



# LIBERTY WIND

## PROPOSALS FOR PURCHASE OF OFFSHORE WIND RENEWABLE ENERGY CERTIFICATES ORECRFP20-1



Prepared for

**The New York State Energy  
Research and Development Authority**

Submitted by



**VINEYARD WIND**

October 20, 2020

PUBLIC

# Supporting Attachment

Response to New York State Energy Research and Development  
Authority Request for Proposals ORECRFP20-1



LIBERTY WIND

# 4.0 PROPOSAL NARRATIVE

## ATTACHMENTS

October 20, 2020

Submitted by



Vineyard Wind LLC  
700 Pleasant St., Suite 510  
New Bedford, MA 02740

---

Certain information in this Submission is non-public, proprietary, commercial, and/or financial information and has been redacted from the version of this Submission marked "PUBLIC." Vineyard Wind LLC has submitted a confidential version of this Submission, marked "CONFIDENTIAL", which includes redacted information, and which should be treated as a non-public record that is exempt from disclosure under New York State law and as set forth in the ORECRFP20-1 Request for Proposals issued July 21, 2020.

**PUBLIC**

## **CONFIDENTIALITY STATEMENT**

As contemplated under Sections 6.2.2 and 8.1 of the Request for Proposals ORECRFP20-1 issued July 21, 2020 and as further described in the Attachment 1–Statement and Request for Confidential Treatment included with Vineyard Wind’s cover letter dated October 20, 2019 (the “Cover Letter”), certain information in this document or electronic file and the appendices listed below, each of which forms a part of this proposal, is non-public, confidential and proprietary information including commercial and financial information and trade secrets (as further defined in the Cover Letter, “Confidential Information”). Vineyard Wind intends for all such Confidential Information to remain confidential and be treated as such by NYSERDA and the Scoring Committee. Under the New York Public Officers Law, Article 6, the New York State Freedom of Information Law and NYSERDA’s implementing regulations under 21 NYCRR Part 501, the Confidential Information contained in this proposal is not a public record and is exempt from public records requests. Confidential Information has been redacted from this Submission and/or is clearly marked “CONFIDENTIAL.”



# VINEYARD WIND

## Attachments to 4.0 Proposal Narrative

<b>Attachment 2-1:</b>	<b>Redacted</b>
<b>Attachment 2-2:</b>	<b>Redacted</b>
<b>Attachment 2-3:</b>	<b>Redacted</b>
<b>Attachment 3-1:</b>	<b>Redacted</b>
<b>Attachment 3-2:</b>	<b>Redacted</b>
<b>Attachment 3-3:</b>	<b>Redacted</b>
<b>Attachment 3-4:</b>	<b>Redacted</b>
<b>Attachment 4-1:</b>	<b>Redacted</b>
<b>Attachment 4-2:</b>	<b>Redacted</b>
<b>Attachment 4-3:</b>	<b>Redacted</b>
<b>Attachment 4-4:</b>	<b>Redacted</b>
<b>Attachment 4-5:</b>	<b>BOEM Lease for OCS-A 0522</b>
<b>Attachment 5-1:</b>	<b>Redacted</b>
<b>Attachment 5-2:</b>	<b>Redacted</b>
<b>Attachment 5-3:</b>	<b>Redacted</b>
<b>Attachment 5-4:</b>	<b>Redacted</b>
<b>Attachment 5-5:</b>	<b>Redacted</b>
<b>Attachment 5-6:</b>	<b>Redacted</b>
<b>Attachment 11-1:</b>	<b>Redacted</b>
<b>Attachment 12-1:</b>	<b>Redacted</b>
<b>Attachment 13-1:</b>	<b>Redacted</b>
<b>Attachment 13-2:</b>	<b>Fisheries Communication Plan</b>
<b>Attachment 14-1:</b>	<b>Description of Affected Environment and References</b>
<b>Attachment 14-2:</b>	<b>Redacted</b>
<b>Attachment 15-1:</b>	<b>Redacted</b>
<b>Attachment 15-2:</b>	<b>Redacted</b>
<b>Attachment 15-3:</b>	<b>Redacted</b>
<b>Attachment 15-4:</b>	<b>Redacted</b>
<b>Attachment 15-5:</b>	<b>Redacted</b>
<b>Attachment 15-6:</b>	<b>Vineyard Wind in the Media</b>



# VINEYARD WIND

- Attachment 15-7: Supportive Opinion Pieces and Letters to the Editor (2019-2020)**
- Attachment 15-8: Community Benefit Agreement with Vineyard Power**
- Attachment 15-9: Community Outreach Case BOEM Public Meetings for Vineyard Wind 1 and Onshore Stakeholders**
- Attachment 15-10: Host Community Agreement - Town of Barnstable**
- Attachment 15-11: Redacted**
- Attachment 15-12: Community Engagement Case - Vineyard Wind SEIS Letters of Support**
- Attachment 15-13: Redacted**
  
- Attachment 16-1: Redacted**



# VINEYARD WIND

**Attachment To:**

**Section 2 of the Proposal Narrative - Impacts of COVID-19 on  
Proposer and Project Development**

**ATTACHMENT 2-1**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 2 of the Proposal Narrative - Impacts of COVID-19 on  
Proposer and Project Development**

**ATTACHMENT 2-2**

**REDACTED**





# VINEYARD WIND

**Attachment To:**

**Section 2 of the Proposal Narrative - Impacts of COVID-19 on  
Proposer and Project Development**

**ATTACHMENT 2-3**

**REDACTED**

PUBLIC



# VINEYARD WIND

**Attachment To:**

**Section 3 of the Proposal Narrative - Proposer Experience**

**ATTACHMENT 3-1**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 3 of the Proposal Narrative - Proposer Experience**

**ATTACHMENT 3-2**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 3 of the Proposal Narrative - Proposer Experience**

**ATTACHMENT 3-3**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 3 of the Proposal Narrative - Proposer Experience**

**ATTACHMENT 3-4**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 4 of the Proposal Narrative - Project Description and Site  
Control**

**ATTACHMENT 4-1**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 4 of the Proposal Narrative - Project Description and Site  
Control**

**ATTACHMENT 4-2**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 4 of the Proposal Narrative - Project Description and Site  
Control**

**ATTACHMENT 4-3**

**REDACTED**





# VINEYARD WIND

**Attachment To:**

**Section 4 of the Proposal Narrative - Project Description and Site  
Control**

**ATTACHMENT 4-4**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 4 of the Proposal Narrative - Project Description and Site  
Control**

**ATTACHMENT 4-5: BOEM LEASE FOR OCS-A 0522**

PUBLIC

RECEIVED

FEB 21 2019

Office of Renewable Energy Programs

<p style="text-align: center;">UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT</p> <p style="text-align: center;"><b>COMMERCIAL LEASE OF SUBMERGED LANDS FOR RENEWABLE ENERGY DEVELOPMENT ON THE OUTER CONTINENTAL SHELF</b></p> <p><i>Paperwork Reduction Act of 1995 statement: This form does not constitute an information collection as defined by 44 U.S.C. § 3501 et seq. and therefore does not require approval by the Office of Management and Budget.</i></p>	Office	Renewable Energy Lease Number
	Sterling, VA	OCS-A 0522
	Cash Bonus and/or Acquisition Fee	Resource Type
	\$135,100,000.00	Wind
	Effective Date	Block Number(s)
	April 1, 2019	See Addendum A

This lease, which includes any addenda hereto, is hereby entered into by and between the United States of America, ("Lessor"), acting through the Bureau of Ocean Energy Management ("BOEM"), its authorized officer, and

Lessee	Interest Held
Vineyard Wind LLC	100%

("Lessee"). This lease is effective on the date written above ("Effective Date") and will continue in effect until the lease terminates as set forth in Addendum "B." In consideration of any cash payment heretofore made by the Lessee to the Lessor and in consideration of the promises, terms, conditions, covenants, and stipulations contained herein and attached hereto, the Lessee and the Lessor agree as follows:

**Section 1: Statutes and Regulations.**

This lease is issued pursuant to subsection 8(p) of the Outer Continental Shelf Lands Act ("the Act"), 43 U.S.C. §§ 1331 et seq. This lease is subject to the Act and regulations promulgated pursuant to the Act, including but not limited to, offshore renewable energy and alternate use regulations at 30 CFR Part 585 as well as other applicable statutes and regulations in existence on the Effective Date of this lease. This lease is also subject to those statutes enacted (including amendments to the Act or other statutes) and regulations promulgated thereafter, except to the extent that they explicitly conflict with an express provision of this lease. It is expressly understood that amendments to existing statutes, including but not limited to the Act, and regulations may be made, and/or new statutes may be enacted or new regulations promulgated, which do not explicitly conflict with an express provision of this lease, and that the Lessee bears the risk that such amendments, regulations, and statutes may increase or decrease the Lessee's obligations under the lease.

## **Section 2: Rights of the Lessee.**

- (a) The Lessor hereby grants and leases to the Lessee the exclusive right and privilege, subject to the terms and conditions of this lease and applicable regulations, to: (1) submit to the Lessor for approval a Site Assessment Plan (SAP) and Construction and Operations Plan (COP) for the project identified in Addendum "A" of this lease; and (2) conduct activities in the area identified in Addendum "A" of this lease ("leased area") and/or Addendum "D" of this lease ("project easement(s)"), that are described in a SAP or COP that has been approved by the Lessor. This lease does not, by itself, authorize any activity within the leased area.
- (b) The rights granted to the Lessee herein are limited to those activities described in any SAP or COP approved by the Lessor. The rights granted to the Lessee are limited by the lease-specific terms, conditions, and stipulations required by the Lessor per Addendum "C."
- (c) This lease does not authorize the Lessee to conduct activities on the Outer Continental Shelf (OCS) relating to or associated with the exploration for, or development or production of, oil, gas, other seabed minerals, or renewable energy resources other than those renewable energy resources identified in Addendum "A."

## **Section 3: Reservations to the Lessor.**

- (a) All rights in the leased area and project easement(s) not expressly granted to the Lessee by the Act, applicable regulations, this lease, or any approved SAP or COP, are hereby reserved to the Lessor.
- (b) The Lessor will decide whether to approve a SAP or COP in accordance with the applicable regulations in 30 CFR Part 585. The Lessor retains the right to disapprove a SAP or COP based on the Lessor's determination that the proposed activities would have unacceptable environmental consequences, would conflict with one or more of the requirements set forth in subsection 8(p)(4) of the Act (43 U.S.C. § 1337(p)(4)), or for other reasons provided by the Lessor pursuant to 30 CFR 585.613(e)(2) or 30 CFR 585.628(f)(2). Disapproval of plans will not subject the Lessor to liability under the lease. The Lessor also retains the right to approve with modifications a SAP or COP, as provided in applicable regulations.
- (c) The Lessor reserves the right to suspend the Lessee's operations in accordance with the national security and defense provisions of Section 12 of the Act and applicable regulations.
- (d) The Lessor reserves the right to authorize other uses within the leased area and project easements(s) that will not unreasonably interfere with activities described in an approved SAP and/or COP, pursuant to this lease.

#### **Section 4: Payments.**

- (a) The Lessee must make all rent payments to the Lessor in accordance with applicable regulations in 30 CFR Part 585, unless otherwise specified in Addendum "B."
- (b) The Lessee must make all operating fee payments to the Lessor in accordance with applicable regulations in 30 CFR Part 585, as specified in Addendum "B."

#### **Section 5: Plans.**

The Lessee may conduct those activities described in Addendum "A" only in accordance with a SAP or COP approved by the Lessor. The Lessee may not deviate from an approved SAP or COP except as provided in applicable regulations in 30 CFR Part 585.

#### **Section 6: Associated Project Easement(s).**

Pursuant to 30 CFR 585.200(b), the Lessee has the right to one or more project easement(s), without further competition, for the purpose of installing gathering, transmission, and distribution cables, pipelines, and appurtenances on the OCS, as necessary for the full enjoyment of the lease, and under applicable regulations in 30 CFR Part 585. As part of submitting a COP for approval, the Lessee may request that one or more easement(s) be granted by the Lessor. If the Lessee requests that one or more easement(s) be granted when submitting a COP for approval, such project easements will be granted by the Lessor in accordance with the Act and applicable regulations in 30 CFR Part 585 upon approval of the COP in which the Lessee has demonstrated a need for such easements. Such easements must be in a location acceptable to the Lessor, and will be subject to such conditions as the Lessor may require. The project easement(s) that would be issued in conjunction with an approved COP under this lease will be described in Addendum "D" to this lease, which will be updated as necessary.

#### **Section 7: Conduct of Activities.**

The Lessee must conduct, and agrees to conduct, all activities in the leased area and project easement(s) in accordance with an approved SAP or COP, and with all applicable laws and regulations.

The Lessee further agrees that no activities authorized by this lease will be carried out in a manner that:

- (a) could unreasonably interfere with or endanger activities or operations carried out under any lease or grant issued or maintained pursuant to the Act, or under any other license or approval from any Federal agency;
- (b) could cause any undue harm or damage to the environment;
- (c) could create hazardous or unsafe conditions; or

- (d) could adversely affect sites, structures, or objects of historical, cultural, or archaeological significance, without notice to and direction from the Lessor on how to proceed.

### **Section 8: Violations, Suspensions, Cancellations, and Remedies.**

If the Lessee fails to comply with (1) any of the applicable provisions of the Act or regulations, (2) the approved SAP or COP, or (3) the terms of this lease, including associated Addenda, the Lessor may exercise any of the remedies that are provided under the Act and applicable regulations, including, without limitation, issuance of cessation of operations orders, suspension or cancellation of the lease, and/or the imposition of penalties, in accordance with the Act and applicable regulations.

The Lessor may also cancel this lease for reasons set forth in subsection 5(a)(2) of the Act (43 U.S.C. § 1334(a)(2)), or for other reasons provided by the Lessor pursuant to 30 CFR 585.437.

Non-enforcement by the Lessor of a remedy for any particular violation of the applicable provisions of the Act or regulations, or the terms of this lease, will not prevent the Lessor from exercising any remedy, including cancellation of this lease, for any other violation or for the same violation occurring at any other time.

### **Section 9: Indemnification.**

The Lessee hereby agrees to indemnify the Lessor for, and hold the Lessor harmless from, any claim caused by or resulting from any of the Lessee's operations or activities on the leased area or project easement(s) or arising out of any activities conducted by or on behalf of the Lessee or its employees, contractors (including Operator, if applicable), subcontractors, or their employees, under this lease, including claims for:

- a. loss or damage to natural resources,
- b. the release of any petroleum or any Hazardous Materials,
- c. other environmental injury of any kind,
- d. damage to property,
- e. injury to persons, and/or
- f. costs or expenses incurred by the Lessor.

Except as provided in any addenda to this lease, the Lessee will not be liable for any losses or damages proximately caused by the activities of the Lessor or the Lessor's employees, contractors, subcontractors, or their employees. The Lessee must pay the Lessor for damage, cost, or expense due and pursuant to this Section within 90 days after written demand by the Lessor. Nothing in this lease will be construed to waive any liability or relieve the Lessee from any penalties, sanctions, or claims that would otherwise apply by

statute, regulation, operation of law, or could be imposed by the Lessor or other government agency acting under such laws.

“Hazardous Material” means

1. Any substance or material defined as hazardous, a pollutant, or a contaminant under the *Comprehensive Environmental Response, Compensation, and Liability Act* at 42 U.S.C. §§ 9601(14) and (33);
2. Any regulated substance as defined by the Resource Conservation and Recovery Act (“RCRA”) at 42 U.S.C. § 6991 (7), whether or not contained in or released from underground storage tanks, and any hazardous waste regulated under RCRA pursuant to 42 U.S.C. §§ 6921 *et seq.*;
3. Oil, as defined by the Clean Water Act at 33 U.S.C. § 1321(a)(1) and the Oil Pollution Act at 33 U.S.C. § 2701(23); or
4. Other substances that applicable Federal, state, tribal, or local laws define and regulate as “hazardous.”

#### **Section 10: Financial Assurance.**

The Lessee must provide and maintain at all times a surety bond(s) or other form(s) of financial assurance approved by the Lessor in the amount specified in Addendum “B.” As required by the applicable regulations in 30 CFR Part 585, if, at any time during the term of this lease, the Lessor requires additional financial assurance, then the Lessee must furnish the additional financial assurance required by the Lessor in a form acceptable to the Lessor within 90 days after receipt of the Lessor’s notice of such adjustment.

#### **Section 11: Assignment or Transfer of Lease.**

This lease may not be assigned or transferred in whole or in part without written approval of the Lessor. The Lessor reserves the right, in its sole discretion, to deny approval of the Lessee’s application to transfer or assign all or part of this lease. Any assignment will be effective on the date the Lessor approves the Lessee’s application. Any assignment made in contravention of this section is void.

#### **Section 12: Relinquishment of Lease.**

The Lessee may relinquish this entire lease or any officially designated subdivision thereof by filing with the appropriate office of the Lessor a written relinquishment application, in accordance with applicable regulations in 30 CFR Part 585. No relinquishment of this lease or any portion thereof will relieve the Lessee or its surety of the obligations accrued hereunder, including but not limited to, the responsibility to remove property and restore the leased area and project easement(s) pursuant to section 13 of this lease and applicable regulations.

**Section 13: Removal of Property and Restoration of the Leased Area and Project Easement(s) on Termination of Lease.**

Unless otherwise authorized by the Lessor, pursuant to the applicable regulations in 30 CFR Part 585, the Lessee must remove or decommission all facilities, projects, cables, pipelines, and obstructions and clear the seafloor of all obstructions created by activities on the leased area and project easement(s) within two years following lease termination, whether by expiration, cancellation, contraction, or relinquishment, in accordance with any approved SAP, COP, or approved Decommissioning Application, and applicable regulations in 30 CFR Part 585.

**Section 14: Safety Requirements.**

The Lessee must:

- a. maintain all places of employment for activities authorized under this lease in compliance with occupational safety and health standards and, in addition, free from recognized hazards to employees of the Lessee or of any contractor or subcontractor operating under this lease;
- b. maintain all operations within the leased area and project easement(s) in compliance with regulations in 30 CFR Part 585 and orders from the Lessor and other Federal agencies with jurisdiction, intended to protect persons, property and the environment on the OCS; and
- c. provide any requested documents and records, which are pertinent to occupational or public health, safety, or environmental protection, and allow prompt access, at the site of any operation or activity conducted under this lease, to any inspector authorized by the Lessor or other Federal agency with jurisdiction.

**Section 15: Debarment Compliance.**

The Lessee must comply with the Department of the Interior's non-procurement debarment and suspension regulations set forth in 2 CFR Parts 180 and 1400 and must communicate the requirement to comply with these regulations to persons with whom it does business related to this lease by including this requirement in all relevant contracts and transactions.

**Section 16: Equal Opportunity Clause.**

During the performance of this lease, the Lessee must fully comply with paragraphs (1) through (7) of Section 202 of Executive Order 11246, as amended (reprinted in 41 CFR 60-1.4(a)), and the implementing regulations, which are for the purpose of preventing employment discrimination against persons on the basis of race, color, religion, sex, or national origin. Paragraphs (1) through (7) of Section 202 of Executive Order 11246, as amended, are incorporated in this lease by reference.



### **Section 17: Certification of Nonsegregated Facilities.**

By entering into this lease, the Lessee certifies, as specified in 41 CFR 60-1.8, that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. As used in this certification, the term "facilities" means, but is not limited to, any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees. Segregated facilities include those that are segregated by explicit directive or those that are in fact segregated on the basis of race, color, religion, sex, or national origin, because of habit, local custom, or otherwise; provided, that separate or single-user restrooms and necessary dressing or sleeping areas must be provided to assure privacy as appropriate. The Lessee further agrees that it will obtain identical certifications from proposed contractors and subcontractors prior to awarding contracts or subcontracts unless they are exempt under 41CFR 60-1.5.

### **Section 18: Notices.**

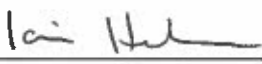
All notices or reports provided from one party to the other under the terms of this lease must be in writing, except as provided herein and in the applicable regulations in 30 CFR Part 585. Written notices and reports must be delivered to the Lessee's or Lessor's Lease Representative, as specifically listed in Addendum "A," either electronically, by hand, by facsimile, or by United States first class mail, adequate postage prepaid. Each party must, as soon as practicable, notify the other of a change to their Lessee's or Lessor's Contact Information listed in Addendum "A" by a written notice signed by a duly authorized signatory and delivered by hand or United States first class mail, adequate postage prepaid. Until such notice is delivered as provided in this section, the last recorded contact information for either party will be deemed current for service of all notices and reports required under this lease. For all operational matters, notices and reports must be provided to the party's Operations Representative, as specifically listed in Addendum "A," as well as the Lease Representative.


### **Section 19: Severability Clause.**

If any provision of this lease is held unenforceable, all remaining provisions of this lease will remain in full force and effect.

**Section 20: Modification.**

Unless otherwise authorized by the applicable regulations in 30 CFR Part 585, this lease may be modified or amended only by mutual agreement of the Lessor and the Lessee. No such modification or amendment will be binding unless it is in writing and signed by duly authorized signatories of the Lessor and the Lessee.

Vineyard Wind LLC  
\_\_\_\_\_  
Lessee  
  
  
\_\_\_\_\_  
(Signature of Authorized Officer)  
  
Iain Henderson  
\_\_\_\_\_  
(Name of Signatory)  
  
CFO  
\_\_\_\_\_  
(Title)  
  
February 20, 2019  
\_\_\_\_\_  
(Date)

The United States of America  
\_\_\_\_\_  
Lessor  
  
  
\_\_\_\_\_  
(Signature of Authorized Officer)  
  
James F. Bennett  
\_\_\_\_\_  
(Name of Signatory)  
Program Manager, Office of  
Renewable Energy Programs  
\_\_\_\_\_  
(Title)  
  
March 5, 2019  
\_\_\_\_\_  
(Date)

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM "A"**

DESCRIPTION OF LEASED AREA AND LEASE ACTIVITIES

Lease Number OCS-A 0522

I. Lessor and Lessee Contact Information

Lessee Company Number: 15010

(a) Lessor's Contact Information

	<b>Lease Representative</b>	<b>Operations Representative</b>
<b>Title</b>	Program Manager	Same as Lease Representative.
<b>Address</b>	U.S. Department of the Interior Bureau of Ocean Energy Management 45600 Woodland Road Sterling, Virginia 20166	
<b>Phone</b>	(703) 787-1300	
<b>Fax</b>	(703) 787-1708	
<b>Email</b>	renewableenergy@boem.gov	

(b) Lessee's Contact Information

	<b>Lease Representative</b>	<b>Operations Representative</b>
<b>Name</b>	ERICH STEPHENS	SAME AS LEASE REPRESENTATIVE
<b>Title</b>	CDO	
<b>Address</b>	700 PLEASANT ST SUITE 510 NEW BEDFORD MA 02740	
<b>Phone</b>	(401) 487-3320	
<b>Fax</b>		
<b>Email</b>	estephens@vineyardwind.com	

II. Description of Leased Area

The total acreage of the leased area is approximately 132,370 acres.

This area is subject to later adjustment, in accordance with applicable regulations (e.g., contraction, relinquishment).

## **Lease OCS-A 0522**

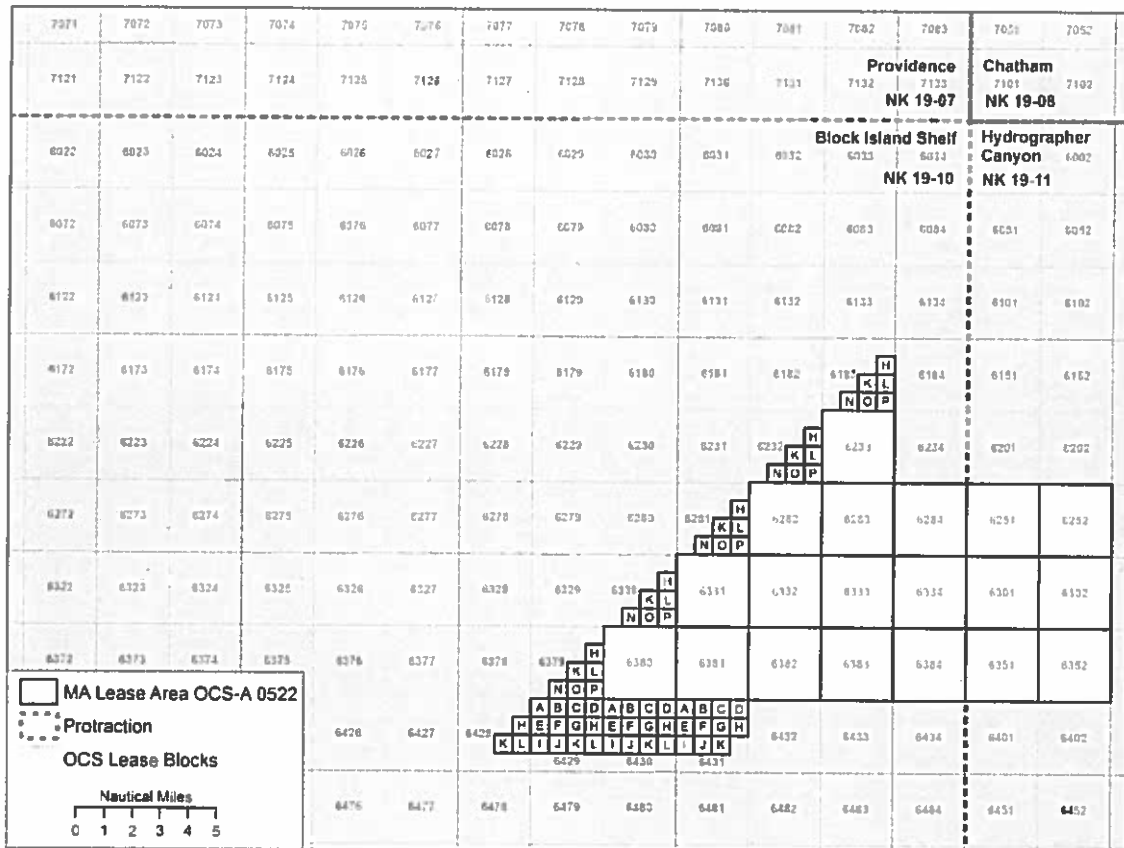
The following Blocks or portions of Blocks lying within Official Protraction Diagram Block Island Shelf NK19-10, are depicted on the map below and comprise 98,210 acres, more or less.

- 1) Block 6183, SE1/4 of NE1/4, SE1/4 of SW1/4, SE1/4
- 2) Block 6232, SE1/4 of NE1/4, SE1/4 of SW1/4, SE1/4
- 3) Block 6233, All of Block
- 4) Block 6281, SE1/4 of NE1/4, SE1/4 of SW1/4, SE1/4
- 5) Block 6282, All of Block
- 6) Block 6283, All of Block
- 7) Block 6284, All of Block
- 8) Block 6330, SE1/4 of NE1/4, SE1/4 of SW1/4, SE1/4
- 9) Block 6331, All of Block
- 10) Block 6332, All of Block
- 11) Block 6333, All of Block
- 12) Block 6334, All of Block
- 13) Block 6379, SE1/4 of NE1/4, SE1/4 of SW1/4, SE1/4
- 14) Block 6380, All of Block
- 15) Block 6381, All of Block
- 16) Block 6382, All of Block
- 17) Block 6383, All of Block
- 18) Block 6384, All of Block
- 19) Block 6428, SE1/4 of NE1/4, N1/2 of SE1/4
- 20) Block 6429, N1/2, N1/2 of S1/2
- 21) Block 6430, N1/2, N1/2 of S1/2
- 22) Block 6431, N1/2, N1/2 of SW1/4, NW1/4 of SE1/4

The following Blocks or portions of Blocks lying within Official Protraction Diagram Hydrographer Canyon NK19-11, are depicted on the map below and comprise 34,160 acres, more or less.

- 23) Block 6251, All of Block
- 24) Block 6252, All of Block
- 25) Block 6301, All of Block
- 26) Block 6302, All of Block
- 27) Block 6351, All of Block
- 28) Block 6352, All of Block

For the purposes of these calculations, a full Block is 2,304 hectares. The acreage of a hectare is 2.471043930.



### III. Renewable Energy Resource

Wind

### IV. Description of the Project

A project to generate energy using wind turbine generators and any associated resource assessment activities, located on the Outer Continental Shelf in the leased area, as well as associated offshore substation platforms, inner array cables, and subsea export cables.

### V. Description of Project Easement(s)

Once approved, the Lessor will incorporate Lessee's project easement(s) in this lease as ADDENDUM "D."

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM "B"**

LEASE TERM AND FINANCIAL SCHEDULE

Lease Number OCS-A 0522

I. Lease Term

The duration of each term of the lease is described below. The terms may be extended or otherwise modified in accordance with applicable regulations in 30 C.F.R. Part 585.

<b>Lease Term</b>	<b>Duration</b>
Preliminary Term	1 year
Site Assessment Term	5 years
Operations Term	33 years

Schedule: Addendum "C" includes a schedule and reporting requirements for conducting site characterization activities.

Renewal: The Lessee may request renewal of the operations term of this lease, in accordance with applicable regulations in 30 CFR Part 585. The Lessor, at its discretion, may approve a renewal request to conduct substantially similar activities as were originally authorized under this lease or in an approved plan. The Lessor will not approve a renewal request that involves development of a type of renewable energy not originally authorized in the lease. The Lessor may revise or adjust payment terms of the original lease as a condition of lease renewal.

II. Definitions

"Lease Issuance Date" refers to the date on which this lease has been signed by *both* the Lessee and the Lessor.

"Effective Date" has the same meaning as "effective date" in the Bureau of Ocean Energy Management (BOEM) regulations provided in 30 CFR 585.237.

"Lease Anniversary" refers to the anniversary of the Effective Date of the lease.

"End Date" refers to the earlier of a) the last calendar day of the last month of the Operations Term; or b) the date on which the lease terminates in the event of a lease termination.

“Commercial Operations” means the generation of electricity or other energy product for commercial use, sale, or distribution.

“Commercial Operation Date,” or “COD,” refers to the date on which the Lessee first begins Commercial Operations on the lease.

“Delivery Point” is the meter identified in the COP where the Lessee’s facility interconnects with the electric grid to deliver electricity for sale.

An individual wind generation turbine is said to be “available for Commercial Operations” on or after the first day that it engages in Commercial Operations on the lease; and to be no longer available for Commercial Operations on or after the day when it is permanently decommissioned. These dates are determined by the Construction and Operations Plan (COP).

### III. Payments

Unless otherwise authorized by the Lessor in accordance with the applicable regulations in 30 CFR Part 585, the Lessee must make payments as described below.

(a) **Rent.** The Lessee must pay rent as described below:

Rent payments prior to the COD, or prior to the lease End Date in the event that the lease terminates prior to the COD, are calculated by multiplying the acres in the leased area times the rental rate per acre as follows:

#### Lease OCS-A 0522

- Acres in Leased Area: 132,370
- Annual Rental Rate: \$3.00 per acre or fraction thereof
- Rental Fee for Entire Leased Area: \$3.00 x 132,370 = \$397,110

The first year’s rent payment of \$397,110 is due within 45 days of the date that the lease is received by the Lessee for execution. Rent for the entire leased area for the next year and for each subsequent year is due on or before each Lease Anniversary through the year in which the COD occurs. The rent for each year subsequent to the COD on the imputed portion of the lease not authorized for Commercial Operations is due on or before each Lease Anniversary. The imputed portion of the lease that is not authorized for Commercial Operations at each Lease Anniversary in year  $t$ ,  $S_t$ , and the corresponding Adjusted Annual Rent Payment will be determined as follows:

$$(A) S_t = \left( 1 - \frac{M'_t}{\text{MAX}(M'_t: \text{for all } t \geq 2)} \right)$$

(B) *Adjusted Annual Rent Payment* =  $S_t * \text{Rental Fee for Entire Leased Area}$

Where:

$S_t$  = Portion of the lease not authorized for Commercial Operations in year  $t$  based on the definition of  $t$  in Section III (b) (4) below.

$M'_t$  = Actual Nameplate capacity expressed in megawatts (MW) rounded to the nearest second decimal in year  $t$  of Commercial Operations on the lease as defined in Section III (b) (4) below, prior to any adjustments as specified in the most recent approved COP for turbine maintenance, replacements, repowering, or decommissioning. For our purposes nameplate capacity is the maximum rated electric output the turbines of the wind farm facility under commercial operations can produce at their rated wind speed designated by the turbine's manufacturer.

