-70.61789024	41.11827383	AM	31
OCS-A 0500	Orsted US	-70.63994174	41.11796197	AM	30
OCS-A 0500	Orsted US	-70.52929373	41.10280211	AN	35
OCS-A 0500	Orsted US	-70.551341	41.10250729	AN	34
OCS-A 0500	Orsted US	-70.57338794	41.10220826	AN	33
OCS-A 0500	Orsted US	-70.59543455	41.10190502	AN	32
OCS-A 0500	Orsted US	-70.61748081	41.10159756	AN	31
OCS-A 0500	Orsted US	-70.63952674	41.10128588	AN	30
OCS-A 0500	Orsted US	-70.66157231	41.10096998	AN	29
OCS-A 0500	Orsted US	-70.68361754	41.10064987	AN	28
OCS-A 0500	Orsted US	-70.7056624	41.10032555	AN	27
OCS-A 0500	Orsted US	-70.7277069	41.099997	AN	26
OCS-A 0500	Orsted US	-70.74975104	41.09966424	AN	25
OCS-A 0500	Orsted US	-70.7717948	41.09932727	AN	24
OCS-A 0500	Orsted US	-70.79383819	41.09898608	AN	23
OCS-A 0500	Orsted US	-70.55094863	41.08583043	AP	34
OCS-A 0500	Orsted US	-70.57299	41.08553158	AP	33
OCS-A 0500	Orsted US	-70.59503104	41.08522851	AP	32
OCS-A 0500	Orsted US	-70.61707173	41.08492123	AP	31

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0500	Orsted US	-70.63911209	41.08460973	AP	30
OCS-A 0500	Orsted US	-70.66115209	41.08429402	AP	29
OCS-A 0500	Orsted US	-70.68319175	41.0839741	AP	28
OCS-A 0500	Orsted US	-70.70523104	41.08364996	AP	27
OCS-A 0500	Orsted US	-70.72726998	41.08332161	AP	26
OCS-A 0500	Orsted US	-70.74930855	41.08298905	AP	25
OCS-A 0500	Orsted US	-70.77134674	41.08265227	AP	24
OCS-A 0500	Orsted US	-70.815422	41.08196608	AP	22
OCS-A 0500	Orsted US	-70.57259239	41.06885484	AQ	33
OCS-A 0500	Orsted US	-70.59462786	41.06855195	AQ	32
OCS-A 0500	Orsted US	-70.616663	41.06824485	AQ	31
OCS-A 0500	Orsted US	-70.63869779	41.06793353	AQ	30
OCS-A 0500	Orsted US	-70.66073223	41.06761801	AQ	29
OCS-A 0500	Orsted US	-70.68276632	41.06729827	AQ	28
OCS-A 0500	Orsted US	-70.70480005	41.06697432	AQ	27
OCS-A 0500	Orsted US	-70.72683342	41.06664616	AQ	26
OCS-A 0500	Orsted US	-70.74886642	41.06631379	AQ	25
OCS-A 0500	Orsted US	-70.77089906	41.06597721	AQ	24
OCS-A 0500	Orsted US	-70.79293131	41.06563642	AQ	23
OCS-A 0500	Orsted US	-70.59422503	41.05187534	AR	32
OCS-A 0500	Orsted US	-70.6162546	41.05156842	AR	31
OCS-A 0500	Orsted US	-70.63828383	41.05125728	AR	30
OCS-A 0500	Orsted US	-70.66031271	41.05094194	AR	29
OCS-A 0500	Orsted US	-70.68234124	41.05062239	AR	28
OCS-A 0500	Orsted US	-70.70436941	41.05029863	AR	27
OCS-A 0500	Orsted US	-70.72639723	41.04997066	AR	26
OCS-A 0500	Orsted US	-70.74842467	41.04963849	AR	25
OCS-A 0500	Orsted US	-70.77045175	41.0493021	AR	24
OCS-A 0500	Orsted US	-70.79247845	41.04896151	AR	23
OCS-A 0500	Orsted US	-70.61584655	41.03489193	AS	31
OCS-A 0500	Orsted US	-70.63787022	41.03458098	AS	30
OCS-A 0500	Orsted US	-70.65989355	41.03426582	AS	29
OCS-A 0500	Orsted US	-70.68191652	41.03394646	AS	28
