UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

December 6, 2024

David Diamond
Deputy Chief for Operations, Atlantic Outer Continental Shelf
Office of Renewable Energy Programs
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, Virginia 20166

RE: Issuance of wind energy leases in Gulf of Maine Wind Energy Area

Dear Mr. Diamond:

This responds to your final Biological Assessment (BA) received on September 19, 2024, and accompanying email requesting concurrence with the conclusions reached in the BA, pursuant to Section 7 of the Endangered Species Act (ESA), of 1973, as amended, for the Bureau of Ocean Energy Management's (BOEM) proposed issuance of commercial leases in the Gulf of Maine Wind Energy Area (WEA) and to grant rights-of-way and rights-of-use and easement in the region of the outer continental shelf of the Gulf of Maine. We note that the e-mail request was followed by a letter dated December 3, 2024, formalizing BOEM's request for section 7 consultation on the proposed action. BOEM is acting as the lead Federal agency for the Section 7 consultation and, as described in the BA and December 3 letter, has determined that the proposed action may affect, but is not likely to adversely affect, any ESA-listed species or designated critical habitat under NMFS jurisdiction and has requested our concurrence with that determination.

On March 15, 2024, BOEM published the final WEA, which is located offshore of Maine, New Hampshire, and Massachusetts. The first lease auction occurred on October 29, 2024; BOEM proposes to issue four leases (OCS A-0562, 0564, 0567, and 0568) in December 2024. We note BOEM's proposed action described in the BA is to issue up to 15 leases in the Gulf of Maine WEA. The second lease sale is expected to occur in 2028; given that four leases are expected to be issued in 2024, up to 11 leases could be issued in 2028. This consultation addresses the proposed issuance of up to 15 leases consistent with the conditions included in the BA. If modifications are made to lease conditions for future leases, BOEM would need to consider if reinitiation of this consultation is necessary and if so, request that we reinitiate the consultation.

Based on our review and assessment of the best available scientific information, including our knowledge, expertise, and the information and analysis in BOEM's BA, we concur with your conclusion that the proposed actions may affect but are not likely to adversely affect any ESA-listed species. We have not identified any effects to designated critical habitat. Therefore, no further consultation pursuant to Section 7 of the ESA is required. In reaching these conclusions, we offer the following supporting analysis and clarification to supplement BOEM's BA. Note that while this consultation incorporates by reference the analysis carried out to support a

September 2021 programmatic ESA consultation; the consultation carried out here is separate and distinct from that programmatic consultation as there is not complete alignment of the activities considered or the action area.

Description of the Proposed Action

As described by BOEM in their BA, "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[1] to BOEM to conduct site characterization surveys and site assessment activities that could be conducted as a result of the Proposed Action. Although BOEM does not permit site characterization activities (i.e., geotechnical and geophysical surveys), a lessee must submit the results of such survey before BOEM can consider approving its Construction and Operations Plan (COP) (30 CFR 285.626)." The scope of this ESA consultation is bounded by the definition of "effects of the action" (50 CFR 402.02) included in the Section 7 implementing regulations. As such, we must first identify "all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action but that are not part of the action." As noted in the definition, a "consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur." The activities that are expected to result from the proposed lease issuance(s) include site assessment and site characterization surveys which may include geophysical and geotechnical surveys of the lease areas and any anticipated cable corridors, deployment of meteorological (met) or other data collection buoys (i.e. Passive Acoustic Monitoring [PAM]), and surveys of biological and benthic resources in the lease area and surrounding waters to inform development of a COP. Construction or operation of any future offshore wind project in any of the lease areas in the Gulf of Maine WEA is not an effect of the action and is not considered here, as those future activities are neither caused by lease issuance nor reasonably certain to occur. Review and approval of a Construction and Operation Plan requires a separate future Federal agency review and decision-making process governed by BOEM's regulations. Therefore, such actions would be the subject of future Section 7 consultations on the effects of proposed approval of a Construction and Operations Plan and any associated federal actions (e.g., issuance of permit authorizations by the U.S. Army Corps of Engineers and issuance of a Marine Mammal Protection Act Incidental Take Authorization by NMFS).