$MAX(M'_t)$  = Highest value of  $M'_t$  projected in the most recent approved version of the COP to be achieved in any year of Commercial Operations on the lease.

The Adjusted Annual Rent Payment calculated in Equation (A) herein, will be rounded up to the nearest dollar. The annual rent payments will be set forth in Addendum "E" when the COP is initially approved or subsequently revised.

Consider an example of a 1,000 MW project on a lease with an Effective Date of January 1, 2014 and a COD of January 1, 2022 on a lease area consisting of 100,000 acres as follows:

Payment (Jan. 1 <sup>st</sup> )	$M'_t$ (MW)	$MAX(M'_t)$ (MW)	$\left(1 - \frac{M'_t}{MAX(M'_t)}\right)$	Rental Fee for Entire Area	Payment Amount	
2014	0	1,000	1.0	\$300,000	\$300,000	
...	...		...		...	...
2021	0		1.0		\$300,000	
2022	500		0.5		\$150,000	
2023	500		0.5		\$150,000	
2024	500		0.5		\$150,000	
2025	800		0.2		\$60,000	
2026	800		0.2		\$60,000	
2027	800		0.2		\$60,000	
2028	1,000		0.0		\$0	

In the event a revised COP is approved by BOEM that identifies an alternative installation schedule that differs from the previously-approved COP, the Lessee must make subsequent payments based on the revised installation schedule. In addition, the Lessee must make a payment equal to the sum of any incremental annual rent payments that would have been due at the Lease Anniversary of prior years based on the differences between the Initial Installation Schedules specified in the previously-approved COP and the revised COP, plus interest on the annual balances, in accordance with 30 CFR 1218.54.

Consider an example whereby the initial COP specified an installation schedule with all 1,000 MW online at the COD, i.e.,  $M'_t$  is 1,000 MW at COD. The following table demonstrates how the back rent payments would be calculated if the project was initially scheduled as a



single phase, but then later determined to be the three-phase project as shown in the previous example in a revised COP approved prior to the payment due on January 1, 2023.

Payment (Jan. 1 <sup>st</sup> )	Initial $M_t$ (MW)	Revised $M_t$ (MW)	Single-Phase Payment Amount	Three-Phase Payment Amount	Back Rent Payment Amount	Subsequent Rent Payment Amount
2014	0	0	\$300,000	\$300,000	\$0	\$0
...	...	...	...	...	...	...
2021	0	0	\$300,000	\$300,000	\$0	\$0
2022	1,000	500	\$0	\$150,000	\$150,000	\$0
2023	1,000	500	\$0	\$150,000	\$0	\$150,000
2024	1,000	500	\$0	\$150,000	\$0	\$150,000
2025	1,000	800	\$0	\$60,000	\$0	\$60,000
2026	1,000	800	\$0	\$60,000	\$0	\$60,000
2027	1,000	800	\$0	\$60,000	\$0	\$60,000
2028	1,000	1,000	\$0	0	\$0	\$0

The last rent payment prior to Commercial Operations being authorized on the entire lease area, i.e., the year in which the value of  $S_t$  is equal to zero, or prior to the lease End Date, in the event that the lease terminates prior to Commercial Operations being authorized on the entire lease area, will represent the final rent payment, unless a revised COP identifying an alternative maximum initial capacity is approved by BOEM. All rent payments, including the last rent payment, are payable for the full year and will not be prorated to the COD or other installation milestones. The COD is equivalent to the authorization date for the first phase of development on the lease, to be updated based on the initial or revised approved COP documentation. The schedule of rent payments on the lease is defined in Addendum "E". All rent payments, except for the first 6-month rent payment, must be made as required in 30 CFR 1218.51. Late rent payments will be charged interest in accordance with 30 CFR 1218.54.

**(1) Project Easement.**

Rent for any project easement(s) is described in ADDENDUM "D".

**(2) Relinquishment.**

If the Lessee submits an application for relinquishment of a portion of the leased area within the first 45 calendar days following the date that the lease is received by the Lessee for execution, and the Lessor approves that application, no rent payment will be due on that relinquished portion of the leased area. Later relinquishments of any leased area will reduce the Lessee's rent payments due the year following the Lessor's approval of the relinquishment, through a reduction in the Acres in Leased Area and the corresponding Rental Fee for the Entire Leased Area and any related Adjusted Annual Rent Payments.

(b) **Operating Fee.** The Lessee must pay an operating fee as described below:

**(1) Initial Operating Fee Payment.**

The Lessee must pay an initial prorated operating fee within 45 calendar days after the COD. The initial operating fee payment covers the first year of Commercial Operations on the lease and will be calculated in accordance with subsection (4) below, using an operating fee rate of 0.02 and a capacity factor of 0.4.

**(2) Annual Operating Fee Payments.**

The Lessee must pay the operating fee for each subsequent year of Commercial Operations on or before each Lease Anniversary following the formula in subsection (4) below. The Lessee must calculate each operating fee annually subsequent to the initial operating fee payment using an operating fee rate of 0.02 through the thirty-three year operations term of the lease. The capacity factor of 0.4 will remain in effect until the Lease Anniversary of the year in which the Lessor adjusts the capacity factor.

**(3) Final Operating Fee Payment.**

The final operating fee payment is due on the Lease Anniversary prior to the End Date. The final operating fee payment covers the last year of Commercial Operations on the lease and will be calculated in accordance with the formula in subsection (4) below.

**(4) The formula for calculating the operating fee in year  $t$ .**

$F_t$	=	$M_t$	*	$H$	*	$c_p$	*	$P_t$	*	$r_t$
(annual operating fee)		(nameplate capacity)		(hours per year)		(capacity factor)		(power price)		(operating fee rate)

Where:

$t$ =	the year of Commercial Operations on the lease starting from each Lease Anniversary, where $t$ equals 1 represents the year beginning on the Lease Anniversary prior to, or on, the COD.
$F_t$ =	the dollar amount of the annual operating fee in year $t$ .
$M_t$ =	the nameplate capacity expressed in megawatts (MW) rounded to the nearest second decimal place in year $t$ of Commercial Operations on the lease.  The value of $M_t$ , reflecting the availability of turbines, will be determined based on the COP. This value will be adjusted to reflect any modifications to the COP approved by BOEM as of the date each operating fee payment is due, in accordance with the calculation in Equation 1, for each year of Commercial Operations on the lease.

$$(1) M_t = \sum_{w=1}^{W_t} \left( N_w * \left[ \frac{\left( \sum_{d=1}^D E_{w,t,d} \right)}{D} \right] \right)$$

Where:

$W_t$  = Number of individual wind generation turbines,  $w$ , that will be available for Commercial Operations during any day of the year,  $t$ , per the COP.

$N_w$  = Nameplate capacity of individual wind generation turbine,  $w$ , per the COP expressed in MW.

$E_{w,t,d}$  = Indicates whether individual wind generation turbine,  $w$ , will be available for Commercial Operations on day  $d$  of year  $t$ . The value is set to 1 for any day in year  $t$  for which the condition is true, i.e., the wind turbine will be available for Commercial Operations, and zero for any day in year  $t$  for which the condition is false, i.e., the wind turbine will not be available for Commercial Operations. The month of February is always assumed to have 28 days for purposes of this calculation, where March 1<sup>st</sup> will be counted as the first day of Commercial Operations if Commercial Operations commence on February 29<sup>th</sup> of a leap year.

$D$  = Days in the year set equal to 365 in all years for purposes of this calculation.

$M_t$  may be reduced only in the event that installed capacity is permanently decommissioned per the COP.  $M_t$  will not be changed in response to routine or unplanned maintenance of units, including the temporary removal of a nacelle for off-site repair or replacement with a similar unit.

**EXAMPLE:** Assume that the Lease Anniversary is January 1<sup>st</sup>, the COD is July 1, 2018, that the facility will ultimately have 100 individual wind generation turbines with a nameplate capacity of 5.0 MW each, and that the COP specifies the following, cumulative installation schedule for wind turbines to become available for Commercial Operations:

- July 1, 2018 (COD): 20 turbines (20 new units);
- October 1, 2018: 45 turbines (25 new units);
- January 1, 2019: 50 turbines (5 new units);
- July 1, 2019: 65 turbines (15 new units);
- January 1, 2020: 95 turbines (30 new units);
- February 29, 2020: 100 turbines (5 new units).

Further assume that the COP calls for 50 of the turbines to be decommissioned after September 30, 2039 ( $t = 22$ ), and that the remaining turbines are decommissioned at

the End Date of March 15, 2040 ( $t = 23$ ).

The value of  $M_t$  would be estimated as demonstrated in Table 1a for each year of Commercial Operations on the lease in this example.

**Table 1a: Example of  $M_t$  Calculations for Installation and Decommissioning**

$t$	Turbines	MW	Commercial Operations Period	Comm. Ops. Days	Days in Year	Share of Days	MW	$M_t$
1	20	100	Jul. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	184	365	50.41%	50.41	81.92
	25	125	Oct. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	92		25.21%	31.51	
2	50	250	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	250.00	287.81
	15	75	Jul. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	184		50.41%	37.81	
3	95	475	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	475.00	495.96
	5	25	Mar. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	306		83.84%	20.96	
4	100	500	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	500.00	500.00
...	...	...	...	...		...	...	...
21	100	500	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	500.00	500.00
22	50	250	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	250.00	436.98
	50	250	Jan. 1 <sup>st</sup> to Sep. 30 <sup>th</sup>	273	74.79%	186.98		
23	50	250	Jan. 1 <sup>st</sup> to Mar. 15 <sup>th</sup>	74	20.27%	50.68	50.68	

To illustrate the impact of decommissioning a portion of the individual wind generation turbines and replacing them with units of greater capacity on the calculation of  $M_t$ , assume that at the end of March 31, 2022, 10 units are to be made unavailable due to decommissioning, and that the incremental units have a capacity of 7.0 MW and are expected to be made available for Commercial Operations on September 15, 2022. The impact on  $M_t$  in 2022 and in subsequent years starting in 2023 and continuing until decommissioning is illustrated in Table 1b.

**Table 1b: Example of  $M_t$  Calculations for Repowering**

$t$	Turbines	MW	Commercial Operations Period	Comm. Ops. Days	Days in Year	Share of Days	MW	$M_t$
5	90 (5.0)	450	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365	365	100.00%	450.00	483.04
	10 (5.0)	50	Jan. 1 <sup>st</sup> . to Mar. 31 <sup>st</sup>	90		24.66%	12.33	
	10 (7.0)	70	Sep. 15 <sup>th</sup> to Dec. 31 <sup>st</sup>	108		29.59%	20.71	
6	90 (5.0)	450	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	450.00	520.00
	10 (7.0)	70	Jan. 1 <sup>st</sup> to Dec. 31 <sup>st</sup>	365		100.00%	70.00	

$H =$  the number of hours in the year for billing purposes which is equal to 8,760 for all years of Commercial Operations on the lease.

$C_p =$  the "Capacity Factor" in Performance Period  $p$ , which represents the share of anticipated generation of the facility that is delivered to where the Lessee's facility interconnects with the electric grid (i.e. the Delivery Point) relative to its generation at continuous full power operation at the nameplate capacity, expressed as a decimal between zero and one.

The initial Capacity Factor ( $C_0$ ) will be set to 0.4.

The Capacity Factor will be subject to adjustment at the end of each Performance Period. After the sixth year of Commercial Operations on the lease has concluded, the Lessee will utilize data gathered from years two through six of Commercial Operations on the lease and propose a revised Capacity Factor to be used to calculate subsequent annual payments, as provided for in Table 2 below. A similar process will be conducted at the conclusion of each five-year Performance Period, thereafter.

**Table 2: Definition of Performance Periods**

Performance Period ( $p$ )	Commercial Operation Years ( $t$ )	Payments Affected by Adjustment	Capacity Factor ( $C$ )	Date End Year ( $n$ )
0 (COD)	Not Applicable	Payments 1 to 7	$C_0=0.4$	--
1	$t = 2$ to 6	Payments 8 to 12	$C_1$	$n_1=6$
2	$t = 7$ to 11	Payments 13 to 17	$C_2$	$n_2=11$
3	$t = 12$ to 16	Payments 18 to 22	$C_3$	$n_3=16$
4	$t = 17$ to 21	Payments 23 to 27	$C_4$	$n_4=21$
5	$t = 22$ to 26	Payments 28 to 32	$C_5$	$n_5=26$
6	$t = 27$ to 31	Payment 33	$C_6$	$n_6=31$

**Adjustments to the Capacity Factor**

The Actual 5-year Average Capacity Factor ( $X_p$ ) is calculated for each Performance Period after COD ( $p > 0$ ) per Equation 2 below.  $X_p$  represents the sum of actual, metered electricity generation in megawatt-hours (MWh) at the Delivery Point to the electric grid ( $A_t$ ) divided by the amount of electricity generation in MWh that would have been produced if the facility operated continuously at its full, stated capacity ( $M_t$ ) in all of the hours ( $h_t$ ) in each year,  $t$ , of the corresponding five-year period.

$$(2) X_p = \frac{\sum_{t=n-4}^n A_t}{\left(\sum_{t=n-4}^n M_t * h_t\right)}$$

Where:

$M_t$  = Nameplate Capacity as defined above.

$n$  = "Date End Year" value for the Performance Period,  $p$ , as defined in Table 2.

$p$  = Performance Period as defined in Table 2.

$A_t$  = Actual generation in MWh associated with each year of Commercial Operations,  $t$ , on the lease that is transferred at the Delivery Point; Delivery Point meter data supporting the values submitted for annual actual generation must be recorded, preserved, and timely provided to the Lessor upon request. In the event the Lessor requires the assistance of the Lessee in obtaining information useful in verifying

	<p>such information, for example by waiving confidentiality with respect to data held by a third party, such assistance must be timely provided.</p> <p><math>h_t</math> = Hours in the year on which the Actual Generation associated with each year of Commercial Operations, <math>t</math>, on the lease is based; this definition of "hours in the year" differs from the definition of H in the operating fee equation above. The hours in the year for purposes of calculating the capacity factor must take into account the actual number of hours, including those in leap years.</p> <p>The value of the Capacity Factor at the outset of Commercial Operations (<math>p = 0</math>) is set to 0.4 as stated in equation 3:</p> <p><b>(3) <math>c_0 = 0.4</math></b></p> <p>The value of the Capacity Factor corresponding to each Performance Period (<math>c_p</math>) is set according to equations 4A, 4B, and 4C as follows for each value of <math>p</math> greater than zero. The Capacity Factor is set equal to the Actual 5-Year Average Capacity Factor provided that the value falls within a range of plus or minus 10 percent of the previous Performance Period's capacity factor.</p> <p><b>(4A) <math>c_p = X_p</math> for <math>c_{p-1} * 0.90 \leq X_p \leq c_{p-1} * 1.10</math></b></p> <p><b>(4B) <math>c_p = c_{p-1} * 0.90</math> for <math>X_p &lt; c_{p-1} * 0.90</math></b></p> <p><b>(4C) <math>c_p = c_{p-1} * 1.10</math> for <math>X_p &gt; c_{p-1} * 1.10</math></b></p> <p>All values for <math>c_p</math> must be rounded to the nearest third decimal place.</p>
<p><math>P_t =</math></p>	<p>a measure of the annual average wholesale electric power price expressed in dollars per MW hour.</p> <p>The Lessee must calculate <math>P_t</math> at the time each operating fee payment is due, subject to approval by the Lessor. The Base Price (<math>P_b</math>) must equal the weighted average of the peak and off-peak spot price indices for the Northeast – Massachusetts Hub power market for the most recent year of data available as reported by the Federal Energy Regulatory Commission (FERC). If FERC stops publishing this data or the specified location of the data changes over time, the Lessor must specify an alternate source of data and methodology that is approximately equivalent.</p> <p>The peak and off-peak price indices must be weighted 52.0% and 48.0%, respectively, for purposes of estimating the weighted index value for the Base Price. For example, in the March 12, 2012 State of the Markets Report the peak price index for 2011 was \$51.99/MWh and the corresponding off-peak price index for 2011 was \$33.94/MWh, resulting in a weighted index value for the Base Price for 2011 (<math>P_{2011}</math>) of \$43.33/MWh (<math>=52.0\% * \\$51.99 / \text{MWh} + 48.0\% * \\$33.94 / \text{MWh}</math>). The calculation of <math>P_b</math> must be</p>

rounded up to the nearest, second decimal place.

The Base Price must be adjusted for inflation from the year associated with the published spot prices to the year in which the operating fee is to be paid as shown in equations (5A) and (5B):

$$(5A) P_t = P_b * \left( \frac{GDP_g}{GDP_{g-1}} \right)^{y-g} * \left( \frac{GDP_g}{GDP_b} \right) \text{ for } g \geq b$$

$$(5B) P_t = P_b * \left( \frac{GDP_g}{GDP_{g-1}} \right)^{y-b} \text{ for } g < b$$

Where:

*GDP* = Annual Implicit Price Deflators for Gross Domestic Product (GDP deflator index) published by the U.S. Bureau of Economic Analysis (BEA) for the specified period.

If BEA stops publishing the data required for this calculation, or the specified location of the data changes over time, the Lessor will specify an alternative source of data and methodology that it considers approximately equivalent.

*b* = The most recent year for which FERC reports the appropriate electricity spot price data expressed as the year, e.g., 2009, as in the illustrative example below.

*g* = The most recent year for which GDP deflator indices are available from BEA expressed as the year, e.g., 2011, as in the illustrative example below.

*y* = The year the annual payment is due expressed as the year corresponding to the value of *t* described above, e.g., 2013, as in the illustrative example below.

The second term on the right-hand side of equation (5A) represents a projected annual change in the index of inflation employing the last year of data available from BEA, while the third term represents the cumulative change in the index of inflation up to the previous year.

**Example:**

The following hypothetical example is provided to illustrate the methodology using Equation (5A) and the illustrative values provided for *b*, *g*, and *y* above, applied to historical GDP deflator data. If the actual FERC price indices are based on 2009 data and the GDP deflator indices are available for 2011, the inflation-adjusted price index value would be determined from equation (5A) as follows for a payment occurring in *y* = 2013:

	$P_{t(2013)} = P_{2009} * \left( \frac{GDP_{2011}}{GDP_{2010}} \right)^{2013-2011} * \left( \frac{GDP_{2011}}{GDP_{2009}} \right) = \frac{\$38.40}{\text{MWh}} * \left( \frac{113.361}{110.992} \right)^2 * \left( \frac{113.361}{109.729} \right) = \frac{\$41.38}{\text{MWh}}$ <p>Note: The current GDP deflator index is 113.361 for 2011, 110.992 for 2010, and 109.729 for 2009 (last revised by BEA on April 27, 2012); the FERC index price for the year 2009 is \$38.40/MWh (On-peak: \$44.60/MWh; Off-peak: \$31.68/MWh; last revised March 12, 2012). Although 2011 FERC prices are available, the 2009 prices are used in the example to illustrate the concept.</p> <p>The Lessor and the Lessee will use the latest FERC price indices and revised BEA GDP deflator index values at the time the pricing adjustments are made. The source of data used in the calculations must be noted in the Lessee's documentation supporting their estimate of the value of <math>P_t</math> each year for review and approval by the Lessor.</p>
$r_t =$	the operating fee rate of 0.02 (2%).

**(c) Reporting, Validation, Audits, and Late Payments.**

The Lessee must submit the values used in the operating fee formula to the Lessor at the time the annual payment based on these values is made. Submission of this and other reporting, validation, audit and late payment information as requested by the Lessor must be sent to the Lessor using the contact information indicated in Addendum "A", unless the Lessor directs otherwise. Failure to submit the estimated values and the associated documentation on time to the Lessor may result in penalties as specified in applicable regulations.

Within 60 days of the submission by the Lessee of the annual payment, the Lessor will review the data submitted and validate that the operating fee formula was applied correctly. If the Lessor validation results in a different operating fee amount, the amount of the annual operating fee payment will be revised to the amount determined by the Lessor.

The Lessor also reserves the right to audit the meter data upon which the Actual 5-year Average Capacity Factor is based at any time during the lease term. If, as a result of such audit, the Lessor determines that any annual operating fee payment was calculated incorrectly, the Lessor has the right to correct any errors and collect the correct annual operating fee payment amount.

If the annual operating fee is revised downward as a result of the Lessee's calculations, as validated by the Lessor, or an audit of meter data conducted by the Lessee or Lessor, the Lessee will be refunded the difference between the amount of the payment received and the amount of the revised annual operating fee, without interest. Similarly, if the payment amount is revised upward, the Lessee is required to pay the difference between the amount



of the payment received and the amount of the revised annual operating fee, plus interest on the balance, in accordance with 30 CFR § 1218.54.

Late operating fee payments will be charged interest in accordance with 30 CFR § 1218.54.

#### IV. Financial Assurance

The Lessor will base the determination for the amounts of all Site Assessment Plan (SAP), COP, and decommissioning financial assurance requirements on estimates of the cost to meet all accrued lease obligations. The Lessor determines the amount of supplemental and decommissioning financial assurance requirements on a case-by-case basis. The amount of financial assurance required to meet all lease obligations includes:

- (a) **Initial Financial Assurance.** Prior to the Lease Issuance date, the Lessee must provide an initial lease-specific bond, or other approved means of meeting the Lessor's initial financial assurance requirements in an amount equal to \$100,000.
- (b) **Additional Financial Assurance.** In addition to the initial lease-specific financial assurance discussed above, the Lessee is also required to provide additional supplemental bonds associated with the SAP and COP, or other form of financial assurances and a decommissioning bond or other approved means of meeting the Lessee's decommissioning obligations.
  - (1) Prior to the Lessor's approval of a SAP, the Lessor will require an additional supplemental bond or other form of financial assurance in an amount determined by the Lessor based on the complexity, number, and location of all facilities involved in the site assessment activities planned in the SAP, and estimates of the costs to meet all accrued obligations, in accordance with applicable BOEM regulations (30 CFR 585.515-537). The supplemental financial assurance requirement is in addition to the initial lease-specific financial assurance in the amount of \$100,000. The Lessee may meet these obligations by providing a new bond or other acceptable form of financial assurance, or increasing the amount of its existing bond or other form of financial assurance.
  - (2) Prior to the Lessor's approval of a COP, the Lessor may require an additional supplemental bond or other form of financial assurance in an amount determined by the Lessor based on the complexity, number, location of all facilities, activities and Commercial Operations planned in the COP, and estimates of the costs to meet all accrued obligations, in accordance with applicable BOEM regulations (30 CFR 585.515-537). The supplemental financial assurance requirement is in addition to the initial lease-specific financial assurance in the amount of \$100,000 and an additional supplemental bond or other form of financial assurance required with the SAP. The Lessee may meet this obligation by providing a new bond or other acceptable form of financial assurance, or increasing the amount of its existing bond or other form of financial assurance.

- (3) The Lessor will require a decommissioning bond or other form of financial assurance based on the anticipated decommissioning costs in accordance with applicable BOEM regulations (30 CFR 585.515-537). The decommissioning obligation must be guaranteed through an acceptable form of financial assurance and will be due according to the schedule beginning before commencement of the installation of commercial facilities on a date or dates to be determined by the Lessor.
- (c) **Adjustments to Financial Assurance Amounts.** The Lessor reserves the right to adjust the amount of any financial assurance requirement (initial, supplemental, or decommissioning) associated with this lease and/or reassess the Lessee's cumulative lease obligations, including decommissioning obligations, at any time. If the Lessee's cumulative lease obligations and/or liabilities increase or decrease, the Lessor will notify the Lessee of any intended adjustment to the financial assurance requirements and provide the Lessee an opportunity to comment in accordance with applicable BOEM regulations.

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM "C"**

**LEASE-SPECIFIC TERMS, CONDITIONS, AND STIPULATIONS**

Lease Number OCS-A 0522

The Lessee's rights to conduct activities on the leased area are subject to the following terms, conditions, and stipulations. The Lessor reserves the right to impose additional terms and conditions incident to the future approval or approval with modifications of plans, such as a Site Assessment Plan (SAP) or Construction and Operations Plan (COP).

1	DEFINITIONS	2
2	SCHEDULE	3
2.1	Site Characterization	3
2.2	Progress Reporting	4
3	173.1 Hold and Save Harmless	4
3.2	Evacuation or Suspension of Activities	5
3.3	Electromagnetic Emissions	6
4	STANDARD OPERATING CONDITIONS	6
4.1	General	6
4.2	Archaeological Survey Requirements	8
4.3	Geological and Geophysical (G&G) Survey Requirements	11
4.4	Reporting Requirements	15
5	SITING CONDITIONS	18
5.1	Vessel Transit Corridors	18
5.2	Surface Structure Setback	18

## **1 DEFINITIONS**

- 1.1 Definition of “Archaeological Resource”: The term “archaeological resource” has the same meaning as “archaeological resource” in the Bureau of Ocean Energy Management (BOEM) regulations provided in 30 CFR 585.112.
- 1.2 Definition of “Dynamic Management Area (DMA)”: The term “DMA” refers to a temporary area designated by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) and consisting of a circle around a confirmed North Atlantic right whale sighting. The radius of this circle expands incrementally with the number of whales sighted, and a buffer is included beyond the core area to allow for whale movement. Mandatory or voluntary speed restrictions may be applied by NOAA NMFS within DMAs. Information regarding the location and status of applicable DMAs is available from the NMFS Office of Protected Resources.
- 1.3 Definition of “Effective Date”: The term “Effective Date” has the same meaning as “effective date” in BOEM regulations provided in 30 CFR 585.237.
- 1.4 Definition of “Geological and Geophysical Survey (G&G Survey)”: The term “G&G Survey” serves as a collective term for surveys that collect data on the geology of the seafloor and landforms below the seafloor. High resolution geophysical surveys and geotechnical (sub-bottom) exploration are components of G&G surveys.
- 1.5 Definition of “Geotechnical Exploration”: The term “Geotechnical Exploration,” also referred to as “Sub-bottom Sampling,” or “Geotechnical Testing,” is used to collectively refer to site specific sediment and underlying geologic data acquired from the seafloor and the sub-bottom and includes geotechnical surveys utilizing deep borings, vibracores, and cone penetration tests.
- 1.6 Definition of “High Resolution Geophysical Survey (HRG Survey)”: The term “HRG Survey” means a marine remote-sensing survey using, but not limited to, such equipment as side-scan sonar, magnetometer, shallow and medium (Seismic) penetration sub-bottom profiler systems, narrow beam or multibeam echo sounder, or other such equipment employed for the purposes of providing data on geological conditions, identifying shallow hazards, identifying archaeological resources, charting bathymetry, and gathering other site characterization information.
- 1.7 Definition of “Protected Species”: The term “protected species” includes marine mammals (those protected under the Endangered Species Act and those protected under the Marine Mammal Protection Act), sea turtles, sturgeon, and giant manta ray.
- 1.8 Definition of “Protected-Species Observer”: The term “protected-species observer,” or “PSO,” means an individual who is trained in the shipboard identification and behavior of protected species.

- 1.9 Definition of "Ramp-up": The term "ramp-up" means the process of incrementally increasing the acoustic source level of the survey equipment when conducting HRG surveys until it reaches the operational setting.
- 1.10 Definition of "Site Assessment Activities": The term "site assessment activities" or "site assessment," has the same meaning as "site assessment activities" in 30 CFR 585.112.
- 1.11 Definition of "Qualified Marine Archaeologist": The term "qualified marine archaeologist" means a person retained by the Lessee who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology (48 FR 44738-44739), and has experience analyzing marine geophysical data.

## **2 SCHEDULE**

### **2.1 Site Characterization**

- 2.1.1 Survey Plan(s). Prior to conducting survey activities in support of the submission of a plan, the Lessee must submit to the Lessor at least one complete survey plan. Each distinct survey effort (e.g., mobilization) must be addressed by a survey plan, although a single survey plan may cover more than one effort. Each survey plan must include details and timelines of the surveys to be conducted on this lease necessary to support the submission of a plan (i.e., necessary to satisfy the information requirements in the applicable regulations, including but not limited to 30 CFR 585.606, 610, 611, 621, 626, 627). Each survey plan must include a description of historic property identification surveys that will be conducted to gather the information required by BOEM to complete review of a plan under the National Historic Preservation Act (e.g., offshore and onshore archaeological surveys and surveys within the viewshed of proposed renewable energy structures). Each survey plan must be consistent with the Lessee's Fisheries Communication Plan (see 4.1.3) and include a description of the Lessee's intentions to coordinate with the U.S. Coast Guard to prepare a Notice to Mariners for the specific survey activities described in the survey plan.

The Lessee must submit each survey plan to the Lessor at least 30 calendar days prior to the date of the required pre-survey meeting with the Lessor (See 2.1.2). Prior to the commencement of any survey activities described in the survey plan, the Lessee must modify each survey plan to address any comments the Lessor submits to the Lessee on the contents of the survey plan in a manner deemed satisfactory by the Lessor.

2.1.2 Pre-Survey Meeting(s) with the Lessor. At least 60 days prior to the initiation of survey activities in support of the submission of a plan (i.e., SAP and/or COP), the Lessee must hold a pre-survey meeting with the Lessor to discuss the applicable proposed survey plan and timelines. The Lessee must ensure the presence at this meeting of a Qualified Marine Archaeologist and any other relevant subject matter experts (e.g., terrestrial archaeologist, architectural historians) related to the proposed historic property identification surveys described in the survey plan unless otherwise authorized by the Lessor. The Lessor may request the presence of other relevant subject matter experts at this meeting.

## 2.2 Progress Reporting

2.2.1 Semi-Annual Progress Report. The Lessee must submit to the Lessor a semi-annual (i.e., every six months) progress report through the duration of the site assessment term that includes a brief narrative of the overall progress since the last progress report, or – in the case of the first report – since the Effective Date. The progress report must include an update regarding progress in executing the activities included in the survey plan(s), and include as an enclosure an updated survey plan(s) accounting for any modifications in schedule.

## 3 NATIONAL SECURITY AND MILITARY OPERATIONS

The Lessee must comply with the requirements specified in stipulations 3.1, 3.2 and 3.3 when conducting site characterization activities in support of plan (i.e., SAP and/or COP) submittal.

### 3.1 Hold and Save Harmless

Whether compensation for such damage or injury might be due under a theory of strict or absolute liability or otherwise, the Lessee assumes all risks of damage or injury to persons or property, which occur in, on, or above the Outer Continental Shelf (OCS), to any persons or to any property of any person or persons in connection with any activities being performed by the Lessee in, on, or above the OCS, if such injury or damage to such person or property occurs by reason of the activities of any agency of the United States Government, its contractors, or subcontractors, or any of its officers, agents or employees, being conducted as a part of, or in connection with, the programs or activities of the individual military command headquarters (hereinafter “the appropriate command headquarters”) listed in the contact information provided as an enclosure to this lease.

Notwithstanding any limitation of the Lessee's liability in Section 9 of the lease, the Lessee assumes this risk whether such injury or damage is caused in whole or in part by any act or omission, regardless of negligence or fault, of the United States, its contractors or subcontractors, or any of its officers, agents, or employees. The Lessee further agrees to indemnify and save harmless the United States against all claims for loss, damage, or injury in connection with the programs or activities of the command headquarters, whether the same be caused in whole or in part by the negligence or fault of the United States, its contractors, or subcontractors, or any of its officers, agents, or employees and whether such claims might be sustained under a theory of strict or absolute liability or otherwise.

### **3.2 Evacuation or Suspension of Activities**

**3.2.1 General.** The Lessee hereby recognizes and agrees that the United States reserves and has the right to temporarily suspend operations and/or require evacuation on this lease in the interest of national security pursuant to Section 3(c) of this lease.

**3.2.2 Notification.** Every effort will be made by the appropriate military agency to provide as much advance notice as possible of the need to suspend operations and/or evacuate. Advance notice will normally be given before requiring a suspension or evacuation. Temporary suspension of operations may include, but is not limited to the evacuation of personnel and appropriate sheltering of personnel not evacuated. "Appropriate sheltering" means the protection of all Lessee personnel for the entire duration of any Department of Defense activity from flying or falling objects or substances and will be implemented by an order (oral and/or written) from the BOEM Office of Renewable Energy Programs (OREP) Program Manager, after consultation with the appropriate command headquarters or other appropriate military agency, or higher Federal authority. The appropriate command headquarters, military agency, or higher authority will provide information to allow the Lessee to assess the degree of risk to, and provide sufficient protection for, the Lessee's personnel and property.