OCS-A 0500	Orsted US	-70.70393914	41.03362289	AS	27
OCS-A 0500	Orsted US	-70.7259614	41.03329511	AS	26
OCS-A 0500	Orsted US	-70.74798329	41.03296313	AS	25
OCS-A 0500	Orsted US	-70.77000481	41.03262694	AS	24
OCS-A 0500	Orsted US	-70.79202596	41.03228655	AS	23
OCS-A 0500	Orsted US	-70.81404673	41.03194195	AS	22
OCS-A 0500	Orsted US	-70.63745696	41.01790463	AT	30
OCS-A 0500	Orsted US	-70.65947474	41.01758965	AT	29
OCS-A 0500	Orsted US	-70.68149216	41.01727048	AT	28
OCS-A 0500	Orsted US	-70.70350923	41.0169471	AT	27

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0500	Orsted US	-70.72552594	41.01661951	AT	26
OCS-A 0500	Orsted US	-70.74754228	41.01628772	AT	25
OCS-A 0500	Orsted US	-70.76955825	41.01595173	AT	24
OCS-A 0500	Orsted US	-70.79157385	41.01561154	AT	23
OCS-A 0500	Orsted US	-70.81358907	41.01526714	AT	22
OCS-A 0500	Orsted US	-70.65905628	41.00091343	AU	29
OCS-A 0500	Orsted US	-70.68106815	41.00059444	AU	28
OCS-A 0500	Orsted US	-70.70307968	41.00027125	AU	27
OCS-A 0500	Orsted US	-70.72509084	40.99994386	AU	26
OCS-A 0500	Orsted US	-70.74710164	40.99961226	AU	25
OCS-A 0500	Orsted US	-70.76911207	40.99927647	AU	24
OCS-A 0500	Orsted US	-70.79112212	40.99893647	AU	23
OCS-A 0500	Orsted US	-70.8131318	40.99859228	AU	22
OCS-A 0487	Orsted US	-70.83514109	40.99824388	AU	21
OCS-A 0487	Orsted US	-70.85714999	40.99789129	AU	20
OCS-A 0487	Orsted US	-70.8791585	40.99753449	AU	19
OCS-A 0487	Orsted US	-70.90116662	40.9971735	AU	18
OCS-A 0487	Orsted US	-70.92317433	40.99680831	AU	17
OCS-A 0487	Orsted US	-70.94518164	40.99643892	AU	16
OCS-A 0487	Orsted US	-70.96718853	40.99606533	AU	15
OCS-A 0487	Orsted US	-70.98919501	40.99568754	AU	14
OCS-A 0487	Orsted US	-71.01120107	40.99530555	AU	13
OCS-A 0487	Orsted US	-71.0332067	40.99491937	AU	12
OCS-A 0500	Orsted US	-70.70265049	40.98359535	AV	27
OCS-A 0500	Orsted US	-70.72465611	40.98326815	AV	26
OCS-A 0500	Orsted US	-70.74666137	40.98293675	AV	25
OCS-A 0500	Orsted US	-70.76866626	40.98260115	AV	24
OCS-A 0500	Orsted US	-70.79067077	40.98226135	AV	23
OCS-A 0500	Orsted US	-70.81267491	40.98191736	AV	22
OCS-A 0500	Orsted US	-70.83467866	40.98156917	AV	21
OCS-A 0500	Orsted US	-70.85668203	40.98121678	AV	20
OCS-A 0487	Orsted US	-70.878685	40.98086019	AV	19
OCS-A 0487	Orsted US	-70.90068758	40.98049941	AV	18
OCS-A 0487	Orsted US	-70.92268975	40.98013443	AV	17
OCS-A 0487	Orsted US	-70.94469152	40.97976525	AV	16
OCS-A 0487	Orsted US	-70.96669288	40.97939188	AV	15
OCS-A 0487	Orsted US	-70.98869382	40.97901431	AV	14
OCS-A 0487	Orsted US	-71.01069434	40.97863255	AV	13
OCS-A 0487	Orsted US	-71.03269444	40.97824659	AV	12
OCS-A 0500	Orsted US	-70.70222166	40.9669194	AW	27
OCS-A 0500	Orsted US	-70.72422174	40.96659239	AW	26
OCS-A 0500	Orsted US	-70.74622146	40.96626118	AW	25
