

## United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT WASHINGTON, DC 20240-0001

Ms. Kathleen Leyden Director, Maine Coastal Program Maine Department of Marine Resources 21 State House Station Augusta, ME 04333

Dear Ms. Leyden:

This document provides the Maine Coastal Program with the Bureau of Ocean Energy Management's (BOEM) Consistency Determination (CD) for the issuance of leases and grants within the Wind Energy Areas (WEAs) on the Atlantic Outer Continental Shelf Offshore Maine under the Coastal Zone Management Act (CZMA) Section 307 (c)(1) and 15 CFR Part 930 Subpart C. The information in this CD is provided pursuant to 15 CFR 930.36(a) and 930.39. The CD takes into consideration the reasonably foreseeable coastal effects of the proposed action and its consistency with the enforceable policies identified by the *Maine Guide to Federal Consistency Review*.

The purpose of the Proposed Action is to issue commercial leases within the WEAs and granting of rightsof-way and rights-of-use and easement in the region of the U.S. Outer Continental Shelf (OCS) in the Gulf of Maine. BOEM's issuance of these leases and grants is needed to (1) confer the exclusive right to submit plans to BOEM for potential development, such that the lessees and grantees develop plans for BOEM's review and will commit to site characterization and site assessment activities necessary to determine the suitability of their leases and grants for commercial offshore wind production and/or transmission; and (2) impose terms and conditions intended to ensure that site characterization and assessment activities are conducted in a safe and environmentally responsible manner. The issuance of a lease by BOEM to the lessee conveys no right to proceed with development of a wind energy facility; the lessee acquires only the exclusive right to submit a plan to conduct this activity.

BOEM's analysis of the reasonably foreseeable environmental consequence of the Proposed Action can be found in the Draft Environmental Assessment, *Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf of the Gulf of Maine*. The Maine Coastal Management Program's applicable enforceable policies and reasonably foreseeable coastal effects are included in Appendix A (enclosed) for your review.

Based upon the above referenced information, data and analysis, BOEM finds that the Proposed Action is consistent to the maximum extent practicable with the enforceable policies of the Maine Coastal Management Program.

Pursuant to 15 CFR 930.41, the Maine Coastal Program has 60 days from the receipt of this letter in which to concur with or object to this CD, or to request an extension under 15 CFR 930.41(b). Maine's concurrence will be presumed if its response is not received by BOEM within 60 days of receipt of this determination.

Maine's response should be sent to:

Bureau of Ocean Energy Management Office of Renewable Energy Programs Attn: Mr. David Diamond, Deputy Chief 45600 Woodland Road Sterling, VA 20166

We appreciate having a cooperative working relationship with the State of Maine as we move forward with our review of potential offshore renewable energy activities.

Sincerely,

Jessica Stromberg Chief, Environmental Branch for Renewable Energy Office of Renewable Energy Programs

Enclosures

## U.S. Department of the Interior Bureau of Ocean Energy Management

## Coastal Zone Management Act, Consistency Determination (15 CFR 930.36(a))

## Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf of the Gulf of Maine

The purpose of this Consistency Determination (CD) is to determine whether issuing commercial leases and grants on the Outer Continental Shelf (OCS) in the Gulf of Maine is consistent to the maximum extent practicable with the enforceable policies of the Maine Coastal Management Program (CMP). This document is provided pursuant to the requirements of 15 Code of Federal Regulations (CFR) 930.39(a) of the Coastal Zone Management Act (CZMA) Federal Consistency regulations.

Section 307(c)(1) of the CZMA, as amended, requires that federal agency activities affecting any land or water use, or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of federally approved state management programs.

The Bureau of Ocean Energy Management (BOEM) is proposing to issue commercial leases within the Wind Energy Area (WEA) and grant of rights-of-way (ROWs) and rights-of-use and easement (RUEs) in support of future wind energy development in the Gulf of Maine. **Figure 1** shows the location of the approximately 2,001,902-acre (8,101-square-kilometer[km<sup>2</sup>]) WEA area on the OCS in a location approximately 58 nautical miles (107 kilometers [km]) or more offshore Maine. Issuance of commercial leases would result in site assessment activities (i.e., placement of a meteorological ocean buoy) on the lease and site characterization activities (i.e., geophysical, geotechnical, biological, and archaeological surveys and monitoring activities) within and around the lease, and between the lease and the shore. Site assessment and site characterization activities associated with issuance of the lease would occur predominantly on the OCS and in the state waters of Maine, Massachusetts, and New Hampshire. As such, separate CDs have been prepared for each state to identify enforceable policies unique to each state.

Issuance of commercial leases would not authorize any energy facility construction or operations activities on the OCS but would grant the lessee the exclusive right to submit, for BOEM's potential approval, a site assessment plan (SAP) and Construction and Operations Plan (COP) proposing development of the leasehold for potential future construction and operation of offshore wind turbines, installation of interarray and export cables, and associated wind energy-related facilities in the Gulf of Maine. Permitting and consultation for future construction and operation of offshore wind energy facilities would be addressed through separate processes after the submittal of a SAP and COP, and are not considered in this CD.



Figure 1. Location of Commercial Lease Area

## **1.0 BACKGROUND**

BOEM is authorized to issue leases on the OCS for wind energy development pursuant to Section 388 of the Energy Policy Act of 2005. On April 22, 2009, BOEM promulgated regulations implementing this authority at 30 CFR Part 585.<sup>1</sup> The regulations establish a program to grant leases, easements, and rights-of-way (ROWs) for orderly, safe, and environmentally responsible renewable energy development activities, such as the siting and construction of offshore wind facilities on the OCS as well as facilities relating to other forms of renewable energy such as marine hydrokinetic energy (i.e., wave and current).

Several programmatic analyses and consultations are relevant to the site assessment and site characterization activities that would be conducted in association with the Proposed Action. The Minerals Management Service (MMS) prepared a Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf (Programmatic EIS) to evaluate the impact of establishing of a comprehensive, nationwide MMS Alternative Energy Program on the OCS, including through federal issuance of leases and associated site assessment and characterization activities (MMS 2007). The final rule and the Programmatic EIS can be reviewed for reference on the BOEM website at http://www.boem.gov/Renewable-Energy-Program/Regulatory-Information/Index.aspx and http://www.boem.gov/Renewable-Energy-Program/Regulatory-Information/Guide-To-EIS.aspx. In addition, BOEM published the Atlantic Geological and Geophysical Activities Programmatic Environmental Impact Statement (G&G PEIS; BOEM 2014). The G&G Programmatic EIS can be viewed here: http://www.boem.gov/Atlantic-G-G-PEIS/. In 2021, BOEM completed a biological assessment for Data Collection and Site Survey Activities for Renewable Energy on the Atlantic Outer Continental Shelf, which established programmatic project design criteria (PDCs) and best management practices (BMPs) for data collection and site survey activities developed through consultation with the National Marine Fisheries Service (NMFS). BOEM proposes to update these PDCs and BMPs for data collection and site survey activities conducted in association with commercial leases in the Gulf of Maine as shown in Appendix A of the BOEM biological assessment for the wind energy commercial leases, which will be posted at Environmental Consultations and Offshore Renewable Energy | Bureau of Ocean Energy Management (boem.gov).