**3.2.3 Duration.** Suspensions or evacuations for national security reasons will not generally exceed seventy-two (72) hours; however, any such suspension may be extended by order of the OREP Program Manager. During such periods, equipment may remain in place, but all operations, if any, must cease for the duration of the temporary suspension if so directed by the OREP Program Manager. Upon cessation of any temporary suspension, the OREP Program Manager will immediately notify the Lessee such suspension has terminated and operations on the leased area can resume.

**3.2.4 Lessee Point-of-Contact for Evacuation/Suspension Notifications.** The Lessee must inform the Lessor of the persons/offices to be notified to implement the terms of 3.2.2 and 3.2.3.

- 3.2.5 Coordination with Command Headquarters. The Lessee must establish and maintain early contact and coordination with the appropriate command headquarters, in order to avoid or minimize the potential to conflict with and minimize the potential effects of conflicts with military operations.
- 3.2.6 Reimbursement. The Lessee is not entitled to reimbursement for any costs or expenses associated with the suspension of operations or activities or the evacuation of property or personnel in fulfillment of the military mission in accordance with 3.2.1 through 3.2.5 above.

### 3.3 **Electromagnetic Emissions**

The Lessee, prior to entry into any designated defense operating area, warning area, or water test area, for the purpose of commencing survey activities undertaken to support SAP or COP submittal must enter into an agreement with the commander of the appropriate command headquarters to coordinate the electromagnetic emissions associated with such survey activities. The Lessee must ensure that all electromagnetic emissions associated with such survey activities are controlled as directed by the commander of the appropriate command headquarters.

## 4 **STANDARD OPERATING CONDITIONS**

### 4.1 **General**

- 4.1.1 Vessel Strike Avoidance Measures. The Lessee must ensure that all vessels conducting activities in support of plan (i.e., SAP and COP) submittal, including those transiting to and from local ports and the lease area, comply with the vessel-strike avoidance measures specified in stipulations 4.1.1.1 through 4.1.1.8.3, except under extraordinary circumstances when complying with these requirements would put the safety of the vessel or crew at risk.
- 4.1.1.1 The Lessee must ensure that vessel operators and crews maintain a vigilant watch for marine mammals (whales, dolphins, porpoises, seals), sea turtles, and giant manta rays, and slow down or stop their vessel to avoid striking these protected species.
- 4.1.1.2 The Lessee must ensure that vessels 19.8 meters (m) (65 feet [ft]) in length or greater that operate between November 1 through July 31, operate at speeds of 10 knots (11.5 mph) or less.
- 4.1.1.3 The Lessee must ensure that vessel operators monitor NMFS North Atlantic Right Whale reporting systems (e.g., the Early Warning System, Sighting Advisory System, and Mandatory Ship Reporting System) from November 1 through July 31 and whenever a DMA is established within any area vessels operate.
- 4.1.1.4 The Lessee must ensure that all vessel operators comply with 10 knot (18.5 kilometers per hour [km/hr]) speed restrictions in any DMA.



4.1.1.5 The Lessee must ensure that all vessel operators reduce vessel speed to 10 knots or less when mother/calf pairs, pods, or large assemblages of marine mammals are observed near an underway vessel.

4.1.1.6 North Atlantic Right Whales.

4.1.1.6.1 The Lessee must ensure all vessels maintain a separation distance of 500 m (1,640 ft) or greater from any sighted North Atlantic right whale or unidentified large marine mammal.

4.1.1.6.2 The Lessee must ensure that the following avoidance measures are taken if a vessel comes within 500 m (1,640 ft) of any North Atlantic right whale:

4.1.1.6.2.1 If underway, any vessel must steer a course away from any North Atlantic right whale at 10 knots ( 18.5 km/h) or less until the 500 m (1,640 ft) minimum separation distance has been established (except as provided in 4.1.1.6.2.2).

4.1.1.6.2.2 If a North Atlantic right whale is sighted within 100 m (328 ft) to an underway vessel, the vessel operator must immediately reduce speed and promptly shift the engine to neutral. The vessel operator must not engage the engines until the North Atlantic right whale has moved beyond 100 m (328 ft), at which point the Lessee must comply with 4.1.1.6.2.1.

4.1.1.6.2.3 If a vessel is stationary, the vessel must not engage engines until the North Atlantic right whale has moved beyond 100 m (328 ft), at which point the Lessee must comply with 4.1.1.6.2.1.

4.1.1.7 Large Whales other than the North Atlantic Right Whale.

4.1.1.7.1 The Lessee must ensure all vessels maintain a separation distance of 100 m (328 ft) or greater from any sighted Endangered Species Act (ESA)-listed whales or humpback whales.

4.1.1.7.2 The Lessee must ensure that the following avoidance measures are taken if a vessel comes within 100 m (328 ft) of whale:

4.1.1.7.2.1 If underway, the vessel must reduce speed and shift the engine to neutral, and must not engage the engines until the whale has moved beyond 100 m (328 ft).

4.1.1.7.2.2 If stationary, the vessel must not engage engines until the whale has moved beyond 100 m (328 ft).

4.1.1.8 Small Cetaceans (Dolphins and Porpoises), Seals, Giant Manta Rays, and Sea Turtles.

4.1.1.8.1 The Lessee must ensure that all vessels underway do not divert to approach any small cetacean, seal, sea turtle, or giant manta ray.

- 4.1.1.8.2 The Lessee must ensure that all vessels maintain a separation distance of 50 meters (164 ft) or greater from any sighted small cetacean, seal, sea turtles, or giant manta ray, except when a small cetacean or seal approaches the vessel, in which case, the Lessee must follow 4.1.1.8.3 below.
- 4.1.1.8.3 If a small cetacean or seal approaches any vessel underway, the vessel underway must avoid excessive speed or abrupt changes in direction to avoid injury to the animal.
- 4.1.1.9 Vessel Operator Briefing. The Lessee must ensure that all vessel operators are briefed to ensure they are familiar with the requirements specified in 4.1.1.
- 4.1.2 Marine Trash and Debris Prevention. The Lessee must ensure that vessel operators, employees, and contractors actively engaged in activity in support of a plan (i.e., SAP and COP) submittal are briefed on marine trash and debris awareness and elimination, as described in the BSEE NTL No. 2015-G03 ("Marine Trash and Debris Awareness and Elimination") or any NTL that supersedes this NTL, except that the Lessor will not require the Lessee to post placards. The Lessee must ensure that these vessel operator employees and contractors receive training on the environmental and socioeconomic impacts associated with marine trash and debris and their responsibilities for ensuring that trash and debris are not intentionally or accidentally discharged into the marine environment. Briefing materials on marine debris awareness, elimination, and protected species are available at <http://oocmain.theooc.us/page41.html>.
- 4.1.3 Fisheries Communications Plan (FCP) and Fisheries Liaison. The Lessee must develop a publicly available FCP that describes the strategies that the Lessee intends to use for communicating with fisheries stakeholders prior to and during activities in support of the submission of a plan. The FCP must include the contact information for an individual retained by the Lessee as its primary point of contact with fisheries stakeholders (i.e., Fisheries Liaison). If the Lessee does not develop a project website, the FCP must be made available to the Lessor and the public upon request.
- 4.1.4 Entanglement Avoidance.
- 4.1.4.1 The Lessee must ensure that any structures or devices attached to the seafloor for continuous periods greater than 24 hours use the best available mooring systems for minimizing the risk of entanglement or entrapment of marine mammals, manta rays and sea turtles, while still ensuring the safety and integrity of the structure or device. The best available mooring system may include, but is not limited to, vertical and float lines (chains, cables, or coated rope systems), swivels, shackles, and anchor designs.
- 4.1.4.2 All mooring lines and ancillary attachment lines must use one or more of the following measures to reduce entanglement risk: shortest practicable line length, rubber sleeves,

weak-links, chains, cables or similar equipment types that prevent lines from looping or wrapping around animals, or entrapping protected species.

- 4.1.4.3 Any equipment must be attached by a line within a rubber sleeve for rigidity. The length of the line must be as short as necessary to meet its intended purpose.
- 4.1.4.4 If an entangled live or dead marine protected species is reported, the Lessee must provide any assistance to authorized stranding response personnel as requested by BOEM or NMFS.

## 4.2 Archaeological Survey Requirements

- 4.2.1 Archaeological Survey Required. The Lessee must provide the results of an archaeological survey with its plans.
- 4.2.2 Qualified Marine Archaeologist. The Lessee must ensure that the analysis of archaeological survey data collected in support of plan (e.g., SAP and/or COP) submittal and the preparation of archaeological reports in support of plan submittal are conducted by a Qualified Marine Archaeologist.
- 4.2.3 Tribal Pre-Survey Meeting. The Lessee must invite by certified mail the Narragansett Indian Tribe, the Mashpee Wampanoag Tribe, and the Wampanoag Tribe of Gay Head (Aquinnah) to a tribal pre-survey meeting. The purpose of this meeting will be for the Lessee and the Lessee's Qualified Marine Archaeologist to discuss the Lessee's Survey Plan and consider requests to monitor portions of the archaeological survey and the geotechnical exploration activities, including the visual logging and analysis of geotechnical samples (e.g., cores, etc.). The meeting must be held subsequent to the pre-survey meeting with the Lessor (see 2.1.2). Invitation to the tribal pre-survey meeting must be made at least 15 calendar days prior to the date of the proposed tribal pre-survey meeting. The meeting must be scheduled for a date at least 30 calendar days prior to commencement of survey activities performed in support of plan submittal and at a location and time that affords the participants a reasonable opportunity to participate. The anticipated date for the meeting must be identified in the timeline of activities described in the applicable survey plan (see 2.1.1).
- 4.2.4 Geotechnical Exploration. The Lessee may only conduct geotechnical exploration activities performed in support of plan (i.e., SAP and/or COP) submittal in locations where an analysis of the results of geophysical surveys has been completed. This analysis must include a determination by a Qualified Marine Archaeologist as to whether any potential archaeological resources are present in the area. Except as allowed by the Lessor under 4.2.6, the geotechnical exploration activities must avoid potential archaeological resources by a minimum of 50 m (164 ft), and the avoidance distance must be calculated from the maximum discernible extent of the archaeological resource. A Qualified Marine Archaeologist must certify, in the

Lessee's archaeological reports, that geotechnical exploration activities did not impact potential historic properties identified as a result of the HRG surveys performed in support of plan submittal, except as follows: in the event that the geotechnical exploration activities did impact potential historic properties identified in the archaeological surveys without the Lessor's prior approval, the Lessee and the Qualified Marine Archaeologist who prepared the report must instead provide a statement documenting the extent of these impacts.

- 4.2.5 **Monitoring and Avoidance.** The Lessee must inform the Qualified Marine Archaeologist that he or she may be present during HRG surveys and bottom-disturbing activities performed in support of plan (i.e., SAP and/or COP) submittal to ensure avoidance of potential archaeological resources, as determined by the Qualified Marine Archaeologist (including bathymetric, seismic, and magnetic anomalies; side scan sonar contacts; and other seafloor or sub-surface features that exhibit potential to represent or contain potential archaeological sites or other historic properties). In the event that this Qualified Marine Archaeologist indicates that he or she wishes to be present, the Lessee must facilitate the Qualified Marine Archaeologist's presence, as requested by the Qualified Marine Archaeologist, and provide the Qualified Marine Archaeologist the opportunity to inspect data quality.
- 4.2.6 **No Impact without Approval.** In no case may the Lessee knowingly impact a potential archaeological resource without the Lessor's prior approval.
- 4.2.7 **Post-Review Discovery Clauses.** If the Lessee, while conducting geotechnical exploration or any other bottom-disturbing site characterization activities in support of plan (i.e., SAP and COP) submittal and after review of the location by a Qualified Marine Archaeologist under 4.2.4, discovers an unanticipated potential archaeological resource, such as the presence of a shipwreck (e.g., a sonar image or visual confirmation of an iron, steel, or wooden hull, wooden timbers, anchors, concentrations of historic objects, piles of ballast rock) or evidence of a pre-contact archaeological site (e.g. stone tools, pottery or other pre-contact artifacts) within the project area, the Lessee must:
- 4.2.7.1 Immediately halt seafloor/bottom-disturbing activities within the area of discovery;
  - 4.2.7.2 Notify the Lessor within 24 hours of discovery;
  - 4.2.7.3 Notify the Lessor in writing via report to the Lessor within 72 hours of its discovery;
  - 4.2.7.4 Keep the location of the discovery confidential and take no action that may adversely affect the archaeological resource until the Lessor has made an evaluation and instructs the applicant on how to proceed; and
  - 4.2.7.5 Conduct any additional investigations as directed by the Lessor to determine if the resource is eligible for listing in the National Register of Historic Places

(30 CFR 585.802(b)). The Lessor will do this if: (1) the site has been impacted by the Lessee's project activities; or (2) impacts to the site or to the area of potential effect cannot be avoided. If investigations indicate that the resource is potentially eligible for listing in the National Register of Historic Places, the Lessor will tell the Lessee how to protect the resource or how to mitigate adverse effects to the site. If the Lessor incurs costs in protecting the resource, under Section 110(g) of the National Historic Preservation Act, the Lessor may charge the Lessee reasonable costs for carrying out preservation responsibilities under the OCS Lands Act (30 CFR 585.802(c-d)).

### 4.3 Geological and Geophysical (G&G) Survey Requirements

- 4.3.1 **General.** The Lessee must ensure that all vessels conducting activity in support of a plan (i.e., SAP and COP) submittal comply with the geological and geophysical survey requirements specified in 4.3 except under extraordinary circumstances when complying with these requirements would put the safety of the vessel or crew at risk.
- 4.3.2 **Visibility.** The Lessee must not conduct G&G surveys in support of plan (i.e., SAP and COP) submittal at night or if any observation conditions (e.g., darkness, rain, fog, and sea state) prevent visual monitoring of the HRG survey exclusion zone (see 4.3.6.1) or the geotechnical exploration exclusion zone (see 4.3.7.1), except as allowed under 4.3.3.
- 4.3.3 **Nighttime Survey Requirements.** If the Lessee intends to conduct G&G survey operations in support of plan submittal at night or when visual observation is otherwise impaired, the Lessee must use PSOs supplemented with night vision technology and a passive acoustic monitoring system to monitor the exclusion zone. The Lessee must submit to the Lessor an alternative monitoring plan detailing the monitoring methodology (e.g., active or passive acoustic monitoring technologies). No nighttime surveys may begin until the Lessor determines that the alternative monitoring plan is adequate to monitor for protected species.
- 4.3.4 **Protected-Species Observer.** The Lessee must ensure that the exclusion zone for all G&G surveys performed in support of plan (i.e., SAP and COP) submittal is monitored by NMFS-approved protected-species observers.
- 4.3.4.1 The Lessor must ensure all PSOs and Passive Acoustic Monitoring (PAM) Operators have completed a PSO and/or PAM training program, as appropriate. PSOs must be approved by NMFS prior to the start of a survey. Instructions and application requirements to become a NMFS-approved PSO can be found at: <https://www.greateratlantic.fisheries.noaa.gov/protected/esaobserver/index.html>.
- 4.3.4.2 No later than 7 calendar days prior to the scheduled start of survey activities that require PSOs, the Lessee must provide to the Lessor a list of PSOs that will implement best management practices (BMPs) during survey work. The Lessee must provide the Lessor a current approval from NMFS that indicates the PSOs

are currently qualified to work on survey, and documentation or certificate of individual PSOs' successful completion of a commercial PSO training course and/or PAM operator course with an overall examination score of 80% or greater (Baker et. al 2013 available at <https://www.fisheries.noaa.gov/resource/document/national-standards-protected-species-observer-and-data-management-program>).

- 4.3.4.3 The Lessee must submit a PSO/PAM Operator schedule showing the number of PSOs/PAM Operators used is sufficient to effectively monitor the affected area identified for each project (e.g., surveys or pile driving) according to the following: a) PSOs/PAM must not be on watch for more than 4 consecutive hours, with at least a 2-hour break after a 4-hour watch, unless otherwise accepted by the Lessor; b) PSOs/PAM must not work for more than 12 hours in any 24-hour period (Baker et al. 2013).
- 4.3.4.4 The Lessee must ensure PSO data is collected in accordance with standard reporting forms, software tools, and electronic data forms approved by BOEM for the particular activity.
- 4.3.5 Observation Location and Optical Device Availability. The Lessee must ensure that monitoring occurs from the highest available vantage point on the associated operational platform, allowing for 360-degree scanning. The Lessee must ensure that reticle binoculars and other suitable equipment are available to each observer to adequately perceive and monitor protected marine species within the exclusion zone during surveys conducted in support of plan (i.e., SAP and COP) submittal.
- 4.3.6 High-Resolution Geophysical Surveys. Stipulations specific to HRG surveys conducted in support of plan (i.e., SAP and COP) submittal where one or more acoustic sound sources is operating at frequencies below 200 kHz are provided in 4.3.6.1 through 4.3.6.9.
- 4.3.6.1 Establishment of Default Exclusion Zone. The Lessee must ensure a 200-meter radius exclusion zone around the sound source for ESA-listed whales and sea turtles. In the case of the North Atlantic right whale, the Lessee must observe a minimum separation distance of 500 m (1,640 ft), as required under 4.1.1.6.1. Exclusion zones for non-listed marine mammals will be determined through project-specific mitigation and monitoring requirements of Incidental Take Authorizations (ITAs) provided by the National Marine Fisheries Service. If an ITA is not required, default exclusion zones of 100 m (328 ft) for harbor porpoises and humpback whales, and 50 m (164 ft) for all other non-listed marine mammals must be established around each vessel conducting HRG survey activities.
- 4.3.6.2 High Resolution Geophysical Sound Source Verification. No later than 45 calendar days prior to the commencement of survey activities, the Lessee must submit the results of sound source verification for any active acoustic devices that may be used. The Lessee must submit sound source verification results containing the frequencies, source

level (dB re 1 $\mu$ Pa), and modeled distances to most current guidance specified by the Lessor for ear injury and behavioral disturbance in the survey area. If existing data is available, the analysis must provide an explanation why the existing data is expected to be representative for the equipment in the area to be surveyed. This explanation must include a discussion of any differences between the equipment tested and the equipment to be used, a discussion of any differences in propagation characteristics conditions (depth, water temperature and bottom conditions), and an explanation for how those differences would affect sound propagation and injury and behavioral disturbance distances. No surveys may begin until the Lessor determines that the sound source verification use of existing information is acceptable.

- 4.3.6.3 If the existing SSV information is not acceptable, the Lessee must submit to the Lessor a sound source verification plan for field measurements of any HRG equipment that will be used, no later than 30 calendar days prior to the commencement of survey activities. Acoustic measurements must be sufficient to establish the following: frequencies, source level (Peak, SEL, and RMS sound pressure levels re 1  $\mu$ Pa at 1 m), and the sound exposure distance for ear injury and behavioral harassment thresholds for marine mammal hearing groups, sea turtles, and fish specified by the Lessor. The Lessee must take these sound measurements from at least three reference distances at two depths (i.e., a depth at mid-water and a depth at approximately 1 m above the seafloor). The results of the field measurements must be provided to the Lessor for review at least 24 hours in advance of commencing a survey.
- 4.3.6.3.1 If the Lessor determines that the exclusion zone does not encompass the sound-exposure threshold for ear injury to protected species, the Lessor will consult with NMFS and may impose additional requirements on the Lessee.
- 4.3.6.4 Modification of Exclusion Zone per Lessee Request. The Lessee may use the field verification results to request modification of the exclusion zone for the specific HRG survey equipment under consideration. Any new exclusion zone radius proposed by the Lessee must be based on the most conservative field measurements of the largest exclusion zone and diving behavior of the protected species in the survey area. The Lessee may periodically reevaluate the modified zone using the field verification procedures described in 4.3.6.3. The Lessee must obtain Lessor approval of any new exclusion zone before it is implemented.
- 4.3.6.5 Clearance of Exclusion Zone. The Lessee must ensure that active acoustic sound sources will not be activated until the PSO has reported the exclusion zone clear of all marine mammals and sea turtles for 60 minutes.
- 4.3.6.6 Electromechanical Survey Equipment Ramp-Up. The Lessee must ensure that, when technically feasible, a “ramp-up” of the electromechanical survey

equipment occurs at the start or re-start of HRG survey activities. A ramp-up would begin with the power of the smallest acoustic equipment for the HRG survey at its lowest power output. The power output would be gradually turned up and other acoustic sources added in a way such that the source level would increase in steps not exceeding 6 dB per 5-minute period.

- 4.3.6.7 **Shut Down for Protected Species.** The Lessee must ensure that anytime a protected species is sighted within the exclusion zone defined in 4.3.6.1, the PSO must notify the Resident Engineer or other authorized individual, and call for an immediate shutdown of the electromechanical survey equipment. HRG survey equipment may be allowed to continue operating if marine mammals voluntarily approach the vessel (e.g., to bow ride) when the sound sources are at full operating power. The vessel operator must comply immediately with such a call by the PSO. Any disagreement or discussion must occur only after shut-down. Subsequent restart of the electromechanical survey equipment may only occur following clearance of the exclusion zone (see 4.3.6.5) and implementation of ramp-up procedures (see 4.3.6.6).
- 4.3.6.8 **Pauses in Electromechanical Survey Sound Source.** The Lessee must ensure that, if the electromechanical sound source shuts down for reasons other than encroachment into the exclusion zone by a whale or sea turtle, including reasons such as, but not limited to, mechanical or electronic failure, resulting in the cessation of the sound source for a period greater than 20 minutes, restart of the electromechanical survey equipment commences only after clearance of the exclusion zone (see 4.3.6.5) and implementation of ramp-up procedures (see 4.3.6.6). If the pause is less than 20 minutes the equipment may be restarted as soon as practicable at its operational level as long as visual surveys were continued diligently throughout the silent period and the exclusion zone remained clear of marine mammals and sea turtles. If visual surveys were not continued diligently during the pause of 20-minutes or less, the Lessee must clear the exclusion zone, as described in 9.3.6.5, and implement ramp-up procedures, as described in 4.3.6.6, prior to restarting the electromechanical survey equipment.
- 4.3.7 **Geotechnical Exploration.** Stipulations specific to geotechnical exploration limited to borings and vibracores and conducted in support of plan (i.e., SAP and COP) submittal are provided in 4.3.7.1 through 4.3.7.6.
- 4.3.7.1 **Establishment of Default Exclusion Zones.** A default exclusion zone distance of 500 m (1,640 ft) for North Atlantic right whales and other listed species must be monitored around each vessel conducting geotechnical survey activities where North Atlantic right whales are expected to occur. If surveys are conducted in an area where North Atlantic right whales are not expected to occur, a default exclusion zone of 200 m (656 ft) for other large whales and sea turtles must be



established around each vessel conducting HRG survey activities. Exclusion zones for non-listed marine mammals will be determined through project-specific mitigation and monitoring requirements of ITAs provided by the NMFS. If an ITA is not required, default exclusion zones of 100 m (328 ft) for harbor porpoises and humpback whales, and 50 m (164 ft) for all other non-listed marine mammals must be established around each vessel conducting HRG survey activities.

- 4.3.7.2 **Geotechnical Sound Source Verification.** No later than 45 calendar days prior to the commencement of any surveys with any geotechnical survey equipment producing underwater sound levels, the Lessee must submit existing information on the sound levels produced by the equipment. If adequate information on the equipment is not available, the Lessor may require the Lessee to submit a plan to the Lessor for field verification of the sound source levels and of any geotechnical survey equipment operating at frequencies below 200 kHz. The Lessor must approve this verification plan prior to the commencement of the survey. The Lessor may require the Lessee to modify the plan in a manner deemed satisfactory by the Lessor,
- 4.3.7.2.1 If the Lessor determines that the exclusion zone is not effective to minimize impacts to protected species, the Lessor may impose additional requirements on the Lessee, including, but not limited to, required expansion of this exclusion zone.
- 4.3.7.3 **Clearance of Exclusion Zone.** The Lessee must ensure that the geotechnical sound source is not activated until the PSO has reported the exclusion zone clear of all marine mammals and sea turtles for 60 minutes.
- 4.3.7.4 **Modification of Exclusion Zone per Lessee Request.** If the Lessee wishes to modify the default exclusion zone for specific geotechnical exploration equipment, the Lessee must submit a plan for verifying the sound source levels of the specific geotechnical exploration equipment to the Lessor. The plan must demonstrate how the field verification activities will comply with the requirements of 4.3.7.2. The Lessor may require that the Lessee modify the plan to address any comments the Lessor submits to the Lessee on the contents of the plan in a manner deemed satisfactory to the Lessor prior to the commencement of field verification activities. Any new exclusion zone radius proposed by the Lessee must be based on the sound exposure distance for ear injury or behavioral harassment thresholds for marine mammal hearing groups, sea turtles, and fish as defined by the Lessor. The Lessee must use this modified zone for all subsequent use of field-verified equipment. The Lessee may periodically reevaluate the modified zone using the field verification procedures described in 4.3.7.2. The Lessee must obtain Lessor approval of any new exclusion zone before it is implemented.

- 4.3.7.5 **Shut Down for Whales and Sea Turtles.** If any whales or sea turtles are sighted at or within the exclusion zone, an immediate shut-down of the geotechnical survey equipment is required. The vessel operator must comply immediately with such a call by the PSO. Any disagreement or discussion must occur only after shut-down. Subsequent restart of the geotechnical survey equipment may only occur following clearance of the exclusion zone (see 4.3.7.3).
- 4.3.7.6 **Pauses in Geotechnical Survey Sound Source.** The Lessee must ensure that, if the geotechnical sound source shuts down for reasons other than encroachment into the exclusion zone by a whale or sea turtle, including reasons such as, but not limited to, mechanical or electronic failure, resulting in the cessation of the sound source for a period greater than 20 minutes, restart of the geotechnical survey equipment commences only following clearance of the exclusion zone (see 4.3.7.3). If the pause is less than 20 minutes, the equipment may be restarted as soon as practicable as long as visual surveys were continued diligently throughout the silent period and the exclusion zone remained clear of marine mammals and sea turtles. If visual surveys were not continued diligently during the pause of 20 minutes or less, the Lessee must clear the exclusion zone, as described in 4.3.7.3, prior to restarting the geotechnical survey equipment.

#### **4.4 Reporting Requirements**

- 4.4.1 The Lessee must ensure compliance with the following reporting requirements for site characterization activities performed in support of plan (i.e., SAP and COP) submittal and must use the contact information provided as an enclosure to this lease, or updated contact information as provided by the Lessor, to fulfill these requirements:
- 4.4.2 **Field Verification of Exclusion Zone Preliminary Report.** The Lessee must report the results of any required sound source verification of the exclusion zone for G&G survey equipment operating below 200 kHz to the Lessor and NMFS prior to using the equipment during survey activities conducted in support of plan submittal. The Lessee must include in its report a preliminary interpretation of the results for all sound sources, which will include details of the operating frequencies, sound pressure levels (SPLs) (measured in Peak, SEL, and RMS), the distance to the ear injury and behavior thresholds, frequency bands measured, as well as associated latitude/longitude positions, ranges, depths and bearings between sound sources and receivers.
- 4.4.3 **Reports of Survey Activities and Observations.** The Lessee must provide the Lessor with reports every 90 calendar days following the completion of HRG or geotechnical exploration activities, and a final report at the conclusion of the HRG or geotechnical exploration activities. Each report must include a summary of survey activities, all PSO and incident reports (See Appendices A and B), and an estimate of the number of listed marine mammals, sea turtles, and sturgeon observed and/or taken during these survey activities. The final report must contain a detailed

analysis and interpretation of the sound source verification data, if such data was collected by the Lessee.

4.4.4 **Reporting Injured or Dead Protected Species.** The Lessee must ensure that sightings of any injured or dead protected species (e.g., marine mammals, sea turtles, giant manta ray or sturgeon) are reported to the Lessor, NMFS, and the NMFS Greater Atlantic (Northeast) Region's Stranding Hotline (866-755-6622 or current) within 24 hours of sighting, regardless of whether the injury or death is caused by a vessel. In addition, if the injury or death was caused by a collision with a project-related vessel, the Lessee must ensure that the Lessor is notified of the incident within 24 hours. The Lessee must use the form provided in Appendix A to ADDENDUM "C" to report the sighting or incident. If the Lessee's activity is responsible for the injury or death, the Lessee must ensure that the vessel assist in any salvage effort as requested by NMFS.

4.4.5 **Reporting Observed Impacts to Protected Species.**

4.4.5.1 The Lessee must report any observed takes of listed marine mammals, sea turtles, sturgeon, or giant manta ray resulting in injury or mortality within 24 hours to the Lessor and NMFS.

4.4.5.2 The Lessee must record any observed injuries or mortalities using the form provided in Appendix A to ADDENDUM "C".

4.4.6 **Protected Species Observer Reports.** The Lessee must ensure that the PSOs record all observations of protected species using standard marine mammal observer data collection protocols. The list of required data elements for these reports is provided in Appendix B to ADDENDUM "C".

4.4.7 **Marine Mammal Protection Act Authorization(s).** If the Lessee is required to obtain an authorization pursuant to section 101(a)(5) of the Marine Mammal Protection Act prior to conducting survey activities in support of plan submittal, the Lessee must provide to the Lessor a copy of the authorization prior to commencing these activities.

## **5 SITING CONDITIONS**

5.1 **Vessel Transit Corridors.** In its COP project design, Lessee must extend any BOEM-approved vessel transit corridors in adjacent lease areas, unless BOEM determines that such corridors are not necessary or can be modified. Lessee may not construct any surface structures in such vessel transit corridors.

5.2 **Surface Structure Setback.** In its COP project design, the Lessee must incorporate a 750 m setback from any shared lease boundary within which the Lessee may not construct any surface structures, unless the Lessee and the adjacent lessee agree to a smaller setback, the Lessee submits such agreement to BOEM, and BOEM approves it.

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

APPENDIX A TO ADDENDUM "C"

Lease Number OCS-A 0522

**Incident Report: Protected Species Injury or Mortality**

*Photographs/Video should be taken of all injured or dead animals.*

Observer's full name: \_\_\_\_\_

Reporter's full name: \_\_\_\_\_

Species Identification: \_\_\_\_\_

Name and type of platform: \_\_\_\_\_

Date animal observed: \_\_\_\_\_ Time animal observed: \_\_\_\_\_

Date animal collected: \_\_\_\_\_ Time animal collected: \_\_\_\_\_

Environmental conditions at time of observation (i.e. tidal stage, Beaufort Sea State, weather):  
\_\_\_\_\_  
\_\_\_\_\_

Water temperature (°C) and depth (m/ft) at site: \_\_\_\_\_

Describe location of animal and events 24 hours leading up to, including and after, the incident (incl. vessel speeds, vessel activity and status of all sound source use):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Photograph/Video taken: YES / NO    If Yes, was the data provided to NMFS? YES / NO  
(Please label *species, date, geographic site* and *vessel name* when transmitting photo and/or video)

Date and Time reported to NMFS Stranding Hotline: \_\_\_\_\_

**Sturgeon Information:** *(please designate cm/m or inches and kg or lbs)*

Species: \_\_\_\_\_

Fork length (or total length): \_\_\_\_\_ Weight: \_\_\_\_\_

Condition of specimen/description of animal: \_\_\_\_\_

\_\_\_\_\_

Fish Decomposed: NO SLIGHTLY MODERATELY SEVERELY

Fish tagged: YES / NO If Yes, please record all tag numbers.

