



United States Department of the Interior

FISH AND WILDLIFE SERVICE



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May 15, 2024

David Bigger, Ph.D.
Office of Renewable Energy Programs
Bureau of Ocean Energy Management
45600 Woodland Road, VAM-OREP
Sterling, VA 20166

Re: Wind Energy Research Lease on the Atlantic Outer Continental Shelf Offshore Maine
Project Code: 2024-0001276

Dear Dr. Bigger:

This letter is in response to your April 25, 2024, request for the U.S. Fish and Wildlife Service's (USFWS or Service) review of the Bureau of Ocean Energy Management's (BOEM) "Wind Energy Research Lease on the Atlantic Outer Continental Shelf Offshore Maine" (Project) Biological Assessment (BA). BOEM has determined that issuance of a wind energy research lease in support of wind energy development in the Gulf of Maine may effect, but is not likely to adversely affect, federally listed species under the jurisdiction of the Service, including roseate tern (*Sterna dougallii dougallii*; endangered), piping plover (*Charadrius melodus*; threatened), rufa red knot (*Calidris canutus rufa*; threatened) (red knot), northern long-eared bat (*Myotis septentrionalis*; endangered), and tricolored bat (*Perimyotis subflavus*; proposed endangered), and will have no effect on monarch butterfly (*Danaus plexippus*; candidate) or Plymouth redbelly turtle (*Pseudemys rubriventris bangsi*; endangered). As BOEM is consulting with the National Marine Fisheries Service (NMFS) on the effects of the Project on Atlantic salmon (*Salmo salar*; endangered) and its critical habitat within the action area, this letter will not be addressing those determinations. BOEM's request and the Service's response are made pursuant to section 7 of the Endangered Species Act, as amended (87 Stat. 884, as amended; 16 U.S.C 1531, *et seq.*) (ESA).

The following comments do not address all Service concerns for fish and wildlife resources and do not preclude separate review and comment by the Service as afforded by other applicable environmental legislation.

CONSULTATION HISTORY

- BOEM first sent the BA to the Service on July 21, 2023. BOEM and the Service had a meeting on August 16, 2023, to discuss the project. The Service sent back comments on the BA on September 6, 2023.

- BOEM sent a second BA that was prepared using the Service’s Information for Planning and Consultation (IPaC) Consultation Package Builder (CPB) on October 20, 2023. The Service sent a response letter including comments on March 8, 2024. In this response letter, the Service requested that BOEM include all listed species identified in the action area and assess all the potential impacts to species resulting from project activities for this consultation in the BA, rather than using the Determination Keys available in IPaC (which are not intended for use by wind power projects).
- BOEM sent a revised BA on April 11, 2024. BOEM and the Service had a meeting to discuss the BA and comments on April 17, 2024. The Service sent a list of comments to BOEM by email the same day.
- BOEM sent an updated BA on April 24, 2024.

PROPOSED ACTION

The proposed Project is the issuance of a wind energy research lease in support of wind energy development in the Gulf of Maine. BOEM established a Research Lease Area approximately 68,320 acres (276 square kilometers) in size on the U.S. Outer Continental Shelf (OCS) in the Gulf of Maine. Within this area, BOEM would issue a research lease not to exceed 10,000 acres (40.5 square kilometers). The research lease would result in site assessment activities (i.e., placement of a meteorological ocean buoy) within the lease and site characterization activities (including geophysical, geotechnical, biological and archaeological surveys and monitoring activities) within and around the lease and potential future project easements. The research lease would not authorize any wind turbine construction activities on the OCS. Issuance of the research lease would also give the State of Maine the exclusive right to submit a detailed site assessment plan (SAP) and a research activities plan (RAP) for wind energy-related research activities offshore Maine. The research lease application submitted to BOEM by the State of Maine in October 2021 included a preliminary plan for development of an array of up to 12 floating offshore wind turbines on the OCS of offshore Maine capable of generating up to 144 megawatts of renewable energy. Prior to the approval of any plan authorizing the construction and operation of the Research Array, installation of inter-array and export cables, and associated wind energy-related research facilities, which is outside the scope of this BA, BOEM would prepare a subsequent plan-specific environmental analysis.

