



In Reply Refer To:
2022-0018531

United States Department of the Interior

FISH AND WILDLIFE SERVICE

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May 12, 2023

Lisa Landers, NEPA coordinator
Environment Branch for Renewable Energy
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, Virginia 20166

Dear Ms. Landers:

This transmits the U.S. Fish and Wildlife Service's (Service or USFWS) final Biological Opinion (BO) and concludes consultation and conference for the Ocean Wind 1 project pursuant to Section 7 of the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA).

BACKGROUND

A Biological Assessment (BA) prepared by Bureau of Ocean Energy Management (BOEM) for the Ocean Wind 1 project assessed effects on 11 federally listed species, 1 species proposed for listing, 1 candidate for listing, and 1 species being evaluated for possible listing (14 species total). Of these 14 species, the Service has previously concurred with BOEM's determinations that the proposed project will have no effect on 2 species, and is not likely to adversely affect 3 additional species.

The BO addresses only the risk that one or more federally listed (threatened) piping plover (*Charadrius melodus*) or rufa red knot (*Calidris canutus rufa*) or federally listed (endangered) roseate tern (*Sterna dougallii dougallii*) (collectively referred to as "listed birds") will collide with any of the Ocean Wind 1 wind turbines over the operational life of the project. Via letter dated February 10, 2023, the Service concurred with BOEM's determination that these listed birds are not likely to be adversely affected by onshore portions of the project, by the construction phase of the offshore components, or by any stationary structures in the offshore environment (whether above or below the ocean surface). This letter concludes informal consultation regarding potential behavioral changes (*e.g.*, displacement, attraction) that these

listed birds may exhibit as a result of wind turbine operation. This letter also concludes informal consultation for the remaining 6 species. A final effects matrix is enclosed.

This letter does not address all Service concerns for fish and wildlife resources. The Service has provided or may provide separate comments and recommendations for the Ocean Wind 1 project pursuant to other authorities such as the National Environmental Policy Act of 1969 as amended (83 Stat. 852; 42 U.S.C. 4321 *et seq.*) (NEPA); the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 703-712); the Bald and Golden Eagle Protection Act (54 Stat. 250; 16 U.S.C. 668-668d); the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 *et seq.*), if any permits are required from the U.S. Army Corps of Engineers; and the December 22, 1993 Memorandum of Agreement among the U.S. Environmental Protection Agency, New Jersey Department of Environmental Protection (NJDEP), and the Service, if project implementation requires any permits from the NJDEP pursuant to the New Jersey Freshwater Wetlands Protection Act (N.J.S.A. 13:9B *et seq.*).

PROJECT DESCRIPTION

The Federal action under consideration is approval by BOEM of a Construction and Operations Plan that would authorize the construction, operations and maintenance (O&M), and eventual decommissioning of an approximately 1,100-megawatt offshore wind energy facility within BOEM Renewable Energy Lease Area OCS-A 0498 (Lease Area) located on the Outer Continental Shelf approximately 15 miles southeast of Atlantic City, New Jersey. The proposed project would consist of up to 98 wind turbine generators (WTGs), up to three offshore substations (OSSs), inter-array cables linking the individual WTGs to the OSS, and substation interconnector cables linking the OSSs to each other. The nacelle of the proposed WTGs would be 512 feet above the mean lower low water surface, while the rotor swept area would extend from 118 to 906 feet above mean lower low water. The project would also install up to three offshore export cables (within two export cable route corridors) that connect to onshore export cable systems and two onshore substations with connections to the existing electrical grid in New Jersey at Oyster Creek and BL England. The Oyster Creek export cable route corridor would be installed under Island Beach State Park before crossing Barnegat Bay and making landfall in Lacey Township, Ocean County, New Jersey. The BL England export cable route corridor would make landfall in Ocean City, Cape May County, New Jersey.

BAT SPECIES

Revised Conservation Measures

In our February 10, 2023 letter, the Service recommended edits to conservation measures AM 4.a, 4.b, and 4.c in order to avoid adverse effects to the federally listed (endangered) northern long-eared bat (*Myotis septentrionalis*), as well as the tricolored bat (*Perimyotis subflavus*) that is proposed for listing as endangered. On February 16, 2023, BOEM transmitted a revised version of Table 2-3 from the BA, which includes the Service-recommended edits. The final versions of AM 4.a, 4.b, and 4.c are listed below. We appreciate BOEM's adoption of these and other measures to avoid adverse effects to listed bats.