A summary of leasing activities for the Gulf of Maine commercial leases follows.

On March 15, 2024, BOEM released the Announcement of the Area Identification (Area ID) memorandum (BOEM 2024a). The Area ID memorandum documents the analysis and

<sup>&</sup>lt;sup>1</sup> On January 31, 2023, the Department of the Interior (Department) issued the "Reorganization of Title 30-Renewable Energy and Alternative Uses of Existing Facilities on the Outer Continental Shelf" direct final rule, which transferred existing safety and environmental oversight and enforcement regulations governing OCS renewable energy activities from 30 CFR part 585, under BOEM's purview, to 30 CFR part 285, under the purview of the Bureau of Safety and Environmental Enforcement (BSEE). Finally, the Department published the Renewable Energy Modernization Rule on May 15, 2024, which will become effective on July 15, 2024. This final rule not only finalized amendments to the Department's existing renewable regulations administered by BOEM, but also regulatory amendments previously proposed by BOEM that are now administered by BSEE.

rationale used to develop the WEA in the Gulf of Maine. The Gulf of Maine is located offshore the states of Maine, New Hampshire, and the Commonwealth of Massachusetts. In partnership with the National Centers for Coastal Ocean Science (NCCOS), BOEM compiled best available data and developed spatial models to identify suitable areas for offshore wind energy in the region (NOAA NCCOS 2024). BOEM identified one WEA in the Gulf of Maine. The purpose of the Proposed Action is to issue commercial leases within the WEA and to grant ROWs and RUEs in the region of the OCS of the Gulf of Maine. BOEM's issuance of these leases is needed to (1) confer the exclusive right to submit plans to BOEM for potential development, such that the lessees and grantees develop plans for BOEM's review and will commit to site characterization and site assessment activities necessary to determine the suitability of their leases and grants for commercial offshore wind production or transmission, and (2) impose terms and conditions intended to ensure that site characterization and assessment activities are conducted in a safe and environmentally responsible manner. The issuance of a lease by BOEM to the lessee conveys no right to proceed with development of a wind energy facility; the lessee acquires only the exclusive right to submit one or more plans to conduct this activity.

This CD incorporates by reference and summarizes, rather than fully restates, the detailed description of the Proposed Action and effects analysis provided in the Draft Environmental Assessment (EA).

## 2.0 PROPOSED ACTION DESCRIPTION

This section provides an overview of the Proposed Action and summarizes associated activities relevant to the enforceable policies of the Maine CZM program.

The Proposed Action is the issuance of commercial wind energy leases and site characterization and site assessment activities within the WEA as identified in Figure 1-1, and the granting of ROWs and RUEs in support of wind energy development in the WEA. The WEA totals approximately 2.0 million acres and is located between 20 and 58 nautical miles (nm) from shore. For the purposes of impact assessment, BOEM is assuming lease areas of approximately 80,000 acres each, with a maximum of 15 lease areas (for a total of up to 1,200,000 million acres across all leases). The impact analyses under the Proposed Action includes potential impacts of lessee site assessment and site characterization activities for lease issuance for all potential lease areas.

The Proposed Action assumes that each lessee would undertake the largest expected number of site characterization surveys (i.e., shallow hazards, geological, geotechnical, archaeological, and biological surveys) in the WEA for which leases are offered. Under the Proposed Action, assuming that the lessee chooses to install met buoys, BOEM anticipates that no more than two met buoys would be installed within a proposed lease (up to 30 total across all leases). BOEM anticipates that each lease could have up to two transmission cable routes for connecting future wind turbines to an onshore power substation (up to 30 total across all leases).

Under the Proposed Action, BOEM would require each lessee to avoid or minimize potential impacts on the environment by complying with various requirements. These requirements,

which are summarized in Chapter 4 of the Draft EA, are referred to as Standard Operating Conditions (SOCs) and would be implemented through lease stipulations.

Impacts from installation, construction, and operation of a full-scale wind energy facility in the WEA are outside the scope of the analysis for the Proposed Action and are not analyzed in the EA. Effects associated with site assessment and site characterization activities are the focus of the EA, including multiple actions intended to aid a future NEPA analysis for a wind energy facility in the event a developer proposes one. The purpose of the NEPA analysis is to identify potential effects on resources, including wildlife species, from the Proposed Action.

The commercial leases would not authorize any energy facility construction or operations activities on the OCS but would grant the lessee the exclusive rights to submit, for BOEM's potential approval, a SAP and COP proposing development of the leasehold. The lease does not, by itself, authorize any activity within the lease area. Under the Proposed Action, BOEM would require each lessee to avoid or minimize potential impacts on the environment by complying with various requirements. Before the approval of any plan authorizing the construction and operation of wind energy-related facilities, BOEM would prepare a plan-specific environmental analysis and would comply with all required consultation requirements, including CZMA Federal Consistency regulations.

The analysis covers the effects of routine and non-routine activities associated with the issuance of a wind energy lease and related site assessment and site characterization activities within and around the lease and areas between the lease and shoreline. Reasonably foreseeable non-routine and low-probability events and hazards that could occur during lease issuance-related activities include (1) severe storms, such as hurricanes and extratropical cyclones; (2) allisions and collisions between the site assessment structure or associated vessels and other marine vessels or marine life; (3) spills from collisions or fuel spills resulting from generator refueling; and (4) recovery of lost survey equipment.

### 2.1 Assumptions and Impact Producing Factors

BOEM's assumptions for the Proposed Action scenario are summarized in **Table 2-1**. An estimated quantification of survey effort is provided in Appendix A of the Draft EA. This scenario is based on the requirements of the renewable energy regulations at 30 CFR Part 585, BOEM's guidance for lessees, previous lease applications and plans that have been submitted to BOEM, previous EAs prepared for similar activities , and the biological assessment evaluating the effects of survey and data collection activities associated with renewable energy on the Atlantic OCS (Baker and Howson 2021). Unless otherwise noted, assumptions in this section are based on these sources.

### Table 2-1. Assumptions for the Proposed Action scenario

### **Overall Scenario Assumptions**

BOEM would issue up to 15 leases within the WEA of around 80,000 acres each (up to 1,200,000 acres total).

A lessee would install up to two met buoys per lease (up to 30 met buoys total).

There would be up to two offshore export cable route corridors per lease (up to 30 offshore export cable route corridors total). Site characterization activities would include the WEA and potential offshore cable route corridors.

### Surveying and Sampling Assumptions

Reconnaissance site characterization surveys would likely begin within 1 year following execution of the lease, along with any additional surveys that may be required prior to installing a met buoy. Site characterization surveys would then continue in a phased approach for up to 5 years leading up to the preparation and submittal of the COP. Additional geophysical surveying may be performed after COP approval to support a facility design report and a fabrication and installation report. Deployment of met buoys requires USCG PATON approval under

### 33 CFR part 66 and 14 U.S.C. 545 and USACE permits.<sup>a</sup>

Lessees would likely survey the entire proposed lease area during the 5-year site assessment term to collect required geophysical and geotechnical information for siting of commercial facilities (wind turbines and offshore export cables). The surveys are typically completed in phases, starting with reconnaissance surveys.