OCS-A 0500	Orsted US	-70.76822082	40.96592578	AW	24

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0500	Orsted US	-70.7902198	40.96558618	AW	23
OCS-A 0500	Orsted US	-70.8122184	40.96524239	AW	22
OCS-A 0500	Orsted US	-70.83421662	40.9648944	AW	21
OCS-A 0500	Orsted US	-70.85621445	40.96454222	AW	20
OCS-A 0500	Orsted US	-70.87821189	40.96418584	AW	19
OCS-A 0487	Orsted US	-70.90020894	40.96382527	AW	18
OCS-A 0487	Orsted US	-70.92220558	40.9634605	AW	17
OCS-A 0487	Orsted US	-70.94420182	40.96309154	AW	16
OCS-A 0487	Orsted US	-70.96619764	40.96271839	AW	15
OCS-A 0487	Orsted US	-70.98819305	40.96234104	AW	14
OCS-A 0487	Orsted US	-71.01018805	40.9619595	AW	13
OCS-A 0487	Orsted US	-71.03218261	40.96157377	AW	12
OCS-A 0500	Orsted US	-70.74578193	40.94958556	AX	25
OCS-A 0500	Orsted US	-70.76777575	40.94925036	AX	24
OCS-A 0500	Orsted US	-70.78976921	40.94891096	AX	23
OCS-A 0500	Orsted US	-70.81176228	40.94856736	AX	22
OCS-A 0500	Orsted US	-70.83375497	40.94821958	AX	21
OCS-A 0500	Orsted US	-70.85574727	40.9478676	AX	20
OCS-A 0500	Orsted US	-70.87773918	40.94751143	AX	19
OCS-A 0500	Orsted US	-70.8997307	40.94715107	AX	18
OCS-A 0487	Orsted US	-70.92172181	40.94678652	AX	17
OCS-A 0487	Orsted US	-70.94371252	40.94641777	AX	16
OCS-A 0487	Orsted US	-70.96570282	40.94604484	AX	15
OCS-A 0487	Orsted US	-70.98769271	40.94566771	AX	14
OCS-A 0487	Orsted US	-71.00968217	40.94528639	AX	13
OCS-A 0487	Orsted US	-71.03167121	40.94490088	AX	12
OCS-A 0500	Orsted US	-70.74534277	40.93290989	AY	25
OCS-A 0500	Orsted US	-70.76733106	40.93257488	AY	24
OCS-A 0500	Orsted US	-70.78931899	40.93223568	AY	23
OCS-A 0500	Orsted US	-70.81130654	40.93189229	AY	22
OCS-A 0500	Orsted US	-70.8332937	40.93154471	AY	21
OCS-A 0500	Orsted US	-70.85528048	40.93119293	AY	20
OCS-A 0500	Orsted US	-70.87726687	40.93083697	AY	19
OCS-A 0500	Orsted US	-70.89925286	40.93047682	AY	18
OCS-A 0487	Orsted US	-70.92123845	40.93011248	AY	17
OCS-A 0487	Orsted US	-70.94322364	40.92974395	AY	16
OCS-A 0487	Orsted US	-70.96520842	40.92937123	AY	15
OCS-A 0487	Orsted US	-70.98719278	40.92899433	AY	14
OCS-A 0487	Orsted US	-71.00917672	40.92861323	AY	13
OCS-A 0487	Orsted US	-71.03116024	40.92822795	AY	12
OCS-A 0500	Orsted US	-70.78886915	40.91556035	AZ	23
OCS-A 0500	Orsted US	-70.81085118	40.91521716	AZ	22
OCS-A 0500	Orsted US	-70.83283282	40.91486978	AZ	21

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0500	Orsted US	-70.85481408	40.91451821	AZ	20
OCS-A 0500	Orsted US	-70.87679495	40.91416246	AZ	19
OCS-A 0500	Orsted US	-70.89877542	40.91380252	AZ	18
OCS-A 0500	Orsted US	-70.9207555	40.91343839	AZ	17
OCS-A 0487	Orsted US	-70.94273517	40.91307008	AZ	16
OCS-A 0487	Orsted US	-70.96471443	40.91269758	AZ	15
