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

August 5, 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, VA 20166

RE: Initiation of Emergency Consultation for Response to Vineyard Wind Blade Failure

Dear Mr. Diamond:

This letter confirms that emergency consultation under section 7 of the Endangered Species Act (ESA) was initiated through an exchange of emails and information between NOAA's National Marine Fisheries Service (NMFS) and the Bureau of Ocean Energy Management (BOEM) on August 1, 2024, for activities related to the emergency response for the Vineyard Wind blade failure, and is ongoing. Your July 31, 2024, letter and supporting information, transmitted by email, described the ongoing emergency response activities associated with the failure of a wind turbine generator blade at the Vineyard Wind project including debris recovery efforts. As noted in our August 1 response email, we agree that use of the emergency consultation provisions identified in 50 CFR 402.05 is appropriate. Specifically, we have reviewed BOEM's request and determined that emergency circumstances mandate the need to consult in an expedited manner and that this consultation will be conducted informally through alternative procedures that are consistent with the requirements of ESA sections 7(a)-(d).

Consistent with the ESA regulations (50 CFR 402.05(a)-(b)) and the Section 7 Handbook (Section 8-1, 8-2), emergency consultation occurs in two phases. In the first phase, the action agency notifies NMFS of the emergency, explains the anticipated emergency response activities, and requests recommendations to minimize impacts of those activities on ESA-listed species and critical habitat. Our response to your July 31 letter requesting emergency consultation completes this first phase of the consultation. However, we will provide additional recommendations as response activities are further defined and additional information is provided to us. In phase two of the emergency consultation, which occurs after the emergency response actions are complete, we will work with you to complete an "after-the-fact" consultation.

Consistent with the emergency consultation procedures, once the emergency is under control, we expect BOEM will initiate consultation with us by submitting an assessment that contains a complete description of the emergency response activities and identifies any effects to listed species (including incidental take) or critical habitat that resulted from the emergency response action as well as a summary of the implementation of recommended minimization measures and their effectiveness. We would then carry out a consultation that will result in a determination as to the effects of the action on ESA-listed species and/or critical habitat. This would be done informally

through issuance of a letter of concurrence or formally through completion and transmission of a Biological Opinion, depending on the nature of effects to ESA-listed species and/or critical habitat.

Attached to this letter is the list of initial recommendations to minimize the effects of the emergency response action on ESA-listed species under NMFS jurisdiction that was provided to you via email on August 1 (Attachment A). We encourage BOEM and BSEE to use the authorities available to them to provide for implementation of the recommendations to minimize the effects of the emergency response action on listed species and to evaluate the potential exposure of listed species to turbine debris and response activities. These recommendations are based on our current understanding of the planned response activities which may affect listed species including: Using nets deployed from boats or by hand to capture debris in the water; use of booms (oil containment or similar) to capture/retain floating debris; removal of debris from shorelines/beaches by hand; use of multibeam echosounder or similar imaging equipment to locate debris on the bottom; use of vessels for monitoring and to assist in debris recovery; and, removal of debris from the ocean floor (unknown methodology). We understand that a number of these recommendations are already being implemented. Should you identify additional activities that may affect listed species or have more details on these activities, please notify us as we may have additional recommendations that can be provided through this ongoing emergency consultation.

We are providing the following information, guidance, and recommendations related to Essential Fish Habitat (EFH), the Fish and Wildlife Conservation Act (FWCA), and general measures to conserve marine resources for awareness and efficiency. They are outside of the scope of the ESA Section 7 emergency consultation.

Recommendations Provided to Vineyard Wind

On July 31, in cooperation with our Northeast Fisheries Science Center, we provided advisory recommendations to Vineyard Wind to assist in avoiding and minimizing the effects of blade debris recovery efforts on our trust resources. In that letter, we also provided recommendations that could be implemented if a comprehensive monitoring strategy were established to document the effects of the release of debris following the failure of one of Vineyard Wind's turbine blades. We encourage BOEM and BSEE to work with Vineyard Wind and GE to implement those comprehensive recommendations, which extend beyond the scope of the ESA-specific recommendations provided here. A copy of that letter is enclosed as Attachment B to this letter.

Essential Fish Habitat

The Vineyard Wind lease area and surrounding waters is designated as EFH for a variety of federally managed fish species. Please refer to the EFH consultation completed for the Vineyard Wind project for information on these species. Pursuant to section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), federal agencies must consult with us regarding any of their actions authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect EFH (see 50 CFR 600.905). Included in these regulations is the requirement for federal agencies to consult with us on emergency federal actions that may adversely affect EFH. While our regulations do not include a specific process for consultations on federal emergency response actions, abbreviated or expanded EFH consultations

can be undertaken on an expedited basis. Consultations may also take place after the fact if consultation on an expedited basis is not practicable before taking the emergency response action.