Additional Measure (AM) 4.a: GEN-13 will be modified to enhance bat habitat in coordination with USFWS and NJDEP. Ocean Wind must develop and implement a replanting plan¹ in areas of temporary deforestation. The replanting plan must include the identification of specific tree species and densities, timing of planting, protection of saplings from herbivory, monitoring, and invasive species control in order to provide high-quality bat habitat and must be provided to BOEM and USFWS for approval prior to commencing onshore construction activities.

Additional Measure (AM) 4.b.: If Ocean Wind elects to construct an Oyster Creek onshore cable route option other than the Holtec route, Ocean Wind must coordinate with BOEM, USFWS, and NJDEP prior to commencing onshore construction activities. After coordination with BOEM, USFWS, and NJDEP, Ocean Wind must retain the services of a USFWS Recognized and Qualified Bat Surveyor to conduct presence/absence surveys (acoustic or mist netting) along the proposed route that are consistent with the USFWS' Rangewide Indiana Bat and Northern Long-eared Bat Survey Guidelines. A survey work plan must be submitted for USFWS approval before commencing the survey. A survey report, including maps and associated spatial files in an ESRI ArcGIS/ArcPro compatible format, must be provided to BOEM and USFWS for review no later than 30 calendar days after the survey has been completed. BOEM and USFWS will complete their reviews and identify any deficiencies that require a report revision by Ocean Wind. Based on the results of the presence/absence survey, USFWS may recommend additional field investigations, such as a tree survey to assess roost habitat suitability and/or a mist netting/bat tracking effort to locate occupied roosts. If potential NLEB or tricolored bat roosting habitat will be impacted by Project activities, Ocean Wind must coordinate with BOEM and USFWS to develop appropriate conservation measures that Ocean Wind is required to implement to avoid adverse effects to this species. Conservation Measures may include a seasonal restriction on tree clearing and avoidance of likely or known roost trees.

AM 4.c.: Ocean Wind will coordinate with the USFWS prior to any clearing of trees (> 3 inches dbh) required during operation and maintenance.

Based on these revisions and other information discussed in previous correspondence, we concur that the proposed Ocean Wind 1 project is not likely to adversely affect the northern long-eared bat. These revisions are also expected to avoid adverse effect to the tricolored bat except as discussed below.

Seasonal Restriction

In our February 10, 2023 letter, the Service recommended seasonally restricting tree clearing associated with the Oyster Creek cable route and substation from April 1 to September 30 to minimize the risk of incidental take of tricolored bats, which have been detected in this area. On March 1, 2023, BOEM transmitted a response that Ocean Wind will avoid tree clearing during the peak tricolored bat pup season (May through July), but is requesting the option to allow for tree clearing at the Oyster Creek substation and cable route beginning August 1.

¹ Preliminary information regarding the planting plan was transmitted by BOEM on March 1, 2023. Please continue to coordination with the Service regarding plan development, approval, and implementation.

While *consultation* is required when a proposed federal action may affect *listed species*, a *conference* is required only when the proposed action is likely to jeopardize the continued existence of *proposed species*. However, a Federal action agency and/or the Service may request informal conference for any action that may affect a proposed species. During the conference, the Service may assist the action agency in determining effects and may advise the action agency on ways to avoid or minimize adverse effects to proposed species.

Based on the results of the 2022 bat acoustic survey, the document “Updated –Bat Habitat Survey and Tree Clearing Information, February 27, 2023,” and the partial seasonal restriction adopted by Ocean Wind, the Service concurs that tree clearing associated with the Oyster Creek cable route and substation is not likely to jeopardize the continued existence of the tricolored bat. This satisfies the conference requirements of the ESA for this species.

However, the Service does not concur that the partial seasonal restriction is sufficient to avoid all adverse effects to the tricolored bat (*i.e.*, we conclude that the risk of incidental take of tricolored bats in the course of tree clearing is not discountable). Therefore:

1. we request that BOEM and Ocean Wind continue to coordinate with the Service’s New Jersey Field Office to assess and minimize the risk of take ahead of each section or phase of tree clearing for the Oyster Creek cable route and substation; and
2. re-initiation of consultation may be necessary if any in-season tree clearing is still proposed for the Oyster Creek portion of the project if/when the tricolored bat listing goes into effect.