Seabed sampling (CPTs, vibracores, grab samples, SPI) of the WEA would require a seabed investigation at every potential wind turbine location to provide sufficient geotechnical data to support facility design (which would only occur in the portion of the WEA where structural placement is allowed) and one investigation per kilometer of offshore export cable corridor. Investigations would also be conducted at locations where offshore collector or converter platforms are proposed. The amount of effort and the number of vessel trips required to perform the geotechnical investigations vary greatly by the type of technology used to retrieve the sample. Benthic sampling could also include nearshore, estuarine, and SAV habitats along the offshore export cable routes.

Lessees would be required to comply with SOCs developed to avoid and minimize adverse effects on resources (Appendix H in the Draft EA). The Lessee must coordinate a tribal pre-survey meeting by sending a letter through certified mail, and following up with email or phone calls as necessary.

### Installation, Decommissioning, and Operations and Maintenance Assumptions

Met buoy installation and decommissioning would likely take approximately 1 day each.

Met buoy installation and decommissioning would likely occur between April and August (due to weather).

Met buoy installation would likely occur in Year 2 after lease execution.

Met buoy decommissioning would likely occur in Year 6 or Year 7 after lease execution.

### **Assumptions for Generation of Noise**

Under the Proposed Action, the following activities and equipment would generate noise: HRG survey equipment and vessel engines during site characterization surveys and met buoy installation, operations and maintenance, and decommissioning.

### **Assumptions for Port Usage**

Vessel traffic associated with the Proposed Action would be split between ports in Maine, Massachusetts, and New Hampshire, and no expansion of these ports is expected in support of the Proposed Action. Vessels could use the following general port locations: Searsport, ME; Portland, ME; Portsmouth, NH; Boston, MA; Salem, MA; and New Bedford, MA.

BOEM = Bureau of Ocean Energy Management; BSEE = Bureau of Safety and Environmental Enforcement; CFR = Code of Federal Regulations; COP = Construction and Operations Plan; CPT = cone penetration test; FR = *Federal Register*; HRG = high-resolution geophysical; met = meteorological; NOPR = Notice of Proposed Rulemaking; SAP = Site Assessment Plan; SAV = submerged aquatic vegetation; SOC = Standard Operating Condition; SPI = sediment profile imaging; USACE = U.S. Army Corps of Engineers; USC = United States Code; WEA = Wind Energy Area.

<sup>a</sup> BOEM regulations previously required lessees to submit a SAP prior to deployment of met buoys. BOEM and BSEE's final Renewable Energy Modernization Rule, published on May 15, 2024 (89 FR 42602), eliminated the SAP requirement for met buoys because the SAP process is duplicative with USACE's long-standing permitting process under Section 404(e) of the Clean Water Act (<u>33 USC 1344(e)</u>) and Section 10 of the Rivers and Harbors Act of 1899 (<u>33 USC 401 et seq</u>.) for the installation of met buoys, which are categorized by the USACE as scientific measurement devices. The final rule is effective on July 15, 2024 and will apply to all commercial lease sales in the Gulf of Maine WEA. The final rule can be found at <a href="https://www.federalregister.gov/documents/2024/05/15/2024-08791/renewable-energy-modernization-rule">https://www.federalregister.gov/documents/2024/05/15/2024-08791/renewable-energy-modernization-rule.</a>

The Proposed Action within the Draft EA analyzes the effects of routine activities associated with lease and grant issuance, site characterization activities (biological, geological, geotechnical, and archaeological surveys of the WEA as shown in **Table 2-2**), and site assessment activities (met buoy deployment, operation, and decommissioning) within the WEA and within potential easements associated with offshore export cable corridors. It does not consider construction and operation of any commercial wind power facilities on a lease or grant in the identified WEA, which would be evaluated separately if a lessee submits a COP.

Impact-producing factors (IPFs) associated with the various activities in the Proposed Action that could affect resources include the following:

Noise	Vessel traffic
Air emissions	Routine vessel discharges
Lighting	Bottom disturbance/anchoring
Habitat degradation	Entanglement

# Table 2-2. Typical equipment that would be used for surveys associated with the Proposed Action

Survey Type	Survey Equipment or Method	Resource Surveyed or Information Used to Inform
High-resolution geophysical surveys	Sub-bottom profiler, side-scan sonar, multibeam echosounder, magnetometer, or gradiometer—towed from vessel or mounted on an AUV within the water column	Shallow hazards, <sup>a</sup> archaeological, <sup>b</sup> bathymetric charting, benthic habitat
Geotechnical/ seafloor investigation <sup>c</sup>	Vibracores, deep borings, cone penetration tests	Geological and geotechnical <sup>c</sup>
Biologicald	Grab sampling, benthic sled, underwater imagery/sediment profile imaging	Benthic habitat
Biologicald	Aerial digital imaging, visual observation from boat, airplane, or remote-operated flying drone	Avian
Biologicald	Ultrasonic detectors installed on survey vessels used for other surveys	Bat
Biologica l <sup>d</sup>	Visual observation from boat, airplane, or remote-operated drone; passive acoustic monitors mounted on AUVs, drones, or vessels	Marine fauna (marine mammals and sea turtles)
Biologicald	Direct sampling of fish and invertebrates, including traps on the seabed and water column and line fishing	Fish

AUV = autonomous underwater vehicle

<sup>a</sup>30 CFR § 585.610(b)(2), 30 CFR § 585.626(a)(1), and 30 CFR § 585.645(a)(2).

<sup>b</sup>30 CFR § 585.626(a), 30 CFR § 585.610–585.611, and 30 CFR § 585.645(a)(3).

°30 CFR § 585.610(b)(1,4), 30 CFR § 585.626(a)(2,4), and 30 CFR § 585.645(a)(1,4).

<sup>d</sup>30 CFR § 585.610(b)(5) and 30 CFR § 585.626(a)(3), and 30 CFR § 585.645(a)(5).

### 2.2 High-Resolution Geophysical Surveys

High-resolution geophysical (HRG) survey data provides information on seafloor and subsurface conditions as they pertain to project siting and design, including shallow geologic and anthropogenic hazards like the presence or absence of archaeological resources. BOEM's Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information (BOEM 2024b) require high-frequency sub-bottom profiler data and medium-penetration seismic surveys. A medium-penetration seismic system, such as a boomer, bubble pulser, or other low-frequency system, can be used to provide information on sedimentary structure that exceeds the depth limitations of compressed high-intensity radiated pulse (CHIRP) systems. BOEM guidance also recommends collection of sedimentary structure data 10 meters beyond the depth of disturbance, which may be conducted using sub-bottom profiler systems.