To initiate the EFH consultation, BOEM must provide us with a written assessment of the effects of the proposed actions on EFH. This assessment must include: A description of the action; an analysis of the potential adverse effects of the action on EFH and the managed species; the federal agency's conclusions regarding the effects of the action on EFH; and, proposed mitigation, if applicable.

We recognize that many of the details of the emergency response activities may not be fully defined due to the nature of the emergency action. The list of recommended avoidance and minimization measures provided in our July 31 letter to Vineyard Wind (and appended here) can be considered a preliminary list of measures to avoid, minimize, or otherwise offset adverse effects to federally managed species and their EFH. As new information becomes available on the response activities, please provide it to us so that we can determine if we have any additional recommendations.

Fish and Wildlife Coordination Act

The FWCA provides authority for our involvement in evaluating impacts to fish and wildlife from proposed federal actions that may affect waters of the United States. Species that we work to protect under the FWCA include commercially, recreationally, and ecologically valuable species that are not managed by the regional fisheries management councils. The FWCA requires federal action agencies to consult with us "with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof in connection with such water-resource development" (16 USC 662). Our FWCA recommendations must be given full consideration by federal action agencies.

FWCA consultations are generally undertaken as part of the EFH consultation process or as part of any National Environmental Policy Act coordination. In this instance, our recommendations under the FWCA will be included as part of any EFH consultation that is carried out for the emergency response actions. The list of recommended avoidance and minimization measures provided in our July 31 letter to Vineyard Wind and included in Attachment A can also be considered a preliminary list of measures to avoid, minimize, or otherwise offset impacts to the species we conserve and enhance under the FWCA.

Conclusion

We look forward to continuing to work with you on this matter. Please contact Julie Crocker in our Protected Resources Division (Julie.Crocker@noaa.gov) if there are questions about implementing any of the recommendations or about next steps for the ESA consultation. For questions about EFH and FWCA consultation requirements, please contact Sue Tuxbury in our Habitat and Ecosystems Services Division (Susan.Tuxbury@Noaa.gov).

Sincerely,

Michael Pentony
Regional Administrator

cc: K. Baker, B. Hooker, N. Turner – BOEM
C. Hunter, T. Artz – BSEE
D. OConnell – USCG
T. Timmermann – EPA

Attachments (2)

Attachment A

Initial NMFS recommendations to minimize the effects of the emergency response action on ESA listed species and to evaluate the potential exposure of listed species to turbine debris and response activities, as provided to BOEM on August 1, 2024:

- Wherever possible, implement blade removal/recovery efforts that avoid additional release of debris in the water
- Use booms or other measures to contain falling debris, as well as potential spills or leaks of fluids from the turbine, particularly if there is a greater risk of failure or risks to structural integrity of the turbine or other structural components.
- Deploy dedicated, trained lookouts or protected species observers on all vessels to monitor for protected species and to ensure that all vessel operators are aware of, and implement, minimum separation distances from protected species and measures to avoid vessel strike (see Vineyard Wind Lease Addendum C, Section 4.1).
- Operate vessels at 10 knots or less whenever possible, particularly in low visibility conditions.
- Prior to initiating activities designed to dislodge debris from the damaged blade, use protected species observers to monitor the area around the foundation for at least 30 minutes. If any ESA listed species (large whales, sea turtles, sturgeon, giant manta rays) are sighted in the area, delay the activity until the individual has left the area or has not been re-sighted for at least 15 minutes.
- Monitor areas for sea turtles and marine mammals for at least 30 minutes prior to deployment of any booms or nets (other than hand-held dip or similar small nets) to minimize the potential for entanglement or entrapment of protected species. If any protected species are sighted in the area, then delay deployment until the individual has moved away or has not been re-sighted for at least 15 minutes.
- In the case of any interactions with listed species, follow all reporting protocols in the Vineyard Wind Biological Opinion. In the event that nets capture any fish or other marine species, prioritize the safe release of protected species, including sea turtles, giant manta rays, or sturgeon. In the event that a sea turtle or marine mammal is entangled or captured, immediately call the NMFS Stranding and Entanglement hotline for instructions for safe release (866-755-6622).
- Retain any dead specimens for necropsy if possible. If this recommendation will be pursued, please contact us so that appropriate handling and preservation instruction can be provided and additional coordination carried out. Do not dispose of any dead marine mammal, sea turtle, or ESA listed fish without discussing appropriate disposal procedures with NMFS.
- During any surveys for marine debris on the ocean bottom:
    - Avoid equipment that operates at frequencies less than 180 kHz; and
    - For any equipment that operates at frequencies less than 180 kHz, follow BMPs/PDCs included in the 2021 NMFS/BOEM programmatic ESA consultation for site assessment activities (Available online: https://media.fisheries.noaa.gov/2021-12/OSW-surveys-NLAA-programmatic-rev-1-2021-09-30-508-.pdf)