Tag #(s): \_\_\_\_\_

Genetic samples collected: YES / NO

Genetics samples transmitted to: \_\_\_\_\_ on \_\_\_\_/\_\_\_\_/20\_\_

**Sea Turtle Species Information:** *(please designate cm/m or inches)*

Species: \_\_\_\_\_ Weight (kg or lbs): \_\_\_\_\_

Sex: Male Female Unknown

How was sex determined?: \_\_\_\_\_

Straight carapace length: \_\_\_\_\_ Straight carapace width: \_\_\_\_\_

Curved carapace length: \_\_\_\_\_ Curved carapace width: \_\_\_\_\_

Plastron length: \_\_\_\_\_ Plastron width: \_\_\_\_\_

Tail length: \_\_\_\_\_ Head width: \_\_\_\_\_

Condition of specimen/description of animal: \_\_\_\_\_

\_\_\_\_\_

**Existing Flipper Tag Information**

Left: \_\_\_\_\_ Right: \_\_\_\_\_

PIT Tag#: \_\_\_\_\_

**Miscellaneous:**

Genetic biopsy collected: YES NO Photographs taken: YES NO

**Turtle Release Information:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

State: \_\_\_\_\_ County: \_\_\_\_\_

**Remarks:** (note if turtle was involved with tar or oil, gear or debris entanglement, wounds, or mutilations, propeller damage, papillomas, old tag locations, etc.) \_\_\_\_\_

**Marine Mammal information:** (please designate cm/m or ft/inches)

Length of marine mammal (note direct or estimated): \_\_\_\_\_

Weight (if possible, kg or lbs): \_\_\_\_\_

Sex of marine mammal (if possible): \_\_\_\_\_

How was sex determined?: \_\_\_\_\_

Confidence of Species Identification:                      SURE                      UNSURE                      BEST GUESS

Description of Identification characteristics of marine mammal: \_\_\_\_\_

Genetic samples collected:                      YES / NO

Genetic samples transmitted to: \_\_\_\_\_ on \_\_\_\_/\_\_\_\_/20\_\_

Fate of marine mammal: \_\_\_\_\_

Description of Injuries Observed: \_\_\_\_\_

Other Remarks/Drawings: \_\_\_\_\_

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**APPENDIX B TO ADDENDUM "C"**

Lease Number OCS-A 0522

**REQUIRED DATA ELEMENTS FOR PROTECTED SPECIES OBSERVER REPORTS**

The Lessee must ensure that the PSO record all observations of protected species using standard marine mammal observer data collection protocols. The list of required data elements for these reports is provided below:

1. Vessel name;
2. PSOs' names and affiliations;
3. Date;
4. Time and latitude/longitude when daily visual survey began;
5. Time and latitude/longitude when daily visual survey ended; and
6. Average environmental conditions during visual surveys including:
  - a. Wind speed and direction;
  - b. Sea state (glassy, slight, choppy, rough, or Beaufort scale);
  - c. Swell (low, medium, high, or swell height in meters); and
  - d. Overall visibility (poor, moderate, good).
7. Species (or identification to lowest possible taxonomic level);
8. Certainty of identification (sure, most likely, best guess);
9. Total number of animals;
10. Number of juveniles;
11. Description (as many distinguishing features as possible of each individual seen, including length, shape, color and pattern, scars or marks, shape and size of dorsal fin, shape of head, and blow characteristics);
12. Direction of animal's travel relative to the vessel (preferably accompanied by a drawing);
13. Behavior (as explicit and detailed as possible, noting any observed changes in behavior);
14. Activity of vessel when sighting occurred.

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM "D"**

**PROJECT EASEMENT**

Lease Number OCS-A 0522

This section includes a description of the Project Easement(s), if any, associated with this lease, and the financial terms associated with it. This section will be updated as necessary.

I. Rent

The Lessee must begin submitting rent payments for any project easement associated with this lease commencing on the date that BOEM approves the Construction and Operations Plan (COP) or modification of the COP describing the project easement. Annual rent for a project easement 200 feet wide, centered on the transmission cable, is \$70.00 per statute mile. For any additional acreage required, the Lessee must also pay the greater of \$5.00 per acre per year or \$450.00 per year.



U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

**ADDENDUM "E"**

**RENT SCHEDULE**

Lease Number OCS-A 0522

This section includes a description of the schedule for rent payments that will be determined after the Construction and Operations Plan has been approved or approved with modifications. This section will be updated as necessary.

Unless otherwise authorized by the Lessor in accordance with the applicable regulations in 30 CFR Part 585, the Lessee must make rent payments as described below.

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF OCEAN ENERGY MANAGEMENT

Lease Number OCS-A 0522

**CONTACT INFORMATION FOR REPORTING REQUIREMENTS**

The following contact information must be used for the reporting and coordination requirements specified in ADDENDUM "C", Stipulation 3:

**United States Fleet Forces (USFF) N46**  
1562 Mitscher Ave, Suite 250  
Norfolk, VA 23551  
(757) 836-6206

The following contact information must be used for the reporting requirements in ADDENDUM C, Stipulation 4.4:

**Reporting Injured or Dead Protected Species**

National Oceanic and Atmospheric Administration  
Fisheries Northeast Region's Stranding Hotline  
800-900-3622

**All other reporting requirements in Stipulation 4.4**

Bureau of Ocean Energy Management  
Environment Branch for Renewable Energy  
Phone: 703-787-1340  
Email: [renewable\\_reporting@boem.gov](mailto:renewable_reporting@boem.gov)

National Marine Fisheries Service  
Northeast Regional Office, Protected Resources Division  
Section 7 Coordinator  
Phone: 978-281-9328  
Email: [incidental.take@noaa.gov](mailto:incidental.take@noaa.gov)

Vessel operators may send a blank email to [ne.rw.sightings@noaa.gov](mailto:ne.rw.sightings@noaa.gov) for an automatic response listing all current dynamic management areas.

**ENCLOSURE**

**PUBLIC**



# VINEYARD WIND

**Attachment To:**

**Section 5 of the Proposal Narrative - Energy Resource Assessment  
Plan**

**ATTACHMENT 5-1**

**REDACTED**

PUBLIC



# VINEYARD WIND

**Attachment To:**

**Section 5 of the Proposal Narrative - Energy Resource Assessment  
Plan**

**ATTACHMENT 5-2**

**REDACTED**

PUBLIC



# VINEYARD WIND

**Attachment To:**

**Section 5 of the Proposal Narrative - Energy Resource Assessment  
Plan**

**ATTACHMENT 5-3**

**REDACTED**

PUBLIC



# VINEYARD WIND

**Attachment To:**

**Section 5 of the Proposal Narrative - Energy Resource Assessment  
Plan**

**ATTACHMENT 5-4**

**REDACTED**

PUBLIC



# VINEYARD WIND

**Attachment To:**

**Section 5 of the Proposal Narrative - Energy Resource Assessment  
Plan**

**ATTACHMENT 5-5**

**REDACTED**

PUBLIC



# VINEYARD WIND

**Attachment To:**

**Section 5 of the Proposal Narrative - Energy Resource Assessment  
Plan**

**ATTACHMENT 5-6**

**REDACTED**

PUBLIC





# VINEYARD WIND

**Attachment To:**

**Section 11 of the Proposal Narrative - Project Schedule**

**ATTACHMENT 11-1**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 12 of the Proposal Narrative - Construction and Logistics**

**ATTACHMENT 12-1**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 13 of the Proposal Narrative - Fisheries Mitigation Plan**

**ATTACHMENT 13-1**

**REDACTED**

PUBLIC



# VINEYARD WIND

**Attachment To:**

**Section 13 of the Proposal Narrative - Fisheries Mitigation Plan**

**ATTACHMENT 13-2: FISHERIES COMMUNICATION PLAN**

**PUBLIC**

# Fisheries Communication Plan

Rev.9

**Vineyard Wind**  
700 Pleasant Street, Suite 510  
New Bedford, MA 02740



<b>Document Title:</b>	<b>Fisheries Communication Plan</b>
Company	Vineyard Wind LLC
Date:	03/30/2020
Document Type:	Plan
Revision:	9
Previous versions:	Rev. 1 – September 2016 Rev. 2 – October 2017 Rev. 3 – November 2017 Rev. 4 – December 2017 Rev. 5 – March 2018 Rev. 6 – June 2018 Rev. 7 – January 2019 Rev. 8 – August 2019
Authors:	Crista Bank and Erik Peckar

PUBLIC

# Vineyard Wind Fisheries Communication Plan

---

Revised March 2020

## I. Introduction

Vineyard Wind's Fisheries Communication Plan (FCP) is a living document first drafted in 2011 in order to develop strategies to improve communication with both commercial and recreational fishermen potentially affected by the development of offshore wind projects. This document continues to evolve with continuous feedback and guidance from fishermen, fishing organizations, and regulatory agencies. The increased participation from the fishing industry will help the offshore wind sector to reduce user conflict, improve project design, and build a better understanding between the two industries.

If you would like to receive updated versions of this FCP as they become available or have any suggestions on how to improve this plan, please send an email to [fisheries@vineyardwind.com](mailto:fisheries@vineyardwind.com). Visit [vineyardwind.com/fisheries](http://vineyardwind.com/fisheries) to sign-up for updates, mariner notices, and information requests as well as to access charts, FAQ sheets, and additional project information.

## II. Vineyard Wind's Lease Areas

### a. Overview

Vineyard Wind holds two lease areas for wind energy development on the Outer Continental Shelf (OCS): Lease Area OCS-A 0501 and Lease Area OCS-A 0522. As shown in Figure 2.1 below, both lease areas are located in the Massachusetts Wind Energy Area (MA WEA). The MA WEA was designated by the Bureau of Ocean Energy Management (BOEM), with significant stakeholder input, including the BOEM MA Renewable Energy Taskforce (made up of local and state elected officials in Massachusetts and Rhode Island), the MA Fishery Working Group (FWG)<sup>1</sup>, and the MA Habitat Working Group (HWG)<sup>2</sup>, with the intention of minimizing and avoiding impacts to the marine environment from offshore wind development on the OCS. For example, after considering stakeholder comments, BOEM modified the initially proposed MA WEA to exclude an area of high fisheries value to reduce potential conflicts with commercial and recreational fishing activities.

### b. Lease Area OCS-A 0501

Lease Area OCS-A 0501 is located approximately 12.4 nautical miles (NM) from the southeast corner of Martha's Vineyard and a similar distance from the southwest side of Nantucket. The lease area comprises more than 260 square miles (sq. mi) and is approximately 8.7 NM wide and 26 NM long. Water depths

---

<sup>1</sup> The FWG includes commercial and recreational fishermen, fisheries scientists, and other interested parties. Early meetings addressed usage of the potential wind areas by various gear types as well as fisheries science. The FWG, convened by the State of Massachusetts, continues to meet and engage in offshore wind issues.

<sup>2</sup> The HWG includes NGOs, scientists, agencies and other interested parties. Early meetings addressed issues such as marine mammal and avian use of the potential wind areas. The HWG, convened by the State of Massachusetts, continues to meet and engage in offshore wind issues.

range from about 121 – 197 feet (ft), gradually increasing as distance from land increases. Lease Area OCS-A 0501 has high wind speeds, moderate water depths, and reasonable proximity to multiple grid connection locations in an area of high electrical load and a need for new generation capacity.

### c. Lease Area OCS-A 0522

Lease Area OCS-A0522 is located approximately 24 – 44 NM south of Nantucket. It comprises more than 330 sq. mi and is approximately 18 NM wide and 12 NM long. Water depths range from about 100– 198 ft. As with Lease Area OCS-A 0501, Lease Area OCS-A0522 has high wind speeds, moderate water depths, and reasonable proximity to multiple grid connection locations in an area of high electrical load and a need for new generation capacity.

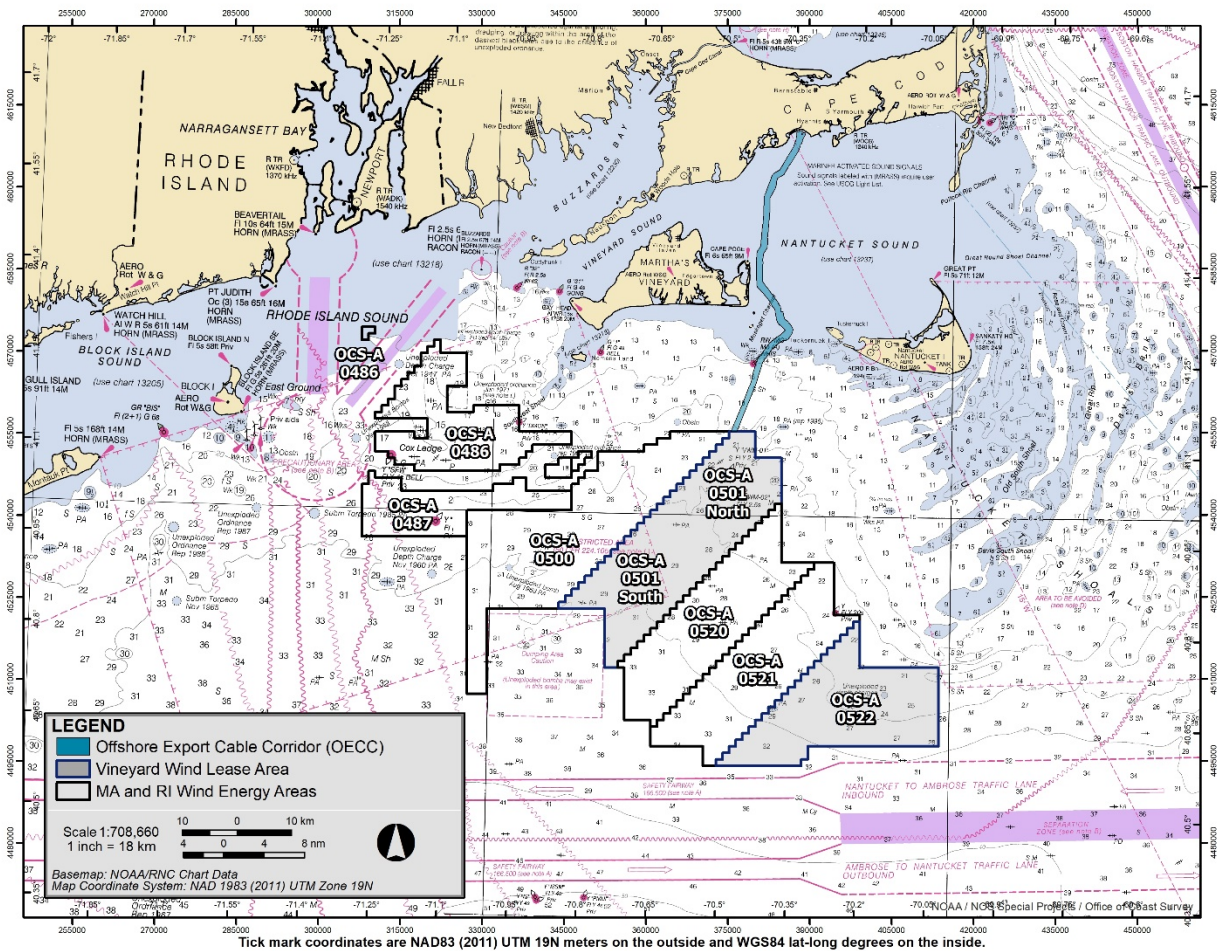


Figure 2.1. Chart of Lease Areas and planned offshore cable corridor.

### III. Vineyard Wind's Offshore Wind Projects

#### a. Overview

Vineyard Wind is developing the nation's first utility-scale offshore wind energy project—Vineyard Wind 1—off the coast of Massachusetts within the northern portion of Lease Area OCS-A 0501. As further described below, Vineyard Wind is also planning projects in the southern portion of Lease Area OCS-A0501 and in Lease Area OCS-A0522.

#### b. Vineyard Wind 1

Vineyard Wind's first offshore wind project is Vineyard Wind 1, an 800 MW facility that will be located in the northern portion of Lease Area OCS-A 0501. The project site is approximately 118 sq. mi in size with water depths ranging from 121 – 162 feet. In May 2018, Vineyard Wind 1 was awarded long-term contracts with Massachusetts electric distribution companies and is on track to be the first utility-scale offshore wind project in the US. Once operational, the project will generate clean, renewable, cost-competitive energy for over 400,000 homes and businesses across the Commonwealth while reducing carbon emissions by over 1.6 million tons per year.

#### c. Park City Wind (Phase 1 of 501 South)

Vineyard Wind's second offshore wind project, Park City Wind, is an 804 MW facility that will be located in Lease Area OCS-A0501, to the south of the Vineyard Wind 1 project. Park City Wind is Phase 1 of Vineyard Wind's planned development of the remainder of Lease Area OCS-A 0501 (referred to as 501 South). In December 2019, through a competitive selection process, the Connecticut Department of Energy and Environmental Protection awarded long-term contracts with Connecticut electric distribution companies to Vineyard Wind for this project. Once operational, Park City Wind will deliver approximately 3.7 million megawatt hours of electricity per year, enough to power approximately 400,000 Connecticut households, through a grid interconnection in West Barnstable, Massachusetts.

#### d. Future Vineyard Wind projects (Phase 2 of 501 South and 522)

Vineyard Wind is developing additional projects in the remaining southern portion of the Lease Area OCS-A 0501 (referred to as Phase 2 of 501 South) and in Lease Area OCS-A 0522 (referred to as 522) and is seeking to secure long-term contracts for these projects through state-led energy procurements. For these projects, the proposed wind turbine layout will be set in an east to west, north to south 1x1 NM grid layout, based on fishermen input. As these and all other Vineyard Wind projects moves forward, the company will continue to work to strengthen its communication between potentially affected fishermen and fishery organizations during design, development, construction, operation, and final decommissioning project phases.

### IV. Fisheries Communication Plan Objectives and Strategy

#### a. Objectives

The purpose of the FCP is to define outreach and engagement to potentially affected fishing interests during design, development, construction, operation, and final decommissioning of offshore wind projects. The main objectives for these outreach and engagement efforts are as follows:



1. Enhance the safety of all who work on the ocean in the wind farms, cable corridors, and landfall sites.
2. Seek stakeholder input and strive for open, transparent communication so as to avoid conflicts before they develop, and quickly and fairly resolve conflicts that do develop.
3. Quantify and avoid, minimize, and, when warranted, mitigate adverse impacts on fisheries, and inform appropriate measures for mitigation.
4. Understand, as fully as possible, historic, current, and potential fisheries in the affected areas.
5. Identify gaps in information relating to fish and fisheries to inform research and monitoring strategies.
6. Demonstrate that decisions with the potential to impact the fishing industry are based on the best available and most credible information, recognizing that information gathering is an on-going iterative process.
7. Facilitate a professional co-existence of these two offshore industries, in which both industries can prosper on a long-term basis.

## b. Strategy

The foundation for achieving the objectives above will be built on Vineyard Wind's existing relationships with the fishing communities, cultivated since 2010, and entail continuous work towards trusted and mutually respectful lines of communications with the diverse fishing communities in the region. Regular, frequent, and open consultation is primary to ensuring all parties are well informed and can work towards the shared objective of maintaining thriving fisheries alongside offshore wind development.

This FCP is based on best practice guidance and has improved with input from the fishing industry through feedback and consultation. Best practice guidance from other resources includes but is not limited to:

- Guidelines for Information Requirements for a Renewable Energy Construction and Operations Plan, Attachment A – Version 3.0, BOEM April 2016
- Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison, January 2014
- Development of Mitigation Measures to Address Potential Use Conflicts between Commercial Wind Energy Lessees/Grantees and Commercial Fishermen on the Atlantic Outer Continental Shelf, BOEM 2014 – 654
- Fishing and Submarine Cables Working Together – International Cable Protection Committee, February 2009, Second Edition
- Options for Cooperation between Commercial Fishing and Offshore Wind Energy Industries: A review of relevant tools and best practices, SeaPlan November 2015
- Commercial Fisheries Mitigation Strategy – Developing Wind Energy in the Outer Moray Firth, Moray offshore renewables ltd 2003
- The Oregon's Fishermen's Cable Commission – A Successful Model for Sharing the Seabed - SubOptic 2019

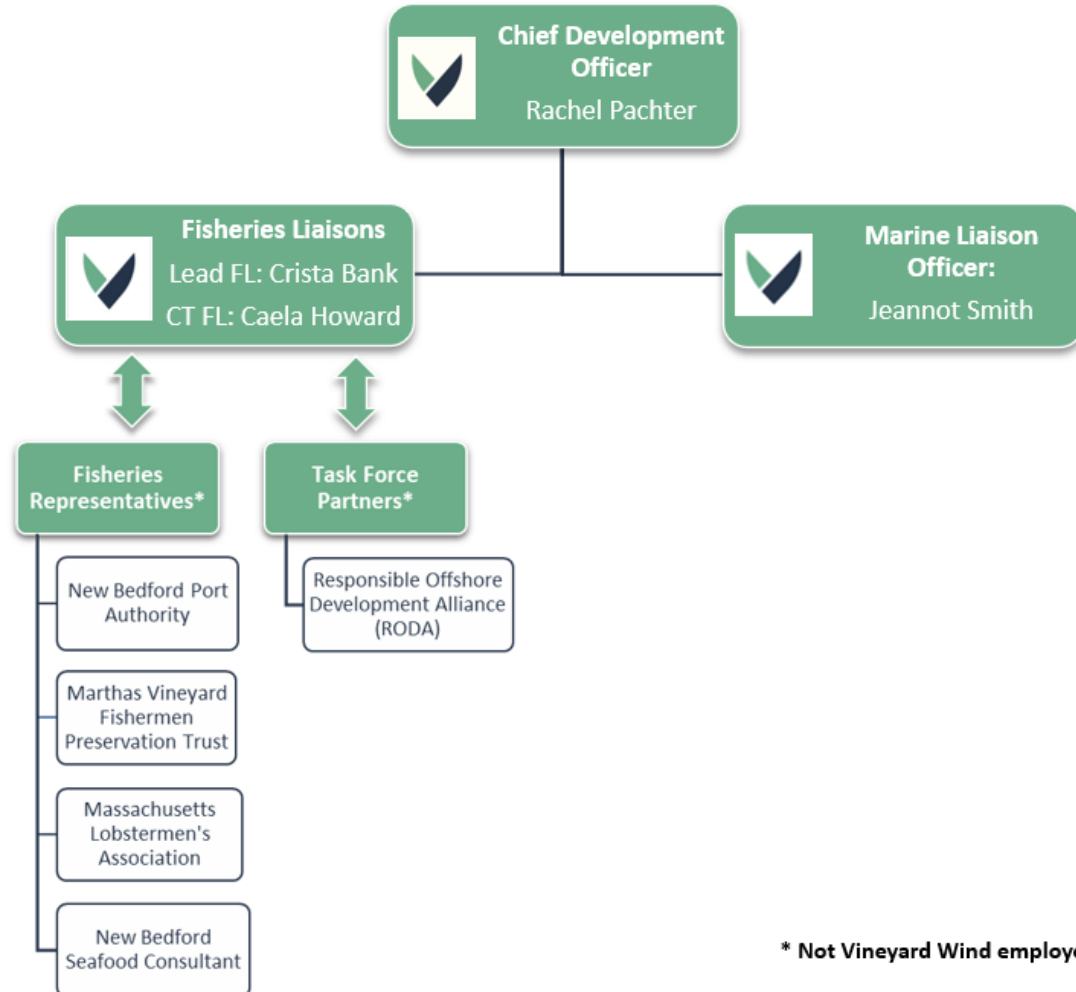
## V. Fisheries Outreach Team

### a. Overview

Fisheries communication is conducted through several roles including Fisheries Representatives (FR) and Fisheries Liaisons (FL). Vineyard Wind has hired two FLs and works with a number of FRs who have been actively engaged with the fishing industry regarding the Vineyard Wind 1 project since 2010. Details describing the different roles and responsibilities of the FL and FR are included in Appendix 1 and 2, respectively. Below is a graphic explaining the communication channel relationship between the FLs and the FRs. Contact details for the FLs and FRs can be found in the Section V.b. and Section V.c.

## Vineyard Wind Fisheries Outreach Organization Matrix

- The Vineyard Wind Fisheries Liaisons (FL) are employed by Vineyard Wind and report directly to the Vineyard Wind Chief Development Officer. The FLs are responsible for overall implementation of the communications plan, in particular communicating project plans and activities that might impact the fishing industry pre, during, and post construction activities of the offshore wind farm, and reporting interactions or concerns from the fishing industry to the Chief Development Officer.
- The Fishery Representatives (FR) do not work on behalf of Vineyard Wind, but rather represent their respective fishing communities to Vineyard Wind. The FRs collect and report information about fishing industry activities and concerns to the FL as well as collect and relay accurate/relevant project information to the fishing community from the FLs.
- The Marine Liaison Officer is responsible for safe marine operations by Vineyard Wind, and ensuring that Vineyard Wind is a good neighbor while on the water. As such, there is frequent interaction, information exchange, and coordination between the MOO and the FLs.



\* Not Vineyard Wind employees

PUBLIC

The FR represents a particular fishing industry, organization, gear type, port, region, state, or sector(s), and is responsible for communicating concerns, issues, and providing input on projects from development and pre-construction into operations and maintenance through to the decommissioning. Typically, the FR is an active fisherman, or group representing active fishermen, within the region, fishery, state, or sector they represent. While FRs are compensated for their time and expenses by Vineyard Wind, their duty is to the fishing region, industry, organization, gear-type, or sector they represent. FRs are solicited by the FLs through an open and equitable process that ensures the FRs selected adequately and fairly represent their respective industry, gear type, port, or region and have the support of the fisheries stakeholders they represent.

The FLs facilitate the work of the FRs by serving as knowledgeable points of contact to which the FLs can efficiently and effectively communicate. The FLs also communicate across fishing communities and regions, inside and outside of the FR network, in order to educate and disseminate vital information to fishermen and to receive input back on projects. The FLs work to validate fisheries information through cross-referencing among data sources.

The FLs seeks to:

- develop relationships and establish direct lines of communication with individuals that are representative of all potentially impacted fishing regions, industries, and interests;
- understand and convey current fishing industry concerns and provide that feedback to the Vineyard Wind development team in order to identify and work towards solutions, as needed;
- identify and engage new FRs;
- confirm appropriate identification of potentially affected fisheries; and
- develop communication methods and tools.

The FLs also work with the FRs and scientists to develop measures to reduce potential impacts to fisheries before any impacts occur and develop resources and potential methods to monitor fisheries species and potential changes in species abundance and distribution pre-, during, and post-construction. The FL is responsible for implementing this plan and updating it at least annually or as needed.

The FLs and FRs work together to review, evaluate and improve the effectiveness of the outreach and two-way communication. Vineyard Wind reviews these methods quarterly.

## b. Fisheries Liaison

Currently, Crista Bank and Caela Howard serve as Vineyard Wind FLs and are Vineyard Wind employees. Crista Bank serves as the company's lead FL. Caela Howard is an FL focused on the Connecticut and New York fishing communities. Crista and Caela's contact information is provided below and posted on Vineyard Wind's website at [www.vineyardwind.com/fisheries](http://www.vineyardwind.com/fisheries).

**FL Name:** Crista Bank  
**Phone:** 508-525-0421  
**Email:** [cbank@vineyardwind.com](mailto:cbank@vineyardwind.com)

**FL Name:** Caela Howard  
**Phone:** 508-386-9832  
**Email:** [choward@vineyardwind.com](mailto:choward@vineyardwind.com)

Vineyard Wind's FLs are available by phone, email, text, and through the company's website for ongoing communication. There is a specific form on Vineyard Wind's website (<https://www.vineyardwind.com/fisheries>) for fishermen to provide their contact information and share their concerns. The form is sent directly to the FLs' email inboxes and a follow-up phone call and/or email is made shortly after receipt of the form.

An FL job description is included as Appendix 1.

### c. Fisheries Representatives

The current list of FRs, along with contact information, is provided below and posted on Vineyard Wind's website:

**FR Name:** New Bedford Seafood Consulting  
**Contact:** Jim Kendall  
**Phone:** 508-287-2010 - cell  
**Email:** [nbsc@comcast.net](mailto:nbsc@comcast.net)

**FR Name:** New Bedford Port Authority  
**Contact:** Ed Washburn  
**Phone:** 508-961-3000

**FR Name:** Massachusetts Lobster Association  
**Contact:** Beth Casoni  
**Phone:** 781-545-6984  
**Email:** [beth.casoni@lobstermen.com](mailto:beth.casoni@lobstermen.com)

**FR Name:** Martha's Vineyard Fishermen's Preservation Trust  
**Contact:** Shelley Edmundson  
**Phone:** 508-687-0344  
**Email:** [mvfishermen@gmail.com](mailto:mvfishermen@gmail.com)

Full roles and responsibilities for the FRs are included as Appendix 2. FR biographies can be found in Appendix 3.

Vineyard Wind is always looking to engage additional FRs to provide regular input to the Company's offshore wind project development efforts. Specifically, at this time, Vineyard Wind is seeking FRs in New York. If you are interested or have suggestions on potential FRs, please contact Vineyard Wind's FLs Crista and Caela (see above).

#### d. RODA Joint Industry Task Force Member

Vineyard Wind is a member of RODA's Joint Industry Task force. This group was created to improve communications between the commercial fishing industry and offshore wind energy developers. The goal is to provide a more structured process to explore improved approaches to project siting, design, operations and decommissioning between the two industries. RODA is a broad membership-based coalition of fishing industry associations and fishing companies.

**Name:** Responsible Offshore Development Alliance  
**Contact:** Annie Hawkins  
**Phone:** 617 359-2576  
**Email:** [annie@rodafisheries.org](mailto:annie@rodafisheries.org)

In addition to the formal FR roles and participation in RODA's joint industry task force, several organizations and working groups provide direct access to fishermen and have been helpful in disseminating project information and gathering feedback. These groups include, but are not limited to:

- NYSERDA Fisheries Technical Working Group (F-TWG)
- Massachusetts Fisheries Working Group
- Rhode Island Fisheries Advisory Board (FAB)
- Massachusetts Department of Marine Fisheries
- Rhode Island Department of Environmental Management
- New England Fishery Management Council
- Mid-Atlantic Fishery Management Council
- Commercial Fisheries Center of Rhode Island
- Long Island Commercial Fishing Association
- Atlantic States Marine Fisheries Commission
- Connecticut Commission on Environmental Standards

Vineyard Wind strives to provide project updates to these organizations and working groups on a regular basis. For example, Vineyard Wind has committed to meet with the Connecticut Commission on Environmental Standards on a quarterly basis to provide updates and discuss issues related to the Park City Wind project.

Vineyard Wind is committed to working with fishermen and fishing organizations. If you would like to receive emails or text message updates and mariner notices, please email the project at [fisheries@vineyardwind.com](mailto:fisheries@vineyardwind.com).

## VI. Stakeholder Identification and Outreach

### a. Overview

Vineyard Wind has proactively engaged with potentially affected fisheries throughout the development of its lease areas. Vineyard Wind regularly communicates with fishermen and fisheries stakeholders and has incorporated input from these parties into project design, communication plans, and mitigation measures.

### b. Potentially Affected Fisheries

Based on Vineyard Wind’s outreach and experience to-date, the fisheries most likely to potentially be affected by the construction, operation and decommissioning of offshore wind projects in Lease Area OCS-A 0501 are:

- Nantucket Sound: conch, squid, surf clam, fluke, sea bass, demersal recreational
- Muskeget Channel: Surf Clam, commercial sea bass, demersal recreational
- Lease Areas: Surf clam, squid, fluke, mackerel, whiting, butterfish, scup, monkfish, lobster, scallop, large pelagic recreational

Based on Vineyard Wind’s outreach and experience to-date, the fisheries most likely to potentially be affected by the construction, operation, and decommissioning of offshore wind projects in Lease Area OCS-A 0522 are:

- Mackerel, whiting, butterfish, Jonah crab, lobster, scallop, surf clam, large pelagic recreational

Outreach to these potentially affected fisheries is prioritized during the implementation of this plan. Regular reviews are used to modify or confirm this prioritization, as needed.

### c. Outreach Approach and Tactics

Vineyard Wind employs a variety of outreach and engagement approaches to communicate and maintain relationships with fishermen and fisheries stakeholders. These include informal conversations with existing contacts, expanding the company’s network of FRs, attending fishing industry trade events and recreational fishing shows, presenting at commercial and recreational fishing group meetings, and working with the various associations and organizations that represent fishing interests. Vineyard Wind understands that some fishermen do not feel adequately represented by fishing organizations, or FRs, and therefore prefer to share information and concerns individually and through different channels of communication. Vineyard Wind is committed to recognizing that individual concerns are just as important as group concerns and will continue efforts to reach out to individuals and respect anonymity.