HRG data acquisition instrumentation used during surveys could add noise to the underwater environment. The types of equipment that may be used during these surveys are described in Table 2-4 and Table 2-5 of the Draft EA; however, alternative equipment and new technologies may be used. Acoustic information presented is representative of the types of equipment that may be used during site characterization surveys, for which sound characteristics are known from field measurements at various distances from the source; these measurements were then back-calculated to 1 meter to estimate the source levels shown in Table 2-5 of the Draft EA (Crocker and Fratantonio 2016). This information is based on the highest reported power settings and source levels, but the actual equipment and settings used could have frequencies and source levels that differ from those indicated. The line spacing for HRG surveys would vary depending on the data collection requirements of the different HRG survey types, as shown in Table 2-4 of the Draft EA. The HRG survey equipment has numerous configurations (e.g., towed, pole mounted, hull mounted or mounted on autonomous underwater vehicles [AUVs]) but is typically deployed as a single source element, unlike other geophysical survey operations (e.g., oil and gas deep penetrating seismic exploration and mid-frequency active sonar military exercises), which use source arrays with multiple units or elements operating in unison. More information on the technical specifications of the representative sources presented here can be found in Crocker and Fratantonio (2016).

BOEM assumes that, during site characterization, a lessee would survey potential offshore export cable routes (for connecting future wind turbines to an onshore power substation) from the WEA to shore using HRG survey methods. BOEM assumes that the HRG survey grids for a proposed offshore export cable route to shore would likely occur over a 1,000meter-wide corridor, centered on the potential offshore export cable location, to allow for anticipated physical disturbances and movement of the proposed cable, if necessary. Because it is not yet possible to predict precisely where an onshore electrical substation may ultimately be installed or to know the route that any potential future export cable would take across the seafloor from the WEA to shore, the Draft EA used direct routes from the far side of the WEA to hypothetical potential interconnection points onshore in Maine, Massachusetts, and New Hampshire. The hypothetical points were selected based on proximity from onshore points of interconnection to the WEA to conservatively approximate the level of surveys that may be conducted and the number of samples that would be collected to characterize an offshore export cable route. The hypothetical points of interconnection used to approximate the level of surveys for the WEA in no way represents proposed export cable routes.

Increased vessel presence and traffic during HRG surveys could result in several impactproducing factors (IPFs), including noise, air emissions, routine vessel discharges, and lighting from vessels.

### 2.3 Geotechnical Surveys

Geotechnical surveys are performed to assess the suitability of substrate for installation of infrastructure including WTGs (wind turbine generators) and substation foundations and cables. Geotechnical samples are also used to evaluate shallow sediment characteristics for water quality and sediment dispersion modeling. Samples for geotechnical evaluation are typically collected using a combination of boring and in situ methods taken from a survey vessel or drilling vessel. Likely methods to obtain samples to analyze physical and chemical properties of surface sediments are described in Table 2-6 of the Draft EA. These methods may result in bottom disturbance as a result of physical seafloor sampling.

Geotechnical and benthic sampling of the WEA would require a sample at every potential wind turbine location (which would only occur in the portion of the WEA where structural placement, including fixed foundations, floating turbine anchors, etc., is allowed) and one sample per kilometer of offshore export cable corridor. The amount of effort and number of vessel trips required to collect the geotechnical samples vary greatly by the type of technology used to retrieve the sample (please see Table 2-6 of the Draft EA). The area of seabed disturbed by individual sampling events (e.g., collection of a core or grab sample) is estimated to range from 1 square meter to 10 square meters (BOEM 2014 Fugro Marine GeoServices Inc. 2017). Some vessels require anchoring for brief periods using small anchors; however, approximately 50% of deployments for this sampling work could involve a boat having dynamic positioning capability (i.e., no seafloor anchoring impacts) (BOEM 2014. There are residual risks of encountering munitions and explosives of concern (MEC)/unexploded ordnance (UXO) during surveying, and in the event that a MEC/UXO is encountered, lessees should follow the National Guidance on Responding to Munitions and Explosives of Concern in U.S. Federal Waters.

As with HRG surveys, increased vessel presence and traffic during geotechnical surveys may result in several IPFs, including noise, air emissions, routine vessel discharges, and lighting from vessels. Additionally, bottom disturbance may occur as a result of geotechnical surveys due to physical sampling methods.

### 2.4 Biological Surveys

Biological surveys are necessary to characterize the biological resources that could be affected by site assessment and site characterization activities in the Proposed Action. Benthic habitat, avian, bat, and marine fauna surveys are all expected as part of the Proposed Action. Biological survey activities associated with the Proposed Action are described in Table 2-7 of the Draft EA. For biological surveys, BOEM assumes that all vessels associated with the Proposed Action would be required to abide by the SOCs (Appendix H in the Draft

EA). NMFS may require additional measures from the lessee to comply with the Marine Mammal Protection Act (MMPA) or the Endangered Species Act (ESA).

Increased vessel presence and traffic during biological surveys may result in several IPFs, including noise, air emissions, routine vessel discharges, and lighting from vessels. Some biological surveys may be conducted from an aircraft (e.g., avian and bat surveys) and, if conducted, may result in aircraft noise, lighting, and emissions. Additionally, bottom disturbance and marine faunal mortality may occur as a result of benthic habitat and fisheries surveys due to physical sampling methods.

### **2.5 Meteorological Buoys**

Installation, operation and maintenance, and decommissioning of met buoys for characterizing wind conditions are part of the assumptions/scenario for the Proposed Action. Met buoys are anchored to the seafloor at fixed locations and regularly collect observations from many different atmospheric and oceanographic sensors. The Draft EA assumes that a maximum of two buoys per lease would be installed in each of the 15 leases within the WEA; therefore, installation, operation, and decommissioning of a total of 30 buoys are included in the analysis.

The type of buoy chosen usually depends on its intended installation location and measurement requirements. For example, a smaller buoy in shallow coastal waters may be moored using an all-chain mooring. On the OCS, a larger discus-type or boat-shaped hull buoy may require a combination of a chain, nylon, and buoyant polypropylene materials designed to sustain several years of ocean service. The other relevant lease issuance EAs listed in Table 2-1 of the Draft EA provide evaluations of various met buoy schematics and met buoy and anchor systems, including hull type, height, and anchoring methods. These EAs also describe activities related to installation, operation and maintenance, and decommissioning of the met buoys. Buoy types that are typically deployed are also described by the National Data Buoy Center (NOAA NDBC 2012).

Buoys are towed or carried aboard a vessel to the installation location and either lowered to the ocean surface from the deck of the vessel or placed over the final location and the mooring anchor is dropped. Based on previous proposals, anchors for boat-shaped or discusshaped buoys would weigh about 2,721 kilograms to 4,536 kilograms, with a footprint of about 0.5 square meter and an anchor chain sweep of about 34,398 square meters (BOEM 2014; Fugro Marine GeoServices Inc. 2017). Transport and installation vessel anchoring for 1 day is anticipated for these types of buoys. For spar-type buoys, installation would occur in two phases: Phase one would occur over 1 day, and the clump anchor would be transported and deployed to the seabed. In phase two, which would take place over 2 days, the spar buoy would be similarly transported and then crane lifted into the water. Divers would secure it to the clump anchor (which weighs a minimum of 100 tons). Previous proposals have indicated that the maximum area of disturbance related to deployment of a spar-buoy occurs during anchor deployment/removal, resulting in a maximum area of disturbance of 118 square meters of seafloor between its clump anchor and mooring chain (BOEM 2014).