- Record and communicate sightings/presence of listed species (including large whales, sea turtles, and ESA listed fish) during all debris and other monitoring efforts, including overflights. The scope of such surveys should include marine waters anticipated to be exposed to turbine debris; and should utilize aircraft, vessel, and uncrewed (including PAM) survey methods. Surveys should be carried out on a frequency appropriate to the size of the area being monitored; it is recommended that this occur at least once daily. These data should be collected following standardized methods and data and metadata provided to NMFS using standardized formats.
- Sightings of North Atlantic right whales should be reported to NMFS as soon as possible to the NMFS Marine Mammal Hotline (866-755-6622)
- Any interactions with marine mammals or observations of injured, entangled, or dead marine mammals should be reported as soon as possible to the Marine Mammal Hotline (866-755-6622).
- Any interactions, including unintentional capture and release of live sea turtles, should be reported to NMFS as soon as possible. Entangled or injured animals should be reported through the stranding hotline (866-755-6622).

Attachment B

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

August 1, 2024

Mark Normann
Vineyard Wind 1 LLC
75 Arlington Street, 7th Floor
Boston, MA 02116

Dear Mr. Normann,

As the Federal agency with primary responsibility for protection and conservation of marine resources, we are writing to provide advisory recommendations to assist in avoiding and minimizing the effects of blade debris recovery efforts on our trust resources. Marine debris has the potential to impact marine life if exposed through ingestion or contact; thus, NOAA trust resources may be negatively affected by this ongoing event. Activities to remove/recover debris may also put NOAA trust resources at risk through interactions with the equipment and/or the vessels being used. Nantucket Shoals and surrounding marine waters are an area of high marine biodiversity, an important foraging area for a number of protected species, and support a number of commercial and recreational fisheries. We are also providing recommendations that could be implemented if a comprehensive monitoring strategy were established to document the effects of the release of debris following the failure of one of Vineyard Wind's turbine blades. In addition, we have included recommendations for reporting any observations or interactions with protected species. Please note that these are advisory recommendations only and do not constitute or obviate the need for any permits, authorizations, consultations, or approvals that may otherwise be necessary to carry out any activities associated with debris recovery and/or monitoring activities.

Recommendations to Avoid and Minimize Effects of Debris Recovery Efforts
The recommendations provided here are based on our current understanding of the planned response activities which we understand may include: Using nets deployed from fishing boats or by hand to capture debris in the water; use of booms (oil containment or similar) to capture/retain floating debris; removal of debris from shorelines/beaches by hand; use of a multibeam echosounder or similar imaging equipment to locate debris on the bottom; and removal of debris from the ocean floor (unknown methodology). Should you identify additional activities or have more details on these activities, including methods for debris removal, we recommend you share this information with us as we may have additional recommendations. We recommend you:

- Wherever possible, implement blade removal/recovery efforts that avoid additional release of debris in the water.
- Use booms or other measures to contain falling debris, as well as potential spills or leaks of fluids from the turbine, particularly if there is a greater risk of failure or risks to structural integrity of the turbine or other structural components.
- Deploy dedicated, trained lookouts or protected species observers on all vessels to monitor for protected species and to ensure that all vessel operators are aware of, and

implement, minimum separation distances from protected species and measures to avoid vessel strike (see Vineyard Wind Lease Addendum C, Section 4.1).

- Operate vessels at 10 knots or less whenever possible, particularly in low visibility conditions.
- Prior to initiating activities designed to dislodge debris from the damaged blade, use protected species observers to monitor the area around the foundation for at least 30 minutes. If any protected species are sighted in the area, delay the activity until the individual has left the area or has not been re-sighted for at least 15 minutes.
- Monitor areas for sea turtles and marine mammals for at least 30 minutes prior to deployment of any booms or nets (other than hand-held dip or similar small nets) to minimize the potential for entanglement or entrapment of protected species. If any protected species are sighted in the area, then delay deployment until the individual has moved away or has not been re-sighted for at least 15 minutes.
- In the event that nets capture any fish or other marine species, prioritize the safe release of protected species, including sea turtles, giant manta rays, or sturgeon. In the event that a sea turtle or marine mammal is entangled or captured, immediately call the NMFS Stranding and Entanglement hotline for instructions for safe release (866-755-6622).
- Retain any dead fish or wildlife for necropsy if possible. If this recommendation will be pursued, please contact us so that appropriate handling and preservation instruction can be provided and additional coordination carried out.
- During any surveys for marine debris on the ocean bottom:
    - Avoid equipment that operates at frequencies less than 180 kHz; and
    - For any equipment that operates at frequencies less than 180 kHz, follow BMPs/PDCs included in the 2021 NMFS/BOEM programmatic ESA consultation for site assessment activities[1] or shut down sources if a non-listed marine mammal, other than bow-riding dolphins, approaches within 150 m of the source.