OCS-A 0487	Orsted US	-70.98669327	40.91232089	AZ	14
OCS-A 0487	Orsted US	-71.0086717	40.91194002	AZ	13
OCS-A 0487	Orsted US	-71.0306497	40.91155496	AZ	12
OCS-A 0500	Orsted US	-70.78841969	40.89888497	BA	23
OCS-A 0500	Orsted US	-70.8103962	40.89854198	BA	22
OCS-A 0500	Orsted US	-70.83237233	40.8981948	BA	21
OCS-A 0500	Orsted US	-70.85434807	40.89784344	BA	20
OCS-A 0500	Orsted US	-70.87632343	40.89748789	BA	19
OCS-A 0500	Orsted US	-70.89829839	40.89712816	BA	18
OCS-A 0500	Orsted US	-70.92027295	40.89676425	BA	17
OCS-A 0500	Orsted US	-70.9422471	40.89639615	BA	16
OCS-A 0487	Orsted US	-70.96422085	40.89602387	BA	15
OCS-A 0487	Orsted US	-70.98619418	40.8956474	BA	14
OCS-A 0487	Orsted US	-71.00816709	40.89526675	BA	13
OCS-A 0487	Orsted US	-71.03013959	40.89488192	BA	12
OCS-A 0500	Orsted US	-70.8099416	40.88186674	BB	22
OCS-A 0500	Orsted US	-70.83191222	40.88151977	BB	21
OCS-A 0500	Orsted US	-70.85388246	40.88116861	BB	20
OCS-A 0500	Orsted US	-70.8758523	40.88081328	BB	19
OCS-A 0500	Orsted US	-70.89782175	40.88045376	BB	18
OCS-A 0500	Orsted US	-70.9197908	40.88009005	BB	17
OCS-A 0500	Orsted US	-70.94175945	40.87972217	BB	16
OCS-A 0500	Orsted US	-70.96372768	40.8793501	BB	15
OCS-A 0500	Orsted US	-70.98569551	40.87897386	BB	14
OCS-A 0487	Orsted US	-71.00766291	40.87859343	BB	13
OCS-A 0487	Orsted US	-71.0296299	40.87820882	BB	12
OCS-A 0500	Orsted US	-70.8314525	40.86484469	BC	21
OCS-A 0500	Orsted US	-70.85341723	40.86449374	BC	20
OCS-A 0500	Orsted US	-70.87538157	40.86413861	BC	19
OCS-A 0500	Orsted US	-70.89734551	40.86377929	BC	18
OCS-A 0500	Orsted US	-70.91930906	40.8634158	BC	17
OCS-A 0500	Orsted US	-70.9412722	40.86304814	BC	16
OCS-A 0500	Orsted US	-70.96323493	40.86267629	BC	15
OCS-A 0500	Orsted US	-70.98519725	40.86230026	BC	14
OCS-A 0500	Orsted US	-71.00715916	40.86192006	BC	13
OCS-A 0500	Orsted US	-71.02912064	40.86153567	BC	12
OCS-A 0500	Orsted US	-70.85295239	40.8478188	BD	20

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0500	Orsted US	-70.87491123	40.84746388	BD	19
OCS-A 0500	Orsted US	-70.89686967	40.84710478	BD	18
OCS-A 0500	Orsted US	-70.91882772	40.8467415	BD	17
OCS-A 0500	Orsted US	-70.94078536	40.84637405	BD	16
OCS-A 0500	Orsted US	-70.96274259	40.84600242	BD	15
OCS-A 0500	Orsted US	-70.98469942	40.84562661	BD	14
OCS-A 0500	Orsted US	-71.00665582	40.84524663	BD	13
OCS-A 0500	Orsted US	-71.0286118	40.84486247	BD	12
OCS-A 0500	Orsted US	-71.0281034	40.82818921	BE	12
OCS-A 0500	Orsted US	-71.02759541	40.8115159	BF	12
OCS-A 0500	Orsted US	-71.02708786	40.79484254	BG	12
OCS-A 0500	Orsted US	-71.02658072	40.77816912	BH	12
OCS-A 0500	Orsted US	-71.02607402	40.76149565	BJ	12
OCS-A 0500	Orsted US	-71.02556773	40.74482212	BK	12
OCS-A 0500	Orsted US	-71.02506187	40.72814855	BL	12