For met buoys, on-site inspections and preventive maintenance (i.e., marine fouling, wear, or lens cleaning) are expected to occur on a monthly or quarterly basis. Periodic inspections for specialized components (i.e., buoy, hull, anchor chain, or anchor scour) would occur at different intervals but would likely coincide with the monthly or quarterly inspection to minimize the need for additional boat trips to the site.

Decommissioning is basically the reverse of the installation process. Equipment recovery would be performed with the support of a vessel (or vessels) equivalent in size and capability to that used for installation. For small buoys, a crane-lifting hook would be secured to the buoy. A water or air pump system would de ballast the buoy, causing it to tip into the horizontal position. The mooring chain and anchor would be recovered to the deck using a winching system. The buoy would then be transported to shore. Buoy decommissioning is expected to be completed within 1 to 2 days, depending on buoy type.

Decommissioning and site clearance activities are also a part of decommissioning obligations and requirements pursuant to 30 CFR 285 Subpart I—Decommissioning. A lessee must provide evidence that the area used for site assessment facilities (i.e., met buoys) has been returned to its original state within 60 days following removal of the facilities. The lessee must remove any trash or bottom debris introduced as a result of operations and document that the lease area is clear; such evidence may consist of one or more of the following: photographic bottom survey, high-resolution side-scan survey, or sector-scanning sonar survey.

IPFs associated with met buoy installation operation and maintenance and with met buoy decommissioning (including site clearance) may include vessel traffic, noise, lighting, air emissions, and routine vessel discharges. Bottom disturbance and habitat degradation may also occur as a result of met buoy anchoring and installation. The buoy may act as a fish aggregating device, attracting fish and other species (e.g., birds) to the buoy location. Entanglement in buoy or anchor components is a possible IPF associated with this phase of the Proposed Action.

### 2.6 Non-Routine Effects

Reasonably foreseeable non-routine events, low-probability events, and hazards that could occur during site characterization and site assessment related activities include the following: (1) severe storms, such as hurricanes and extratropical cyclones; (2) allisions and collisions between the site assessment structures or associated vessels and other vessels or marine life; (3) spills from collisions or fuel spills resulting from generator refueling; and (4) recovery of lost survey equipment.

### 2.6.1 Storms

Severe weather events have the potential to cause structural damage and injury to personnel. Major storms, winter nor'easters, and hurricanes pass through the area regularly, resulting in elevated water levels (storm surge) and high waves and winds. Storm surge and wave heights from passing storms are worse in shallow water and along the coast but can pose hazards in offshore areas. Nor'easters are common between October and April, and the Atlantic Ocean hurricane season runs from June 1 to November 30.

Storms could increase the likelihood of allisions and collisions that could result in a spill. However, the storm would cause the spill and its effects to dissipate faster, vessel traffic is likely to be significantly reduced before an impending storm, and surveys related to the Proposed Action would be postponed until after the storm had passed. Although storms have the potential to impact met buoys, the structures are designed to withstand storm conditions. Though unlikely, structural failure of a met buoy could result in a temporary hazard to navigation.

### 2.6.2 Allisions and Collisions

An allision occurs when a moving object (e.g., a vessel) strikes a stationary object (e.g., met buoy); a collision occurs when two moving objects strike each other. A met buoy in the WEA could pose a risk to vessel navigation. An allision between a ship and a met buoy could result in the damage or loss of the buoy or the vessel, as well as loss of life and spillage of petroleum product. Although such an event is considered unlikely, vessels associated with site characterization and site assessment activities could collide with other vessels, resulting in damages, petroleum product spills, or capsizing. Risk of allisions and collisions may be reduced through compliance with USCG Navigation Rules and Regulations, use of navigational aids (e.g., aids to navigation [ATON], bridge equipment, charts, and informational notices and publications), safety fairways, and traffic separation schemes (TSSs) for vessels transiting to and from ports primarily in Maine, Massachusetts, and New Hampshire. BOEM anticipates that aerial surveys, if deemed necessary, would not be conducted during periods of storm activity because the reduced visibility conditions would not meet visibility requirements for conducting the surveys and because flying at low elevations would pose a safety risk during storms and times of low visibility.

Collisions between vessels and allisions between vessels and met buoys are considered unlikely because vessel traffic is controlled by multiple routing measures, such as safety fairways, TSSs, and anchorages. Areas with higher traffic were excluded from the WEA. BOEM requires the lessee to submit a private aid to navigation (PATON) application with the USCG for the met buoy. Risk of allisions with met buoys would be further reduced by USCG-approved marking and lighting on the met buoys. The lessee will be responsible for the establishment, operation, maintenance, and discontinuance of the PATON.

### 2.6.3 Spills

A spill of petroleum product could occur as a result of hull damage from allisions with a met buoy, collisions between vessels, accidents during the maintenance or transfer of offshore equipment or crew, or natural events (e.g., strong waves or storms). From 2011 to 2021, the average spill size for vessels other than tank ships and tank barges was 95 gallons (USCG 2022); should a spill from a vessel associated with the Proposed Action occur, BOEM anticipates that the volume would be similar to that average. Diesel fuel is lighter than water and may float on the water's surface or be dispersed into the water column by waves. Diesel would be expected to dissipate very rapidly, evaporate, and biodegrade within a few days (MMS 2007). An oil weathering model from the National Oceanic and Atmospheric Administration (NOAA), the Automated Data Inquiry for Oil Spills (ADIOS), was used to predict dissipation of a maximum spill of 2,500 barrels, a spill far greater than what is assumed as a non-routine event during the Proposed Action. Results of the modeling analysis showed that dissipation of spilled diesel fuel is rapid. The amount of time it took to reach diesel fuel concentrations of less than 0.05% varied between 0.5 and 2.5 days, depending on ambient wind (Tetra Tech Inc. 2015), suggesting that the average amount of 95 gallons would reach similar concentrations much faster and limit the environmental impact of such a spill. Based on the size of the spill, it would be expected to dissipate very rapidly and then evaporate and biodegrade within 1 or 2 days (at most), limiting the potential impacts to a localized area for a short duration.

Vessels are expected to comply with USCG requirements relating to prevention and control of oil spills, and most equipment on the met buoys would be powered by batteries charged by small wind turbines and solar panels. BOEM expects that each of the vessels involved with site characterization and site assessment activities would minimize the potential for a release of oils or chemicals in accordance with 33 CFR Part 151, 33 CFR Part 154, and 33 CFR Part 155, which contain guidelines for implementation and enforcement of vessel response plans, facility response plans, and shipboard oil pollution emergency plans.