Recommendations for Monitoring

- To address the need to establish a sufficient monitoring program to survey potential interactions of the blade debris on NOAA trust resources, a survey program should be established to monitor, record, and communicate sightings/presence of protected species and fishery species prior to, during, and after all debris monitoring and collection efforts.
- Conduct aerial surveys, vessel surveys, and uncrewed surveys (including passive acoustic monitoring) of the area containing debris and record and communicate sightings/presence of protected species. The scope of such surveys should include marine waters anticipated to be exposed to turbine debris and areas adjacent but not exposed to turbine debris (e.g., control areas). Visual sightings and turbine debris modeling should be used to define the survey area. Surveys should be carried out on a frequency appropriate to the size of the area being monitored; it is recommended that this occur at least once daily during the period of release and response activities, and then continued until the clean-up of debris is considered complete.
- Monitor the distribution and abundance of marine wildlife (marine mammals and sea turtles) in the vicinity of the debris field using standard protocols for line-transect aerial

[1] Available online: https://media.fisheries.noaa.gov/2021-12/OSW-surveys-NLAA-programmatic-rev-1-2021-09-30-508-.pdf

surveys, such as those conducted by the New England Aquarium or Northeast Fisheries Science Center. Those protocols should include an approach to estimate the detectability of marine wildlife on the transect line.

- Collect data on debris size, composition, disposition, and location coincident with biological surveys.
- Given the composition of the debris and its wide dispersion field, we recommend monitoring and collection of representative benthic species to evaluate the rate and magnitude of debris uptake and the potential for biomagnification/bioaccumulation. Biological collections should occur at near-field and far-field locations using an exposure gradient design. Collected individuals should be examined for gut contents, contaminants, and microplastics. Potential target species for the monitoring include bivalves, decapods, and echinoderms. Additional samples should include any dead individuals collected within the debris field during debris recovery operations. These samples should be preserved and necropsies performed following standardized methods.
- Acoustic methods are recommended to monitor for fish and whale abundance and to ascertain whether fish and whales are aggregating around or avoiding impacted areas.
- Monitoring of animals and debris field/composition should commence immediately and occur at a stepped time interval. Daily (conditions permitting) in the near term, weekly for approximately 3 months in the medium term, and monthly for approximately one year. Durations should be dependent on findings comparing near field collections to far-field collections. All data should be collected using standardized methods and raw data, processed data, and metadata should be made publicly available soon after collection in standard and described formats in a formal data repository.
- In addition to monitoring fish and protected species, we recommend fisheries socioeconomic impact monitoring of both commercial and recreational fisheries in the area affected by marine debris. This could include immediate collection of information through rapid assessment surveys from affected entities (e.g., commercial fleets anticipated to fish in area, for hire recreational vessels with planned trips to the area) for potential lost revenue within unanticipated exclusions zones, changes in navigational patterns from debris fields, potential damage caused by debris, or other social, economic or cultural concerns.

Recommendations for Reporting

- Sightings of North Atlantic right whales should be reported to NMFS as soon as possible to the NMFS Marine Mammal Hotline (866-755-6622)
- All marine mammals are protected under the Marine Mammal Protection Act and a number of large whale species are also protected under the Endangered Species Act. Any interactions with marine mammals or observations of injured, entangled, or dead marine mammals should be reported as soon as possible to the Marine Mammal Hotline (866-755-6622).
- All sea turtles are listed under the Endangered Species Act. Any interactions, including unintentional capture and release of live animals, should be reported to NMFS as soon as possible. Entangled or injured animals should be reported through the stranding hotline (866-755-6622).

- All reports of observations of protected species, including marine mammals, sea turtles, giant manta rays, and Atlantic sturgeon, should be submitted within 24 hours via email [nmfs.gar.incidental-take@noaa.gov].

We urge Vineyard Wind to ensure that a complete and rapid recovery of blade debris is carried out in a manner that avoids and minimizes impacts on living marine species and that includes locating and removing all debris that may have settled to the ocean bottom. If you have questions about these recommendations, please contact Julie Crocker (Julie.Crocker@noaa.gov) in our Greater Atlantic Regional Fisheries Office or Andy Lipsky (Andrew.Lipsky@noaa.gov) in our Northeast Fisheries Science Center.

Sincerely,

Jon Hare
Director, Northeast Fisheries Science Center

Michael Pentony
Regional Administrator

Cc: Tim Brown - GE
Kevin Sligh, Cheri Hunter - BSEE
Karen Baker, David Diamond - BOEM
David OConnell - USCG
Tim Timmermann - EPA