SALT MARSH SPECIES

In our February 10, 2023 letter, the Service requested additional information and conservation measures to avoid adverse effects to the federally listed (threatened) eastern black rail (*Laterallus jamaicensis jamaicensis*), as well as the saltmarsh sparrow (*Ammodramus caudacutus*), which is a Service Bird Species of Conservation Concern, a Service Priority At-Risk Species for the Northeast Region, and an Atlantic Coast Joint Venture Focal Species. In responses transmitted March 1, 2023, BOEM:

- provided GIS layers of the 8 delineated wetlands that have been determined to provide suitable habitat for these marsh bird species;
- confirmed that Ocean Wind’s currently proposed Oyster Creek cable route will not pass through, under, or adjacent to wetlands I or J on Figure 1 in the assessment report;
- confirmed that the currently proposed cable route will not pass through, under, or adjacent to wetlands A and E identified as suitable habitat on assessment report Figure 1 (*i.e.*, these habitat areas will not be impacted during construction or by O&M activities);
- provided an assessment of potential impacts from development of the BL England substation on surrounding marsh habitat;
- added wetland B along the BL England cable route to conservation measure AM 3.i.; and
- provided information regarding the subsurface cable crossing of wetlands A and C along Roosevelt Boulevard.

Based on the above information and other information discussed in previous correspondence, the Service concurs that the proposed Ocean Wind 1 project is not likely to adversely affect the eastern black rail or saltmarsh sparrow.

PLANT SPECIES

In our February 10, 2023 letter, the Service requested edits to conservation measure AM 1.a to avoid adverse effects to the federally listed (threatened) swamp pink (*Helonias bullata*). In BOEM's March 1, 2023 response, these edits were adopted and incorporated in the revised (final) version of BA Table 2-3. Via BOEM's March 1, 2023 response, Ocean Wind also provided a habitat impact assessment along the Oyster Creek cable route west of Route 9, and south of the Oyster Creek substation parcel.

Based on the above information and other information discussed in previous correspondence, we concur that the Ocean Wind 1 project is not likely to adversely affect swamp pink, the federally listed (threatened) Knieskern's beaked-rush (*Rhynchospora knieskernii*), or the federally listed (endangered) American chaffseed (*Schwalbea americana*).

BIRD SPECIES OFFSHORE BEHAVIORAL CHANGES

In our February 10, 2023 letter, we requested that BOEM and Ocean Wind include assessment of behavioral changes among the objectives of the post-construction monitoring plan that is now in development. This recommendation was adopted via BOEM's February 16, 2023 response, and is reflected in the revised Avian and Bat Post-Construction Monitoring Framework. We appreciate adoption of this conservation measure in support of BOEM's determination, with which we have concurred, that piping plover, rufa red knot, and roseate tern behavioral changes in response to WTG operation are expected to be insignificant and/or discountable. Following construction, if the monitoring were to detect behavioral change rising to the level of an adverse effect, consultation would need to be reinitiated. However, at this time, incidental take from behavioral changes is not reasonably certain to occur. Thus, monitoring is the most appropriate course of action, and behavioral change is not included in the BO transmitted with this letter.

OIL SPILLS

Based on information provided in the Environmental Impact Statement (prepared by BOEM pursuant to NEPA), the Service concurs that the risk of adverse effects to listed species originating from an oil spill associated with the Ocean Wind 1 project is discountable.

CONCLUSION

This concludes consultation and conference for the Ocean Wind 1 project pursuant to Section 7 of the ESA. We appreciate BOEM's ongoing cooperation to assess and abate adverse effects to listed species from offshore wind energy development.

Please contact Wendy Walsh at wendy_walsh@fws.gov to discuss next steps in implementing the conservation measures adopted in the BA (including revised Table 2-3) and in the BO transmitted with this letter, and to discuss ongoing coordination regarding tree clearing.