### 2.6.4 Recovery of Lost Survey Equipment

Equipment used during site characterization and site assessment activities (e.g., towed HRG survey equipment, cone penetration test [CPT] components, grab sampler, buoys, lines, cables) could be accidentally lost during survey operations. Additionally, it is possible (although unlikely) that a met buoy could disconnect from the clump anchor. In the event of lost equipment, recovery operations may be undertaken to retrieve the equipment.

Recovery operations may be performed in a variety of ways depending on the type of equipment lost. A commonly used method for retrieval of lost equipment on the seafloor is dragging grapnel lines (e.g., hooks, trawls). A single vessel deploys a grapnel line to the seafloor and drags it along the bottom until it catches the lost equipment, which is then brought to the surface for recovery. This process can result in significant bottom disturbances because it may require multiple passes in a given area. Additional disturbance could come after the line catches the lost equipment, when it drags all the components along the seafloor until recovery.

Marine debris, such as lost survey equipment, that cannot be retrieved because either it is small or buoyant enough to be carried away by currents or it is completely or partially embedded in the seafloor could create a potential hazard for bottom-tending fishing gear or cause additional bottom disturbance. For instance, a broken vibracore rod that cannot be retrieved may need to be cut and capped 1 to 2 meters below the seafloor. For the recovery of marine debris, BOEM or BSEE will work with the lessee/operator to develop a recovery plan as described in the NMFS Programmatic ESA consultation for data collection activities

(Anderson 2021). Selection of a mitigation strategy would depend on the nature of the lost equipment, and further consultation may be necessary.

IPFs associated with recovery of marine debris such as lost survey equipment may include vessel traffic, noise, lighting, air emissions, and routine vessel discharges from a single vessel. Recovery operations may also cause bottom disturbance and habitat degradation.

## **3.0 STATE ENFORCEABLE POLICIES**

As part of this CD, BOEM has evaluated and documented in the enclosed table (*see* Appendix A), policies identified by Maine as enforceable, applicable offshore and coastal resources or uses, and CZMA "reasonably foreseeable coastal effects" that might be expected for activities conducted under the Proposed Action.

## 4.0 CONSISTENCY DETERMINATION

BOEM has evaluated all applicable enforceable policies of Maine and the potential activities resulting from the Proposed Action. This CD has examined whether the Proposed Action described in Section 1 is consistent to the maximum extent practicable with the policies and provisions identified as enforceable by the CMP of Maine (see **Appendix A**). Based on the preceding information and analyses, and the incorporated-by-reference EA, BOEM has determined the proposed action will be consistent to the maximum extent practicable with the policies that Maine has identified as enforceable.

## 5.0 LITERATURE CITED

- Anderson J. 2021. Letter to J.F. Bennett concerning the effects of certain site assessment and site characterization activities to be carried out to support the siting of offshore wind energy development projects off the U.S. Atlantic coast. 68 p.
- Baker K, Howson U. 2021. Data collection and site survey activities for renewable energy on the Atlantic Outer Continental Shelf. Biological assessment. Sterling (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 152 p.
- Bureau of Ocean Energy Management (BOEM). 2014. Atlantic OCS proposed geological and geophysical activities mid-Atlantic and south Atlantic planning areas, final programmatic environmental impact statement. New Orleans (LA): U.S. Department of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region. Report No.: OCS EIS/EA BOEM 2014-001. [accessed 2024 May29]. <u>https://www.boem.gov/oil-gas-energy/atlantic-geological-and-geophysical-ggactivities-programmatic-environmental-impact</u>.
- Bureau of Ocean Energy Management (BOEM) 2024a. Gulf of Maine Area Identification Pursuant to 30 C.F.R. § 585.211(b). [accessed 2024 May29]. <u>https://www.boem.gov/sites/default/files/documents/renewableenergy/Gulf%20of%20Maine%20Area%20ID%20Memo\_03142024.pdf</u>.

- Bureau of Ocean Energy Management (BOEM). 2024b. Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information Pursuant to 30 CFR Part 585. [accessed May 29, 2024]. <u>https://www.boem.gov/sites/default/files/documents/aboutboem/Updated%20Renewable%20Energy%20Geohazard%20Guidelines%202023\_5</u>08c.pdf
- Crocker SE, Fratantonio FD. 2016. Characteristics of Sounds Emitted During High-Resolution Marine Geophysical Surveys. Newport, RI: Naval Undersea Warfare Center Division. Report No.: OCS Study BOEM 2016-044, NUWC-NPT Technical Report 12,203. [accessed 2024 May29]. https://espis.boem.gov/final%20reports/5551.pdf.
- Fugro Marine GeoServices Inc. 2017. Geophysical and Geotechnical Investigation Methodology Assessment for Siting Renewable Energy Facilities on the Atlantic OCS. Herndon, VA: U.S. Department of the Interior, Bureau of Ocean Energy Management. 229 p. Report No.: OCS Study BOEM 2017-049. [accessed 2024 May29]. <u>https://www.boem.gov/sites/default/files/environmentalstewardship/Environmental-Studies/Renewable-Energy/G-and-G-Methodology-Renewable-Energy-Facilities-on-the-Atlantic-OCS.pdf</u>
- MMS. 2007. Programmatic environmental impact statement for alternative energy development and production and alternate use of facilities on the Outer Continental Shelf. Final environmental impact statement. Herndon (VA): U.S. Department of the Interior, Minerals Management Service. 4 vols. Report No.: OCS EIS/EA MMS 2007-046. [accessed 2024 May 29]. <u>https://www.boem.gov/renewable-energy/guide-ocs-alternative-energy-final-programmatic-environmental-impact-statement-eis.</u>
- National Oceanic and Atmospheric Administration, National Data Buoy Center (NDBC). 2012. Can you describe the moored buoys? [accessed 2024 May 29]. https://www.ndbc.noaa.gov/faq/hull.shtml.
- National Oceanic and Atmospheric Administration (NOAA) NCCOS 2024. Final Wind Energy Areas Identified in the Gulf of Maine, National Centers for Coastal Ocean Science (NCCOS) National Oceanic and Atmospheric Administration (NOAA), Published on: March 15, 2024. [accessed 2024 May 29]. <u>https://www.boem.gov/sites/default/files/documents/renewableenergy/GOME\_Final\_WEA\_Report\_NCCOS\_20240314\_508c.pdf</u>.
- Tetra Tech Inc. 2015. USCG final environmental impact statement for the Port Ambrose Project deepwater port application. Washington, DC: U.S. Coast Guard, Vessel and Facility Operating Standards. 549 p. Report No.: Report No.: USCG-2013-0363.