Target Audience	Principle Channels	Supporting Tactics
Fishing sectors, fishing region, seasonal fisheries, specific fishery gear types, fishermen at sea, charter fishermen, fishing ports	<ul style="list-style-type: none"> <li>• Fisheries Representatives (FRs) and Fisheries Liaisons (FLs)</li> <li>• Other fishermen</li> <li>• Port Agents</li> <li>• Fish houses</li> <li>• Sector Managers</li> <li>• Media – newspapers, internet, e-mail subscriptions, flyers, and thumb-drives</li> </ul>	<ul style="list-style-type: none"> <li>• Access to information via internet, e-mail lists (state and Vineyard Wind), and social media</li> <li>• Industry specific publications or e-mails</li> <li>• Trade magazines</li> <li>• 24-hour phone service for up-to-date project info and emergencies.</li> <li>• Project specific radio alerts to fishermen at sea</li> <li>• FLs contact info on website</li> </ul>

Target Audience	Principle Channels	Supporting Tactics
	<ul style="list-style-type: none"> <li>Fishing organizations, alliances, partnerships, commissions, coalitions, councils, state agencies, federal agencies, and advocacy groups</li> <li>Local elected officials</li> <li>Friends and family</li> <li>Employers</li> </ul>	<ul style="list-style-type: none"> <li>Attending and speaking at fishermen working group meetings</li> <li>Fishermen open house information meetings</li> <li>FL/FR communication channels</li> <li>Clear daily two-way communication channels between fishery/fishermen and project during construction</li> </ul>
Recreational fisherman, recreational boaters	<ul style="list-style-type: none"> <li>Same as above</li> <li>Bait and tackle shops</li> </ul>	<ul style="list-style-type: none"> <li>Access to information via Vineyard Wind’s website, social media, and newsletters</li> <li>Advertisements through recreational fishing magazines and websites</li> <li>FL contact info on website</li> <li>Attending and speaking at recreational fishing group meetings</li> <li>Fishermen open house information meetings.</li> </ul>

## VII. Communication Protocols

### a. Overview

Effective communication is a high priority for Vineyard Wind. It is important to ensure fishermen are aware of activities in Vineyard Wind’s lease areas and along cable route(s) and feel comfortable reaching out with questions and concerns. It is also important to communicate to the Vineyard Wind survey vessels any expected fishing activities in and around the lease areas, what to be aware of, and how to handle any interactions with the fishing fleet. The protocols outlined below are procedures Vineyard Wind has implemented to-date, which will be adjusted and adapted as needed. Similar protocols will be standardized and implemented for project construction phases.

### b. Communication and Notification to Fishing Industry Prior to and During Offshore Work

Our communication strategy, which includes recommendations from fishermen and adopts protocols the Massachusetts Division of Marine Fisheries (MADMF) uses for their biannual inshore trawl survey, are as follows:

1. Send Notices to Mariners to the US Coast Guard.
2. Send notifications with all survey vessel identifying features to Vineyard Wind fisheries email list.
3. Publicize through organization websites and newsletters (MA DMF, Rhode Island Department of Environmental Management, FRs, sector managers, NOAA port agents, Fishing Support Services navigators, etc.).
4. Publicize through SkyMate and other current Vessel Monitoring System email alerts.



5. One week before offshore work begins, send out an email/text to fixed gear permit holders reminding them that offshore work is about to begin.
6. Three days before offshore work begins, send out an email/text to fixed gear permit holders that offshore work is on schedule.
7. During offshore work send out a regular email updates detailing progress, both for completed areas and areas next on the list (DMF, FRs, etc.).
8. Implement a text notification system where fishermen can sign up to receive daily texts of offshore work progress (i.e. more frequently than general updates, and specific to an area or time of work).
9. Attend fisheries trade shows and outreach events to encourage fishermen to sign up for fisheries emails and text alerts regarding the project's offshore work.
10. Vineyard Wind will hire, with help from FRs, local fisherman respected among the fleet to help spread the word exactly when project vessels will be in their immediate area, relay any work zone areas to stay clear of, and communicate when vessels have left the area.
11. Maintain an email address (fisheries@vineyardwind.com) that is monitored by a team, so as to ensure timely response even if the FLs are not immediately available. A fisheries team dedicated cell phone number will also be established.

In addition to the protocols listed above, in the time leading up to offshore construction Vineyard Wind will hold regular meetings with fishing groups that may be affected during the construction phase to go over the timing of anticipated work, what to expect during construction, and how to best communicate. The company will work with the FRs to help coordinate and reach the right fishermen to attend the meetings. Some of the small groups identified to-date include squid vessels in Nantucket Sound, the conch fleet from the Cape and islands, state permitted clam vessels, and the squid fleet from Pt. Judith.

Additional groups or individuals who want to stay updated on vessel activity and construction plans can sign up for email and /or text alerts at fisheries@vineyardwind.com.

### c. Communication and Fisheries Protocols on Geological Survey Vessels Working for Vineyard Wind

To help communicate with the fishing industry, Vineyard Wind will have an Onboard Fisheries Liaison (OFL) to assist captains with communication and to document fishing gear in the area to help avoid interactions. The OFL's role is, simply put, to continue the role of the FL offshore, so that there is effective communication onsite, in real time. The OFL reports to the FLs, and serves as the FL's "eyes, ears, and voice" during offshore operations. The OFL records observed fishing activities, ensures vessel operations are compliant with this FCP and other fisheries-related policies, and seeks to avoid negative fisheries interactions by looking out for fixed gear and establishing communications (usually by VHF radio) with fishing vessels when appropriate. In the event of a negative fisheries interaction, the OFL works with the FLs and relevant FRs to quickly resolve the matter safely, fairly, and efficiently. Typically, the OFL is contracted for the duration of a vessel's operations for Vineyard Wind, and is an individual familiar with marine operations and fishing practices in the region. Vineyard Wind is currently in the process of establishing a mechanism to hire fishermen, preferably fixed gear fishermen, as OFLs.

Before the survey trip begins, the FL and OFL attends the pre-trip meetings with captain, and crew to go over specific fisheries active in the area. If the FL has known coordinates of fixed gear in the area, the information is shared with the captain and OFL. Captain and crew are instructed to communicate respectfully with fishing industries and to work around fishing gear to the greatest extent practicable.

Captain, crew chief, Vineyard Wind client rep, and OFL sign off on communication protocols and gear interaction protocols outlined below:

#### Vineyard Wind Protocols for Survey Vessel Captains:

1. Captains establish an agreed upon safety zone to relay to fishing vessels in the area.
2. Any communication with fishing vessels is reported to the OFL and will be conducted in a professional manner.
3. Preferably, the OFL will have their own VHF unit to monitor radio communications and communicate directly with fishermen, as may be necessary or agreed upon with the captain, especially if language or accent may be a hinderance to communications with fishermen.
4. Alert OFL to all gear interactions at the time it occurs, waking the OFL, if necessary.
5. Have one GPS unit in the wheelhouse set up for LORAN coordinates.
6. Work around fishing gear to the greatest extent practicable.
7. Plot fixed gear locations while OFL is off watch and relay information when back on watch.

#### Vineyard Wind Fixed Gear Interaction Protocols for Survey Vessels:

If an incident between a survey vessel and static fishing gear does occur, the following outlines the roles and procedures for such an event:

##### ON BOARD

1. Immediately alert OFL (wake up if sleeping and off watch).
2. Fishing gear interaction is logged in daily vessel report, recording time, location, photos, etc.
3. If feasible and safe, Vineyard Wind will attach a float or buoy to any gear that is brought on board, moved, or if a line was cut, should the gear be returned or remain in the water. The buoy is intended to help the fishermen locate the gear and is also marked with Vineyard Wind contact information so that communications can be readily established with the affected fishermen.
4. GPS location and time of relocation is recorded.
5. Buoy permit number and color is logged.
6. Pictures are taken of the gear.
7. FL on land is notified of incident as soon as possible.

##### ON LAND

1. FL will cross reference buoy color and permit number with current fishing databases to identify owner of gear.

2. If FL is unsuccessful in finding owner of gear, FL will give notice to FRs and other fishing organizations. If still unsuccessful in locating the owner, FL will send notice to the relevant state Environmental Police of gear entanglement.
3. Once fisherman/owner of gear is identified, information regarding buoy location and timeline of interaction will be relayed.
4. Follow up with fisherman to confirm gear was found.
5. If gear is not found Gear Loss form will be filled out and processed.

The above procedures will be updated prior to construction and will reflect any feedback and lessons learned on Vineyard Wind projects or learned from other project experiences.

#### d. Communication during Operations / Safety Management System

An important objective of this plan is to use fisheries communications to enhance safety of all those who work on the ocean in the project area through construction, operations, and decommissioning. Vineyard Wind's Safety Management System will outline clear communication protocols and procedures for emergency events such as: collision of a vessel with a turbine structure, gear entanglement, damage to cabling by fishing activity, catastrophic failure of a turbine, or other event. Safety planning will be further elaborated in this FCP and the Safety Management System will be a publicly available document that is completed prior to the start of project construction. Tower lighting and marking will adhere to US Coast Guard, Federal Aviation Administration, and BOEM requirements.

## VIII. Financial Compensation

### a. Overview

Vineyard Wind is developing and implementing procedures for handling compensation to fishermen for potential gear loss. Financial support and/or compensatory mitigation mechanisms to offset the potential loss or reduction of income to fishermen due to offshore wind on the OCS is developed through the project permitting process. Determining appropriate levels of financial support requires detailed discussions between impacted fishing communities, Vineyard Wind, and regulatory agencies.

### b. Gear Loss / Damage

Any potential gear loss or damage from a Vineyard Wind survey vessel should be reported immediately to the FLs. Vineyard Wind has received feedback from many fishermen and FRs that gear loss/damage claims should be simple and direct and be the same across lease holders in the Rhode Island and Massachusetts Wind Energy Areas. Vineyard Wind has not created an official gear loss/damage form yet, but is currently working with the other developers to design one in the hopes that a standardized form and protocol will be established soon. Absent a standardized form and protocol, Vineyard Wind can utilize a standardized form developed by MA DMF.

### c. Potential Lost Revenue

Vineyard Wind will also create a process for filing fishery compensation claims for the potential loss of revenue associated with one of Vineyard Wind's offshore wind projects. A third-party fiduciary agent will handle claims. Until this process is developed, fishermen should make any such request through the FLs whose contact information can be found at [www.vineyardwind.com/fisheries](http://www.vineyardwind.com/fisheries).

## IX. Fisheries Initiatives

### a. Overview

Vineyard Wind takes the concerns of the fishing community seriously and understands that while the conversations between stakeholders are not always easy, they are necessary. The company understands the time it takes to attending meetings and working groups is potentially time away from fishing and has offered compensation for participation in project-specific meetings and will continue to do so, if appropriate and helpful to the process. Vineyard Wind recognizes that continued engagement with the fishing industry improves offshore wind projects as well as understanding between the two industries.

Some of the key initiatives Vineyard Wind has engaged in as a result of consultations with the fishing industry include, but are not limited to:

- Providing thumb drive electronic charts, showing Lease Area OCS-A 0501 and areas of offshore survey work to area fishermen.
- Including LORAN navigation lines and closed areas on project charts to facilitate discussion of fishing activities in the area.
- Orienting the wind turbines in a regular grid pattern to allow for navigable uninterrupted travel in multiple directions (to avoid 'zig-zagging').
- Committing to east/west north/south 1 NM spacing and alignment of the wind turbines.
- Considering use of the largest commercially available wind turbines on the market in order to reduce overall project footprints and installation-related impacts.
- Committing to install AIS on select wind turbines and electrical service platforms to improve navigation and safety.
- Creating protocols for project vessels to adhere to when encountering fishing activity.
- Dedicating a page on Vineyard Wind's website for fishermen ([www.vineyardwind.com/fisheries](http://www.vineyardwind.com/fisheries)) to find the latest information on surveys and construction, and sign up to receive email or text message alert updates.
- Hosting port hours in MA, RI, CT and NY to provide fishermen on the docks access to FLs and project information.

### b. Fisheries Research

Vineyard Wind understands how important science and research is to the fishing community. This is one of the primary reasons why Vineyard Wind created an extensive fisheries science program. Vineyard Wind currently provides more than \$2 million in annual funding to fisheries research making it the largest offshore wind developer-supported program in the US.

The Vineyard Wind fisheries science program prioritizes:

- Establishing relationships with academic institutions and research organizations that engage in collaborative research with fishermen;
- Defining research objectives with input from fisheries stakeholders;
- Supporting a regional science approach to offshore wind development and fisheries; and
- Making data easily accessible and publicly available.

For Massachusetts, Vineyard Wind has taken steps to address industry concerns by partnering with UMass Dartmouth's School for Marine Sciences and Technology (SMAST), an academic institution trusted throughout the fishing community, and the New England Aquarium. Vineyard Wind is also currently developing partnerships with the University of Connecticut Department of Marine Sciences and Mystic Aquarium.

A video trawl survey of Vineyard Wind's Lease Area OCS-A 0501 and an adjacent control area was completed in October 2018 by researchers from SMAST on the New Bedford-based Fishing Vessel Justice. The goal was to gather preliminary data and to determine the best methods for pre-, during, and post-construction studies for Vineyard Wind 1. This video trawl was an innovative survey method that SMAST scientists wanted to test for use in surveys in the MA/RI wind energy areas. The result of the test was that further improvements would be needed for the method to be effective, given the soft sea-bottom in the area causing sediment dispersal and hindering video observations.

Vineyard Wind also contracted with SMAST to actively engage with the fishing industry to provide feedback for the pre/during/post construction studies of the project. Four workshops were held in different ports during November and December of 2018 (New Bedford, MA; Kingston, RI; Chatham, MA; and West Tisbury, MA) to share results from the video trawl survey, discuss other potential survey methods, and to work with the fishing industry to help identify research questions for species of concern, both site-specific and regionally. Just over 100 people attended the workshops including over 75 active fishermen. Based on the feedback from the fishing industry, and state and federal regulators, SMAST produced a report with their research recommendations in early 2019. The complete report is available at <https://www.vineyardwind.com/document-room> (listed under Fisheries/Fisheries Studies). Vineyard Wind has adopted the recommendations and surveys began in Spring of 2019, which include a trawl survey, plankton survey, drop camera survey of macroinvertebrates and benthic communities, and a ventless lobster trap survey. The survey areas for trawl and drop camera include all lease areas in order to support baseline data collection for future projects. Data collected and reports from these studies will be made public through Vineyard Wind's website and shared with agencies and other institutions.

Recreational fishermen subsequently raised concerns that highly migratory species were not addressed in the SMAST research recommendations. Vineyard Wind reached out to recreational fishing groups and individual fishermen to understand their concerns and brainstorm what could be done to better understand recreational fishing in the area and potential impacts. This led to partnering with the New

England Aquarium to initiate a study to document highly migratory species presence across all MA/RI wind energy areas with help from the pelagic recreational fleet. The results of this effort will be made publicly available through Vineyard Wind's website and shared with agencies and academic institutions.

### Data Sharing

The survey and monitoring work Vineyard Wind will conduct will generate a substantial body of environmental, fisheries, and other data, all of which will be available in the public domain in a manner consistent with other academic research. Much of the data is publicly available through the federal and state permitting process, as well as reports or academic publications that may come out of the survey or monitoring work. Vineyard Wind also plans to make all fisheries monitoring data generated publicly available on its website. For all other environmental and fisheries data, Vineyard Wind will explore cost-effective and appropriate ways to store and make data publicly available and easy to access. Through the Responsible Offshore Science Alliance (ROSA) and a Regional Science Entity, Vineyard Wind will work with stakeholders and neighboring developers to find ways to streamline and standardize available data across all offshore efforts.

### Responsible Offshore Science Alliance

The need for a regional science approach to offshore wind development is an important component to understand how this new industry may be affecting fisheries and the environment. The absence of a regional science framework has made it challenging for developers and concerned stakeholders to design appropriate studies that can provide consistency across all lease areas. ROSA is an attempt to fill that void and bring developers, fishing industry, state, and federal agencies together to develop a regional science framework. Vineyard Wind was part of the working group to get the organization launched, and is currently on the ROSA board of this recently established group that is committed to regional fisheries science.

### c. Opportunities

At this stage, many in the fishing industry see offshore wind as a threat to their business. However, it is in the developer's best interest for the fishing industry to thrive and grow. Vineyard Wind is in support of research development to help the fishing industry adjust to the changes offshore wind may bring, either by testing different gear to target species in the wind farm, or testing different technologies to fish more efficiently among turbines.

Vineyard Wind is not proposing to replace fishing jobs with wind development jobs, but there can be opportunities for fishing vessel owners, individual fishermen, and shore side businesses. Some examples include:

- 1) Fishing vessels as safety zone vessels and scout vessels during construction.
- 2) Fishermen-owned shore support businesses:
  - a. Sign up by emailing [b2b@vineyardwind.com](mailto:b2b@vineyardwind.com) to be listed on the supply chain network and to learn about supply chain events.
  - b. Attend Meet the Buyer events that are intended to introduce local businesses to wind project contractors.

- 3) Fishermen as OFLs on project vessels to help communicate with fishermen working in the vicinity.
- 4) Scholarship availability for fishermen and family members to get free training for offshore wind technician certifications.

## Appendix 1 – Fisheries Liaison Roles and Responsibilities

The FL role & responsibilities include but are not limited to:

- The FL represents Vineyard Wind to fishermen and is the principal contact to the fishing community, and is not someone currently actively engaged in commercial fishing.
- The FL is responsible for the overall effective implementation of the FCP.
- During project pre-construction development, the FL will communicate directly with FRs via email, in person meetings, and conference calls and will provide monthly written reports to management on this outreach. Project management will provide feedback, when necessary, to ensure timely dissemination of information regarding all project activities.
- During project construction, the FL will have direct access to the project management team in order to ensure updated project information is available to the fishing community. It should be noted that changes may take place in real time during construction. Vineyard Wind will endeavor to disseminate that information as quickly and widely as possible either through our website or a 24-hour phone line.
- Refine and enhance the FCP given learning experiences and new information received.
- Ensure Vineyard Wind’s fisheries communication and communication strategy is effective across all relevant fishing communities, organizations, sectors, regions/ports, seasons, and gear types.
- Establish a clear line of communication with entities from affected fishing regions to ensure all states where the fishing industry could be impacted are well informed during all phases of development and through decommissioning.
- Maintain awareness of ongoing fishery management action development by the New England and Mid-Atlantic Fishery Management Councils and the Atlantic States Fisheries Commission.
- Help develop and refine communication materials in addition to communication plans to ensure effective messaging.
- Develop or recommend mitigation measures.
- Provide a record of relevant project information and communications, including presentations and individual conversations, but maintaining confidentiality as appropriate.
- Participate in BOEM, fisheries task force, and working groups meetings, as appropriate.
- Maintain a fishery stakeholder database and contacts list for all identified fisheries operating within the vicinity of the offshore development area(s) and offshore cable route(s).
- Investigate and follow-up on complaints and concerns received or heard about.
- Have a direct line of communication to Vineyard Wind’s senior management, through which to make recommendations for improvement and address complaints, concerns, and other input received.
- Proactively make fisheries aware of upcoming efforts and activities related to the project so as to facilitate shared use of the lease area(s).
- Be available to meet with fishermen representatives in person, via email or social media, phone, or radio outside of regular business hours and on weekends.



- Participate in weekly calls with the Vineyard Wind development team on conversations, activities, suggestions, questions, and concerns from the fishing community.
- Coordinate and work with FRs, who are active fishermen and serve to facilitate communications between the project and specific fisheries sectors.
- Identify potential FRs and establish working relations; contract OFLs as needed.
- Attend meetings with fisheries groups, regulators, non-government organizations, policy makers, contractors working on the project, and other offshore wind project developers to best ensure shared use of the lease area(s) and good, working relations among the offshore wind industry, fisheries, government, and other stakeholders.
- Supervise and manage contracts as necessary for the effective fisheries surveys and science work undertaken by or on behalf of Vineyard Wind, and participate and provide input into relevant fisheries science initiatives.

## Appendix 2 – Fisheries Representatives Roles and Responsibilities

An individual or group's time serving as an FR will be compensated by Vineyard Wind, but the FR is considered to be an independent, third party agent, serving fisheries' interests, not Vineyard Wind's interests. Roles & responsibilities of FRs include but are not limited to:

- Be available to meet with fellow fishermen in person or via email, social media, phone, or radio.
- Pro-actively work with the Vineyard Wind FLs to communicate about active fisheries, upcoming efforts and seasonal changes in the fisheries, to facilitate shared use of lease area(s).
- Work with the FL and scientists to develop measures to reduce potential impacts to the fisheries prior to construction (before any impacts may occur) and develop resources and potential methods to monitor effectiveness.
- Meet directly with the fisheries liaison, by phone or in person, bi-weekly to help evaluate communication and outreach efforts, learn more about project plans, and make FL aware of current fisheries issues and concerns.
- Effectively disseminate project information to the FR's constituency. Specifically emailing Notice to Mariners or fishery updates from Vineyard Wind to FR's contact list.
- Be available and accessible to their represented fishery.
- Communicate to FL any potential conflicts regarding surveys and project development.
- Assist FL to understand fishing activity in Vineyard Wind's lease area(s) and submarine cable routes (e.g. gear types, specific fisheries, time of year fisheries are in the area).
- Work with FL to develop and refine fisheries communication plan(s).
- Assist FL in meeting facilitation and support, and other tasks, as needed, for engaging local fishermen during all project phases to ensure effective messaging.
- FR will meet directly with the FL and project management every quarter and evaluate communication and outreach efforts and review quarterly outreach and mitigation measures employed by Vineyard Wind
- Maintain awareness of ongoing fishery management action development by the New England and Mid-Atlantic Fishery Management Councils and the Atlantic States Fisheries Commission.
- Provide input to, or recommend, mitigation measures.
- Participate in working group meetings, such as the Massachusetts Fisheries Working Group, ROSA, or the RODA task force meetings when appropriate for the fishery they represent.

## Appendix 3 – Fisheries Representatives

### New Bedford Seafood Consulting

Mr. Kendall is the Executive Director of New Bedford Seafood Consulting. He is a former scallop fisherman with over 50 years of experience in the fishing industry and with fisheries issues. Mr. Kendall was a member of a research team for the Commercial Fisheries Research Foundation that focused on discard mortality rates of Southern New England flatfish. Mr. Kendall served as a New England Fishery Management Council member for numerous terms. He has also served on the Massachusetts Fisheries Recovery Commission, the New England Commercial Fishing Law Enforcement Working Group, and is a founding member of the Massachusetts Fishermen’s Partnership. Mr. Kendall was featured in the book *A Doryman’s Reflection: A Fisherman’s Life*. Additionally, Mr. Kendall has been interviewed on WBSM radio and by the New Bedford Standard Times, the Gloucester Times, and the Boston Globe on fisheries issues.

### New Bedford Port Authority

The New Bedford Port Authority (NBPA) is the governing body for New Bedford’s harbor and city-owned waterfront properties. It is chaired by the Mayor of New Bedford with six other members. The role of the NBPA is to support the Port of New Bedford by continually upgrading port resources; preserving its spot as the #1 U.S. fishing port; and expanding the New Bedford economy. The NBPA oversees all the commercial and recreational vessel activity within New Bedford city limits, incorporating the city’s entire coastline and harbor.

### Massachusetts Lobstermen’s Association

The Massachusetts Lobstermen’s Association (MLA) is a member-driven organization that accepts and supports the interdependence of species conservation and the members’ collective economic interests. The Massachusetts Lobstermen’s Association was established in 1963 by the fishermen, for the fishermen, and is presently one of the leading commercial fishing industry associations in New England. On behalf of the 1,800 members, the MLA works to maintain both the industry and the resource. The MLA strives to be proactive on issues affecting the lobster industry and is active in the management process at both the state and federal levels. The MLA communicates with its members through a monthly newspaper, weekly email, Facebook, Twitter and attendance at meetings. For the past 54 years, the MLA has become a trustworthy voice for the industry on important issues, and is looked to by both the fishing industry and the management community.

### The Martha’s Vineyard Fishermen’s Preservation Trust

The Martha’s Vineyard Fishermen’s Preservation Trust is a Massachusetts 501(c)(3) non-profit corporation established in 2011 to: (i) Preserve the historic fishing fleets, communities, and economies of Martha’s Vineyard; (ii) Protect the marine populations and fishing grounds off the coast of Martha’s Vineyard and New England; (iii) Educate the community about its local fisheries.



# VINEYARD WIND

**Attachment To:**

**Section 14 of the Proposal Narrative - Environmental Mitigation Plan**

**ATTACHMENT 14-1: DESCRIPTION OF AFFECTED  
ENVIRONMENT AND REFERENCES**

## TABLE OF CONTENTS

---

<b>ATTACHMENT 14-1 - SPECIES PRESENCE IN THE VICINITY OF THE PROJECT AND REFERENCES</b>	<b>1</b>
Presence of Marine Mammals and Sea Turtles	1
Marine Mammal Species of Greatest Concern	2
Other Marine Mammals Expected to Occur in and Around the Project Area	6
Sea Turtles	12
Presence of Birds and Bats	14
Federally-Listed Avian Species	16
State-Listed Avian Species	19
Federally and State-Listed Bat Species	20
Presence of Fish, Invertebrates, and their Habitats	21
References	27
References for Marine Mammals and Sea Turtles	27
References for Birds and Bats	34
References for Fish and Invertebrates	38

### List of Tables

---

Table 1	Marine Mammals that may Occur in the Vicinity of the Project.....	6
Table 2	Major Fish and Invertebrate Species Potentially Occurring in Lease Area OCS-A 0522 and the OECC <sup>1</sup> .....	23

## **ATTACHMENT 14-1**

### **SPECIES PRESENCE IN THE VICINITY OF THE PROJECT AND REFERENCES**

---

#### **PRESENCE OF MARINE MAMMALS AND SEA TURTLES**

There are numerous existing data sources that characterize the distribution and abundance of marine mammals and sea turtles potentially affected by Liberty Wind's (the "Project's") activities, including:

- Marine Mammal Stock Assessment Reports released by the National Marine Fisheries Service (NMFS)
- Northeast Large Pelagic Survey Collaborative Aerial and Acoustic Surveys for Large Whales and Sea Turtles (Kraus et al. 2016)
- Atlantic Marine Assessment Program for Protected Species (AMAPPS) surveys
- Duke University Habitat-based Cetacean Density Models (Roberts et al. 2016a; 2016b; 2017; 2018; 2020)
- National Oceanic and Atmospheric Administration's (NOAA) Fisheries Sea Turtle Stranding and Salvage Network (STSSN)
- North Atlantic Right Whale Consortium (NARWC) Database
- The North Atlantic Right Whale Sighting Survey and Right Whale Sighting Advisory System
- Navy Operations Area Density Estimates (NODEs)
- New York Bight Whale Monitoring Program Aerial and Acoustic Surveys
- Wildlife Conservation Society/Woods Hole Oceanographic Institution New York Bight Acoustic Buoy
- New York State Research and Development Authority's (NYSERDA) Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy and Remote Marine and Onshore Technology (ReMOTe)
- NYSERDA's (2017) Marine Mammals and Sea Turtles Study
- Ocean Biogeographic Information System Spatial Ecological Analysis of Megavertebrate Populations (OBIS-SEAMAP) Model Repository
- Northeast Ocean Data Portal
- Bureau of Ocean Energy Management (BOEM) studies and environmental assessments, including:
  - BOEM's (2014) Revised Environmental Assessment for the Massachusetts Wind Energy Area (MA WEA)

- BOEM's (2018a) Vineyard Wind Offshore Wind Energy Project Biological Assessment for NOAA
- BOEM's (2018b) Draft Environmental Impact Statement (DEIS) for Vineyard Wind 1
- Assessments performed for other Vineyard Wind projects, including the Construction and Operations Plan (COP) for Vineyard Wind's first project, Vineyard Wind 1 (Epsilon Associates 2020)
- Protected species observer (PSO) reports from Vineyard Wind geotechnical and geophysical surveys

These studies and reports, which were developed using a variety of methodologies (aerial, boat, acoustic), provide comprehensive data sets for marine mammals and sea turtles that define their spatial and temporal distribution.

To supplement the above studies, Vineyard Wind is continuing a multi-year high-resolution digital aerial survey across Lease Area OCS-A 0522 (the "Lease Area") to collect spatial and temporal distribution and abundance data on wildlife including marine mammals and sea turtles. Vineyard Wind has already collected over one year of data (20 surveys from June 2019 through September 14, 2020). Vineyard Wind plans to commission an additional 12 surveys through July 2021. The survey plan is included as Attachment 14-2. The objectives of the survey are to: (1) determine the distributions and abundances of wildlife species present in the area, (2) determine seasonal variability in these distributions and abundances, and (3) document use of the Lease Area by species of conservation concern. These continued aerial surveys will be conducted once per month but will increase in frequency to twice per month during the fall (August and September) and spring (April and May). The collected data will be collated with other available information, which will inform understanding of the regional distribution of species.

The following discussion of marine mammals and sea turtles is based on the comprehensive literature review conducted for Vineyard Wind 1 and Park City Wind as well as an initial review of available data for Lease Area OCS-A 0522. The information presented herein is considered preliminary with respect to species occurrence. As part of a future COP, Vineyard Wind will complete a more in-depth assessment that includes relevant publications and publicly available literature released since the Park City Wind literature review. In the subsequent review, Vineyard Wind expects to review the data gathered as part of the ongoing Phase III AMAPPS surveys, the recently completed New York Bight Whale Monitoring Program, and data from other New York Bight monitoring to the extent that it is available.

### **Marine Mammal Species of Greatest Concern**

As described in Section 14 of the Proposal Narrative, of the 38 marine mammal species documented in the Northwest Atlantic Outer Continental Shelf (OCS) region, four Endangered Species Act- (ESA) listed species are likely to be the species of greatest concern given their biology, habitat use, abundance, distribution, existing threats, and potential to occur at least

seasonally in and around Lease Area OCS-A 0522 and the offshore export cable corridor (OECC): sperm whale (*Physeter macrocephalus*), North Atlantic right whale (*Eubalaena glacialis*) (NARW), fin whale (*Balaenoptera physalus*), and sei whale (*Balaenoptera borealis*). Each species is briefly described below. This assessment will be confirmed through additional analysis of existing and collected data.

**North Atlantic Right Whale.** The NARW is listed as an endangered species under both federal and New York State law and is among the rarest of all marine mammal species in the Atlantic Ocean. Scientists separate these baleen whales into two separate stocks: Eastern North Atlantic and Western Atlantic. NARWs in US waters belong to the Western Atlantic stock, which is classified as a strategic stock under the Marine Mammal Protection Act (MMPA). This stock ranges primarily from calving grounds in coastal waters of the southeastern US to feeding grounds in New England waters and the Canadian Bay of Fundy, Scotian Shelf, and Gulf of St. Lawrence (Hayes et al. 2019).

The size of the Western Atlantic stock is considered extremely low relative to its Optimum Sustainable Population (OSP) in the US Atlantic Exclusive Economic Zone (EEZ). Historically, the population suffered severely from commercial overharvesting and has more recently been threatened by incidental fishery entanglement and vessel collisions (Knowlton and Kraus 2001; Kraus et al. 2005; Pace et al. 2017). A best estimate of living NARW was reported to be 451 but this estimate does not consider that NARWs have been experiencing unusually high mortality events since June 2017 (Pace et al. 2017; NOAA Fisheries 2020). As such, the actual number of individuals is likely to be lower.

The NARW is a migratory species that travels from high-latitude feeding waters to low-latitude calving and breeding grounds, though this species has been observed feeding in winter in the mid-Atlantic region and has been recorded off the coast of New Jersey in all months of the year (Whitt et al. 2013). NARWs have been identified in the MA WEA and Rhode Island/Massachusetts Wind Energy Area (RI/MA WEA) on multiple occasions. For example, a total of 77 unique individual NARWs were observed in the MA WEA and RI/WEA over the duration of the Northeast Large Whale Pelagic Survey, which ran from October 2011 to June 2015 (Kraus et al. 2016).

Kraus et al. (2016) acoustically detected NARWs with passive acoustic monitoring within the MA WEA on 43% of survey days (443/1,020 days) and during all months of the year. NARWs exhibited notable seasonal variability in acoustic presence in and around the MA WEA, with maximum occurrence in the winter and spring (January to March) and minimum occurrence in the summer (July to September). During 436 hours of aerial surveys from October 2011 through June 2015, 93% of the NARW sightings (56 out of 60) occurred in January through April. The greatest sightings per unit effort by Kraus et al. (2016) took place in March (Kraus et al. 2016). In addition, Lease Area OCS-A 0522 and the OECC are encompassed by a NARW Biologically Important Area (BIA) for migration that occurs from March to April and from



November to December (LaBrecque et al. 2015). The NARW BIA for migration includes the MA WEA and RI/MA WEA and beyond to the continental slope, extending northward to offshore of Provincetown, Massachusetts and southward to halfway down the Florida coast.

NARW are expected to migrate through waters off New York primarily during spring and fall, while traveling between feeding and breeding/calving regions (Hayes et al. 2019). Over three years of New York Bight Whale Monitoring Aerial Surveys (March 2017-February 2020), 15 sightings (24 individuals) of NARW were documented (Tetra Tech and LGL 2020). NARW were observed in five of 12 months, primarily from November to May, with a continuous lack of sightings from June through October.