Sincerely,

Eric Schradling
Field Supervisor

Enclosures

cc via email:

subject: Section 7 Consultation for Ocean Wind 1

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	<i>Onshore</i>	<i>Onshore</i>	<i>Onshore</i>	<i>Onshore</i>	<i>Onshore</i>	<i>Onshore</i>	<i>Onshore</i>	<i>Onshore</i>	<i>Onshore</i>	<i>Onshore</i>
	Construction	Construction	Construction	Construction	Construction	O&M	O&M	O&M	O&M	O&M
	<i>Habitat</i>	<i>Injury / Mortality (trampling, crushing, etc.)</i>	<i>Noise</i>	<i>Lighting</i>	<i>Collision</i>	<i>Habitat</i>	<i>Injury / Mortality (trampling, crushing, etc.)</i>	<i>Noise / EM Fields</i>	<i>Lighting</i>	<i>Collision</i>
bog turtle	na	na	na	na	na	na	na	na	na	na
sensitive joint-vetch	na	na	na	na	na	na	na	na	na	na
northern long-eared bat	INS/DIS	DIS	DIS	INS/DIS	DIS	INS/DIS	DIS	INS	INS	DIS
tricolored bat	INS	MA	MA	INS	DIS	INS/DIS	DIS	INS	INS	DIS
eastern black rail	INS/DIS	DIS	INS/DIS	INS	DIS	INS/DIS	DIS	INS	INS	DIS
saltmarsh sparrow	INS/DIS	DIS	INS/DIS	INS	DIS	INS/DIS	DIS	INS	INS	DIS
piping plover	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS
rufa red knot	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS
roseate tern	DIS	DIS	DIS	DIS	DIS	DIS	DIS	INS/DIS	INS/DIS	DIS
monarch butterfly	INS	DIS	INS	INS	DIS	INS	DIS	INS	INS	DIS
swamp pink	INS/DIS	DIS	na	na	na	INS/DIS	DIS	na	na	na
Knieskern's beaked-rush	INS/DIS	DIS	na	na	na	INS/DIS	DIS	na	na	na
American chaffseed	DIS	DIS	na	na	na	DIS	DIS	na	na	na
seabeach amaranth	DIS	DIS	na	na	na	DIS	DIS	na	na	na
	na = not applicable									
	INS = Insignificant									
	DIS = Discountable									
	NE = No Effect									
	NLAA = Not Likely to Adversely Affect									
	MA = May Affect									
	LAA = Likely to Adversely Affect									
	NJ = not likely to jeopardize									

	<i>Offshore Construction</i>	<i>Offshore Construction</i>	<i>Offshore Construction</i>	<i>Offshore Construction</i>	<i>Offshore O&M</i>	<i>Offshore O&M</i>	<i>Offshore O&M</i>	<i>Offshore O&M</i>		
	<i>Noise</i>	<i>Lighting</i>	<i>Collision</i>	<i>Displacement/ Behavioral Change</i>	<i>Noise</i>	<i>Lighting</i>	<i>Collision</i>	<i>Displacement/ Behavioral Change</i>	<i>BOEM Determination</i>	<i>USFWS Determination</i>
bog turtle	na	na	na	na	na	na	na	na	NE	NE
sensitive joint-vetch	na	na	na	na	na	na	na	na	NLAA	NE
northern long-eared bat	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	NLAA	NLAA
tricolored bat	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	NJ	NJ / MA
eastern black rail	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	NLAA	NLAA
saltmarsh sparrow	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	NLAA	NLAA
piping plover	INS	INS	DIS	INS	INS/DIS	MA	LAA	INS/DIS	NLAA	NJ
rufa red knot	INS	INS	DIS	INS	INS/DIS	MA	LAA	INS/DIS	LAA	NJ
roseate tern	INS	INS	DIS	INS	INS/DIS	MA	LAA	INS/DIS	NLAA	NJ
monarch butterfly	DIS	DIS	DIS	DIS	DIS	DIS	DIS	DIS	NLAA	NLAA
swamp pink	na	na	na	na	na	na	na	na	NLAA	NLAA
Knieskern's beaked-rush	na	na	na	na	na	na	na	na	NLAA	NLAA
American chaffseed	na	na	na	na	na	na	na	na	NLAA	NLAA
seabeach amaranth	na	na	na	na	na	na	na	na	NLAA	NLAA
	na = not applicable									
	INS = Insignificant									
	DIS = Discountable									
	NE = No Effect									
	NLAA = Not Likely to Adversely Affect									
	MA = May Affect									
	LAA = Likely to Adversely Affect									
	NJ = not likely to jeopardize									