Commonwealth of Massachusetts

Division of Marine Fisheries

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May 1, 2019

Barnstable Conservation Commission
Town Hall
367 Main Street
Hyannis, MA 02601

Dear Commissioners:

The Division of Marine Fisheries (MA DMF) has reviewed the Notice of Intent (NOI) by Vineyard Wind LLC for the Vineyard Wind Connector project for the portions of the offshore transmission that are in Barnstable waters, as part of a broader offshore wind project. This includes approximately 6.6 miles of Offshore Export Cable Corridor (OECC) within Barnstable's offshore waters, the Landfall Site at a town-owned parking lot at Covell's Beach, and those portions of the onshore transmission system that are located within the jurisdiction of the Barnstable Conservation Commission. The first 1,000 feet of the two proposed cables off Covell's Beach will be buried approximately 30 feet deep and will head in a southeastward direction under and around the resource areas via Horizontal Directional Drilling (HDD). The cables will be pulled through an approximate 10-foot by 10-foot "pit" where the drill head reaches the seafloor surface. The two cables traversing Nantucket Sound waters will most likely be jet-plowed approximately 330 feet apart and buried between 5 – 8 feet under the substrate. If cable protection is needed (approximately 10' across), a layer of rock, concrete mattresses, or half-shell pipes will be laid over the exposed cables. If the dredging of sand waves is necessary, jetting or trailer suction hopper dredging will be used. Construction methodologies have not been finalized. In our recommendations we attempt to identify the methodologies that minimize impact. If other methodologies are selected, additional conditions to avoid or minimize impacts may be necessary. Work within Barnstable waters is likely to occur in the fall of 2020 to avoid impacting squid mops, squid fishing, and other fishing activities. In addition, to avoid impacting piping plovers, HDD activities shall not occur between April 1 and August 31.

The Covell's Beach Landfall Site has been identified by MA DMF as a horseshoe crab nesting beach. Horseshoe crabs deposit their eggs in the upper intertidal regions of sandy beaches from late spring to early summer during spring high tides (Barlow Jr. et al, 1986). Adult crabs congregate in deep waters such as channel areas and troughs during the day while waiting to move on to the beaches at night to spawn. Adults will also overwinter in these deeper water areas. Recent stock assessments show a decline in horseshoe crab abundance in the New England region (ASMFC Horseshoe Crab Assessment Subcommittee 2013).

The waters offshore of the eastern and western ends of Covell's Beach have been mapped previously by the Department of Environmental Protection (DEP) as eelgrass (*Zostera marina*) meadows although the areas along the proposed cable landfall do not contain any mapped eelgrass habitat (Figure 1). In-water surveys described in the NOI identified additional eelgrass near Spindle Rock at the Covell's Beach Landfall Site. Eelgrass beds provide one of the most productive habitats for numerous marine species (Jackson et al. 2001; Heck et al. 2008) but have

declined statewide in the past decade (Costello and Kenworthy 2011). According to plans provided in the NOI, the proposed cable route will avoid this sensitive resource.