Appendix A		
<b>Applicable E</b>	nforceable Policies of the	Core Laws of the Maine Coastal Program
CATEGORY	ENFORCEABLE	<b>REASONABLY FORESEEABLE COASTAL EFFECTS (CZMA</b>
	POLICIES:	COASTAL EFFECTS)
	APPLICABLE	
	COASTAL ZONE	
	MANAGEMENT RULES	
Coastal	Wetlands and Waterbodies	For the Proposed Action, BOEM estimated approximately 3,996 vessel trips from site
Habitats/	Protection rules (Department of	characterization and assessment activities are projected to occur over 5-7 years with the
Protected	Environmental Protection (DEP)	issuance of commercial wind energy leases (see Appendix A of the Draft Environmental
Species	effective November 11, 2018.	Assessment (EA) for vessel trip calculations).
		Indirect impacts from routine activities may occur from wake erosion caused by vessel
Wetlands	Natural Resources Protection	traffic resulting from the Proposed Action. These trips would likely be divided among
Management	Act (38 M.R.S. §§480-A to 480-	multiple ports in Massachusetts (Boston, Salem, and New Bedford), multiple ports in Maine
	JJ)	(Portland, and Searsport) and one port in New Hampshire (Portsmouth), slightly increasing
	Maina Endangarad Spacias A at	traffic in already heavily used waterways. wake erosion and sedimentation effects would be limited to approach channels and the coastal areas near ports and have used to conduct
	(12  MRSA  8812801 - 12810)	activities. Given the existing amount and nature of vessel traffic, there would be a
	[inland species]: 12 M.R.S.	negligible, if any, increase in wake-induced erosion of associated channels based on the
	§6971-6976 [marine species];	relatively small size and number of vessels associated with the Proposed Action. Moreover,
	and 12 M.R.S. §10001, sub-§§19	all approach channels to these ports are armored, and speed limits would be enforced, which
	and 62 [definitions]	also helps to prevent most erosion.
	Oil Discharge Provention &	Routine activities in the Wind Energy Area (described in Section 2.4 of the Draft EA)
	Pollution Control Law (38	would not have direct impacts on coastal benthic resources and coastal benthic habitats
	M.R.S. 88541 to 560)	because the proposed site assessment activities would take place at least 12 nautical miles
		(nm) from the shore. Site characterization surveys for potential export cable routes may take
	38 M.R.S. § 1306 and 38 M.R.S.	place within 12 nm of shore in the state waters of Maine, Massachusetts, and New
	§ 1317-A	Hampshire. <sup>1</sup> Direct impacts from the Proposed Action on benthic habitats would be limited
		to short-term disturbance and only minimal removal of available bentine habitat in the long-

<sup>&</sup>lt;sup>1</sup> According to 33 CFR 2.22, the territorial sea means the waters, 12 nautical miles wide, adjacent to the coast of the United Sates and seaward of the territorial sea baseline. Within this zone, the coastal state has full sovereignty over the air space above the sea, and over the seabed and subsoil.

		term. Sensitive benthic areas such as coral reefs, hard-bottom areas, seagrass beds, and chemosynthetic communities would be avoided when placing the meteorological buoy. No direct impacts on wetlands or other coastal habitats would occur from routine activities in the WEA based on the distance of the WEA from shore. Additionally, existing ports or industrial areas in Massachusetts, Maine, and New Hampshire are expected to be used in support of the proposed project. No expansion of existing facilities is expected to occur because of the Proposed Action. Indirect impacts from routine activities may occur from wake erosion and associated added sediment caused by increased traffic in support of the Proposed Action. Given the volume and nature of existing vessel traffic in the area, a negligible increase in wake-induced erosion may occur.
Energy and Offshore Wind Energy Facilities	Expedited Permitting of Grid- scale Wind Energy Development (35-A M.R.S. §§3451-3459)	The Proposed Action does not include the installation, construction, or operation of a full- scale wind energy facility. The purpose of the Proposed Action is the issuance of commercial wind energy leases and site characterization (i.e., geophysical, geotechnical, biological, and archeological surveys and monitoring activities) and site assessment activities (i.e., placement of meteorological ocean buoys) within the WEA and the granting of ROWs and RUEs in support of wind energy development in the WEA.
Fisheries Management	Natural Resources Protection Act (38 M.R.S. §§480-A to 480- JJ) Department of Inland Fisheries and Wildlife (DIFW) rules ch. 10, as amended effective October 21, 2009	See Section 3.4.9 of the Draft EA for more information on potential impacts to commercial and recreational fisheries. Impacts from seafloor disturbances are anticipated to range from negligible to minor for commercial and recreational fisheries. This impact determination is based on multiple factors, including the low level of vessel traffic activity associated with site characterization and site assessment activities relative to existing traffic, the fact that Acoustic Doppler Current Profilers (ADCP) and/or met buoys would be installed over a large geographic area, the relatively small spatial area and limited duration of sound produced from routine activities and events, and that the resource would be expected to recover completely without remedial or mitigating action. Communication and coordination between a lessee and affected anglers could greatly reduce the potential for conflict during vessel movement and buoy installation activities. Most coastal recreational fishing for Maine, New Hampshire, and Massachusetts takes place away from the WEA. Considering also the nominal increase in vessel traffic associated with the Proposed Action_impacts of increased vessel traffic to commercial and recreational

		fishing are anticipated to be negligible. Although commercial fishing vessels may transit the Lease Area en route to historical fishing grounds, site assessment and site characterization activities or met-buoy installation activities likely would not interfere with access to active fishing grounds outside of the need to change transit routes slightly to avoid survey and installation vessels and installed met buoys. After the met buoys are decommissioned and removed, the proposed sites would pose no obstacle to commercial or recreational fishing.
Public Access	Expedited Permitting of Grid- scale Wind Energy Development (35-A M.R.S. §§3451-3459) Natural Resources Protection Act (38 M.R.S. §§480-A to 480- JJ)	No direct impacts on wetlands or other coastal habitats would occur from routine activities in the WEA based on the distance of the WEA from shore. Site characterization surveys may occur within the state waters of Maine, Massachusetts, and New Hampshire. Additionally, existing ports or industrial areas in Massachusetts, Maine, and New Hampshire are expected to be used in support of the proposed project. No expansion of existing facilities is expected to occur because of the Proposed Action. The Proposed Action is not anticipated to restrict public use and general enjoyment of the water's edge. BOEM does not anticipate impacts to public recreation areas in ME because of the Proposed Action. No new onshore coastal structures would be built if the Proposed Action is implemented, and the amount of associated vessel traffic is expected to be small, thereby limiting the number of potential spills. Additionally, because the WEA is located more than 12 nm offshore, there would be no visual impacts on recreational resources. See Section 3.4.10 of the Draft EA for additional information on public recreation areas and Appendix B for visual resources.
Water Quality	Protection and Improvement of Waters Act15 (38 M.R.S. §§361- A, 362, 362-A, 363-D, and 372; 410-N; 411 to 424; 451, 451-A, and 452; and 464 to 470) Natural Resources Protection Act (38 M.R.S. §§480-A to 480- JJ)	The routine activities associated with the Proposed Action which would impact coastal and marine water quality include vessel discharges (including bilge and ballast water and sanitary waste), geotechnical and benthic sampling and other seafloor disturbances that could generate suspended sediment, and installation and removal of met buoys. Additional information on water quality and impacts on coastal and marine water quality can be found in Section 3.4.2 of the Draft EA. The USEPA National Pollutant Discharge Elimination System (NPDES) stormwater effluent limitation guidelines control stormwater discharges from support facilities such as ports and harbors. Activities associated with staging and fabrication of the met-buoys would account for a very small amount of activity at existing port facilities during staging. The