GENERAL COMMENTS

Service Comment: The Service made a number of comments in our March 8, 2024, letter that were unaddressed by BOEM, and these comments still stand. There are multiple sections of the BA, especially the species sections, that could be answered more accurately or thoroughly in regards to the specific prompts provided in the CPB template. We request that BOEM continue to coordinate with the Service for accuracy and completeness in future BAs prepared using the CPB.

Section 1.4.5.6 Conduct Offshore Geophysical Survey: “Additionally, there will be 60 daily trips by 12-hour vessel from March through May 2024.

Section 1.4.5.11 Seafloor Habitat Characterization Sampling and Surveys: “Activity Frequency and Timing: ...Beginning in Quarter 1 2023 and continuing until approval of the RAP.”

Service Comment: Please amend Project activities in the BA with dates that start before consultation. Any activities that have already happened should be considered part of the environmental baseline of the project, as the Service does not provide concurrence on activities after the fact.

LISTED SPECIES THAT MAY BE AFFECTED

Northern Long-Eared Bat

The BA summarizes northern long-eared bat occurrence in the action area in Section 2.3. The BA describes one potential offshore detection of northern long-eared bats at South Fork Wind Farm, with little other evidence of their use of the offshore environment. While data is limited and there many unknowns about this species' presence in offshore environments, BOEM concluded that northern long-eared bats will have minimal exposure to the Project action area.

Service Comment: The Service disagrees with BOEM using the following language to describe the presence of northern long-eared bat in the action area: *“There are no records of northern long-eared bats on the OCS, and the available bat survey data suggest there is little evidence of use of the offshore environment (Pelletier et al. 2013; ESS Group, Inc. 2014; Hatch et al. 2013; Sjollem et al. 2014; Smith and McWilliams 2016; Dowling et al. 2017), and the same expected in the potential lease area.”* This language is used in Section 2.3.2.1. Species Presence and Use, Section 2.3.2.2 Species Conservation Needs Within the Action Area, Section 2.3.2.3 Habitat Condition (General), Section 2.3.2.4 Influences, and Section 2.3.2.5 Additional Baseline Information. As discussed in our previous comments, the Stantec (2016) study detected 50,961 passes of *Myotis* species over 23 sites in the Gulf of Maine, which ranged from 4 to 41.6 km offshore. Since detections were not identified down to the species level, there is no evidence to rule out presence of northern long-eared bats within these detections. The statement that there are no records of northern long-eared bats on the OCS does not accurately represent the results of this study.

Section 2.3.2.1. Species Presence and Use – Northern Long-eared Bat: “Myotis species were detected at two dozen coastal and offshore sites in the Gulf of Maine region; however, none of the detections were identified northern long-eared bats (Santec 2016). BOEM anticipates limited use of the offshore environment by the northern long-eared bat, and exposure to the Wind Energy Area...”

Service Comment: The phrasing of the first sentence suggests that the *Myotis* detections were identified to species and none of them were northern long-eared bats. However, none of the detections were identified to species level, so it would be inaccurate to imply that none of the detections were identified as northern long-eared bats. Please amend this sentence in the BA to say “to the species level” instead of “northern-long-eared bats.”

Also please amend the second sentence to remove “Wind Energy Area,” which is not being considered as part of this consultation, and replace with “Research Lease Area.” Please delete the same incorrect sentence which is used again in Section 2.3.2.2 Species Conservation Needs Within the Action Area (not relevant to this section).

Section 2.3.2.2 Species Conservation Needs Within the Action Area – Northern Long-eared Bat: “Although no surveys have been conducted for Northern-long eared bats within the Lease Area.”