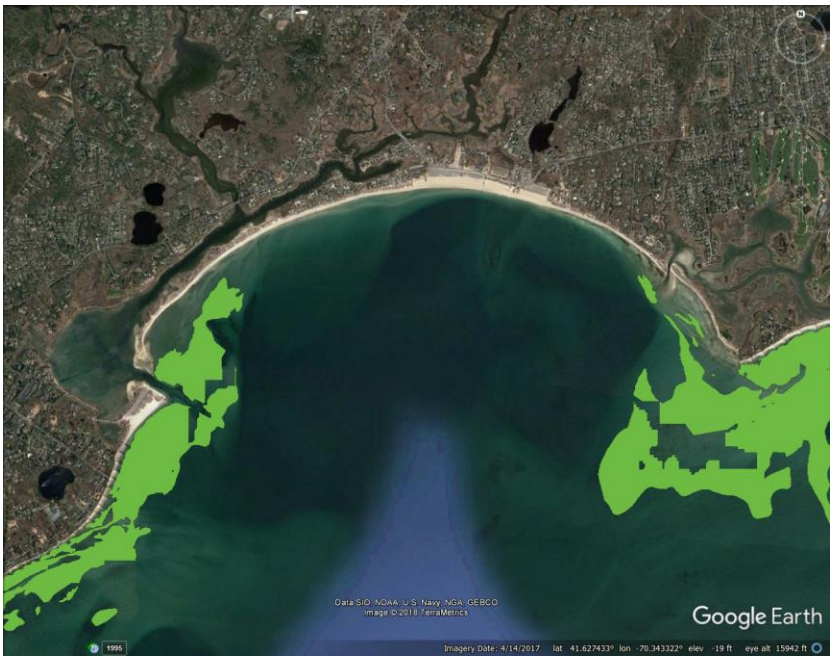

Figure 1. Waters near the Covell's Beach landfall site previously (1995-2013) mapped by DEP as eelgrass (*Zostera marina*) beds.

MA DMF offers the following comments for your consideration:

- While Covell's Beach has been identified as a horseshoe crab nesting beach, MA DMF does not recommend a time-of-year (TOY) restriction on cable landfall as proposed methods (HDD) should avoid any impacts to spawning horseshoe crabs and their nests.
- For the non-HDD portion of the cable laying operation, MA DMF recommends avoidance of the spring season (April-June) within Nantucket Sound waters due to high concentrations of fishing activities and natural resource events (spawning and egg laying). A meeting with Vineyard Wind on 1/31/2019 laid out a sequencing of cable-laying that results in fall cable laying in the northern part of the offshore export cable, alleviating our primary time of year concerns. Provided that this updated sequencing is maintained, MA DMF does not have any further TOY restriction recommendations for cable laying operations.
- This NOI provides an appropriate avoidance strategy (HDD) for eelgrass identified off Covell's Beach such that work within the proposed cable corridor should not have adverse impacts to eelgrass. Our primary concern is that contractors do not damage vulnerable seafloor areas that are being avoided by cable routing. Damage to these areas could occur via vessel anchoring, grounding, or operation in shallow water. To avoid such impacts, MA DMF recommends that the edge of the eelgrass bed identified near the proposed cable route be clearly marked with buoys prior to cable installation to provide a visual indication of areas to avoid during all construction operations.
- Adequate cable burial is necessary to ensure avoidance of conflict with fishing gear and to reduce potential electromagnetic field (EMF) impacts on marine resources. We recommend including in the cable conduits continuous monitoring mechanisms that can verify cable burial (such as temperature monitoring). If continuous monitoring cannot be done, then geophysical surveys should occur more annually and always after major storm events such as hurricanes and nor'easters.
- Some sections of the cable may need to be armored for long-term protection. We recommend using natural materials that mimic the surrounding seafloor. Mitigation for habitat conversion may be needed.

- A mechanism to compensate fishermen for lost gear during construction and operation is under discussion.
- As we have stated in other letters, the Benthic Habitat Monitoring Plan needs to be fully revised with guidance from the agencies. Some specific recommendations that we have made include:
    - The benthic stations where infauna is being sampled should also be sampled for grain size.
    - Sediment profile imaging (SPI) images should be taken pre- and post-construction.
    - The entire cable pathway should be re-imaged with multibeam post-construction; those data should be incorporated in a post-construction impact analysis.
    - Video surveys should use high resolution video and be georeferenced.
    - The timeline of sampling, including the season, should be clarified.
    - The benthic monitoring plan needs additional detail with respect to how change will be measured and may need additional sampling stations for a quantitative assessment.
    - The plan should state the hypotheses being tested.
    - The plan identifies reports as the primary product; we recommend all data be made available in regional database management systems and directly to requesting agencies.
    - The plan should also describe potential mitigation if alterations associated with cable laying are detected.

Questions regarding this review may be directed to Eileen Feeney in our New Bedford office at (508) 742-9721.

Sincerely,

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Director

cc: Jack Vaccaro, Epsilon Associates, Inc.
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References

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