**Fin Whale.** Fin whales, also known as finback whales, are the second-largest species of baleen whale in the northern hemisphere and are the most commonly observed large whale in continental shelf waters from the mid-Atlantic coast of the US to Nova Scotia (CeTAP 1982; Hain et al. 1992; Sergeant 1977; Sutcliffe and Brodie 1977). Fin whales off the eastern US, Nova Scotia, and the southeastern coast of Newfoundland are believed to constitute a single stock under the present International Whaling Commission management scheme and have been called the Western North Atlantic stock. The best abundance estimate available for the Western North Atlantic fin whale stock in US waters is 1,618 individuals (Hayes et al. 2019). The status of this stock relative to its OSP in the US Atlantic EEZ is unknown, but the North Atlantic population is listed as a strategic stock under the MMPA and is listed as endangered under the ESA. Fin whales are also listed as endangered under New York State law.

Fin whales are common in waters of the US Atlantic EEZ, principally from Cape Hatteras northward. While fin whales typically feed in the Gulf of Maine and the waters surrounding New England, mating and calving (and general wintering) areas are largely unknown (Hain et al. 1992; Hayes et al. 2019). There are currently no critical habitat areas established for the fin whale under the ESA. However, the Offshore Wind Generation Facility site is flanked by two BIAs for feeding fin whales; the area to the north is considered a BIA year-round, while the area off the tip of Long Island to the west is a BIA from March to October.

Kraus et al. (2016) suggests that, compared to other baleen whale species, fin whales have a high multi-seasonal relative abundance in the MA WEA, RI/MA WEA, and surrounding areas. Fin whales have been observed in the MA WEA in spring and summer. The species has been observed primarily in the offshore (southern) regions of the MA WEA and RI/MA WEAs during spring and found closer to shore (northern areas) during the summer months. Although fin whales were largely absent from visual surveys in the MA WEA and RI/MA WEA in the fall and winter months, acoustic data indicated that this species was present in the WEAs during all months of the year. Over three years of New York Bight Whale Monitoring Aerial Surveys (March 2017-February 2020) in waters offshore New York, fin whales were observed during all three years and all 12 survey months; 124 sightings (207 individuals) of fin whales were recorded, with sighting rates approximately three times higher during summer (Tetra Tech and LGL 2020).

**Sei Whale.** Sei whales are a baleen whale species that generally travel in small groups (two to five individuals), but larger groups are observed in feeding grounds (NOAA Fisheries 2018b). The stock that occurs in the US Atlantic EEZ is the Nova Scotia stock, which ranges along the continental shelf waters of the northeastern US to Newfoundland (Hayes et al. 2017). The best abundance estimate for this stock is 357 individuals (Hayes et al. 2017). This is considered to be an underestimate because the full known range of the stock was not surveyed, the estimate did not include availability-bias correction for submerged animals, and there was uncertainty regarding population structure. Sei whales are listed as endangered under the ESA and under New York State law; the Nova Scotia stock is considered strategic under the MMPA.

Sighting data suggest sei whale distribution is largely centered in the waters of New England and eastern Canada, and there appears to be a strong seasonal component to sei whale distribution (Hayes et al. 2017; Roberts et al. 2016a). Sei whales are relatively widespread and most abundant in New England waters from spring to fall (Roberts et al. 2016a). There are no critical habitat areas designated for the sei whale under the ESA. However, a BIA for feeding for sei whales occurs east of the Offshore Wind Generation facility site from May to November (LaBrecque et al. 2015).

Kraus et al. (2016) observed sei whales in the MA WEA, RI/MA WEA, and surrounding areas between March and June. The number of sei whale observations was less than half of other baleen whale species in the two seasons in which sei whales were observed (spring and summer). This species demonstrated a distinct seasonal habitat use pattern that was consistent throughout the study. Based on Kraus et al. (2016) sighting rates, sei whales are expected to be present but much less common than fin whales, minke whales, humpback whales, and NARWs. New York waters may serve as an important migration corridor for sei whales, but no known resident seasonal population is known to occur there. During the New York Bight Whale Monitoring Aerial Surveys (March 2017-February 2020), two sightings (seven individuals) of sei whales were recorded, which only occurred in the spring (Tetra Tech and LGL 2020).

**Sperm Whales.** The sperm whale is the largest of all toothed whales. The species has a global distribution in deep water and range from the equator to the edges of the polar ice pack (Whitehead 2002). Though there is currently no reliable estimate of total sperm whale abundance in the entire western North Atlantic, the most recent population estimate for the US Atlantic EEZ is 2,288 (Waring et al. 2015). This figure is likely an underestimate. Sperm whales are listed as endangered under the ESA and New York State law; the North Atlantic stock is considered strategic under the MMPA.

Sperm whales mainly reside in deep-water habitats on the OCS, along the shelf edge, and in mid-ocean regions (NOAA Fisheries 2010). However, this species has been observed in relatively high numbers in the shallow continental shelf areas of southern New England (Scott and Sadove 1997). There are no critical habitat areas designated for sperm whales under the ESA.

Kraus et al. (2016) observed sperm whales four times in the MA WEA and RI/MA WEA during the summer and fall from 2011 to 2015. Sperm whales, traveling singly or in groups of three or

four, were observed three times in August and September of 2012 and once in June of 2015. Sperm whales are expected to be present but uncommon in the MA WEA based on Kraus et al. (2016) sightings. Sperm whales were recorded during all seasons and all months except May and November during the New York Bight Whale Monitoring Aerial Surveys offshore New York (Tetra Tech and LGL 2020).

### Other Marine Mammals Expected to Occur in and Around the Project Area

Of the remaining 34 marine mammal species that may occur in and around the Offshore Wind Generation Facility site, OECC, and/or New York State waters, 15 are listed as rare and are not discussed below (see Table 1). The following section provides brief additional information on the common and uncommon non-endangered or threatened marine mammals that may occur, at least seasonally, in the vicinity of the Project. This assessment will be confirmed and supplemented with additional analysis of existing and newly collected data.

**Table 1 Marine Mammals that may Occur in the Vicinity of the Project**

Species	Stock	Federal Regulatory Status	Occurrence in the MA and RI/MA WEAs	Abundance <sup>1</sup> (NMFS Best Available <sup>2</sup> )
<b>Baleen whales (Mysticeti)</b>				
Blue whale <i>Balaenoptera musculus</i>	West (W.) North Atlantic	ESA-Endangered	Rare	440
Fin whale <i>Balaenoptera physalus</i>	W. North Atlantic	ESA-Endangered	Common	1,618
Humpback whale <i>Megaptera novaeangliae</i>	Gulf of Maine	MMPA	Common	896
Minke whale <i>Balaenoptera acutorostrata</i>	Canadian East Coast	MMPA	Common	2,591
North Atlantic right whale <i>Eubalaena glacialis</i>	W. North Atlantic	ESA-Endangered	Common	451
Sei whale <i>Balaenoptera borealis</i>	Nova Scotia	ESA-Endangered	Common	357
<b>Toothed whales (Odontoceti)</b>				
Atlantic spotted dolphin <i>Stenella frontalis</i>	W. North Atlantic	MMPA	Rare	44,715
Atlantic white-sided dolphin <i>Lagenorhynchus acutus</i>	W. North Atlantic	MMPA	Common	48,819
Common bottlenose dolphin <sup>7</sup> <i>Tursiops truncatus</i>	W. North Atlantic, Offshore	MMPA	Common	77,532 <sup>8</sup>

**Table 1 Marine Mammals that may Occur in the Vicinity of the Project (Continued)**

Species	Stock	Federal Regulatory Status	Occurrence in the MA and RI/MA WEAs	Abundance <sup>1</sup> (NMFS Best Available <sup>2</sup> )
<b>Toothed whales (Odontoceti) (Continued)</b>				
Clymene dolphin <i>Stenella clymene</i>	W. North Atlantic	MMPA	Rare	Unknown
False killer whale <i>Pseudorca crassidens</i>	W. North Atlantic	MMPA-Strategic <sup>3</sup>	Rare	442
Fraser’s dolphin <i>Lagenodelphis hosei</i>	W. North Atlantic	MMPA	Rare	Unknown
Killer whale <i>Orcinus orca</i>	W. North Atlantic	MMPA	Rare	Unknown
Long-finned pilot whale <i>Globicephala malaena</i>	W. North Atlantic	MMPA	Uncommon	5,636
Melon-headed whale <i>Peponocephala electra</i>	W. North Atlantic	MMPA	Rare	Unknown
Pan-tropical spotted dolphin <i>Stenella attenuata</i>	W. North Atlantic	MMPA	Rare	3,333
Pygmy killer whale <i>Feresa attenuata</i>	W. North Atlantic	MMPA	Rare	Unknown
Risso’s dolphin <i>Grampus griseus</i>	W. North Atlantic	MMPA	Uncommon	18,250 <sup>10</sup>
Rough-toothed dolphin <i>Steno bredanensis</i>	W. North Atlantic	MMPA	Rare	136
Short-beaked common dolphin <i>Delphinus delphis</i>	W. North Atlantic	MMPA	Common	70,184
Short-finned pilot whale <i>Globicephala macrorhynchus</i>	W. North Atlantic	MMPA	Rare	28,924
Sperm whale <i>Physeter macrocephalus</i>	North Atlantic	ESA-Endangered	Uncommon	2,288
Spinner dolphin <i>Stenella longirostris</i>	W. North Atlantic	MMPA	Rare	Unknown
Striped dolphin <i>Stenella coeruleoalba</i>	W. North Atlantic	MMPA	Rare	54,807

**Table 1 Marine Mammals that may Occur in the Vicinity of the Project (Continued)**

Species	Stock	Federal Regulatory Status	Occurrence in the MA and RI/MA WEAs	Abundance <sup>1</sup> (NMFS Best Available <sup>2</sup> )
<b>Beaked whales</b>				
Cuvier's beaked whale <i>Ziphius cavirostris</i>	W. North Atlantic	MMPA	Rare	6,532
Blainville's beaked whale <i>Mesoplodon densirostris</i>	W. North Atlantic	MMPA	Rare	7,092 <sup>4,6</sup>
Gervais' beaked whale <i>Mesoplodon europaeus</i>	W. North Atlantic	MMPA		
Sowerby's beaked whale <i>Mesoplodon bidens</i>	W. North Atlantic	MMPA		
True's beaked whale <i>Mesoplodon mirus</i>	W. North Atlantic	MMPA		
Northern bottlenose whale <i>Hyperoodon ampullatus</i>	W. North Atlantic	MMPA	Rare	Unknown
Dwarf sperm whale <i>Kogia sima</i>	W. North Atlantic	MMPA	Rare	3,785 <sup>5</sup>
Pygmy sperm whale <i>Kogia breviceps</i>	W. North Atlantic	MMPA		
Harbor porpoise <i>Phocoena phocoena</i>	Gulf of Maine/Bay of Fundy	MMPA	Common	79,833
<b>Earless seals (Phocidae)</b>				
Gray seal <i>Halichoerus grypus</i>	W. North Atlantic	MMPA	Common	27,131 <sup>9</sup>
Harbor seal <i>Phoca vitulina</i>	W. North Atlantic	MMPA	Regular	75,834
Harp seal <i>Pagophilus groenlandicus</i>	W. North Atlantic	MMPA	Rare	Unknown <sup>8</sup>
Hooded seal <i>Cystophora cristata</i>	W. North Atlantic	MMPA	Rare	Unknown

**Table 1 Marine Mammals that may Occur in the Vicinity of the Project (Continued)**

Species	Stock	Federal Regulatory Status	Occurrence in the MA and RI/MA WEAs	Abundance <sup>1</sup> (NMFS Best Available <sup>2</sup> )
<b>Sirenia</b>				
Florida manatee <i>Trichechus manatus latirostris</i>	Florida	MMPA-Threatened/ Depleted and Strategic <sup>3</sup>	Rare	Unknown

Notes:

1. Abundance estimates are based on the most recent best available information.
2. Estimate is from NMFS Stock Assessment Reports (Hayes et al. 2017; 2018; 2019; Waring et al. 2016).
3. A strategic stock is defined as any marine mammal stock: (1) for which the level of direct human-caused mortality exceeds the potential biological removal level; (2) that is declining and likely to be listed as threatened under the ESA; or (3) that is listed as threatened or endangered under the ESA or as depleted under the MMPA (NOAA Fisheries 2019a).
4. This estimate includes Gervais’ and Blainville’s beaked whales (*Mesoplodon europaeus* and *Mesoplodon densirostris*) and undifferentiated *Mesoplodon* spp. beaked whales (Hayes et al. 2017; 2018; Kenney and Vigness-Raposa 2009; RI Ocean SAMP 2011; Waring et al. 2011; 2013; 2015).
5. This estimate may include both the dwarf and pygmy sperm whales.
6. The four *Mesoplodon* beaked whale species are grouped in Roberts et al. (2017).
7. Common bottlenose dolphins (*Tursiops truncatus*) occurring in the vicinity of the Project likely belong to the Western North Atlantic Offshore stock.
8. Hayes et al. (2018) report insufficient data to estimate the population size of harp seals in US waters; the best estimate for the whole population is 7.4 million.
9. Estimate of gray seal population in US waters. Data are derived from pup production estimates; Hayes et al. (2019) notes that uncertainty about the relationship between whelping areas along with a lack of reproductive and mortality data make it difficult to reliably assess the population trend.

**Minke Whale.** Minke whales (*Balaenoptera acutorostrata*) are a baleen whale species that is common and widely distributed within the US Atlantic EEZ. The best abundance estimate for the US Atlantic EEZ is 2,591 individuals (Hayes et al. 2019). Kraus et al. (2016) observed minke whales in the MA WEA, RI/MA WEA, and surrounding areas primarily from May to June. This species demonstrated a distinct seasonal habitat usage pattern that was consistent throughout the study.

**Humpback Whale.** Humpback whales are a baleen whale species that was previously listed as endangered under the ESA. However, in September 2016, NMFS revised the ESA listing for this species. Humpback whales within the US Atlantic EEZ belong to the West Indies distinct population segment (DPS), which is considered not warranted for listing under the ESA (DoC 2016a). Humpback whales are still listed as endangered at the State level, but their status is under review. Most humpback whales that inhabit the US Atlantic EEZ belong to the Gulf of Maine stock. The best available population estimate for the Gulf of Maine stock from NMFS stock assessments is 896 individuals and this population appears to be increasing (Hayes et al. 2019). Kraus et al. (2016) observed humpback whales in the MA WEA, RI/MA WEA, and surrounding areas during all seasons. Humpback whales were visually observed most often in the spring and summer, with a peak from April to June. Although Humpback whales were only rarely seen during fall and winter surveys, acoustic data indicate that this species may be

present within the MA WEA year-round, with the highest rates of acoustic detections in the winter and spring (Kraus et al. 2016). Humpback whales have a BIA for feeding northeast of the Offshore Wind Generation Facility site from March to December (LaBrecque et al. 2015). Humpback whales are often observed in New York's shallower waters, such as Long Island Sound, Block Island Sound, Gardiners Bay, Fire Island, and New York Harbor, and are also known to spend time in the New York Bight region (Sadove and Cardinale 1993).

**Pilot Whales.** Two species of Pilot Whale occur within the western North Atlantic: the long-finned pilot whale (*Globicephala melaena*) and the short-finned pilot whale (*Globicephala macrorhynchus*). These species are difficult to differentiate visually and acoustically and cannot be reliably distinguished during most surveys. Within the US Atlantic EEZ, both species are categorized into Western North Atlantic stocks. The best available population estimate in the US Atlantic EEZ for short-finned pilot whales is 21,515 and for long-finned pilot whales is 5,636 (Hayes et al. 2019). These estimates are from summer 2011 aerial and shipboard surveys covering waters from central Florida to the lower Bay of Fundy. Neither pilot whale species is listed as endangered or threatened under the ESA, and the Western North Atlantic stock is not considered strategic under the MMPA.

Kraus et al. (2016) observed pilot whales infrequently in the MA WEA, RI/MA WEA, and surrounding areas. No pilot whales were observed during the fall or winter, and these species were only observed 11 times in the spring and three times in the summer. It is possible that the Northeast Large Whale Pelagic Survey may have underestimated the abundance of Pilot Whales, as this survey was designed to target large cetaceans and most small cetaceans were not identified to species.

**Risso's Dolphin.** Risso's dolphins (*Grampus griseus*) occur worldwide in both tropical and temperate waters (Jefferson et al. 2008; Jefferson et al. 2014). Those that are present in the US Atlantic EEZ are part of the Western North Atlantic stock. The best available abundance estimate is 18,250 based on data collected during surveys in 2011 (Hayes et al. 2019). The results from Kraus et al. (2016) suggest that Risso's dolphins occur infrequently in the MA WEA, RI/MA WEA, and surrounding areas. No Risso's dolphins were observed during summer, fall, or winter, and they were only observed twice in the spring. It is possible that the Northeast Large Whale Pelagic Survey may have underestimated the abundance of Risso's Dolphins, as this survey was designed to target large cetaceans and the majority of small cetaceans were not identified to species.

**Atlantic White-Sided Dolphin.** Atlantic white-sided dolphins (*Lagenorhynchus acutus*) are located in cold temperate and subpolar waters of the North Atlantic (Cipriano 2002). Individuals observed off the US Atlantic coast are part of the Western North Atlantic stock (Hayes et al. 2019). The best available abundance estimate for this stock in the US Atlantic EEZ is 48,819 based on data collected during surveys in 2011 (Roberts et al. 2018). Kraus et al. (2016) suggest that Atlantic white-sided dolphins occur infrequently in the MA WEA, RI/MA WEA, and surrounding areas. No individuals were observed during the winter months, and this species was only observed twice in the fall and three times in the spring and summer. It is

possible that the Northeast Large Whale Pelagic Survey may have underestimated the abundance of Atlantic white-sided dolphins, as this survey was designed to target large cetaceans and the majority of small cetaceans were not identified to species.

**Short-Beaked Common Dolphins.** Short-beaked common dolphins (*Delphinus delphis*) are one of the most widely distributed cetaceans and occurs in temperate, tropical, and subtropical regions (Jefferson et al. 2008). Individuals in the US Atlantic EEZ belong to the Western North Atlantic stock. The best population estimate for this stock in the US Atlantic EEZ is 70,184 (Hayes et al. 2019).

Kraus et al. (2016) suggested that short-beaked common dolphins occur year-round in the MA WEA, RI/MA WEA, and surrounding areas and were the most frequently observed small cetacean species in the survey study area. Individuals were observed in the MA WEA and RI/MA WEA during all seasons. Short-beaked common dolphins were most frequently observed during the summer with observations peaking between June and August. Sighting data may indicate that short-beaked common dolphin distribution tended to be farther offshore during the winter than during spring, summer, and fall. It is possible that the Northeast Large Whale Pelagic Survey may have underestimated the abundance of short-beaked common dolphins, as this survey was designed to target large cetaceans and the majority of small cetaceans were not identified to species.

**Bottlenose Dolphin.** Bottlenose dolphins (*Tursiops truncatus*) are one of the most well-known and widely distributed species of marine mammals. Bottlenose dolphins along the New England Coast belong to the Western North Atlantic Offshore stock, which ranges throughout the US Atlantic EEZ and into Canada (Hayes et al. 2017). The best available population estimate for this stock of bottlenose dolphins is 77,532 (Hayes et al. 2017). Kraus et al. (2016) observed bottlenose dolphins during all seasons within the MA WEA and RI/MA WEA. Bottlenose dolphins were the second most commonly observed small cetacean species and exhibited little seasonal variability in abundance. It is possible that the Northeast Large Whale Pelagic Survey may have underestimated the abundance of bottlenose dolphins, as this survey was designed to target large cetaceans and the majority of small cetaceans were not identified to species.

**Harbor Porpoise.** The harbor porpoise (*Phocoena phocoena*) is the only porpoise species found in the Atlantic Ocean. Harbor porpoises observed in the US Atlantic EEZ are considered part of the Gulf of Maine/Bay of Fundy stock. The best current abundance estimate of the Gulf of Maine/Bay of Fundy harbor porpoise stock is 79,883 individuals based upon data collected during a 2011 line-transect sighting survey (Hayes et al. 2019). Kraus et al. (2016) indicate that harbor porpoises occur within the MA WEA and RI/MA WEA in fall, winter, and spring. Harbor porpoises were observed in groups ranging in size from three to 15 individuals, and were primarily observed in the Kraus et al. (2016) study area from November through May, with very few sightings during June through September.



**Harbor Seal.** The harbor seal (*Phoca vitulina*) is found throughout coastal waters of the Atlantic Ocean and adjoining seas above 30°N and is the most abundant pinniped in the US Atlantic EEZ (Hayes et al. 2019). Although the stock structure of the Western North Atlantic population is unknown, it is thought that harbor seals found along the eastern US and Canadian coasts represent one population that is termed the Western North Atlantic stock (Andersen and Olsen 2010; Temte et al. 1991). The best estimate of abundance for harbor seals in the Western North Atlantic stock is 75,834 individuals (Hayes et al. 2019).

Harbor seals are year-round inhabitants of the coastal waters of eastern Canada and Maine and occur seasonally along the southern New England to New Jersey coasts from September through late May (Richardson and Rough 1993; Barlas 1999; Schneider and Payne 1983; Schroeder 2000). Kraus et al. (2016) observed harbor seals in the MA WEA, RI/MA WEA, and surrounding areas, but this survey was designed to target large cetaceans so locations and numbers of seal observations were not included in the study report. Harbor seals have five major haul-out sites in and near the MA WEA and RI/MA WEA: Monomoy Island, the northwestern side of Nantucket Island, Nomans Land, the north side of Gosnold Island, and the southeastern side of Naushon Island (Payne and Selzer 1989).

**Gray Seal.** Gray seals (*Halichoerus grypus*) are the second most common pinniped off the US Atlantic coast (Jefferson et al. 2008). This species forms three major populations in the Atlantic: Northeast Atlantic, Northwest Atlantic, and Baltic Sea (Haug et al. 2013). The Western North Atlantic stock is equivalent to the Northwest Atlantic population. In US waters alone, Hayes et al. (2019) estimated an abundance of 27,131. In US waters, gray seals primarily pup at four established colonies: Muskeget and Monomoy islands in Massachusetts and Green and Seal Islands in Maine. Since 2010, pupping has also been observed at Noman's Island in Massachusetts and Wooden Ball and Matinicus Rock in Maine (Hayes et al. 2019). Although white-coated pups have stranded on eastern Long Island beaches in New York, no pupping colonies have been detected in that region. Kraus et al. (2016) observed gray seals in the MA WEA, RI/MA WEA, and surrounding areas, but this survey was designed to target large cetaceans, so locations and numbers of seal observations were not included in the study report.

### Sea Turtles

As described in Section 14 of the Proposal Narrative, only three species are likely to occur in and around Lease Area OCS-A 0522 and the OECC: loggerhead sea turtles (*Caretta caretta*), Kemp's Ridley sea turtles (*Lepidochelys kempii*), and leatherback sea turtles (*Dermochelys coriacea*). These three species of concern are described briefly below. Two other sea turtle species may occur rarely in the vicinity of the Project and are not assessed below: green sea turtles (*Chelonia mydas*) and hawksbill sea turtles (*Eretmochelys imbricata*).

**Loggerhead Sea Turtle.** Loggerhead sea turtles consist of nine DPSs, four of which are identified as threatened and five as endangered. Only the Northwest Atlantic DPS is likely to occur in Lease Area OCS-A 0522, along the OECC, and in New York waters. This DPS is listed as threatened under both federal and New York State law. No marine areas are designated as critical habitat for that DPS (NOAA Fisheries 2018a).

Nesting for this DPS is concentrated along the Florida coast, with lower levels of nesting occurring into the Gulf of Mexico and up the Atlantic coast as far north as Virginia (far south of the landfall site). The most common way to census sea turtle populations is to count nests on nesting beaches. In 2019, the loggerhead nest count for Florida index beaches was 53,000 (FFWCC 2020). This value represents approximately 70% of all nesting that occurs in Florida.

Kraus et al. (2016) surveys of the MA WEA and RI/MA WEA found that loggerhead sea turtles occur throughout the region, with the most sightings occurring during the summer and fall months (over 92% of sightings occurred in August and September). Loggerheads tend to be absent during the winter months and are rare during the spring months (Kraus et al. 2016). These findings of loggerhead sea turtle spatial and temporal distributions are consistent with prior studies in the region (e.g., AMAPPS surveys and STSSN data). Loggerhead sea turtles are the most frequently seen sea turtle in New York waters; they are typically found between May and October.

**Kemp's Ridley Sea Turtle.** The Kemp's Ridley sea turtle is listed as endangered under the ESA and New York State law. There is only one population of Kemp's Ridley sea turtles, and all nesting occurs in the western Gulf of Mexico. After years of decline in the latter half of the 20th century, the population of this species appears to be recovering, with annual nest counts exceeding 20,000 in recent years (Bevan et al. 2016).

Although Kemp's Ridley sea turtles are expected to regularly occur within Lease Area OCS-A 0522 and surrounding waters, their abundance may be biased due to several factors: (1) most individuals are too small to be detected during surveys; (2) historically, shallow bays and estuaries utilized by Kemp's Ridley sea turtles in the region have been excluded from survey designs (including Kraus et al. 2016); and (3) Kemp's Ridley sea turtles may be overrepresented in stranding reports due to cold-stun events (i.e., a hypothermic reaction that occurs from prolonged exposure to cold water temperatures).

In the Kraus et al. (2016) surveys of the MA WEA and RI/MA WEA, the only confirmed sightings of Kemp's Ridley sea turtles occurred within a four-week span in 2012 (one on August 23, four on September 12, and one on September 17, 2012). Modeling from the NARWC database show that Kemp's Ridley sea turtles are present in the MA WEA and RI/MA WEA, with over 85% of records in summer months; however, this species is sighted at much lower numbers than other species (Kenney and Vigness-Raposa 2010). Cold stun events are relatively common in Cape Cod, and 50 to 200 turtles are expected to be found cold-stunned each year and reported as strandings in the STSSN (Dodge et al. 2007).

In the New York waters where the Project's offshore export cables will be located, Kemp's Ridley sea turtles are typically found from June to October.

**Leatherback Sea Turtles.** Leatherback sea turtles are listed as endangered under federal and New York State law. This species has the widest geographic distribution of all sea turtles. While primarily found in tropical and temperate waters, they occur as far north as British Columbia, Newfoundland, and the British Isles in the Northern Hemisphere. Primary nesting beaches for Atlantic leatherbacks are Gabon, Africa, and French Guiana, though substantial nesting also occurs in the US, Puerto Rico, and US Virgin Islands. Nesting trends for these areas are generally stable or increasing (TEWG 2007).

Modeled seasonal abundance patterns of leatherback sea turtles suggest that the species is present in the MA WEA during the fall months and remains south of the MA WEA during the summer months (Kenney and Vigness-Raposa 2010). Kraus et al. (2016) differed from this conclusion and reported that leatherbacks were widespread throughout the region during both summer and fall months (98.7% of sightings) (Kraus et al. 2016). Kraus et al. (2016) detected only two leatherback sea turtles outside of the summer and winter months during surveys of the MA WEA and RI/MA WEA (both in the spring). AMAPPS surveys sighted leatherback sea turtles only during summer surveys (shipboard and aerial) in 2011 and 2016 (NEFSC and SEFSC 2011b; 2016). A lack of spring and winter survey sightings are consistent with previous modeling efforts that suggest leatherback sea turtles are not expected to be present during these seasons. Data from the STSSN also support the conclusion that leatherback sea turtles are relatively common within the MA WEA during the summer and fall months. Leatherback sea turtles are most often present in New York waters between May and November and are most often seen along the south shore of Long Island and within Long Island Sound (Sadove and Cardinale 1993).

## **PRESENCE OF BIRDS AND BATS**

The occurrence of birds in the MA WEA and surrounding area is well-documented, with multiple studies providing important information on avian presence and abundances at a series of useful scales. Key studies and reports that contribute to the available information related to birds and bats occurring near the Project include, but are not limited to, the following:

- Pelagic Seabirds off the East Coast of the United States 2008-2013 (Veit et al. 2015)
- Massachusetts Clean Energy Center (MassCEC) seabird surveys as reported in Abundance and Distribution of Seabirds off Southeastern Massachusetts, 2011–2015: Final Report (Veit et al. 2016)
- Marine-life Data and Analysis Team (MDAT) marine bird abundance and occurrence models (Winship et al. 2018; Curtice et al. 2019)
- Tracking Offshore Occurrence of Common Terns, Endangered Roseate Terns, and Threatened Piping Plovers with VHF Arrays (Loring et al. 2019)
- Tracking movements of threatened migratory rufa Red Knots in U.S. Atlantic Outer Continental Shelf waters (Loring et al. 2018).

- Assessing the Exposure of Three Diving Bird Species to Offshore Wind Areas on the U.S. Atlantic Outer Continental Shelf using Satellite Telemetry (Stenhouse et al. 2020)
- NYSERDA's Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy and Remote Marine and Onshore Technology (ReMOTe) (Normandeau Associates and APEM 2019)
- NYSERDA's Birds and Bats Study (Ecology and Environment Engineering 2017a)
- NYSERDA's Cable Landfall Permitting Study (Ecology and Environment Engineering 2017b)
- NYSERDA's Multi-Scale Relationships Between Marine Predators and Forage Fish project (ongoing)
- Long Island Colonial Waterbird and Piping Plover Surveys
- BOEM studies and environmental assessments, including:
  - BOEM's (2014) Revised Environmental Assessment for the MA WEA
  - BOEM's (2016) Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore New York
  - BOEM's (2018) DEIS for Vineyard Wind 1
  - BOEM's (2019) Vineyard Wind Offshore Wind Energy Project Biological Assessment for the US Fish and Wildlife Service
- Vineyard Wind COP for Vineyard Wind 1 (Epsilon Associates 2020)

To complement existing studies and reports for birds, Vineyard Wind is conducting digital aerial surveys across Lease Area OCS-A 0522 to collect spatial and temporal distribution and abundance data on birds and other wildlife (including species listed under the ESA) in the Lease Area. This data will support exposure and risk assessments in the COP and provide a baseline for post-construction monitoring. The surveys are conducted monthly, with two surveys per month during the spring (April and May) and fall (August and September) migration periods. Twenty aerial surveys occurred in the Lease Area between June 2019 and September 14, 2020 and an additional 12 surveys are planned through July 2021 (see Section 14 of the Proposal Narrative and the survey plan in Attachment 14-2). Vineyard Wind also conducted four boat-based avian surveys in the northern portion of Lease Area OCS-A 0501 in spring 2018 and one year of monthly boat surveys (October 2018 to September 2019) in the southern portion of Lease Area OCS-A 0501, which can be used to corroborate baseline data for the Project given the proximity of Lease Area OCS-A 0501.

As described in Section 14 of the Proposal Narrative, based on a review of the data sources listed above for Vineyard Wind 1 and Park City Wind, the most likely marine species to occur within Lease Area OCS-A 0522 and surrounding waters include sea ducks, auks, gulls and terns, loons, shearwaters and storm-petrels, and gannets and cormorants. Other migratory

non-marine bird species may pass through the Lease Area. This assessment will be confirmed through additional analysis of available studies and data collected from the ongoing aerial surveys across Lease Area OCS-A 0522.

Regional studies generally indicate low use of the offshore environment by cave-hibernating bats (BOEM 2018). In addition, these species are not expected to regularly feed on insects over the ocean. While tree bats are detected more often in the offshore environment, exposure is likely to be limited to the migration period.

Although numerous bird and bat species occur in the vicinity of the Project, the following discussion focuses on federally- and state-listed bird and bat species that, upon initial review, could occur near the onshore and offshore portions of the Project. As described in Section 14 of the Proposal Narrative and further below, not all of these federally- and state-listed bird and bat species are of greatest concern. Based upon this initial assessment, the bird species of greatest concern are the three species of birds federally-listed as threatened or endangered under the ESA (and are also listed in New York State's Endangered Species Regulations) that may occur within the vicinity of the Project: roseate tern (*Sterna dougallii*), piping plover (*Charadrius melodus*), and red knot (*Calidris canutus rufa*). The bat species of greatest concern is expected to be the northern long-eared bat (*Myotis septentrionalis*). This assessment will be confirmed and supplemented with additional analysis of existing and newly collected data as part of a future COP.

### Federally-Listed Avian Species

**Piping Plover.** Piping plovers are a small shorebird that nest on beaches, sand flats, and alkali wetlands along the Atlantic coast of North America, the Great Lakes, and in the Midwestern plains (Elliott-Smith and Haig 2004). The Atlantic coast-breeding subspecies, which is the only population likely to occur in the vicinity of Lease Area OCS-A 0522, breeds as individual pairs on sandy beaches from Newfoundland to North Carolina (Elliott-Smith and Haig 2004; BOEM 2014). The Atlantic population is listed as threatened under the ESA and New York State law, with approximately 1,698 nesting pairs in the US as of 2018 (USFWS 2018), and breeding grounds are heavily managed to promote population recovery (Elliott-Smith and Haig 2004).