Service Comment: This sentence should be deleted from this section and Section 2.3.2.5 Additional Baseline Information, as it was for the Species Presence and Use Section.

Piping Plover

The BA summarizes piping plover occurrence in the action area in Section 2.4. Piping plovers are present in Massachusetts, New Hampshire, and Maine during the summer breeding season and the spring and fall migratory season from late March through mid-October. While no studies have been done tracking piping plovers through the Gulf of Maine, studies have found that piping plovers fly directly across the mid-Atlantic during migration (Loring et al. 2019). BOEM acknowledges the possibility for piping plovers that breed in Canada to migrate through the Gulf of Maine. BOEM concluded that piping plovers may be present in the Project action area during migration.

Section 2.4.2.1 Species Presence and Use – Piping Plover: “The migration period lasted for a period of several weeks and included low visibility conditions, during which the two birds stayed close to shore and were not detected north of Montauk, New York (Loring et al. 2019).”

Service Comment: This is an incorrect statement that the Service commented on previously in this BA review and in the Revolution Wind BA in 2022. It has been flagged as incorrect by the report’s lead author (Pam Loring) on multiple occasions and has yet to be corrected by BOEM. Please amend the second half of the sentence to say “... during which one bird flew over 200 km offshore” instead of “during which the two birds stayed close to shore and were not detected north of Montauk.” Please delete the same incorrect sentence which is used again in Section 2.4.2.5 Additional Baseline Information (not relevant to this section).

Roseate Tern

The BA summarizes roseate tern occurrence in the action area in Section 2.6. Roseate terns are present in Maine during the breeding season, where 200 to 250 pairs nest on coastal islands, and forage in near-shore habitats during this time, and during migration. Roseate terns migrate mainly offshore during the spring and fall migratory season (Nisbet et al. 2014). Roseate terns have been documented foraging close to or in the potential Research Lease area (Yakola and Lyons 2023). BOEM concluded that roseate terns may pass through the Project action area during the migration or use nearby foraging habitat offshore.

Section 2.6.2.1 Species Presence and Use – Roseate Tern: “During nesting season, they feed primarily in near-shore habitats on sand lance. Roseate tern foraging areas are not well known but can be 10 or 15 miles or greater from nesting islands (USFWS Maine n.d.).”

Service Comment: As the Service previously stated in earlier comments on this BA, recent tracking work with GPS tags on roseate terns from summer 2023 (Yakola and Lyons 2023) documented roseate terns foraging a maximum of 32.5 miles offshore from breeding colonies, which is more than double what is described in this BA. We appreciate that BOEM updated this section with this study to note that roseate terns passed close to or in the potential lease area, but

please amend the sentence above to reflect the farther distance that roseate terns have been found to forage.

Red Knot

The BA summarizes red knot occurrence in the action area in Section 2.7. Red knots use coastal habitats in Massachusetts, New Hampshire, and Maine during spring and fall migration (BOEM 2013). While no studies have been done tracking red knots through the Gulf of Maine, studies have found that most red knots fly over open ocean during fall migration from Canada (Loring et al. 2018). BOEM concluded that little red knot activity is expected over the Project action area.

Section 2.7.2.1 Species Presence and Use – Red Knot: “Very little, if any, rufa red knot activity is expected over the Research Lease Area, with relatively few flying through the Potential Action Area during the spring and fall migration.”

Service Comment: Due to the lack of fine-scale movement data for Red Knot that move through the Gulf of Maine, please amend this sentence in the BA to remove the 'if any' phrase and more accurately say: "Little red knot activity is expected, but there are many unknowns in red knot movement through the Gulf of Maine" or similar.

Tricolored Bat

The BA summarizes tricolored bat occurrence in the action area in Section 2.8. Low numbers of tricolored bats have been recorded offshore, including within the Project action area (Pelletier et al. 2013, Stantec 2016, Stantec 2018). BOEM concluded that tricolored bats are not anticipated to be encountered in the Research Area.