As noted in the September 2024 BA, BOEM acknowledges that while an individual Gulf of Maine lessee may opt to carry out biological surveys to characterize resources in their lease area to inform the development of a future COP, there is not an affirmative requirement to carry out any fisheries surveys, and no fisheries survey plans have been developed by any of the potential Gulf of Maine lessees. In the BA, BOEM has concluded that fisheries surveys, extractive fisheries surveys especially, that may be conducted in association with Gulf of Maine lease issuance are not "effects of the action." Based on our experience with activities carried out by

[1] We note that 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 (33 USC 1344(e)) and Section 10 of the Rivers and Harbors Act of 1899 (33 USC 401 et seq.) 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.

lessees in other WEAs, we expect that the Gulf of Maine lessees will carry out at least some fisheries surveys. Depending on the survey type and gear used, some surveys may affect ESA-listed species and/or designated critical habitat. These surveys would not occur but for BOEM's issuance of the associated lease; therefore, they meet the first prong of the definition of "effects of the action." However, as we have no information on the type of surveys, scope, timing, or duration, we agree with BOEM that at this time, any effects of such surveys are not reasonably certain to occur. Therefore, at this time, the effects of any future fisheries surveys are outside the definition of effects of the action. Condition 5.2.1 of the proposed leases states that the lessee must consult with BOEM and NMFS prior to designing and conducting biological surveys that "could interact with ESA-listed species." We expect this condition will provide an appropriate opportunity for BOEM to determine if any biological surveys proposed by a lessee may affect any ESA-listed species or critical habitat under our jurisdiction such that this consu ltation would be reinitiated to consider the effects of those surveys before those surveys are conducted. To be clear, this consultation does not consider the effects of any fisheries surveys that may affect ESA listed species or designated critical habitat and such activities would require additional Section 7 consultation.

Effects of the Action

Consistent with the information provided in BOEM's September 2024 BA, the effects of the action considered here are those resulting from site assessment activities (installation, operation and maintenance, and decommissioning of met buoys and PAM buoys and gliders) and site characterization activities (geophysical and geotechnical surveys, benthic surveys, physical oceanographic monitoring, and certain biological surveys that would not interact with any ESA listed species[2]) in the proposed lease areas. As described in the BA, BOEM is proposing to include[3] a number of conditions in any leases issued for the Gulf of Maine WEA; these conditions are part of the proposed action we are consulting on. Section 5.2 of the leases identifies stipulations for Protected Species and Sensitive Habitat and we consider whether these measures can effectively minimize effects. In addition to requirements related to vessel transits, buoy deployments, and geotechnical and geophysical survey activities, this includes a requirement to collect a minimum of three years of Passive Acoustic Monitoring (PAM) data for monitoring the presence of large whales.

Condition 5.2.2 of the proposed leases requires that lessees comply with the requirements in BOEM's *Project Design Criteria and Best Management Practices (PDC and BMP) for Protected Species Associated with Offshore Wind Data Collection*[4]. These PDCs and BMPs are consistent with the measures included with our June 2021 informal ESA programmatic consultation for geophysical and geotechnical surveys and the deployment, operation, and retrieval of environmental data collection buoys associated with site characterization and site

[2] As described in section 3.1.3.6 of BOEM's BA, these include aerial and vessel-based visual surveys and PAM monitoring and do not include any extractive surveys such as trawl, gillnet, or trap/pot surveys.

[3] The lease documents for the first lease sale can be found at: https://www.boem.gov/renewable-energy/state-activities/maine/gulf-maine (last accessed September 26, 2024).

[4] https://www.boem.gov/sites/default/files/documents/PDCs%20and%20BMPs%20for%20Atlantic%20Data%20Collection%2011222021.pdf

assessment activities along the U.S. Atlantic Coast (Appendix A to this letter)[5] and include a number of additional measures including requirements for deploying moon pools and additional vessel speed restrictions. The applicable survey and monitoring PDCs and BMPs included in the 2021 programmatic ESA consultation, incorporated by reference, are also considered elements of the proposed action for this consultation[6].