As there is no breeding or foraging habitat for piping plovers in Lease Area OCS-A 0522, the only exposure incurred may be during migration. While the precise migratory pathways along the Atlantic coast and to the Bahamas are not well known, both spring and fall migration routes are believed to generally follow the Atlantic coast (BOEM 2019). A recent nanotag study tracked the movement of 150 piping plovers from nesting areas in Massachusetts and Rhode Island (Loring et al. 2019). This study confirmed that piping plovers can fly parallel to the coast with a favorable tail wind, and that most migrate above a 25-250 meter rotor swept zone with an estimated 84.8% flying outside the rotor swept zone in the WEAs (Loring et al. 2019; BOEM 2019). Thus, the expected exposure to the Offshore Wind Generation Facility is expected to be limited. BOEM's (2019) Biological Assessment for Vineyard Wind 1 found that collision fatalities of piping plovers resulting from the project would be insignificant and discountable; Vineyard Wind expects similar findings for Liberty Wind.

In New York, Approximately 200 breeding pairs of piping plover nest in New York exclusively on Long Island from Queens to the Hamptons, including the Eastern bays and harbors of Northern Suffolk County. Breeding population distribution has shifted slightly from a greater number of bayside beaches occupied on Southern Long Island to a greater number of beaches occupied along the shores of the Atlantic Ocean, Long Island Sound, and Peconic Bay. Vineyard Wind will further evaluate whether piping plovers have potential exposure to the Project's landfall site during the construction phase and, if needed, can manage such exposure by scheduling construction activities outside of the breeding season.

**Red Knot.** Red knots are medium-sized shorebirds with some of the longest migrations in the world, undertaking nonstop flights of up 4,970 miles on their circumpolar travels between breeding and wintering locations (Baker et al. 2013). Migration routes appear to be highly diverse. Some individuals fly over the open ocean from the northeastern US directly to stopover/wintering sites in the Caribbean and South America, while others make the ocean "jump" from farther south or follow the US Atlantic coast for the duration (Baker et al. 2013; BOEM 2014). Some of this variation may be due to birds avoiding storms in the Atlantic (Baker et al. 2013). The *rufa* subspecies of the red knot is listed as threatened under the ESA, primarily because the Atlantic flyway population decreased by approximately 70% from 1981 to 2012, to <30,000 individuals (Burger et al. 2011; Baker et al. 2013; USFWS 2015).

Most adult *rufa* fly offshore over the Atlantic from Canadian or US staging areas to South America (Baker et al. 2013); this is the period in which red knots could potentially move through the Lease Area. Red knot exposure to the Offshore Wind Generation Facility would be limited to migration and there is no habitat for the species in the surrounding area. Furthermore, despite the presence of many onshore turbines along the red knot's overland migration route, there are no records of red knots colliding with turbines (see 78 FR 60024; BOEM 2019). For Vineyard Wind 1, BOEM's (2019) Biological Assessment found that collision fatalities of red knot resulting from the project would be insignificant and discountable; Vineyard Wind expects similar findings for Liberty Wind.

**Roseate Tern.** Roseate terns are a small tern species that breed colonially on coastal islands. The northwest Atlantic Ocean population of roseate terns breeds in the northeastern US and Atlantic Canada and winters in South America, primarily eastern Brazil (USFWS 2010; Nisbet et al. 2014). This population has been federally-listed as endangered under the ESA since 1987 and is also a state-listed species in New York. Declines in the population have been largely attributed to low reproductive productivity, partially related to predator impacts on breeding colonies and habitat loss and degradation, though adult roseate tern survival is also unusually low for a small tern species. As of 2017, approximately 50% of the Northeast US population's 4,446 pairs nested in Massachusetts (Mostello et al. 2019). Overall, regional information indicates that roseate terns may use Lease Area OCS-A 0522 on a limited basis during spring, summer, and fall (terns are not present in the winter). Roseate terns could occur in Lease Area OCS-A 0522 ephemerally during spring and fall migration as well as during post-breeding movements towards staging areas (Burger et al. 2011; BOEM 2014), although Vineyard Wind's boat surveys in the southern portion of Lease Area OCS-A 0501 and initial surveys in Lease Area OCS-A 0522 suggest that the occurrence of terns is probably sporadic and more likely to

occur in the spring during migration and just after arrival at breeding areas. Tracking data shows that in July and August, individuals move between staging locations on islands in Nantucket Sound, Block Island, and Montauk, including potential movements through the MA WEA, RI/MA WEA, and Block Island Wind Farm (Loring et al. 2017). In the automated radio telemetry study, there was no evidence of post-breeding movements through Lease Area OCS-A 0501 (although receivers did not fully cover the Lease Area; Loring et al. 2017), likely due to its location to the south of known breeding and staging locations. In addition, according to BOEM's Biological Assessment for Vineyard Wind 1, any migrating roseate terns passing through the project's action area are likely to be flying during good weather conditions and below the rotor swept zone (BOEM 2019). Therefore, exposure to the Offshore Wind Generation Facility is expected to be limited.

In New York, only two sizeable colonies of roseate terns occur, with most of the population nesting on Great Gull Island located in eastern Long Island Sound, outside of the landfall site and onshore export cable route. Smaller colonies also occur on barrier beach islands and salt marsh islands. The expected exposure of roseate terns is expected to be limited and temporally constrained to the cable installation phase of the Project.

**Bald and Golden Eagles.** Bald eagles (*Haliaeetus leucocephalus*) were removed from the federal list of threatened and endangered species in 2007 but are listed as threatened in New York. Golden Eagles (*Aquila chrysaetos*) are listed as endangered in New York, but are not listed federally. Both Bald Eagles and Golden Eagles remain federally protected under the Bald and Golden Eagle Protection Act (16 U.S.C. §§668-668d). The general morphology of both bald eagles and golden eagles dissuades regular use of offshore habitats. These two species generally rely upon thermals, which are poorly developed over the ocean, during migration movements. Golden eagle exposure to Lease Area OCS-A 0522 is expected to be highly unlikely due to their dietary habits, limited distribution in the eastern US, and reliance on terrestrial habitats (BOEM 2014). Bald eagle exposure to Lease Area OCS-A 0522 is also expected to be highly unlikely because the Lease Area is not located along any likely or known bald eagle migration route, bald eagles tend not to fly over large waterbodies, and features that might potentially attract them offshore (i.e., islands) are absent nearby.

**Black-Capped Petrel.** The black-capped petrel (*Pterodroma hasitata*) is extremely uncommon in areas not directly influenced by the warmer waters of the Gulf Stream (Haney 1987) and is thought to be found in coastal waters of the US only as a result of tropical storms (Lee 2000). Black-capped petrels were not observed during Vineyard Wind's boat surveys in the southern portion of Lease Area OCS-A 0501 or during the MassCEC aerial surveys and other data sources. The Offshore Wind Generation Facility site is outside any known distribution of the species. The Northwest Atlantic Seabird Catalog contains approximately 5,000 individual observations of black-capped petrels at sea from 1979-2006 (O'Connell et al. 2009; Simons et al. 2013), with some observations off of Long Island. The black-capped petrel is proposed for listing as threatened by the US Fish and Wildlife Service (Threatened Species Status for the black-capped petrel with a Section 4(d) Rule, 83 Fed. Reg. 195 [October 9, 2018]).

## State-Listed Avian Species

The following state-listed avian species are primarily expected to occur onshore, particularly at the landfall site, and may only be present offshore at the Offshore Wind Generation Facility site in limited numbers.<sup>1</sup> Thus, the following descriptions focus on onshore habitat. A full assessment of exposure to the Offshore Wind Generation Facility will be performed as part of a future COP.

**Black Skimmer.** Black skimmer (*Rynchops niger*) is listed as a species of special concern in New York State due to the limited number of breeding colonies within New York. They are a migratory species that winter in the south and nest in the north during the summer, appearing in New York State the last week of April into early May. Preferred nesting habitat includes beaches, salt marsh islands, dredge spoil islands, and sand bars. Within New York State, most are found on the southern coast of Long Island. The largest breeding colonies are found in Breezy Point, Queens, and on Nickerson Beach in Nassau County. Black skimmer forages at night or during low tide for small fish in shallow tidal waters, bays, and tidal inlets. They migrate back to their wintering grounds during October and November; however, some stay as late as December (New York State Department of Environmental Conservation [NYSDEC] [date unknown]).

**Common Tern.** The common tern (*Sterna hirundo*) is listed as threatened in New York. Breeding colonies migrate north from late April to mid-May. In New York, they predominantly nest on the north shore, south shore, and off the eastern tip of Long Island. The largest breeding colony is located on Great Gull Island. There are also other smaller and scattered breeding colonies in New York State along Lake Erie and Lake Ontario and on islands along the St. Lawrence River, the Finger Lakes, Lake Champlain, and the Hudson River (New York Natural Heritage Program 2020a). Common tern occurs in a variety of habitat, including coastal beaches, barrier islands, marshes, and inland lakes. Preferred nesting habitat includes sand, gravel, shell, and cobble in open areas with some vegetation. Colonies depart to southern wintering grounds in mid-October (NYSDEC [date unknown]).

**Forester's tern.** Forester's tern (*Sterna forsteri*) is a state protected species in New York that nest on marsh islands located in bays off the south shore of Long Island (New York Natural Heritage Program 2020b). New York is the northern extent of their eastern range. They are currently threatened by habitat loss and historically, in parts of their range, populations have likely been affected by environmental toxins (1960s-1970s) and hunting for feather collection by the millinery trade or hat making industry (1880s). As populations increase in New York, they may be restricted by habitat availability, human disturbance, and rising sea levels due to climate change (New York Natural Heritage Program 2020b).

**Least Tern.** Least tern (*Sternula antillarum*) is a threatened species in New York State. It is also listed as federally endangered for internal US populations only. Migrants appear on northern breeding grounds during late April to mid-May (NYSDEC [date unknown]). In New York,

---

<sup>1</sup> With the exception of common terns, which are expected to be present but still in low densities based on Vineyard Wind's boat-based avian surveys in the southern portion of Lease Area OCS-A 0501.



breeding populations mainly occur on Long Island's outer coast and rarely on the lower Hudson River. Between 50 and 66 breeding colonies occur predominantly in Nassau and Suffolk counties on Long Island. Preferred breeding habitat includes broad, open, sandy or gravel beaches, dredge spoil areas, and areas with open shoreline. Common least terns leave their breeding grounds for wintering areas in late August and early September (NYSDEC [date unknown]).

**Peregrine Falcon.** Peregrine falcon is listed as endangered in New York State. Preferred nesting sites include both natural cliff habitats as well as engineered structures such as bridges and skyscrapers. This species is known to nest on the Jones Beach water tower and forage in a variety of open habitats nearby (Taggart [date unknown]).

**Short-eared Owl.** Short-eared owl (*Asio flammeus*) is listed as endangered in New York State. Preferred habitat includes grasslands and fresh and saltwater marshlands where small mammals are abundant. They are primarily active in the late afternoon, dusk, and dawn (NYSDEC [date unknown]). New York State is both a wintering and breeding location. It is the southernmost edge of the short-eared owl's breeding range, where breeding is rare and limited to the St. Lawrence and Lake Champlain valleys, the Great Lakes Planes, and the marshes of Long Island's south shore. Populations are more common as winter residents. Numbers increase between fall and spring, most likely in search of food sources in the south (NYSDEC [date unknown]). On Long Island, short-eared owls are most seen during the spring and summer in the marshes of Gilgo Beach (Suffolk County) and Jones Beach/Tobay (Nassau County); however, it appears that Long Island has lost nearly all breeding locations.

### Federally and State-Listed Bat Species

The northern long-eared bat is currently listed as threatened under federal and New York State law. Although the range of the northern long-eared bat extends throughout the Northeast, based on BOEM's (2019) Biological Assessment for Vineyard Wind 1, given the rarity of the bat in the region, its ecology, and habitat requirements, it is extremely unlikely that this species would traverse portions of Lease Area OCS-A 0522. Similarly, it is unlikely that eastern small-footed bat (*Myotis leibii*; a New York State species of special concern), little brown bat (*Myotis lucifugus*; a New York State high priority species of greatest conservation need), or tri-colored bat (*Perimyotis subflavus*; a New York State high priority species of greatest conservation need) would encounter the Offshore Wind Generation Facility during migration. The Indiana bat (*Myotis sodalis*) is listed as endangered under federal and New York State law, but its range does not extend to the Lease Area or Long Island.

The northern long-eared bat is expected to be a bat species of greatest concern because the onshore portions of the Project may potentially include northern long-eared bat habitat and their federal status is currently being reviewed.

## **PRESENCE OF FISH, INVERTEBRATES, AND THEIR HABITATS**

Many recently completed studies as well as data from long-term monitoring programs provide information about fish, invertebrates, and benthic habitats (especially rare and unique habitats such as hard bottom seafloor) within the MA WEA, OECC, and surrounding waters. Key data sources by others include, but are not limited to:

- Northeast Fisheries Science Center (NEFSC) multispecies bottom trawl surveys and other databases
- Massachusetts Department of Marine Fisheries (MA DMF) trawl surveys
- Northeast Ocean Data Portal (NEODP)
- Comprehensive Seafloor Substrate Mapping and Model Validation in the New York Bight (Battista et al. 2019)
- SMAST video survey of the western portion of the MA WEA (2013; 2014) and other SMAST databases
- NYSERDA's Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy and Remote Marine and Onshore Technology (ReMOTe)
- NYSERDA's (2017) Fish and Fisheries Study
- NOAA's Fisheries and Endangered Species [Internet] databases and Deep-Sea Coral Data Portal
- Fishery Physical Habitat and Epibenthic Invertebrate Baseline Data Collection (BOEM and NOAA NEFSC—ongoing study)
- Habitat Mapping and Assessment of Northeast Wind Energy Areas (Guida et. al 2017)
- Northeast Area Monitoring and Assessment Program (NEAMAP)
- The Nature Conservancy and SMAST Offshore Video Survey and Oceanographic Analysis: Georges Bank to the Chesapeake (2003-2012) (Bethoney et al. 2015)
- Southern New England Juvenile Fish Habitat Research Study (2017)
- Spatial and Temporal Distributions of Lobsters and Crabs in the Rhode Island/Massachusetts Wind Energy Area (Collie and King 2016)
- Southern New England Industry-Based Yellowtail Flounder Survey (2003-2005) (Valliere 2007)
- BOEM studies and environmental assessments, including:
  - BOEM's (2014) Revised Environmental Assessment for the MA WEA
  - BOEM's (2018a) BOEM's (2018) Vineyard Wind Offshore Wind Energy Project Biological Assessment for NOAA
  - BOEM's (2018b) DEIS for Vineyard Wind 1

- BOEM's (2019) Vineyard Wind Offshore Wind Energy Project Essential Fish Habitat Assessment

In addition to the numerous data sources above, Vineyard Wind has initiated and supported multiple ongoing seasonal fisheries and benthic macroinvertebrate field surveys and studies to characterize baseline conditions in its Lease Areas OCS-A 0522 and OCS-A 0501. These surveys were developed in collaboration with and conducted by fisheries experts and regulatory agencies. The surveys use a range of established survey methods to assess different facets of the regional ecology using accepted protocols that are designed to be compatible with previous data and ongoing regional surveys. The data collection includes:

- Vineyard Wind is already conducting trawl and drop camera surveys in Lease Area OCS-A 0522 in collaboration with the Massachusetts School for Marine Science and Technology (SMAST). Trawl surveys are planned to occur each season (spring, summer, winter, fall) and drop camera surveys are planned to occur twice per year until the start of construction. See Section 13 of the Proposal Narrative for additional details.
- Vineyard Wind is collecting benthic habitat data via surficial and subsurface sonar systems, underwater video, and benthic grab samples as part of its geophysical and geotechnical (G&G) surveys in Lease Area OCS-A 0522. To date, Vineyard Wind has collected 40 benthic grab samples and 25 video transects (300-500 m long) throughout the Lease Area.
- SMAST is also conducting trawl and drop camera surveys in Lease Area OCS-A 0501 and has conducted an American Lobster, Black Sea Bass, Larval Lobster Abundance Survey, and Lobster Tagging Study in the northern portion of Lease Area OCS-A 0501.
- Vineyard Wind partnered with the New England Aquarium to study highly migratory species presence across the MA WEA and RI/MA WEA, with help from the pelagic recreational fleet.
- Vineyard Wind has conducted comprehensive desktop studies of existing literature on fish and invertebrates as well as essential fish habitat (EFH) assessments for Vineyard Wind 1 and Park City Wind.

Through desktop assessments and surveys performed for Vineyard Wind 1 and Park City Wind, Vineyard Wind has developed a strong understanding of fish and invertebrate assemblage as well as temporal and spatial variations in fish, invertebrates, and their habitats in the vicinity of the Project. The following discussion of fish, invertebrates, and their habitats is based on Vineyard Wind's knowledge of nearby Lease Area OCS-A 0501 as well as an initial review of available data for Lease Area OCS-A 0522 and the OECC. The information presented herein is preliminary and will be confirmed and refined through subsequent desktop review, analysis of G&G survey data collected in and near Lease Area OCS-A 0522 and along the OECC, results of ongoing fisheries surveys in the Lease Area, and consultations with state and federal agencies, researchers, and fisheries stakeholders.

A list of the major fish assemblages expected to be found in Lease Area OCS-A 0522 and the OECC is presented in Table 2. Additional information, including federal listing, presence of EFH, habitat association, and fishery importance, is also noted in the table. EFH is designated for 42 species within Lease Area OCS-A 0522 and 46 species within the OECC. No Habitat Areas of Particular Concern (HAPCs) are located within the Offshore Wind Generation Facility site or the OECC.

**Table 2 Major Fish and Invertebrate Species Potentially Occurring in Lease Area OCS-A 0522 and the OECC<sup>1</sup>**

Common Name	Scientific Name	EFH	Listing Status <sup>2</sup>	Commercial/Recreational Importance	Habitat Association
Acadian redfish	<i>Sebastes fasciatus</i>	●		●	Demersal
Alewife	<i>Alosa pseudoharengus</i>		S	●	Pelagic
American conger	<i>Conger oceanicus</i>				Demersal
American eel	<i>Anguilla rostrata</i>			●	Pelagic
American lobster	<i>Homarus americanus</i>			●	Benthic
American plaice	<i>Hippoglossoides platessoides</i>	●			Demersal
American shad	<i>Alosa sapidissima</i>			●	Pelagic
American sand lance	<i>Ammodytes americanus</i>			●	Demersal
Atlantic albacore tuna	<i>Thunnus alalunga</i>	●		●	Pelagic
Atlantic bluefin tuna	<i>Thunnus thynnus</i>	●	S	●	Pelagic
Atlantic butterfish	<i>Peprilus triacanthus</i>	●		●	Demersal / Pelagic
Atlantic cod	<i>Gadus morhua</i>	●		●	Demersal
Atlantic menhaden	<i>Brevoortia tyrannus</i>			●	Pelagic
Atlantic mackerel	<i>Scomber scombrus</i>	●		●	Pelagic
Atlantic skipjack tuna	<i>Katuwonus pelamis</i>	●		●	Pelagic
Atlantic sea herring	<i>Clupea harengus</i>	●		●	Pelagic
Atlantic sea scallop	<i>Placopecten magellanicus</i>			●	Benthic
Atlantic surf clam	<i>Spisula solidissima</i>	●		●	Benthic
Atlantic wolffish	<i>Anarhichas lupus</i>		S		Demersal
Atlantic yellowfin tuna	<i>Thunnus albacares</i>	●		●	Pelagic

Table 2

### Major Fish and Invertebrate Species Potentially Occurring in Lease Area OCS-A 0522 and the OECC<sup>1</sup> (Continued)

Common Name	Scientific Name	EFH	Listing Status <sup>2</sup>	Commercial/ Recreational Importance	Habitat Association
Barndoor skate	<i>Dipturus laevis</i>	●			Demersal
Basking shark	<i>Cetorhinus maximus</i>	●	S		Pelagic
Bay anchovy	<i>Anchoa mitchilli</i>				Pelagic
Bay scallops	<i>Argopecten irradians</i>			●	Benthic
Beardfish	<i>Polymixia lowei</i>				Demersal
Black sea bass	<i>Centropristis striata</i>	●		●	Demersal
Blue Crab	<i>Callinectes sapidus</i>			●	Benthic
Blue mussels	<i>Mytilus edulis</i>			●	Benthic
Blue shark	<i>Prionace glauca</i>	●			Pelagic
Bluefin tuna	<i>Thunnus thynnus</i>			●	Pelagic
Bluefish	<i>Pomatomus saltatrix</i>	●		●	Pelagic
Blueback herring	<i>Alosa aestivalis</i>		S	●	Pelagic
Channeled whelk	<i>Busycotypus canaliculatus</i>			●	Benthic
Cobia	<i>Rachycentron canadum</i>				Pelagic
Common spider crab	<i>Libinia emarginata</i>				Benthic
Common thresher shark	<i>Alopias vulpinus</i>	●			Pelagic
Cunner	<i>Tautogalabrus adspersus</i>			●	Demersal
Cusk	<i>Brosme brosme</i>		C/S	●	Demersal
Dusky shark	<i>Carcharhinus obscurus</i>	●	S		Pelagic
Eastern oyster	<i>Crassostrea virginica</i>			●	Benthic
Fourspot flounder	<i>Hippoglossina oblonga</i>			●	Demersal
Golden tilefish	<i>Lopholatilus chamaeleonticeps</i>			●	Demersal
Gulfstream Flounder	<i>Citharichthys arctifrons</i>				Demersal
Haddock	<i>Melanogrammus aeglefinus</i>	●		●	Demersal
Horseshoe crab	<i>Limulus Polyphemus</i>			●	Benthic
John Dory	<i>Zeus faber</i>				Demersal
Jonah crab	<i>Cancer borealis</i>			●	Benthic
King mackerel	<i>Scomberomorus cavalla</i>				Pelagic
Knobbed whelk	<i>Busycon carica</i>			●	Benthic
Lightning whelk	<i>Busycon contrarium</i>			●	Benthic
Little skate	<i>Leucoraja erinacea</i>			●	Demersal
Longfin squid	<i>Doryteuthis pealeii</i>	●		●	Pelagic
Longhorn sculpin	<i>Myoxocephalus octodecemspinosus</i>				Demersal
Monkfish	<i>Lophius americanus</i>	●		●	Demersal
Northern puffer	<i>Sphoeroides maculatus</i>				Demersal
Northern quahog	<i>Mercenaria mercenaria</i>			●	Benthic
Northern sand lance	<i>Ammodytes dubius</i>			●	Demersal
Northern sea robin	<i>Prionotus carolinus</i>			●	Demersal

**Table 2**

**Major Fish and Invertebrate Species Potentially Occurring in Lease Area OCS-A 0522 and the OECC<sup>1</sup> (Continued)**

Common Name	Scientific Name	EF H	Listing Status <sup>2</sup>	Commercial/ Recreational Importance	Habitat Association
Ocean pout	<i>Macrozoarces americanus</i>	●			Demersal
Ocean quahog	<i>Artica islandica</i>	●		●	Benthic
Pollock	<i>Pollachius pollachius</i>			●	Demersal
Porbeagle shark	<i>Lamna nasus</i>	●	S		Pelagic
Red hake	<i>Urophycis chuss</i>	●		●	Demersal
Rock crab	<i>Cancer irroratus</i>				
Round herring	<i>Etrumeus teres</i>			●	Pelagic
Sand tiger shark	<i>Carcharias taurus</i>	●	S		Pelagic
Sandbar shark	<i>Carcharhinus plumbeus</i>	●			Pelagic
Sea Raven	<i>Hemitripteris americanus</i>				
Scup	<i>Stenotomus chrysops</i>	●		●	Demersal/ Pelagic
Shortfin mako	<i>Isurus oxyrinchus</i>	●		●	Pelagic
Shortfin squid	<i>Illex illecebrosus</i>	●		●	Pelagic
Shortnose greeneye	<i>Chlorophthalmus agassizi</i>				Demersal
Silver hake	<i>Merluccius bilinearis</i>			●	Demersal
Smooth dogfish	<i>Mustelus canis</i>	●		●	Demersal
Spanish mackerel	<i>Scomberomorus maculatus</i>				Pelagic
Spotted hake	<i>Urophycis regius</i>				Demersal
Spiny dogfish	<i>Squalus acanthias</i>	●		●	Demersal
Striped bass	<i>Morone saxatilis</i>			●	Pelagic
Striped searobin	<i>Prionotus evolans</i>				Demersal
Summer flounder	<i>Paralichthys dentatus</i>	●		●	Demersal
Swordfish	<i>Xiphias gladius</i>			●	Pelagic
Tautog	<i>Tautoga onitis</i>			●	Demersal
Thorny skate	<i>Amblyraja radiata</i>	●	S		Demersal
Tiger shark	<i>Galeocerdo cuvier</i>	●			Pelagic
Weakfish	<i>Cynoscion regalis</i>			●	Demersal
White hake	<i>Urophycis tenuis</i>			●	Demersal
White shark	<i>Carcharodon carcharias</i>	●			Pelagic
Windowpane flounder	<i>Scopthalmus aquosus</i>	●		●	Demersal
Winter flounder	<i>Pseudopleuronectes americanus</i>	●		●	Demersal
Winter skate	<i>Leucoraja ocellata</i>			●	Demersal
Witch flounder	<i>Glyptocephalus cynoglossus</i>	●		●	Demersal
Yellowtail flounder	<i>Limanda ferruginea</i>	●		●	Demersal

Notes:

1. BOEM 2014; BOEM 2018b; Rillahan and He 2020a; 2020b.  
C= candidate, S= species of concern, T= threatened, E = endangered

As indicated in the table above, commercially important fish and invertebrate species are likely to occur in and around the Offshore Wind Generation Facility site and surrounding waters.

Based on Rhode Island Department of Environmental Management (RIDEM; 2017) vessel monitoring system (VMS) data from 2011-2016, key commercially important fish and invertebrate species within Lease Area OCS-A 0522 are expected to include: bluefish (*Pomatomus saltatrix*), dogfish, eel, monkfish (*Lophius americanus*), Atlantic cod (*Gadus morhua*), Atlantic pollock (*Pollachius pollachius*), haddock (*Melanogrammus aeglefinus*), redfish (*Sebastes fasciatus*), hakes, scallop, skates, squid, mackerel, butterfish (*Peprilus triacanthus*), flounders, scup (*Stenotomus chrysops*), and black sea bass (*Centropristis striata*). The predominant gear types within the Lease Area are scallop dredge, gill net, and bottom trawl, which likely harvest scallop, hakes, and monkfish (*Lophius americanus*). Monkfish were the only species that had landings from within Lease Area OCS-A 0503 (roughly the same area now called Lease Area OCS-A 0522) during all six years. Jonah crab (*Cancer borealis*) and American lobster (*Homarus americanus*), which are not included in RIDEM (2017), are also commercially important species that are potentially present in the Offshore Wind Generation Facility site and surrounding waters.

Species commercially harvested from habitat similar to the OECC may include: monkfish, scallop, squid, ocean quahog (*Artica islandica*), summer flounder (*Paralichthys dentatus*), black sea bass, Atlantic herring (*Clupea harengus*), golden tilefish (*Lopholatilus chamaeleonticeps*), hake, Atlantic surf clam (*Spisula solidissima*), scup, blue crab (*Callinectes sapidus*), bluefish, menhaden (*Brevoortia tyrannus*), horseshoe crab (*Limulus Polyphemus*), whelks (*Busycon spp.*), Jonah crab, and American lobster. Vineyard Wind will analyze landings data for the OECC to determine which commercial fisheries are most active along the OECC.

Three federally-listed threatened or endangered fish species may occur off the northeast Atlantic coast: shortnose sturgeon (*Acipenser brevirostrum*), Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), and Atlantic salmon (*Salmo salar*). In addition, the following species have been proposed for endangered status and not deemed candidates (or are currently candidates for listing and the status determination has not yet been made): Atlantic bluefin tuna (*Thunnus thynnus*), Atlantic halibut (*Hippoglossus hippoglossus*), Atlantic wolfish (*Anarhichas lupus*), dusky shark (*Carcharhinus obscurus*), porbeagle shark (*Lamna nasus*), rainbow smelt (*Osmerus mordax*), sand tiger shark (*Carcharias taurus*), thorny skate (*Amblyraja radiata*), alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), cusk (*Brosme brosme*), American eel (*Anguilla rostrata*), basking shark (*Cetorhinus maximus*), great hammerhead shark (*Sphyrna mokarran*), and scalloped hammerhead shark (*Sphyrna lewini*). Vineyard Wind will perform a more detailed assessment to determine which of these species may occur within the Offshore Wind Generation Facility site and OECC as part of a future COP.

## REFERENCES

### References for Marine Mammals and Sea Turtles

- [BOEM] Bureau of Ocean Energy Management. 2014. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf Offshore Massachusetts revised environmental assessment. U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. OCS EIS/EIA BOEM 2014-603. <http://www.boem.gov/Revised-MA-EA-2014/>
- [BOEM] Bureau of Ocean Energy Management. 2018a. Vineyard Wind Offshore Wind Energy Project Biological Assessment. National Marine Fisheries Service. <https://www.boem.gov/Vineyard-Draft-NOAA-BA/>
- [BOEM] Bureau of Ocean Energy Management. 2018b. Vineyard Wind Offshore Wind Energy Project Draft Environmental Impact Statement. OCS EIS/EA BOEM 2018-060. US Department of the Interior, Bureau of Ocean Energy Management, Headquarters, Herndon, VA. 478 pp.
- [CeTAP] Cetacean and Turtle Assessment Program, University of Rhode Island. 1982. A Characterization of marine mammals and turtles in the mid- and North Atlantic areas of the US Outer Continental Shelf, final report. Washington, DC: Contract AA551-CT8-48. Bureau of Land Management.
- [DoC] Department of Commerce (US). 2016a. 50 CFR Part 223 and 224: Endangered and Threatened Species; Identification of 14 Distinct Population Segments of the Humpback Whale (*Megaptera novaeangliae*) and Revision of Species-Wide Listing; Final Rule. US Federal Register. p. 62260-62320.
- [FFWCC] Florida Fish and Wildlife Conservation Commission. Index Nesting Beach Survey Totals (1989-2019). 2020. [accessed 2020 May 13]. <https://myfwc.com/research/wildlife/sea-turtles/nesting/beach-survey-totals/>
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2011a. 2010 Annual Report to the Inter-Agency Agreement M10PG00075/0001: A Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the western North Atlantic Ocean.
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2011b. 2011 Annual Report to the Inter-Agency Agreement M10PG00075/0001: A Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the western North Atlantic Ocean.
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2011c. Preliminary summer 2010 regional abundance estimate of loggerhead turtles (*Caretta caretta*) in northwestern Atlantic Ocean continental shelf waters.



- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2012. 2012 Annual Report of a Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the Western North Atlantic Ocean.
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2014a. 2013 Annual Report of a Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the Western North Atlantic Ocean.
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2014b. 2014 Annual Report of a Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the Western North Atlantic Ocean.
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2015. 2015 Annual Report of a Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the Western North Atlantic Ocean - AMAPPS II.
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2016. 2016 Annual Report of a Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the Western North Atlantic Ocean - AMAPPS II.
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2018. 2017 Annual Report of a Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the Western North Atlantic Ocean - AMAPPS II.
- [NEFSC] Northeast Fisheries Science Center, [SEFSC] Southeast Fisheries Science Center. 2019. 2018 Annual Report of a Comprehensive Assessment of Marine Mammal, Marine Turtle, and Seabird Abundance and Spatial Distribution in US Waters of the Western North Atlantic Ocean - AMAPPS II.
- [NMFS] National Marine Fisheries Service. 2018. 2018 Revision to: Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0): Underwater Thresholds for Onset of Permanent and Temporary Threshold Shifts. US Department of Commerce, NOAA. NOAA Technical Memorandum NMFS-OPR-59. p. 167.
- [NOAA Fisheries] National Oceanic and Atmospheric Administration Fisheries. 2010. Final recovery plan for the sperm whale (*Physeter macrocephalus*). Silver Spring, MD, USA: National Marine Fisheries Service.

