



MASSWILDLIFE

DIVISION OF FISHERIES & WILDLIFE

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Jack Buckley, Director

January 30, 2018

Matthew A. Beaton, Secretary
Executive Office of Energy and Environmental Affairs
Attention: MEPA Office
Purvi Patel, EEA No. 15787
100 Cambridge St.
Boston, Massachusetts 02114

Project Name: Vineyard Wind Connector
Proponent: Vineyard Wind
Location: Cable connection (from offshore wind project within federal waters) through Massachusetts waters northerly through Nantucket Sound to New Hampshire Ave in Yarmouth (Preferred Route) with onshore underground cables to Barnstable Switching Station. Alternate onshore route beginning at Covell's Beach, Barnstable
Project Description: Utility – Transmission Cables
Document Reviewed: Environmental Notification Form
EEA File Number: 15787
NHESP Tracking No.: 17-37398

Dear Secretary Beaton:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the Division) has reviewed the *Environmental Notification Form* (ENF) for the proposed cable connection (from offshore wind project within federal waters) through Massachusetts waters northerly through Nantucket Sound to New Hampshire Ave in Yarmouth (Preferred Route) with onshore underground cables to Barnstable Switching Station and would like to offer the following comments.

The proposed offshore and onshore cable will occur within areas mapped as *Priority and Estimated Habitat* for state-listed species. The Preferred Route offshore will occur within key overwintering and feeding habitat for the state-listed migratory birds listed below; the Preferred Route onshore will occur within the mapped habitat of state-listed invertebrate species listed below.

Scientific Name	Common Name	Taxonomic Group	State Status
<i>Sterna dougallii</i>	Roseate Tern	Bird	Endangered*
<i>Sterna hirundo</i>	Common Tern	Bird	Special Concern
<i>Sternula antillarum</i>	Least Tern	Bird	Special Concern
<i>Papaipema sulphurata</i>	Water-willow Borer Moth	Butterflies and Moths	Threatened
<i>Enallagma pictum</i>	Scarlet Bluet	Damselflies	Threatened

Species also protected pursuant to the U.S. Endangered Species Act (ESA, 50 CFR 17.11).

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These species and their habitats are protected pursuant to the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (MESA, 321 CMR 10.00) as well as the rare wildlife provisions of the Massachusetts Wetlands Protection Act and its implementing regulations (WPA, 310 CMR 10.37, 10.58(4)(b) and 10.59). This project will require a direct filing with the Division for compliance with the MESA and the WPA.

The Preferred Route for onshore components, including cable landing location, route, and switching station, mostly avoid areas identified as Priority Habitat and Estimated Habitat for state-listed species. As the project location is further refined and more information becomes available the Division will be able to determine whether the proposed project will impact state-listed species and their habitats, and whether conditions will be necessary to avoid a prohibited Take of state-listed species (321 CMR 10.18). The Division notes that the alternative cable landing locations presented in the ENF (Great Island, Yarmouth and Covell's Beach, Barnstable) intersect habitat for the Piping Plover (*Charadrius melodus*), state- and federally-listed as Threatened. The Proponent should be aware that work occurring within habitat for Piping Plover, including nearshore and onshore aspects of the cable installation, is typically subject to a time of year restriction (work prohibited from April 1 – August 31). As proposed, the mechanism for cable installation at the alternative landing locations is horizontal directional drilling, Proponent should consult with the Division should the mechanism for installation change.

According to the information contained within the ENF, installation of the offshore cables will impact 4,054,000 square feet (93 acres) of wetlands in state waters (mostly Land Under Ocean), and will require up to 160,800 cubic yards of dredging in state waters and 1.9 million square feet of dredging in federal waters. These estimates do not include additional impacts associated with sidecast of dredged and trenched materials.

Although terns forage in the project area during the nesting, staging, and migratory seasons, the area has the greatest use by terns during the staging period (primarily August and September) (ESS Group 2006). During those months, Roseate and Common Terns from all over the Northeast leave their nesting islands and converge on post-breeding aggregation areas ("staging areas") surrounding Nantucket Sound – the beaches of Cape Cod, Martha's Vineyard, and Nantucket -- where they prepare for southern migration. Nantucket Sound itself therefore represents a key habitat area for tern foraging during both breeding and staging seasons. A primary prey item for terns during the breeding and staging seasons is the sand lance (*Ammodytes americanus*), a fish that burrows in the seafloor during the day (Runfola 2017, Wilken 2017). This is an especially critical prey resource for the Roseate Tern, a sand lance specialist. Installation of offshore cables could impact the habitat of this key prey resource.

