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Jessica Stromberg
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road, Mailstop VAM-OREP
Sterling, VA 20166

Re: Docket No. BOEM–2023–0031: Notice of Intent to Prepare an Environmental Assessment for a Wind Energy Research Lease on the Atlantic Outer Continental Shelf Offshore Maine

Dear Ms. Stromberg:

The Massachusetts Executive Office of Energy and Environmental Affairs (EEA) offers the following comments in response to the above-referenced Notice of Intent issued by the Bureau of Ocean Energy Management (BOEM) relating to a wind energy research lease off the coast of Maine. The proposed 9,700-acre offshore wind energy research lease represents an important opportunity to utilize the proposed research array to develop and assess best practices and standards for floating offshore wind projects in the Gulf of Maine that will inform planning, permitting, construction/installation, and operations at commercial scales. The following comments provide suggestions for topics that should be considered in the Environmental Assessment for the lease as well as priorities for the proposed research framework. Separately, EEA, through my office of Coastal Zone Management, will participate as a cooperating agency in the Environmental Assessment of the Wind Energy Research Lease to evaluate potential environmental effects associated with leasing activities.

Offshore wind is a key component of the future renewable energy portfolio for the Northeast. As a regionally abundant renewable resource, offshore wind will provide a substantial portion of New England's total energy needs while simultaneously mitigating climate change and helping to meet state and national clean energy goals. Purposeful and forward-looking research will support the successful deployment of floating offshore wind development in the Gulf of Maine and other deepwater leases planned for the East, West, and Hawaiian coasts.

The Commonwealth supports the development of the research lease off the coast of Maine to inform the sustainable development of floating offshore wind and to support innovation and standardization of best practices in this important industry. However, it is critical that the timeline for development of the research array closely aligns with that for commercial leasing in the Gulf of Maine. Commercial leasing in the Gulf of Maine should not be delayed due to alterations in timelines or pending research schedules. The research array can inform the development and operations of commercial offshore wind development in the Gulf of Maine on a parallel track. Communication channels should be established early in the process to allow for the results of research conducted at the array to efficiently inform development in the parallel commercial Gulf of Maine wind energy areas, and offshore wind development more broadly, in a timely manner.

As early-stage wind farms, the Block Island Wind and the Coastal Virginia Offshore Wind Pilot projects have offered important testing grounds for emerging offshore wind technologies as well as an opportunity to assess the effects of wind turbine generator (WTG) construction on coastal and marine habitats, sensitive and endangered species, and fishing activities. And as offshore wind projects increase in size, move further offshore, and transition to floating platforms, research initiatives like that proposed at the Maine research array focused on floating offshore wind can inform the operations of commercial scale projects. More distant wind farms in deeper waters means a shift to floating platforms for WTGs, and to high voltage direct current (HVDC) transmission lines, rather than the fixed WTGs with high voltage alternating current (HVAC) transmission currently in use for most US-based commercial and research installations. These technological and structural changes will be associated with different potential effects on existing maritime uses and resources – for example changes to fishing industry activity adjacent to floating WTG platforms; shifts in maritime transit within and around floating WTG arrays; different electro-magnetic frequency (EMF) effects associated with HVDC transmission and dynamic inter-array cable systems; and changes to seafloor habitat from various anchor and cable technologies. In addition, the research array offers the opportunity to consider potential effects on the physical and biological oceanographic environment including changes in sedimentation and scour patterns on the seafloor, localized temperature and currents in the water column, and the staging, migration, breeding, and feeding behaviors of numerous species including endangered birds, bats, whales, sea turtles, and fish. The wind energy research lease offshore Maine would allow these and other topics to be explored.

The research array presents opportunities for regional academic institutions to collaborate to advance the science of floating offshore wind in the United States. As a cooperating agency and as a national leader in offshore wind development, we look forward to our involvement in the planning of research activities at the research lease, in collaboration with Maine and regional stakeholders. All research conducted at the lease should be prioritized and designed in consultation with subject matter experts such as those participating in the Regional Wildlife Science Collaborative and the Responsible Offshore Science Alliance, along with other interested and engaged stakeholder groups

and research institutions. Prioritization and design considerations should contain provisions for efficient and effective communication of research results to developers, regulators, and regional and local stakeholders, and should include best practices for data archival and sharing.

As with commercial offshore wind leasing, BOEM must ensure that impacts to marine resources, habitats, and uses due to site characterization and assessment activities in the research lease are minimized. This includes careful siting and micro-siting of buoys, monitoring devices, etc., within the lease area to avoid sensitive bottom features and existing uses including fishing activity and maritime transit into and out of Portland and along the Maine coast. Since the primary goal of this lease is research to support the commercial deployment of floating offshore wind, any required mitigation, including compensatory mitigation, should be commensurate with commercial leases. The Gulf of Maine is important foraging ground for multiple whale, sea turtle, bird, and bat species, including endangered species such as the North Atlantic right whale and Roseate Tern, and all measures to protect these species should be taken. These measures may include vessel speed restrictions, protected species observers, time of year restrictions, as well as robust monitoring plans. Additionally, efforts to gather more extensive and/or more detailed baseline data in this lease that will support and expedite subsequent or concurrent monitoring activities at commercial leases, potentially incorporating new or emerging monitoring technologies, should be explored.

Thank you for the opportunity to offer input on the Environmental Assessment for the proposed research lease in Maine. We appreciate the efforts by BOEM to foster innovation and research in the offshore wind space with transparency and stakeholder input. We look forward to continuing to engage with BOEM, other federal agencies, our fellow New England States, and other stakeholders during this important process.

Sincerely,



Rebecca Tepper
Secretary

cc:
James Bennett, David MacDuffee, Luke Feinberg, Zach Jylkka, Bureau of Ocean Energy Management
Marc Sanborn, NH Department of Environmental Services
Dan Burgess, Maine Governor's Energy Office