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October 3, 2018

Hon. Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Also via email: purvi.patel@state.ma.us
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Subject: Vineyard Wind Connector (EEA #15787)
Supplemental Draft Environmental Impact Report
Vineyard Wind LLC EFSB 17-05/D.P.U. 18-18/18-19

Dear Secretary Beaton:

We operate two separate commercial oyster farms in Lewis Bay, Dunbar Aquafarm and Sweetheart Creek Oyster Company, Inc. We submit this Comment to inform you that we strenuously object to the disruption to the seabed of Lewis Bay as proposed by Vineyard Wind, LLC, as part of the Connector Project, and to the burial in Lewis Bay at any depth of transmission cables for the purpose of bringing 800 megawatts of electrical energy to shore.

Our concerns are as follows:

1. Plowing, trenching and burial of the industrial cables will cause sand, silt and sediment to be raised throughout the entire eastern end of Lewis

Bay which will smother and choke our oysters. This sediment will be raised with each successive storm for an extended period of months.

2. The impact of the electromagnetism, heat, sound and vibration emanating from the industrial cables into the Lewis Bay estuary will have a detrimental impact on the growth pattern of our oysters. *Vibrio* is a concern; even a one-degree temperature increase could be problematic.
3. In the event of a tiniest leak of electricity into Lewis Bay electrolysis will occur and will cause damage to our aquafarm equipment.
4. Any need for future repairs will again present all of the above issues.

Both Dunbar Aquafarm and Sweetheart Creek Oyster Company, LLC (Sweetheart Creek) operate pursuant to a permit issued by the Massachusetts Division of Marine Fisheries and both submit annual reports and annual fees to DMF. We each possess leases with the Town of Yarmouth for the purpose of operating our oyster aquaculture farms in Lewis Bay and we each pay an annual amount for our leases to the Town of Yarmouth.

Dunbar Aquafarm has conducted an aquaculture farm in Lewis Bay for the past 17 years. Sweetheart Creek has conducted an aquaculture farm for the past two years in Lewis Bay. Both these farms are located at the eastern end of Lewis Bay very near the proposed track of the Vineyard Wind cable trenches.

Dunbar Aquafarm now consists of approximately three million growing oysters. During 2018, Dunbar planted one million oyster seeds. The 2018 yield is expected to be 500,000 oysters ready to be sold commercially.

Sweetheart Creek is a newer aquafarm and currently has approximately 250,000 oyster seeds planted in Lewis Bay. It is expected that Sweetheart Creek will go to market with fully grown oysters during 2018.

A. Damage Due to Burial of Cables

If the Project includes the plowing and burial of 800 megawatt cables under the seabed of the Lewis Bay estuary, the damage to the four aquafarmers could well exceed millions of dollars. The plowing as proposed by Vineyard Wind will result in sand, sediment or silt smothering and choking the oysters. We lose our entire investment of money and time. If even a small amount of sediment is found inside the oysters, this will cause harm to the brand quality of our oysters. We are at risk of losing our wholesale customers if the quality of the oysters is diminished by even the slightest presence of sand or silt inside the oyster.

Each winter, our oyster farms suffer from the natural storms which cause sand and silt to be disturbed and to float naturally in the Bay. We actually can lose a portion of our oyster seed after a major storm. We anticipate that any additional disturbance will cause long-lasting and even permanent damage to our aquafarms.

B. Risk from Future Interruption of Lewis Bay Seabed in Event Repairs Have to be Made

There are known failures of cables now in place in Nantucket Sound and there is a recent exposure of a cable off Block Island, R.I., requiring repairs. We refer you to the Presentation entitled **Martha's Vineyard Hybrid Submarine Cable Project Comcast & NSTAR and** which is described at:

[https://web.whoi.edu/seagrant/wp-](https://web.whoi.edu/seagrant/wp-content/uploads/sites/24/2018/06/09_NCC2017_smith.pdf)

[content/uploads/sites/24/2018/06/09_NCC2017_smith.pdf](https://web.whoi.edu/seagrant/wp-content/uploads/sites/24/2018/06/09_NCC2017_smith.pdf). This project was proposed in 2012 and started in 2014. The Presentation describes the status of the existing four cables between Martha's Vineyard and Falmouth, MA and states:

- Cable # 75 has failed and is not operational.
- Cable # 91 failed six times.
- Cable #99 failed four times over a span of 15 years.
- Cable # 97 is the only cable in that project which has not failed.