The Division would encourage the Proponent to consider design and implementation alternatives that avoid and minimize impacts to state-listed species and their habitats. The ENF indicates a variety of methods that could be utilized to install the offshore cable. Although all methods will cause displacement of sediments and suspension of particles in the water column for a period of time, the degree to which the benthic environment will be affected may vary based on the installation method. At this time, the Division cannot adequately assess potential impacts to state-listed species based on the information provided in the ENF. To better assess impacts associated with the offshore cable installation, we request that the proponent evaluate alternative construction methodologies and provide information relative to the impacts and disturbance associated with each (e.g. jet plow, trenching device or other mechanism for installation, turbidity duration, and distance and depth to

which material will be displaced), the anticipated recovery time of benthic organisms after installation, and any potential secondary impacts (e.g. electromagnetic fields or heat from the cables) and their anticipated impacts on benthic organisms.

According to the information contained within the ENF, and with the exception of the nearshore cable landing location, it appears the proponent has attempted to site the offshore cable route, within the cable corridor location indicated in the 2015 Massachusetts Ocean Management Plan. The Proponent has primarily avoided the shallowest depths within Nantucket Sound in selecting the potential cable routes; this may reduce impacts to several additional, important migratory birds - including Long-tailed ducks, Scoters, and Eiders - that may congregate on the shoals and feed on benthic organisms. Additionally, the proposed cable installation timeline (March – September) avoids most of the overwintering period for these migratory birds within Nantucket Sound.

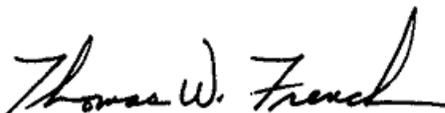
Given the magnitude of the project and the importance of the project area for state-listed and migratory birds, both direct and indirect effects of the proposed project must be assessed. The Division requests that all avian data and study plans for the project be made available to the Division for review and comment. Additionally, the Division recommends that the Proponent prepare and submit an Avian Risk Assessment for both the turbine and cable components of the project. As noted in the ENF, the Proponent should initiate consultations with the Division to minimize potential impacts to state-listed species and refine supplemental information that may be necessary for the Division to continue its review of the proposed project.

As outlined in the 2015 Massachusetts Ocean Management Plan, when determining the Mitigation Fee for this project, we strongly recommend that funding be used to benefit the Roseate Tern and other birds potentially affected by the proposed project.

The Division will not render a final decision until the MEPA review process and associated public and agency comment period is completed, and until all required MESA filing materials are submitted by the proponent to the Division. As our MESA review is not complete, no work or alteration to the soil, surface, or vegetation associated with the proposed project shall occur until the Division has made a final determination.

If you have any questions about this letter, please contact Amy Hoenig, Endangered Species Review Biologist, at (508) 389-6364 or Amy.Hoenig@state.ma.us. We appreciate the opportunity to comment on this project.

Sincerely,



Thomas W. French, Ph.D.
Assistant Director

cc: Holly Carlson Johnston, Epsilon Associates, Inc.
Yarmouth Board of Selectmen

Yarmouth Conservation Commission
Yarmouth Planning Department
Barnstable Board of Selectmen
Barnstable Conservation Commission
Barnstable Planning Department
DEP Southeast Regional Office, MEPA

Citations

ESS Group. 2006. Summary of the Cape Wind and Massachusetts Audubon Society Aerial Surveys 2002-2006. Appendix 3.6-H of the Final Environmental Impact Report.

Runfola, A. 2017. Stellwagen seabirds: life in the open ocean. *Massachusetts Wildlife* 67 (2): 4 – 13.

Wilken, R. 2017. Small but Mighty: Understanding Sand Lance in Stellwagen Bank National Marine Sanctuary. (<https://sanctuaries.noaa.gov/news/jan17/sand-lance-stellwagen-bank.html>). Accessed 10/25/2017.