OCS-A 0500	Orsted US	-71.02455644	40.71147491	BM	12
OCS-A 0486	Orsted US	-70.83885451	41.1316397	AL	21
OCS-A 0486	Orsted US	-70.86090789	41.13128546	AL	20
OCS-A 0486	Orsted US	-70.88296087	41.13092699	AL	19
OCS-A 0486	Orsted US	-70.90501345	41.13056431	AL	18
OCS-A 0486	Orsted US	-70.92706563	41.13019741	AL	17
OCS-A 0486	Orsted US	-70.9491174	41.12982629	AL	16
OCS-A 0486	Orsted US	-70.97116875	41.12945095	AL	15
OCS-A 0486	Orsted US	-70.99321968	41.12907139	AL	14
OCS-A 0486	Orsted US	-71.01527019	41.12868762	AL	13
OCS-A 0486	Orsted US	-71.03732027	41.12829963	AL	12
OCS-A 0486	Orsted US	-71.05936992	41.12790742	AL	11
OCS-A 0486	Orsted US	-71.08141913	41.12751099	AL	10
OCS-A 0486	Orsted US	-71.10346789	41.12711035	AL	09
OCS-A 0486	Orsted US	-71.12551621	41.12670549	AL	08
OCS-A 0486	Orsted US	-71.19165844	41.12546562	AL	05
OCS-A 0486	Orsted US	-71.21370493	41.1250439	AL	04
OCS-A 0486	Orsted US	-71.23575094	41.12461796	AL	03
OCS-A 0486	Orsted US	-71.25779648	41.12418781	AL	02
OCS-A 0486	Orsted US	-70.94961123	41.14649947	AK	16
OCS-A 0486	Orsted US	-70.97166816	41.14612391	AK	15
OCS-A 0486	Orsted US	-70.99372467	41.14574414	AK	14
OCS-A 0486	Orsted US	-71.01578075	41.14536014	AK	13
OCS-A 0486	Orsted US	-71.03783641	41.14497192	AK	12
OCS-A 0486	Orsted US	-71.05989163	41.14457948	AK	11
OCS-A 0486	Orsted US	-71.08194642	41.14418283	AK	10
OCS-A 0486	Orsted US	-71.10400076	41.14378195	AK	09
OCS-A 0486	Orsted US	-71.12605466	41.14337685	AK	08

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0486	Orsted US	-70.95010547	41.1631726	AJ	16
OCS-A 0486	Orsted US	-70.97216799	41.16279682	AJ	15
OCS-A 0486	Orsted US	-70.99423008	41.16241682	AJ	14
OCS-A 0486	Orsted US	-71.01629175	41.1620326	AJ	13
OCS-A 0486	Orsted US	-71.03835299	41.16164416	AJ	12
OCS-A 0486	Orsted US	-71.06041379	41.16125149	AJ	11
OCS-A 0486	Orsted US	-71.08247416	41.1608546	AJ	10
OCS-A 0486	Orsted US	-71.10453408	41.16045349	AJ	09
OCS-A 0486	Orsted US	-71.12659356	41.16004816	AJ	08
OCS-A 0486	Orsted US	-71.14865258	41.15963861	AJ	07
OCS-A 0486	Orsted US	-71.17071114	41.15922483	AJ	06
OCS-A 0486	Orsted US	-71.19276925	41.15880684	AJ	05
OCS-A 0486	Orsted US	-71.21482688	41.15838462	AJ	04
OCS-A 0486	Orsted US	-71.23688405	41.15795819	AJ	03
OCS-A 0486	Orsted US	-71.25894074	41.15752753	AJ	02
OCS-A 0486	Orsted US	-71.10506785	41.17712498	AH	09
OCS-A 0486	Orsted US	-71.12713291	41.17671941	AH	08
OCS-A 0486	Orsted US	-71.14919751	41.17630962	AH	07
OCS-A 0486	Orsted US	-71.17126166	41.17589561	AH	06
OCS-A 0486	Orsted US	-71.19332535	41.17547737	AH	05
OCS-A 0486	Orsted US	-71.21538857	41.17505491	AH	04
OCS-A 0486	Orsted US	-71.10560206	41.19379641	AG	09
OCS-A 0486	Orsted US	-71.12767271	41.19339061	xx	08