Service Comment: The Service disagrees with the BOEM's statements in BA that say: “*the tricolored bat is not expected to be found offshore or on the OCS*” and “*there are no records of tricolored bats on the OCS.*” This language can be found in Section 2.8.2.1 Species Presence and Use, Section 2.8.2.2 Species Conservation Needs Within the Action Area, Section 2.8.2.3 Habitat Condition (General), and Section 2.8.2.5 Influences. As discussed in our previous comments, Stantec (2016) recorded 39 passes of tricolored bat over 9 sites in the Gulf of Maine, including on coastal islands that were 10-30 km off the coast of the mainland. The other studies that BOEM has referenced in this section, as well as Stantec (2020), have also found evidence of tricolored bats offshore. Therefore, language stating that tricolored bats are not expected to be found offshore or that there are no records is inaccurate. Please amend these sentences to more accurately say: “Few tricolored bats are expected to be found offshore or on the OCS” or similar.

PROPOSED CONSERVATION MEASURES FOR LISTED SPECIES

The Service’s Consultation Handbook defines “Conservation Measures” as “*actions to benefit or promote the recovery of listed species that are included by a Federal agency as an integral part of a proposed action under ESA consultation. These actions will be taken by the Federal agency or applicant, and serve to minimize or compensate for, project effects on the species under review*” (USFWS and NMFS 1998). Conservation Measures may include actions that the Federal agency or applicant have committed to complete in a BA or similar document. When used in the context of the ESA, “Conservation Measures” represent actions pledged in the project description that the action agency or the applicant will implement to further the recovery of the

species under review. Such measures may be tasks recommended in the species' recovery plan, should be closely related to the action, and should be achievable within the authority of the action agency or applicant. Since Conservation Measures are part of the proposed action, their implementation is required under the terms of the consultation (USFWS and NMFS 1998).

BOEM provided a list of conservation measures to avoid and minimize effects on listed species in Section 1.6 of the BA. Through coordination with BOEM, we understand that these measures will be incorporated into the project description and will be implemented as part of the proposed action.

1. The applicant must provide an annual report to the BOEM and the Service. The report must document any dead or injured birds or bats found during activities conducted in support of plan submittal. The annual report must document any dead (or injured) birds or bats found on vessels and structures during surveys. The report must contain the following information: the name of species, date found, location, a picture to confirm species identity (if possible), and any other relevant information. Carcasses with Federal or research bands must be reported to the United States Geological Survey Bird Band Laboratory, available at <https://www.usgs.gov/labs/bird-banding-laboratory>.
2. The applicant must install a Motus station on any meteorological buoy in coordination with the USFWS Offshore Motus network to help address information gaps on offshore movements of birds and bats, including ESA-listed species.
3. To minimize the attraction of birds, the applicant must install bird deterrent devices (e.g., anti-perching), where appropriate.
4. The applicant must provide the results of avian surveys and data to BOEM and USFWS with its plans.
5. The applicant must coordinate with the USFWS to identify appropriate mitigation measures.
6. The applicant must ensure that lighting will be minimized to reduce potential attraction of birds and bats to vessels and aircraft during site assessment and site characterization activities to the extent practicable. Any lights used to aid marine navigation by the lessee during construction, operations, and decommissioning of a meteorological buoy must meet USGS requirements for Private Aids to Navigation (PATON) and BOEM's guidelines for lighting and marking of structures supporting renewable energy development (<https://www.boem.gov/2021-lighting-and-marking-guidelines>). For any additional lighting, the lessee must use such lighting only when necessary, and the lighting must be hooded downward and directed when possible, to reduce upward illumination and illumination of adjacent waters.
7. The applicant must use approved oil spill response plan (OSRP) mitigation measures, as necessary, to prevent birds from going to affected areas including chumming, hazing, and relocating to unaffected areas.