The best management practices and project design criteria are designed to minimize the potential effects of the activities evaluated in this consultation on ESA-listed species. In the programmatic consultation, we concluded that substantially similar activities, inclusive of vessel transits, are not likely to adversely affect any ESA-listed species if implemented in accordance with the applicable BMPs and PDCs. Therefore, since the activities described in the proposed action for this consultation are substantially similar to the activities evaluated in the 2021 programmatic consultation with, no meaningful difference in effects to listed species, we expect, consistent with the assessment of effects and conclusions of the 2021 programmatic consultation, any effects of this proposed action to ESA-listed species to be extremely unlikely to occur and therefore, discountable or will be so small that they cannot be meaningfully measured, evaluated, or detected and are therefore insignificant. The analysis supporting these conclusions is presented in the 2021 programmatic consultation and incorporated by reference here; a brief summary of the relevant analysis is included below. While we rely on the analysis in the 2021 programmatic consultation as it includes the best available science on effects of these activities, we have independently reviewed and evaluated the effects of the proposed action for this consultation (i.e. issuance of the referenced Gulf of Maine leases) and reach our conclusions based on that independent review.

High Resolution Geophysical (HRG) Survey Noise

As described in the BA, a number of minimization measures for HRG surveys are included as part of the proposed action. This includes monitoring of a 500 m zone by third-party PSOs around all vessels operating boomer, sparkers, or bubble gun equipment (including requirements for monitoring at night or in low-visibility conditions and when autonomous surface vessels are used); maintenance of a 500 m clearance zone for ESA-listed marine mammals and sea turtles; and, shutdown requirements (500 m for North Atlantic right whales and 100 m for other ESA-listed species).

For ESA-listed whales, horizontal impact distances to the onset of auditory injury threshold is less than 1 m from the source; noise is not expected to exceed the behavioral disturbance threshold (160 dB re 1uPa RMS) at distances greater than 200 m (BOEM 2021, using data from Crocker and Fratantonio 2016; additional information submitted to NMFS). For sea turtles, noise is not expected to exceed the onset of injury threshold at any distance and is not expected to exceed the behavioral disturbance threshold (175 dB re 1uPa RMS) beyond 100 m. For ESA-listed fish, noise is not expected to exceed the onset of injury threshold beyond 10 m; the maximum distance to the 150 dB re 1uPa behavioral disturbance threshold is approximately 2 km for the loudest equipment (sparker).

[5] https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-take-reporting-programmatics-greater-atlantic#offshore-wind-site-assessment-and-site-characterization-activities-programmatic-consultation

[6] We note BOEM has included a measure in the BA to minimize vessel interactions with listed species during use of a moon pool. This measure is not included in the 2021 programmatic consultation.

Autonomous Underwater Vehicles (AUVs) may be used for some HRG surveys in the Gulf of Maine, these vehicles can run many geophysical sensors at once, and typically would consist of a multibeam echosounder (mobile, non-impulsive intermittent sound source), side-scan sonar (mobile, non-impulsive intermittent sound sound), magnetometer, and a sub-bottom profiler (mobile, impulsive intermittent sound source). The BA states that typical survey speeds for AUVs are not expected to exceed 2.5 knots. As opposed to towed sound sources from a vessel, AUVs would operate closer to the seafloor and thus reduce the area ensonified by the sound source as the noise would be concentrated near the bottom of the ocean. As described in the BA, BOEM is requiring that lessees discuss AUV deployment prior to contracting to understand what measures may be necessary to minimize interactions with protected species for the AUV system under consideration. Based on our correspondence with BOEM on this topic, we understand that as necessary, BOEM may identify additional measures for the use of AUVs which would be incorporated into survey plans to ensure that effects to listed species are insignificant or discountable. We do not rely on the effectiveness of those future measures to support our conclusions here. The consistency review process for survey plans ensures that reviews of AUV activities will occur; reinitiation of this consultation would be required if it is determined that there are effects of AUV surveys not considered here.