OCS-A 0486	Orsted US	-71.1497429	41.19298058	AG	07
OCS-A 0486	Orsted US	-71.17181264	41.19256632	AG	06
OCS-A 0486	Orsted US	-71.19388192	41.19214784	AG	05
OCS-A 0486	Orsted US	-71.21595072	41.19172513	AG	04
OCS-A 0486	Orsted US	-71.06198289	41.21126719	AF	11
OCS-A 0486	Orsted US	-71.08406003	41.21086961	AF	10
OCS-A 0486	Orsted US	-71.10613672	41.2104678	AF	09
OCS-A 0486	Orsted US	-71.12821296	41.21006175	AF	08
OCS-A 0486	Orsted US	-71.15028875	41.20965148	AF	07
OCS-A 0486	Orsted US	-71.17236408	41.20923699	AF	06
OCS-A 0486	Orsted US	-71.19443895	41.20881826	AF	05
OCS-A 0486	Orsted US	-71.0625068	41.22793898	AE	11
OCS-A 0486	Orsted US	-71.08458954	41.22754117	AE	10
OCS-A 0486	Orsted US	-71.10667183	41.22713912	AE	09
OCS-A 0486	Orsted US	-71.12875367	41.22673284	AE	08
OCS-A 0486	Orsted US	-71.15083506	41.22632233	AE	07
OCS-A 0486	Orsted US	-71.17291599	41.22590759	AE	06
OCS-A 0486	Orsted US	-71.06303116	41.24461072	AD	11
OCS-A 0486	Orsted US	-71.0851195	41.24421268	AD	10
OCS-A 0486	Orsted US	-71.10720739	41.24381039	AD	09

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0486	Orsted US	-71.12929484	41.24340388	AD	08
OCS-A 0486	Orsted US	-71.15138183	41.24299313	AD	07
OCS-A 0486	Orsted US	-71.12983646	41.26007486	AC	08
OCS-A 0486	Orsted US	-71.13037853	41.27674579	AB	08
OCS-A 0486	Orsted US	-71.28563801	41.29044734	AA	01
OCS-A 0486	Orsted US	-70.83838897	41.11496541	AM	21
OCS-A 0486	Orsted US	-70.86043677	41.11461137	AM	20
OCS-A 0486	Orsted US	-70.88248418	41.11425312	AM	19
OCS-A 0486	Orsted US	-70.90453119	41.11389064	AM	18
OCS-A 0486	Orsted US	-70.92657779	41.11352396	AM	17
OCS-A 0486	Orsted US	-70.94862398	41.11315305	AM	16
OCS-A 0486	Orsted US	-70.97066976	41.11277793	AM	15
OCS-A 0486	Orsted US	-70.99271512	41.1123986	AM	14
OCS-A 0486	Orsted US	-71.01476005	41.11201505	AM	13
OCS-A 0486	Orsted US	-71.03680456	41.11162728	AM	12
OCS-A 0486	Orsted US	-71.05884864	41.1112353	AM	11
OCS-A 0517	Orsted US	-71.08089228	41.11083911	AM	10
OCS-A 0517	Orsted US	-71.10293547	41.1104387	AM	09
OCS-A 0517	Orsted US	-71.12497822	41.11003408	AM	08
OCS-A 0517	Orsted US	-71.14702052	41.10962524	AM	07
OCS-A 0517	Orsted US	-71.16906236	41.10921219	AM	06
OCS-A 0517	Orsted US	-71.19110374	41.10879493	AM	05
OCS-A 0486	Orsted US	-71.21314466	41.10837345	AM	04
OCS-A 0486	Orsted US	-71.2351851	41.10794776	AM	03
OCS-A 0486	Orsted US	-71.25722508	41.10751786	AM	02
OCS-A 0486	Orsted US	-70.94813098	41.09647976	AN	16
OCS-A 0486	Orsted US	-70.97017119	41.09610486	AN	15
OCS-A 0486	Orsted US	-70.99221098	41.09572575	AN	14
OCS-A 0486	Orsted US	-71.01425035	41.09534242	AN	13
OCS-A 0486	Orsted US	-71.03628929	41.09495489	AN	12
OCS-A 0486	Orsted US	-71.0583278	41.09456313	AN	11
OCS-A 0517	Orsted US	-71.08036587	41.09416717	AN	10