As recently as August 2018, news reports showed two-year-old cables were exposed off the coast of Block Island. Please see:

<https://turnto10.com/news/local/electric-transmission-line-at-ri-beach-designed-to-be-buried-below-sea-bottom-exposed>

and

<https://www.blockislandtimes.com/article/deepwater-wind%E2%80%99s-cable-exposed/53036>

In the event repair to the cable in Lewis bay is necessary, there will be no time to consider the protection of the 5 million oysters growing in Lewis Bay. Repair will have to be immediate, and that repair will take precedence over the health and growth of oysters. We understand that. The only way to protect the aquafarmers from this event is to not permit cabling in Lewis Bay from the inception of the Project.

C. Electro Magnetic Field and Electrolysis have not been reviewed in relation to the aquafarms by Vineyard Wind, LLC in the SDEIR.

The possibility of electrolysis causing harm to our metal equipment has not been reviewed by Vineyard Wind and no remediation plan has been presented to us. The issue surrounding the effects of the electro-magnetic field have also not been reviewed by Vineyard Wind and there has been no proof or studies to suggest that our oyster farms will not be harmed by the electro-magnetic field.

D. Suggestions of Remediation by Vineyard Wind Are Inadequate.

Vineyard Wind has met informally with us to discuss the Connector Project. Vineyard Wind representatives talked about possible preventive measures.

- a. Installing silt curtains while cabling work is being conducted. However, there is no evidence or guarantee that harm to our oysters will still not occur. The flow of the unsettled silt and sand is unpredictable and there are no assurances that Vineyard Wind's concepts will work.

- b. Moving oysters physically off the Lewis Bay grants. This method is in use successfully where oyster farms are located in intertidal sea beds which go dry at low tides. The oysters are accustomed to being exposed to air and sun. The oyster farms in Lewis Bay are in subtidal locations, and the oysters may be damaged by being removed from water. This is not a viable option. In fact, Southeastern Massachusetts Aquaculture Center (SEMAC) has advised us to never remove the oysters for an extended period of time due to high mortality rates associated with taking the oysters out of the water.
- c. Vineyard Wind has suggested that it will conduct its work in Lewis Bay during the month of November. At that time of year, our oysters are still growing and are very susceptible to harm. Our oysters are dormant during the months of January and February. However, Vineyard Wind cannot conduct its work at that time because Lewis Bay is the breeding ground for flounder during that time.

Furthermore, there is a suggestion by Mr. Mayo that laying the cables in the coldest of months is not practicable because the cables are not pliable in freezing temperatures. The SDEIR is unclear whether freezing temperatures affect the protective coating covering the cables or if any further problems exist due to freezing weather. This issue needs to be examined and understood by the Energy Facilities Siting Board.

E. AQUAFARMS IN THE LEWIS BAY ESTUARY ARE AN INTEGRAL PART OF THE TOWN OF YARMOUTH NITROGEN ABATEMENT PROGRAM.

Our aquafarms provide a major benefit to the health of Lewis Bay. Each oyster filters 35 to 50 gallons of water **daily**. During the filtering process, the oyster absorbs the nitrogen from the water to build its shell. The oyster itself does not absorb the nitrogen. This absorption greatly assists with the elimination of the harmful impact of nitrogen in Lewis Bay. In fact, the nitrate content of Lewis Bay is reduced each year in large part because of the presence of the oyster aquafarms.

The Town of Yarmouth has encouraged aquafarms in the Lewis Bay to help bring nitrogen levels to safe standards as established by Massachusetts regulations. Many towns on Cape Cod rely on oyster aquafarms as nontechnical nitrogen abatement strategies. This is well documented in the Cape Cod Commission study of estuaries and nitrogen abatement. Therefore, our aquafarms are more than simply our livelihood. They are part of the nitrogen abatement strategies to protect residents, tourists and tourist related businesses which rely on estuaries like Lewis Bay. Lewis Bay is precious and is a natural resource for recreational shell-fishing, boating, swimming and beautiful views. Our aquafarms profit not only us; they profit all the Town of Yarmouth.

The Cape Cod Commission study can be accessed at:

http://www.capecodcommission.org/resources/208/watershedreports/2017_Watershed_Report_MC_Lewis_Bay.pdf. This study was a collaboration between the MA Department of Environmental Protection, the US Environmental Protection Agency, the MA Executive Office of Energy and Environmental Affairs, the Cape Cod Commission, and other state and federal offices.

Finally, please note that there are two additional aquaculture farmers in Lewis Bay estuary and they are equally at risk of damage and loss due to the proposed plowing and burial of 800 megawatt transmission cables in Lewis Bay estuary.

Thank you for your review and understanding of our serious concerns.

Sincerely,

Michael H. Dunbar
dba Dunbar Aquafarm

Edmund J. Janiunas
SOC Signatory
Sweetheart Creek Oyster Co., LLC