Storm Water Management Law 38 M.R.S. §420-D	Proposed Action is not anticipated to increase runoff or onshore discharge into harbors, waterways, coastal areas, or the ocean environment.
<ul> <li>Oil Discharge Prevention &amp; Pollution Control Law (38 M.R.S. §§541 to 560)</li> <li>Protection and Improvement of Waters Act15 (38 M.R.S. §§361- A, 362, 362-A, 363-D, and 372; 410-N; 411 to 424; 451, 451-A, and 452; and 464 to 470)</li> <li><u>38 M.R.S. § 1306</u>, <i>Prohibition</i>, in part, states: The discharge of hazardous waste into or upon any waters of the State, or into or upon any land within the State's territorial boundaries or into the ambient air, is prohibited unless licensed or authorized under state or federal law.</li> <li><u>38 M.R.S. § 1317-A</u>, <i>Discharge prohibited</i>, in part, states: The discharge of hazardous matter into or upon any waters of the State, or into or upon any land within the State's territorial boundaries or into the ambient air is prohibited unless licensed or authorized under state or federal law.</li> </ul>	Site characterization surveys are described in Section 2.4 of the Draft EA and include HRG surveys, geotechnical surveys, and biological surveys. These surveys are performed during cruises where specialized instrumentation is typically attached to the survey vessel, either through the hull or in packages towed behind the vessel. Other instrumentation, such as dredges and grab samplers, Vibracores, and deep coring devices, are placed on the bottom to acquire data or samples. All of this instrumentation is self-contained with no discharges to affect the water quality in the WEA, including hydrography, nutrients, chlorophyll, dissolved oxygen, or trace metals. Survey vessels performing these characterization surveys may affect water quality both during the surveys in the WEA, as well as traveling to and from shore facilities. Vessels generate operational discharges that can include bilge and ballast water, trash and debris, and sanitary waste. In the event of failure of the onboard equipment for treating such waste, water quality could be compromised, particularly in nearshore areas. However, in the WEA, coastal and oceanic circulation and the large volume of water would disperse, dilute, and biodegrade vessel discharges relatively quickly, and the water quality impact would be minor. As described in Section 2.4.4 of the Draft EA, the construction and deployment of metbuoys would disturb the seabed via anchoring. However, because the equipment is compact, only small, local changes in water quality (turbidity) in the vicinity of the buoys would occur until decommissioning.

	The discharge must be reported and removed as provided under section 1318-B, subsections 1 and 3.	<ul> <li>even without mitigation because any changes to water quality would be small in magnitude, highly localized, and transient.</li> <li>No development on barrier beaches is anticipated to occur because of the Proposed Action due to the use of existing facilities. No expansion of existing facilities is anticipated because of the Proposed Action.</li> <li>The activities associated with the Proposed Action would not adversely affect the characteristics of any Area of Critical Environmental Concern (ACEC) of Maine</li> </ul>
Air Quality	Protection and Improvement of Air Law (38 M.R.S. §§581 to 610-A, -B) Major and minor source air emissions license regulations (DEP rules ch. 115), as amended effective December 1, 2012 Oil Discharge Prevention & Pollution Control Law (38 M.R.S. §§541 to 560) 38 M.R.S. § 1306 and 38 M.R.S. § 1317-A	Section 3.4.1 of the Draft EA includes an evaluation of air quality impacts associated project activities. Increased vessel traffic associated with site characterization surveys would add to current vessel traffic levels associated with the ports used by the vessel operators. The level of additional vessel activity associated with the proposed action is anticipated to be relatively low when compared with existing and future vessel traffic levels in the area. Impacts from pollutant emissions associated with these vessels would likely be localized within the WEA and in the vicinity of vessel activity. Appendix A of the Draft EA provides further information on the anticipated numbers of project-related vessel traffic levels associated with the ports used by the vessel operators. The level of additional vessel activity associated with installation, operation and maintenance, and decommissioning of the meteorological buoys would add to current vessel traffic levels associated with the ports used by the vessel operators. The level of additional vessel activity associated with the proposed action is anticipated to be relatively low when compared with existing and future vessel traffic levels in the area. Impacts from pollutant emissions associated with these vessels would most likely be localized within the WEA and in the vicinity of vessel activity. Appendix A of the Draft EA provides further information on the anticipated numbers of project-related vessel traffic levels in the area. Impacts from pollutant emissions associated with these vessels would most likely be localized within the WEA and in the vicinity of vessel activity. Appendix A of the Draft EA provides further information on the anticipated numbers of project-related vessel trips.

		<ul><li>be expected to have impacts on onshore air quality because of the estimated size of the spill, prevailing atmospheric conditions over the WEA, and distance from shore.</li><li>Although unlikely, a spill could occur in the event of vessel collision while in route to and from the WEA or during surveys. Spills occurring in these areas, including harbor and coastal areas, are not anticipated to have significant impacts on onshore air quality due to the estimated small size and short duration of the spill.</li></ul>
<b>Historical</b> <b>Properties</b>	Expedited Permitting of Grid- scale Wind Energy Development (35-A M.R.S. §§3451-3459)	The potential impact of the Proposed Action on cultural and historic resources has been evaluated in accordance with the National Historic Preservation Act and Antiquities Act, and additional information on Recreation and Tourism is located in Section 3.4.10 and information regarding Visual Resources is located in Appendix B of the Draft EA. See Section 3.4.11 of the Draft EA for additional information on impacts on cultural resources. Temporary placement of met-buoys and vessels conducting site characterization surveys have the potential to impact the viewshed of onshore historic properties with open views in the direction of the WEA. The met-buoys and vessel traffic associated with surveys may fall within the viewshed of these onshore properties. The presence of met-buoys is expected to result in negligible impacts on onshore historic properties because its visibility from onshore locations would be temporary and indistinguishable from lighted vessel traffic associated with site characterization surveys also would be temporary. These vessels would be indistinguishable from existing vessel traffic and only result in a nominal increase in existing vessel traffic over the approximately 5-7 year span of activities. Because the vessel traffic would be both temporary and indistinguishable from existing vessel traffic in the Gulf of Maine, it is expected to have negligible impacts on onshore historic properties.
Non- Applicable Core Laws	Site Location of Development Law (w (38 M.R.S. §§481 to 489-E)	There are no components of the Proposed Action that meet the definition of "Development of state or regional significance that may substantially affect the environment," therefore, this law is not applicable.
	Maine Metallic Mineral Mining Act (38 M.R.S. §§490-LL-490- TT)	There are no mining activities included in the Proposed Action, therefore, this law is not applicable.

MaineDOT Traffic Movement Permit Law (23 M.R.S. §704-A)	There are no onshore components for the Proposed Action, therefore, this law is not applicable.
Erosion Control and Sedimentation Law (38 M.R.S. §420-C)	There are no onshore components for the Proposed Action, therefore, this law is not applicable.
Maine Waterway Development and Conservation Act (38 M.R.S. §§630 to638; and 640)	There are no hydropower components for the Proposed Action, therefore, this law is not applicable.