OCS-A 0517	Orsted US	-71.1024035	41.093767	AN	09
OCS-A 0517	Orsted US	-71.12444068	41.09336261	AN	08
OCS-A 0517	Orsted US	-71.14647741	41.09295401	AN	07
OCS-A 0517	Orsted US	-71.16851369	41.0925412	AN	06
OCS-A 0517	Orsted US	-71.19054951	41.09212418	AN	05
OCS-A 0486	Orsted US	-71.21258486	41.09170295	AN	04
OCS-A 0486	Orsted US	-70.94763839	41.07980642	AP	16
OCS-A 0486	Orsted US	-70.96967303	41.07943174	AP	15
OCS-A 0486	Orsted US	-70.99170726	41.07905285	AP	14
OCS-A 0486	Orsted US	-71.01374107	41.07866975	AP	13
OCS-A 0486	Orsted US	-71.03577444	41.07828243	AP	12

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0486	Orsted US	-71.05780739	41.07789091	AP	11
OCS-A 0517	Orsted US	-71.0798399	41.07749518	AP	10
OCS-A 0517	Orsted US	-71.10187197	41.07709524	AP	09
OCS-A 0517	Orsted US	-71.12390359	41.07669109	AP	08
OCS-A 0517	Orsted US	-71.14593476	41.07628273	AP	07
OCS-A 0517	Orsted US	-71.16796548	41.07587016	AP	06
OCS-A 0517	Orsted US	-71.18999573	41.07545338	AP	05
OCS-A 0486	Orsted US	-71.21202553	41.0750324	AP	04
OCS-A 0487	Orsted US	-70.83745906	41.08161666	AP	21
OCS-A 0487	Orsted US	-70.83699469	41.06494221	AQ	21
OCS-A 0487	Orsted US	-70.85902579	41.06458879	AQ	20
OCS-A 0487	Orsted US	-70.8810565	41.06423117	AQ	19
OCS-A 0487	Orsted US	-70.94665445	41.04645958	AR	16
OCS-A 0487	Orsted US	-71.21090827	41.04169112	AR	04
OCS-A 0487	Orsted US	-71.23292649	41.04126642	AR	03
OCS-A 0487	Orsted US	-71.25494424	41.04083752	AR	02
OCS-A 0487	Orsted US	-70.83606711	41.03159315	AS	21
OCS-A 0487	Orsted US	-70.8580871	41.03124015	AS	20
OCS-A 0487	Orsted US	-70.88010671	41.03088294	AS	19
OCS-A 0487	Orsted US	-70.90212591	41.03052152	AS	18
OCS-A 0487	Orsted US	-70.92414471	41.0301559	AS	17
OCS-A 0487	Orsted US	-70.9461631	41.02978608	AS	16
OCS-A 0487	Orsted US	-70.96818108	41.02941205	AS	15
OCS-A 0487	Orsted US	-70.99019865	41.02903382	AS	14
OCS-A 0487	Orsted US	-71.01221579	41.02865139	AS	13
OCS-A 0487	Orsted US	-71.03423251	41.02826475	AS	12
OCS-A 0487	Orsted US	-71.05624879	41.02787392	AS	11
OCS-A 0487	Orsted US	-71.07826464	41.02747888	AS	10
OCS-A 0487	Orsted US	-71.10028005	41.02707964	AS	09
OCS-A 0487	Orsted US	-71.12229502	41.02667619	AS	08
OCS-A 0487	Orsted US	-71.14430954	41.02626855	AS	07
OCS-A 0487	Orsted US	-71.1663236	41.0258567	AS	06
OCS-A 0487	Orsted US	-71.1883372	41.02544065	AS	05
OCS-A 0487	Orsted US	-71.21035035	41.0250204	AS	04
OCS-A 0487	Orsted US	-71.23236302	41.02459595	AS	03
OCS-A 0487	Orsted US	-71.25437522	41.0241673	AS	02
OCS-A 0487	Orsted US	-71.27638695	41.02373445	AS	01
OCS-A 0487	Orsted US	-70.83560391	41.01491854	AT	21
OCS-A 0487	Orsted US	-70.85761835	41.01456574	AT	20
OCS-A 0487	Orsted US	-70.87963241	41.01420874	AT	19