As described in the 2021 programmatic consultation, given the characteristics of the noise associated with HRG survey equipment and the use of best management practices to limit exposure of listed species, including protected species observers and clearance and shutdown requirements, effects of exposure to noise from the identified survey equipment on listed species are expected to be extremely unlikely to occur or insignificant. Injury or any effects to hearing to any ESA-listed species are extremely unlikely to occur. Given the intermittent and short duration of exposure to any potentially disturbing noise from HRG equipment, effects to ESA-listed species, including individual whales, sea turtles, or sturgeon, from brief exposure to potentially disturbing levels of noise are expected to be minor and limited to a brief startle, short increase in swimming speed and/or short displacement from a very small area, and will be so small that they cannot be meaningfully measured, detected, or evaluated; therefore, effects are insignificant. Similarly, we have not anticipated any adverse effects to any ESA-listed species resulting from any effects to habitats or prey from HRG surveys.

Geotechnical Surveys

Consistent with the conclusions of the 2021 programmatic, any effects of geotechnical surveys designed to characterize benthic and subsurface conditions, including associated noise and disturbance of the ocean bottom, are expected to be insignificant and discountable.

Data Collection Buoys

Best management practices for moored buoys used for data collection, including PAM, are designed to eliminate the potential for entanglement with any ESA-listed species and to minimize disturbance of the ocean floor. All deployed buoys will use the best available technology to reduce any potential risks of entanglement and deployment will comply with best management practices designed to reduce the risk of entanglement in anchored monitoring gear. Moored PAM systems are stationary and may include platforms that reside completely underwater with no surface expression (i.e., HARPs, high-frequency acoustic recording

packages) or may consist of buoys (at the surface) connected via a data and power cable to an anchor or bottom lander on the seafloor. For moored PAM systems, there are cables connecting the hydrophones and/or buoy to the anchor or lander. For moored metocean buoys, heavy chain connects the buoy to the anchor. The cables and chains associated with moored buoys have a minimum bend radius that minimizes entanglement risks and does not create loops during deployment, further minimizing entanglement risks. Therefore, consistent with the conclusions of the 2021 programmatic, we expect any effects to ESA-listed species from deployment, presence, and removal of any data collection buoys to be extremely unlikely to occur and therefore, discountable.

Vessel Traffic
A number of PDCs and BMPs are included to avoid and minimize the risk of vessel strike including restrictions on vessel speed and the use of lookouts. As described in our 2021 programmatic consultation, with these measures in place, we expect that vessel strike, of any ESA-listed species, resulting from operation of a vessel carrying out activities consistent with those described in the programmatic consultation is extremely unlikely to occur and discountable.

Non-Routine Events
In the BA, BOEM identifies a number of "low probability events," that include structural failures of met buoys resulting from storms, allisions or collisions, petroleum spills from vessels, and loss of survey equipment. In this section of the BA, BOEM identifies effects as being "unlikely to occur…and…discountable." We note that effects are "discountable" when they are "extremely unlikely to occur." Considering the information presented in the BA, and our understanding of BOEM's intent with this language, we concur with BOEM's determination that the effects of these unexpected events are extremely unlikely to occur and therefore, discountable.

Effects to Critical Habitat
BOEM concluded that the proposed action is not likely to adversely affect right whale critical habitat. We find that BOEM's analysis appears to address effects to right whale habitat and use of the area more generally and is not limited to consideration of impacts to the identified physical and biological features of the critical habitat. Our rationale, addressing the physical and biological features of the critical habitat is presented here.