Additionally, as per conversation with BOEM during our April 17, 2024, meeting, the Service requests implementation of the following conservation measure:

8. The applicant must install acoustic detectors for bats on survey vessels when possible. These vessel-based surveys will supplement the data captured by the single FLiDAR buoy and are important to capture bat activity at the margins of or in proximity to the

Research Lease Area, especially in the areas closest to land. The Service will provide a bat survey and monitoring protocol for the applicant to use as guidelines for acoustic detections.

CONCURRENCE

Bat Species

The BA addresses effects to northern long-eared bat in Section 2.3.3.2 and tricolored bats in Section 2.8.3.2, including collision with vessels and aircraft and disturbance. The Service concurs with BOEM's determination that the Project may affect, but is not likely to adversely affect, northern long-eared bat. Our concurrence is based on the following:

- we anticipate only a small number of bats may occur in the offshore action area. At any given time, Project activities would occur in a small portion of the action area and/or they would be brief, so disturbance would be insignificant;
- vessel and aircraft traffic increase due to the project would be minimal compared to baseline conditions in the Gulf of Maine;
- the Project will minimize lighting to reduce potential attraction of birds and bats to vessels and aircraft by only using lighting when required and ensuring that additional lighting is hooded downward and directed when possible;
- anthropogenic noise associated with vessels and aircrafts during site characterization and assessment activities would be temporary and highly localized.

The Service notes that we are currently working to complete a final listing decision for the tricolored bat, and until that time we cannot provide concurrence on an effects determination for this species. Publication of the final rule and effective dates are yet to be determined, but the Service is expecting to make a final decision during summer 2024. If tricolored bat is listed, BOEM should contact the Service immediately and request reinitiation, as this would meet the criteria for requiring reinitiation of consultation per the implementing regulations for section 7 of the ESA (50 CFR 402.16). Depending on if any changes to the Project are anticipated at that time or if any new information is available, the Service may be able to issue a concurrence letter addressing this change specifically.

Avian Species

The BA addresses effects to piping plover in Section 2.4.3.2, roseate tern in Section 2.6.3.2, and red knot in Section 2.7.3.2, including collision with vessels and aircraft and disturbance. The Service concurs with BOEM's determination that the Project may affect, but is not likely to adversely affect, piping plovers, roseate tern, and red knot. Our concurrence is based on the following:

- we anticipate that migrating piping plovers, roseate terns, and red knots would occur in the offshore action area during spring and fall migration periods, and foraging roseate terns would occur in the offshore action area during the summer breeding period. However, at any given time, Project activities would occur in a small portion of the action area and/or they would be brief, so disturbance would be insignificant;
- vessel and aircraft traffic increase due to the project would be minimal compared to baseline conditions in the Gulf of Maine;

- the Project will minimize lighting to reduce potential attraction of birds and bats to vessels and aircraft by only using lighting when required and ensuring that additional lighting is hooded downward and directed when possible;
- bird deterrent devices (e.g., anti-perching) will be installed where appropriate;
- an oil spill response plan will be developed with mitigation measures; and
- anthropogenic noise associated with vessels and aircrafts during site characterization and assessment activities would be temporary and highly localized.

The Service acknowledges BOEM's 'no effect' determinations for monarch butterfly and Plymouth redbelly turtle, as project activities would not occur in habitat that supports Plymouth redbelly turtle, and the risk of monarch butterflies colliding with vessels is discountable, since only occasional transient individuals would be expected to occur offshore.

As a reminder, until the proposed project is complete, we recommend that you check IPaC every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project area is current (by selecting "Request updated list" on your My Projects page). Should project plans change or additional information on listed or proposed species or critical habitat become available, our concurrences or acknowledgement of the effects of the proposed project may be reconsidered.

Thank you for continued coordination with the Service. If you have any questions or require further assistance, please contact Kim Spiller (kimberly_spiller@fws.gov; 413-770-2484) of the Maine Field Office.

Sincerely,

Amanda S. Cross, Ph.D.
Project Leader
Maine Field Office

Literature Cited

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