OCS-A 0487	Orsted US	-70.90164606	41.01384754	AT	18
OCS-A 0487	Orsted US	-70.92365932	41.01348213	AT	17
OCS-A 0487	Orsted US	-70.94567216	41.01311252	AT	16

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0487	Orsted US	-70.9676846	41.01273872	AT	15
OCS-A 0487	Orsted US	-70.98969662	41.01236071	AT	14
OCS-A 0487	Orsted US	-71.01170822	41.0119785	AT	13
OCS-A 0487	Orsted US	-71.03371939	41.01159209	AT	12
OCS-A 0487	Orsted US	-71.05573013	41.01120148	AT	11
OCS-A 0487	Orsted US	-71.07774044	41.01080667	AT	10
OCS-A 0487	Orsted US	-71.0997503	41.01040766	AT	09
OCS-A 0487	Orsted US	-71.12175973	41.01000445	AT	08
OCS-A 0487	Orsted US	-71.1437687	41.00959704	AT	07
OCS-A 0487	Orsted US	-71.16577722	41.00918544	AT	06
OCS-A 0487	Orsted US	-71.18778529	41.00876963	AT	05
OCS-A 0487	Orsted US	-71.20979289	41.00834963	AT	04
OCS-A 0487	Orsted US	-71.23180002	41.00792543	AT	03
OCS-A 0487	Orsted US	-71.25380668	41.00749703	AT	02
OCS-A 0487	Orsted US	-71.27581287	41.00706443	AT	01
OCS-A 0487	Orsted US	-71.0552119	40.99452899	AU	11
OCS-A 0487	Orsted US	-71.07721667	40.99413441	AU	10
OCS-A 0487	Orsted US	-71.099221	40.99373563	AU	09
OCS-A 0487	Orsted US	-71.12122489	40.99333266	AU	08
OCS-A 0487	Orsted US	-71.14322832	40.99292549	AU	07
OCS-A 0487	Orsted US	-71.16523131	40.99251412	AU	06
OCS-A 0487	Orsted US	-71.18723383	40.99209856	AU	05
OCS-A 0487	Orsted US	-71.2092359	40.9916788	AU	04
OCS-A 0487	Orsted US	-71.2312375	40.99125485	AU	03
OCS-A 0487	Orsted US	-71.25323862	40.9908267	AU	02
OCS-A 0487	Orsted US	-71.27523927	40.99039435	AU	01
OCS-A 0487	Orsted US	-71.05469411	40.97785644	AV	11
OCS-A 0487	Orsted US	-71.07669334	40.97746209	AV	10
OCS-A 0487	Orsted US	-71.09869214	40.97706355	AV	09
OCS-A 0487	Orsted US	-71.12069049	40.97666081	AV	08
OCS-A 0487	Orsted US	-71.1426884	40.97625388	AV	07
OCS-A 0487	Orsted US	-71.16468585	40.97584275	AV	06
OCS-A 0487	Orsted US	-71.18668284	40.97542743	AV	05
OCS-A 0487	Orsted US	-71.20867938	40.97500792	AV	04
OCS-A 0487	Orsted US	-71.23067544	40.97458421	AV	03
OCS-A 0487	Orsted US	-71.25267104	40.97415631	AV	02
OCS-A 0487	Orsted US	-71.27466616	40.97372422	AV	01
OCS-A 0487	Orsted US	-71.05417675	40.96118384	AW	11
OCS-A 0487	Orsted US	-71.07617046	40.96078972	AW	10
OCS-A 0487	Orsted US	-71.09816372	40.96039141	AW	09
OCS-A 0487	Orsted US	-71.12015655	40.95998891	AW	08
OCS-A 0487	Orsted US	-71.14214892	40.95958221	AW	07
OCS-A 0487	Orsted US	-71.16414085	40.95917133	AW	06

Lease Number	Owner	Longitude	Latitude	Row	Column
OCS-A 0487	Orsted US	-71.18613231	40.95875625	AW	05
OCS-A 0487	Orsted US	-71.20812332	40.95833698	AW	04
OCS-A 0487	Orsted US	-71.23011386	40.95791352	AW	03
OCS-A 0487	Orsted US	-71.25210393	40.95748587	AW	02
OCS-A 0487	Orsted US	-71.27409352	40.95705403	AW	01