As identified in the final rule (81 FR 4837), the physical and biological features essential to the conservation of the North Atlantic right whale that provide foraging area functions in Unit 1 are: The physical oceanographic conditions and structures of the Gulf of Maine and Georges Bank region that combine to distribute and aggregate *C. finmarchicus* for right whale foraging, namely prevailing currents and circulation patterns, bathymetric features (basins, banks, and channels), oceanic fronts, density gradients, and temperature regimes; low flow velocities in Jordan, Wilkinson, and Georges Basins that allow diapausing *C. finmarchicus* to aggregate passively below the convective layer so that the copepods are retained in the basins; late stage *C. finmarchicus* in dense aggregations in the Gulf of Maine and Georges Bank region; and diapausing *C. finmarchicus* in aggregations in the Gulf of Maine and Georges Bank region.

The activities considered here will not affect the physical oceanographic conditions and structures of the region that distribute and aggregate *C. finmarchicus* for foraging. This is because the activities considered here have no potential to affect currents and circulation patterns, flow velocities, bathymetric features (basins, banks, and channels), oceanic fronts, density gradients, or temperature regimes. Therefore, we have determined that the activities considered in this consultation will have no effect on Unit 1 of right whale critical habitat.

BOEM concluded that the only activity that would overlap with critical habitat designated for the Gulf of Maine DPS of Atlantic sturgeon is vessel transits in the Piscataquis River. BOEM determines that vessel transits may affect PBF 4. In considering effects to PBF 4, we consider whether the proposed action will have any effect on water, between the river mouth and spawning sites, especially in the bottom meter of the water column, with the temperature, salinity, and oxygen values that, combined, support: spawning; annual and interannual adult, subadult, larval, and juvenile survival; and larval, juvenile, and subadult growth, development, and recruitment. Therefore, we consider effects of the action on temperature, salinity and DO needs for Atlantic sturgeon spawning and recruitment. We have determined that vessel transits will have no effect on this feature as they will not have any effect on temperature, salinity or dissolved oxygen. We note that BOEM's analysis addresses water quality more generally and is not limited to consideration of temperature, salinity, and oxygen. We have not identified any effects to critical habitat designated for the Gulf of Maine DPS of Atlantic sturgeon from vessel transits. If in the future any benthic survey activities are proposed in areas designated as critical habitat for Atlantic sturgeon, reinitiation of this consultation may be required.

Conclusion

As explained above, we concur with BOEM's determination that the effects of the proposed action may affect, but are not likely to adversely affect any ESA-listed species or designated critical habitat under our jurisdiction. As stated in 50 CFR §402.16, reinitiation of consultation is required and shall be requested by the Federal action agency, where discretionary Federal involvement or control over the action has been retained or is authorized by law and: If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered in the consultation; if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation; or, if a new species is listed or critical habitat designated that may be affected by the identified action. No incidental take is anticipated or exempted; if there is any incidental take, NMFS must be notified immediately, and reinitiation of this consultation would be required. As noted above, we will consider any lessee's proposal to carry out a biological survey that may affect ESA-listed species or critical habitat to be a modification to the action that causes an effect to listed species or critical habitat that was not considered in this consultation and that this would require reinitiation of this consultation; this would include trawl, gillnet, and/or trap-pot surveys. As described in the BA, BOEM will conduct individual reviews of site characterization and site assessment activities proposed by lessees and will coordinate with NMFS to determine consistency of those activities with this consultation. If an activity is proposed by a lessee that is outside of the scope of the activities considered here (e.g., uses different survey equipment), reinitiation of consultation may be required.

We look forward to working with you as plans for offshore wind development in the Gulf of Maine WEA move forward. Should you have any questions about this correspondence please contact Nick Sisson at (978) 281-9179 or by email (nick.sisson@noaa.gov).

Sincerely,

ANDERSON.JENNIFER.LYNN.1365847238 Digitally signed by ANDERSON.JENNIFER.LYNN.1365847238 Date: 2024.12.06 15:29:30 -05'00'

Jennifer Anderson
Assistant Regional Administrator
for Protected Resources

ec: Hooker, Wisman, Baker, Turner - BOEM
Crocker, Tuxbury, Christel - GARFO
Laws, Daly - OPR
Brien - USACE
Arzt - BSEE

File Code: Section 7/BOEM/ Informals/2024/Gulf of Maine Leasing
GARFO-2024-03012