- [NOAA Fisheries] National Oceanic and Atmospheric Administration Fisheries. Critical Habitat for Loggerhead Sea Turtle. 2018a. [accessed 2020 Aug 27]. <https://www.fisheries.noaa.gov/action/critical-habitat-loggerhead-sea-turtle>
- [NOAA Fisheries] National Oceanic and Atmospheric Administration Fisheries. Sei Whale (*Balaenoptera borealis*) overview. 2018b. [accessed 2018 Jul 24]. <https://www.fisheries.noaa.gov/species/sei-whale>
- [NOAA Fisheries] National Oceanic and Atmospheric Administration Fisheries. Glossary: Marine Mammal Protection Act. 2019a. [accessed 2020 Apr 21].
- [NOAA Fisheries] National Oceanic and Atmospheric Administration Fisheries. Marine Mammal Stock Assessments. 2019b. [accessed 2020 Feb 26]. <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments>
- [NOAA Fisheries] National Oceanic and Atmospheric Administration Fisheries. 2017-2020 North Atlantic Right Whale Unusual Mortality Event. 2020. Office of Protected Resources; [accessed 2020 March 20]. <https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2020-north-atlantic-right-whale-unusual-mortality-event>
- [NYSDEC] New York State Department of Environmental Conservation. 2015. List of Endangered, Threatened and Special Concern Fish & Wildlife Species of New York State. <https://www.dec.ny.gov/animals/7494.html#Authority>
- [NYSDEC] New York State Department of Environmental Conservation. [date unknown]. New York Bight Whale Monitoring Program. [accessed 2020 August 27]. <https://www.dec.ny.gov/lands/113647.html>
- [TEWG] Turtle Expert Working Group. 2007. An assessment of the leatherback turtle population in the Atlantic Ocean. NOAA Technical Memorandum NMFS-SEFSC-555.
- [USFWS] United States Fish and Wildlife Service. 2014. West Indian Manatee (*Trichechus manatus*). Florida Stock (Florida subspecies, *Trichechus manatus latirostris*). <https://www.fws.gov/ecological-services/es-library/pdfs/West-Indian-Manatee-FL-Final-SAR.pdf>
- Andersen L, Olsen MT. 2010. Distribution and population structure of North Atlantic harbour seals (*Phoca vitulina*). NAMMCO Scientific Publications. 8:15-35.
- Barlas ME. 1999. The distribution and abundance of harbor seals (*Phoca vitulina concolor*) and gray seals (*Halichoerus grypus*) in southern New England, winter 1998-summer 1999. Boston University.

- Bellmann MA. 2014. Overview of existing noise mitigation systems for reducing pile-driving noise. Paper presented at: Inter-noise2014. Melbourne, Australia.
- Bellmann MA, May A, Wendt T, Gerlach S, Remmers P, and Brinkmann J. 2020. Unterwasserschall während des Impulsrammverfahrens: Einflussfaktoren auf Rammschall und technische Möglichkeiten zur Einhaltung von Lärmschutzwerten. Report by itap GmbH, Oldenburg, Germany. [https://www.itap.de/media/erfahrungsbericht\\_rammschall\\_era-bericht\\_.pdf](https://www.itap.de/media/erfahrungsbericht_rammschall_era-bericht_.pdf).
- Bevan E, Wibbels T, Najera BMZ, Sarti L, Martinez FI, Cuevas JM, Gallaway BJ, Pena LJ, Burchfield PM. 2016. Estimating the historic size and current status of the Kemp's ridley sea turtle (*Lepidochelys kempii*) population. *Ecosphere*. 7(3):e01244.
- Christopherson A, Lundberg J. 2013. Underwater Sound Attenuation in Construction Projects: Applying Science to Pile Driving Permits. Deep Foundations Institute. Article #1629. OneMine.org.
- Cipriano F. 2002. Atlantic white-sided dolphin. In: Perrin WF, Wursig B, Thewissen JGM, editors. *Encyclopedia of marine mammals*. San Diego, CA: Academic Press. p. 49-51.
- Dodge KD, Prescott R, Lewis D, Murle D, Merigo C. 2007. A review of cold-stun strandings on Cape Cod Massachusetts from 1979-2003. Paper presented at: 24th Annual Symposium on Sea Turtle Biology and Conservation NOAA Tech Memor NMFS-SEFSC-567. San Jose, Costa Rica.
- Ecology and Environment Engineering. 2017. New York State Offshore Wind Master Plan Marine Mammals and Sea Turtles Study: Final Report. Prepared for New York State Energy Research and Development Authority. NYSERDA Report 17-25 L. <https://www.nysERDA.ny.gov/-/media/Files/Publications/Research/Biomass-Solar-Wind/Master-Plan/17-25L-Marine-Mammals-and-Sea-Turtles-Study.pdf>
- Epsilon Associates. 2020. Vineyard Wind Construction and Operations Plan. Prepared for Vineyard Wind 1.
- Hain JHW, Ratnaswamy MJ, Kenney RD, Winn HE. 1992. The fin whale, *Balaenoptera physalus*, in waters of the northeastern United States continental shelf. *Rep Int Whal Commn*. 42, 653-669.
- Halpin PN, Read AJ, Fujioka E, Best BD, Donnelly B, Hazen LJ, Kot C, Urian K, LaBrecque E, Dimatteo A et al. 2009. OBIS-SEAMAP: The world data center for marine mammal, sea bird, and sea turtle distributions. *Oceanography*. 22(2):104-115.
- Haug T, Hammill M, Olafsdóttir D. 2013. Introduction. Grey seals in the North Atlantic and the Baltic. NAMMCO Scientific Publications. p. 7-12.

- Hayes SA, Josephson E, Maze-Foley K, Rosel PE. 2017. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments–2016 (second edition). Woods Hole, MA, USA: NOAA Technical Memorandum NMFS-NE-241.
- Hayes SA, Josephson E, Maze-Foley K, Rosel PE. 2018. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments–2017 (second edition). Woods Hole, MA, USA: NOAA Technical Memorandum NMFS-NE-245.
- Hayes SA, Josephson E, Maze-Foley K, Rosel PE. 2019. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments–2018. Woods Hole, MA, USA: NOAA Technical Memorandum NMFS-NE-258.
- Jefferson TA, Webber MA, Pitman RL. 2008. Marine Mammals of the World, A Comprehensive Guide to their Identification. Amsterdam: Elsevier.
- Jefferson TA, Weir CR, Anderson RC, Ballance LT, Kenney RD, Kiszka JJ. 2014. Global distribution of Risso's dolphin *Grampus griseus*: A review and critical evaluation. *Mammal Review*. 44(1):56-68.
- Kenney RD, Vigness-Raposa KJ. 2009. Marine Mammals and Sea Turtles of Narragansett Bay, Block Island Sound, Rhode Island Sound, and Nearby Waters: An Analysis of Existing Data for the Rhode Island Ocean Special Area Management Plan: Draft Technical Report. University of Rhode Island.
- Kenney RD, Vigness-Raposa KJ. 2010. Marine mammals and sea turtles of Narragansett Bay, Block Island Sound, Rhode Island Sound, and nearby waters: An analysis of existing data for the Rhode Island Ocean Special Area Management Plan. RICRMC (Rhode Island Coastal Resources Management Council) Ocean Special Area Management Plan (SAMP) Appendix A: Technical Reports for the Rhode Island Ocean Special Area Management Plan. p. 705-1042.
- Knowlton AR, Kraus SD. 2001. Mortality and serious injury of northern right whales (*Eubalaena glacialis*) in the western North Atlantic Ocean. *J Cetacean Res Manage*. 2(Special Issue):193-208.
- Kraus SD, Brown MW, Caswell H, Clark CW, Fujiwara M, Hamilton PK, Kenney RD, Knowlton AR, Landry S, Mayo CA et al. 2005. North Atlantic Right Whales in Crisis. *Science*. 309(5734):561-562.

- Kraus SD, Leiter S, Stone K, Wikgren B, Mayo CA, Hughes P, Kenney RD, Clark CW, Rice AN, Estabrook BJ et al. 2016. Northeast Large Pelagic Survey Collaborative Aerial and Acoustic Surveys for Large Whales and Sea Turtles. Sterling, Virginia: US Department of the Interior, Bureau of Ocean Energy Management. OCS Study BOEM 2016-054.
- LaBrecque E, Curtice C, Harrison J, Van Parijs SM, Halpin PN. 2015. 2. Biologically Important Areas for cetaceans within U.S. waters - East coast region. *Aquat Mamm.* 41(1):17-29.
- Normandeau Associates and APEM. 2019. Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy. Data prepared for New York State Energy Research and Development Authority.  
[https://remote.normandeau.com/portal\\_data.php?pj=6&public=1](https://remote.normandeau.com/portal_data.php?pj=6&public=1)
- Pace RM, III, Corkeron PJ, Kraus SD. 2017. State-space mark-recapture estimates reveal a recent decline in abundance of North Atlantic right whales. *Ecol Evol.* 7(21):8730-8741.
- Palka DL, Chavez-Rosales S, Josephson E, Cholewiak DM, Haas HL, Garrison LP, Jones M, Sigourney D, Waring GT, Jech M et al. 2017. Atlantic Marine Assessment Program for Protected Species: 2010-2014. Washington, DC: US Department of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region. OCS Study BOEM 2017-071.
- Payne PM, Selzer LA. 1989. The distribution, abundance, and selected prey of the harbor seal, *Phoca vitulina concolor*, in southern New England. *Mar Mamm Sci.* 5(2):173-192.
- Pettis HM, Pace RM, III, Hamilton PK. 2020. North Atlantic Right Whale Consortium 2019 Annual Report Card.
- Pettis HM, Pace RM, III, Schick RS, Hamilton PK. 2017. North Atlantic Right Whale Consortium 2017 Annual Report Card.
- Reinhall PG, Dardis T, Dahl PH. 2015. Underwater Noise Reduction of Marine Pile Driving Using a Double Pile. Washington State Transportation Center, Office of Research & Library Services.
- RI Ocean SAMP. 2011. Rhode Island Ocean Special Area Management Plan: OCEANSAMP. Adopted by the Rhode Island Coastal Resources Management Council, October 19, 2010.
- Richardson DT, Rough V. 1993. A field guide to whales, porpoises, and seals from Cape Cod to Newfoundland. Washington: Smithsonian Institution Press.
- Roberts JJ, Best BD, Mannocci L, Fujioka E, Halpin PN, Palka DL, Garrison LP, Mullin KD, Cole TVN, Khan CB et al. 2016a. Habitat-based cetacean density models for the U.S. Atlantic and Gulf of Mexico. *Sci Rep.* 6.

- Roberts JJ, Best BD, Mannocci L, Halpin PN, Palka DL, Garrison LP, Mullin KD, Cole TVN, McLellan WM. 2015. Density Model for Seals (Phocidae) Along the U.S. East Coast, Preliminary Results. Durham, NC: Version 3.2. Marine Geospatial Ecology Lab, Duke University.
- Roberts JJ, Mannocci L, Halpin PN. 2016b. Final Project Report: Marine Species Density Data Gap Assessments and Update for the AFTT Study Area, 2015-2016 (Base Year). Durham, NC, USA: Version 1.0. Report by the Duke University Marine Geospatial Ecology Lab for Naval Facilities Engineering Command, Atlantic
- Roberts JJ, Mannocci L, Halpin PN. 2017. Final Project Report: Marine Species Density Data Gap Assessments and Update for the AFTT Study Area, 2016-2017 (Opt. Year 1). Durham, NC, USA: Version 1.4. Report by Duke University Marine Geospatial Ecology Lab for Naval Facilities Engineering Command, Atlantic.
- Roberts JJ, Mannocci L, Schick RS, Halpin PN. 2018. Final Project Report: Marine Species Density Data Gap Assessments and Update for the AFTT Study Area, 2017-2018 (Opt. Year 2). Durham, NC, USA: Version 1.2. Report by the Duke University Marine Geospatial Ecology Lab for Naval Facilities Engineering Command, Atlantic
- Roberts JJ, Schick RS, Halpin PN. 2020. Final Project Report: Marine Species Density Data Gap Assessments and Update for the AFTT Study Area, 2018-2020 (Option Year 3). Document version 1.4. Report prepared for Naval Facilities Engineering Command, Atlantic by the Duke University Marine Geospatial Ecology Lab, Durham, NC.
- Sadove, S. S. and P. Cardinale. 1993. Species composition and distribution of marine mammals and sea turtles in the New York Bight. Final Report to U.S. Dept. of the Interior, Fish and Wildlife Service Southern New England-New York Bight Coastal Fisheries Project. Charlestown, RI.
- Schneider DC, Payne PM. 1983. Factors affecting haul-out of harbor seals at a site in southeastern Massachusetts. *J Mammal.* 64(3):518-520.
- Schroeder CL. 2000. Population status and distribution of the harbor seal in Rhode Island waters. [Narragansett, RI]: University of Rhode Island.
- Scott TM, Sadove SS. 1997. Sperm whale, *Physeter macrocephalus*, sightings in the shallow shelf waters off Long Island, New York. *Mar Mamm Sci.* 13(2):317-321.
- Sergeant DE. 1977. Stocks of fin whales (*Balaenoptera physalus* L.) in the North Atlantic Ocean. *Reports of the International Whaling Commission.* 27:460-473.
- Sutcliffe MH, Brodie PF. 1977. Whale distributions in Nova Scotia waters. Fisheries and Marine Service Technical Report No. 722.

- Temte JL, Bigg MA, Wiig Ø. 1991. Clines revisited: The timing of pupping in the harbour seal (*Phoca vitulina*). *Journal of Zoology*. 224(4):617-632.
- Tetra Tech and LGL. 2020. Final Comprehensive Report for New York Bight Whale Monitoring Aerial Surveys, March 2017 - February 2020. Technical report prepared by Tetra Tech, Inc. and LGL Ecological Research Associates, Inc. 211 pp. + appendices. Prepared for New York State Department of Environmental Conservation, Division of Marine Resources, East Setauket, NY. May 18, 2020.
- Waring GT, Josephson E, Maze-Foley K, Rosel PE. 2011. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments–2010. Woods Hole, MA, USA: NOAA Technical Memorandum NMFS-NE-219.
- Waring GT, Josephson E, Maze-Foley K, Rosel PE. 2013. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments–2012. Woods Hole, MA, USA: NOAA Technical Memorandum NMFS-NE-223.
- Waring GT, Josephson E, Maze-Foley K, Rosel PE. 2015. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments–2014. Woods Hole, MA, USA: NOAA Technical Memorandum NMFS-NE-232.
- Waring GT, Josephson E, Maze-Foley K, Rosel PE. 2016. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments–2015. Woods Hole, MA, USA: NOAA Technical Memorandum NMFS-NE-238.
- Whitehead H. 2002. Estimates of the current population size and historical trajectory for sperm whales. *Mar Ecol Prog Ser*. 242:295-304.
- Whitt AD, Dudzinski K, Laliberté JR. 2013. North Atlantic right whale distribution and seasonal occurrence in nearshore waters off New Jersey, USA, and implications for management. *Endanger Species Res*. 20(1):59-69.

### References for Birds and Bats

- [BOEM] Bureau of Ocean Energy Management. 2014. Commercial wind lease issuance and site assessment activities on the Atlantic Outer Continental Shelf Offshore Massachusetts revised environmental assessment. U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. OCS EIS/EIA BOEM 2014-603. <http://www.boem.gov/Revised-MA-EA-2014/>

- [BOEM] Bureau of Ocean Energy Management. 2016. Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore New York. U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs. OCS EIS/EA BOEM 2016-042 <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/NY/NY-Public-EA-June-2016.pdf>
- [BOEM] Bureau of Ocean Energy Management. 2018. Vineyard Wind Offshore Wind Energy Project Draft Environmental Impact Statement. OCS EIS/EA BOEM 2018-060. US Department of the Interior, Bureau of Ocean Energy Management, Headquarters, Herndon, VA. 478 pp.
- [BOEM] Bureau of Ocean Energy Management. 2019. Vineyard Wind Offshore Wind Energy Project Biological Assessment: Final. For the US Fish and Wildlife Service. [https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Vineyard-Wind/Vineyard\\_Draft-USFWS-BA\\_Final.pdf](https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Vineyard-Wind/Vineyard_Draft-USFWS-BA_Final.pdf)
- [NYSDEC] New York State Department of Environmental Conservation. [date unknown]. Black Skimmer. [accessed 2020 September 11]. <https://www.dec.ny.gov/animals/79513.html>
- [NYSDEC] New York State Department of Environmental Conservation. [date unknown]. Common Tern. [accessed 2020 September 11]. <https://www.dec.ny.gov/animals/7100.html>
- [NYSDEC] New York State Department of Environmental Conservation. [date unknown]. Least Tern. [accessed 2020 September 11]. <https://www.dec.ny.gov/animals/7094.html>
- [NYSDEC] New York State Department of Environmental Conservation. [date unknown]. Short-eared Owl. [accessed 2020 September 11]. <https://www.dec.ny.gov/animals/7080.html>
- [USFWS] United States Fish and Wildlife Service. 2015. Status of the Species - Red Knot.
- [USFWS] United States Fish and Wildlife Service. 2010. Caribbean Roseate Tern and North Atlantic Roseate Tern (*Sterna dougallii dougallii*) 5-Year Review: Summary and Evaluation.
- [USFWS] United States Fish and Wildlife Service. 2018. Piping Plover. New Jersey Field Office. <https://www.fws.gov/northeast/njfieldoffice/endangered/plover.html>
- Audubon. [date unknown]. Important Bird Areas West Hempstead Bay/Jones Beach West New York. [accessed 2020 September 9]. <https://www.audubon.org/important-bird-areas/west-hempstead-bayjones-beach-west>
- Baker A, Gonzalez P, Morrison RIG, Harrington BA. 2013. Red Knot (*Calidris canutus*). In: Rodewald PG, editor. The Birds of North America. Ithaca, New York: Cornell Lab of Ornithology.



- Burger J, Gordon C, Lawrence J, Newman J, Forcey G, Vlietstra L. 2011. Risk evaluation for federally listed (roseate tern, piping plover) or candidate (red knot) bird species in offshore waters: A first step for managing the potential impacts of wind facility development on the Atlantic Outer Continental Shelf. *Renew Energy*. 36(1):338-351. doi:10.1016/j.renene.2010.06.048.
- Curtice C, Cleary J, Scumchenia E, Halpin PN. 2019. Marine-life Data and Analysis Team (MDAT) technical report on the methods and development of marine-life data to support regional ocean planning and management. Prepared on behalf of the Marine-life Data and Analysis Team (MDAT). <http://seamap.env.duke.edu/models/mdat/MDAT-Technical-Report.pdf>
- Ecology and Environment Engineering. 2017a. New York State Offshore Wind Master Plan Birds and Bats Study: Final Report. Prepared for New York State Energy Research and Development Authority. NYSERDA Report 17-25d. <https://www.nyserdera.ny.gov/-/media/Files/Publications/Research/Biomass-Solar-Wind/Master-Plan/17-25d-OSW-Birds-and-Bats.pdf>
- Ecology and Environment Engineering. 2017b. New York State Offshore Wind Master Plan Cable Landfall Permitting Study: Final Report. Prepared for New York State Energy Research and Development Authority. NYSERDA Report 17-25e. <https://www.nyserdera.ny.gov/-/media/Files/Publications/Research/Biomass-Solar-Wind/Master-Plan/17-25e-OSW-Cable-Landfall-Permitting-Study.pdf>
- Elliott-Smith E, Haig SM. 2004. Piping Plover (*Charadrius melodus*). In: Rodewald PG, editor. *The Birds of North America*. Ithaca, New York: Cornell Lab of Ornithology.
- Epsilon Associates. 2020. Vineyard Wind Construction and Operations Plan. Prepared for Vineyard Wind 1.
- Haney JC. 1987. Aspects of the pelagic ecology and behavior of the Black-capped Petrel (*Pterodroma hasitata*). *Wilson Bull*. 99(2):153-168.
- Kinlan BP, Winship AJ, White TP, Christensen J. 2016. Modeling at-sea occurrence and abundance of marine birds to support Atlantic marine renewable energy planning: Phase I report. OCS Study BOEM 2016-039. Sterling, VA. 113 pp.
- Lee DS. 2000. Status and Conservation Priorities for Black-capped Petrels in the West Indies. In: Schreiber EA, Lee DS, editors. *Status and Conservation of West Indian Seabirds*. Special Pu. Ruston, LA: Society of Caribbean Ornithology. p. 11-18.
- Loring P, Goyert H, Griffin C, Sievert P, Paton P. 2017. Tracking Movements of Common Terns, Endangered Roseate Terns, and Threatened Piping Plovers in the Northwest Atlantic. 2017 Annual Report to the Bureau of Ocean Energy Management. US Fish and Wildlife Service, Hadley, MA. 134 pp.

- Loring P, McLaren J, Smith P, Niles L, Koch S, Goyert H, Bai H. 2018. Tracking movements of threatened migratory rufa Red Knots in U.S. Atlantic Outer Continental Shelf waters. Sterling (VA): US Department of the Interior, Bureau of Ocean Energy Management. OCS Study BOEM 2018-046. 145 p.
- Loring PHP, Paton PWCP, McLaren JDJ, Bai H, Janaswamy R, Goyert HHF, Griffin CCR, Sievert PPR. 2019. Tracking Offshore Occurrence of Common Terns, Endangered Roseate Terns, and Threatened Piping Plovers with VHF Arrays. US Department of the Interior, Bureau of Ocean Energy Management, Sterling, Virginia. OCS Study BOEM 2019-017. 140 pp.: US Department of the Interior, Bureau of Ocean Energy Management. [https://espis.boem.gov/final-reports/BOEM\\_2019-017.pdf](https://espis.boem.gov/final-reports/BOEM_2019-017.pdf)
- Mostello CS, Walker K, Veinotte A, Longsdorf J. 2019. Inventory of Terns, Laughing Gulls, and Black Skimmers Nesting in Massachusetts in 2017. Massachusetts Division of Fisheries & Wildlife.
- New York Natural Heritage Program. 2020a. Online Conservation Guide for *Sterna hirundo*. [assessed 2020 September 11]. <https://guides.nynhp.org/common-tern/>
- New York Natural Heritage Program. 2020b. Online Conservation Guide for *Sterna forsteri*. [assessed 2020 September 11]. <https://guides.nynhp.org/forsters-tern/>
- Nisbet ICT, Gochfeld M, Burger J. 2014. Roseate Tern (*Sterna dougallii*). Poole A, editor. Ithaca, New York: Cornell Lab of Ornithology.
- Normandeau Associates and APEM. 2019. Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy. Data prepared for New York State Energy Research and Development Authority. [https://remote.normandeau.com/portal\\_data.php?pj=6&public=1](https://remote.normandeau.com/portal_data.php?pj=6&public=1)
- O'Connell AF, Gardner AT, Gilbert AT, Laurent K. 2009. Compendium of Avian Occurrence Information for the Continental Shelf Waters along the Atlantic Coast of the United States, Final Report (Database Section - Seabirds). OCS Study BOEM 2012-076. Prepared by the USGS Patuxent Wildlife Research Center, Beltsville, MD. U.S. Department of the Interior, Geological Survey, and Bureau of Ocean Energy Management Headquarters. 362 pp. <http://www.gomr.boemre.gov/homepg/espis/espismaster.asp?appid=1>
- Simons TR, Lee DS, Hanley JC. 2013. Diablotin (*Pterodroma hasitata*): A biography of the endangered Black-capped Petrel. *Mar Ornithol.* 41(Special Issue):S3-S43.
- Spiegel CS, Berlin AM, Gilbert AT, Gray CO, Montevecchi WA, Stenhouse IJ, Ford SL, Olsen GH, Fiely JL, SavoyL, Goodale MW, Burke CM. 2017. Determining fine-scale use and movement patterns of diving bird species in federal waters of the Mid-Atlantic United States using satellite telemetry. [Online.] Available at <https://www.boem.gov/espis/5/5635.pdf>.

- Stenhouse IJ, Berlin AM, Gilbert AT, Goodale MW, Gray CE, Montevecchi WA, Savoy L, Spiegel CS. 2020. Assessing the exposure of three diving bird species to offshore wind areas on the U.S. Atlantic Outer Continental Shelf using satellite telemetry. *Divers Distrib* 2020; 00: 1- 12. <https://doi.org/10.1111/ddi.13168>
- Taggart D. [date unknown]. Long Island Wildlife Bird of the Week: Peregrine Falcon. [accessed 2020 September 11]. <https://fireislandandbeyond.com/long-island-wildlife-bird-week-peregrine-falcon/>?
- Veit RR, Goyert HF, White TP, Martin M-C, Manne LL, Gilbert A. 2015. Pelagic Seabirds off the East Coast of the United States 2008-2013. US Dept. of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs, Sterling, VA. OCS Study BOEM 2015-024. 186 pp.
- Veit RR, White TP, Perkins SA, Curley S. 2016. Abundance and Distribution of Seabirds off Southeastern Massachusetts, 2011-2015: Final Report. OCS Study. Sterling, Virginia: U.S. Department of the Interior, Bureau of Ocean Energy Management.
- Winship AJ, Kinlan BP, White TP, Leirness JB, Christensen T. 2018. Modeling At-Sea Density of Marine Birds to Support Atlantic Marine Renewable Energy Planning: Final Report. OCS Study BOEM 2018-010. Sterling, VA. 67 pp. [https://coastalscience.noaa.gov/data\\_reports/modeling-at-sea-density-of-marine-birds-to-support-atlantic-marine-renewable-energy-planning-final-report/](https://coastalscience.noaa.gov/data_reports/modeling-at-sea-density-of-marine-birds-to-support-atlantic-marine-renewable-energy-planning-final-report/)

### References for Fish and Invertebrates

- [BOEM] Bureau of Ocean Energy Management. 2013. Guidelines for Providing Information on Fisheries for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585.
- [BOEM] Bureau of Ocean Energy Management. 2014. Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts: Revised Environmental Assessment. OCS EIS/EA BOEM 2014-603. US Department of the Interior, Bureau of Ocean Energy Management, Herndon, VA. 674 pp. <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Revised-MA-EA-2014.pdf>
- [BOEM] Bureau of Ocean Energy Management. 2018a. Vineyard Wind Offshore Wind Energy Project Biological Assessment. National Marine Fisheries Service. <https://www.boem.gov/Vineyard-Draft-NOAA-BA/>
- [BOEM] Bureau of Ocean Energy Management. 2018b. Vineyard Wind Offshore Wind Energy Project Draft Environmental Impact Statement. OCS EIS/EA BOEM 2018-060. US Department of the Interior, Bureau of Ocean Energy Management, Headquarters, Herndon, VA. 478 pp.

- [BOEM] Bureau of Ocean Energy Management. 2019. Vineyard Wind Offshore Wind Energy Project Essential Fish Habitat Assessment. [https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Vineyard-Wind/Vineyard\\_EFH\\_2019\\_04\\_19\\_Final\\_posted.pdf](https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/MA/Vineyard-Wind/Vineyard_EFH_2019_04_19_Final_posted.pdf)
- [NEODP] Northeast Ocean Data Portal [Internet]. 2020. Northeast Ocean Data: Maps and Data for Ocean Planning in the Northeastern United States. <http://www.northeastoceandata.org/data-explorer/>
- [NOAA] National Oceanic and Atmospheric Administration [Internet]. NOAA Deep-Sea Coral Data Portal. NOAA's Deep Sea Coral Research and Technology Program (DSCRTP). 2019. <https://deepseacoraldata.noaa.gov/website/AGSViewers/DeepSeaCorals/mapSites.htm>
- [RIDEM] Rhode Island Department of Environmental Management, [DMF] Division of Marine Fisheries. 2017. Spatiotemporal and economic analysis of vessel monitoring system data within wind energy areas in the Greater North Atlantic. [http://www.dem.ri.gov/programs/bnatres/fishwild/pdf/RIDEM\\_VMS\\_Report\\_2017.pdf](http://www.dem.ri.gov/programs/bnatres/fishwild/pdf/RIDEM_VMS_Report_2017.pdf)
- Battista, Sautter TW, Poti M, Ebert E, Kracker L, Kraus J, Mabrouk A, Williams B, Dorfman DS, Husted R, Jenkins CJ. 2019. Comprehensive Seafloor Substrate Mapping and Model Validation in the New York Bight. NOAA Technical Memorandum NOS NCCOS 255 and BOEM OCS Study 2019-069. Silver Spring, MD. 187 pp. doi:10.25923/yys0-aa98
- Bethoney D, Kleisner K, Anderson M, Chen C, Harris B, McGee S, McGuire C, Moret S, Odell J, Stokesbury K, Zhao L (SMAST). 2015. Offshore Video Survey and Oceanographic Analysis: Georges Bank to the Chesapeake. SMAST. <https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reportsdata/marine/otherprojects/Pages/SMAST.aspx>
- Collie JS, King. 2016. Spatial and Temporal Distributions of Lobsters and Crabs in the Rhode Island/Massachusetts Wind Energy Area. Bureau of Ocean Energy Management. OCS Study BOEM 2016-073. <https://www.boem.gov/Spatial-and-Temporal-Distributions/>
- Guida V, Drohan A, Welch H, McHenry J, Johnson D, Kentner V, Brink J, Timmons D, Estela-Gomez E. 2017. Habitat Mapping and Assessment of Northeast Wind Energy Areas. Sterling, VA: US Department of the Interior, Bureau of Ocean Energy Management. OCS Study BOEM 2017-088. 312 p.
- Normandeau Associates and APEM. 2019. Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy. Data prepared for New York State Energy Research and Development Authority. [https://remote.normandeau.com/portal\\_data.php?pj=6&public=1](https://remote.normandeau.com/portal_data.php?pj=6&public=1)

- Siemann L, Smolowitz R. 2017. Southern New England Juvenile Fish Habitat Research Paper. Bureau of Ocean Energy Management. OCS Study BOEM 2017-028. <https://www.boem.gov/ESPIS/5/5592.pdf>
- Stokesbury, KDE (SMAST). 2013. S Mast video survey of Western portion of the offshore Windfarm area. University of Massachusetts Dartmouth. Final Report. 13 p.
- Stokesbury, KDE. 2014. S Mast video survey of Western portion of the offshore Windfarm area. University of Massachusetts Dartmouth. Final Report. 18 pp.
- Valliere A, Pierce S. 2007. Southern New England industry-based yellowtail flounder survey: pilot study report. National Marine Fisheries Service. <http://www.dem.ri.gov/programs/bnatres/fishwild/pdf/ytibsrpt.pdf>



# VINEYARD WIND

**Attachment To:**

**Section 14 of the Proposal Narrative - Environmental Mitigation Plan**

**ATTACHMENT 14-2**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-1**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-2**

**REDACTED**





# VINEYARD WIND

**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-3**

**REDACTED**



**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-4**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-5**

**REDACTED**



**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-6: VINEYARD WIND IN THE MEDIA**



# VINEYARD WIND

## Media Coverage

1. **Energy Global:** [Challenge participants announced by Greentown Labs and Vineyard Wind](#)  
August 20, 2020
2. **Cape Cod Broadcast Media:** [Two Cape Lawmakers call for Vineyard wind Proposal Approval](#)  
July 23, 2020
3. **ecoRI:** [Island Residents Express Support for Vineyard Wind](#)  
July 13, 2020
4. **North American Windpower:** [Vineyard Wind Offshore Development Garner Public support](#)  
July 9, 2020
5. **Martha's Vineyard Times:** [Vineyard Wind Sails Forward](#)  
July 21, 2020
6. **Workboat:** [Support for 1-mile offshore wind turbine spacing in BOEM's first 'virtual' public hearing](#)  
June 29, 2020
7. **WindTech International:** [Vineyard Wind files PPA for its Park City offshore wind project](#)  
May 27 2020
8. **SouthCoast Today:** [Vineyard Wind launches boat from New Bedford to do geotechnical surveys](#)  
May 20, 2020
9. **Greentech Media:** [Vineyard Wind's Permitting On Track Despite Coronavirus, BOEM Says](#)  
April 21, 2020
10. **The Barnstable Patriot:** [YMCA receives \\$20K from Cape Cod Foundation; nine other Cape nonprofits given \\$10K each](#)  
April 21, 2020

11. **CT Examiner:** [Vineyard Wind Biologist Talks Common Ground with Fishing Industry](#)  
February 21, 2020
12. **WGBH:** [Right Whale Protection At Heart Of New Vineyard Wind Partnership](#)  
February 20, 2020
13. **Cape Cod Today:** [Leading Marine Mammal Acoustic Expert joins Vineyard Wind](#)  
February 3, 2020
14. **CT Insider:** [Park City Wind job creation in Bridgeport modest but focused on long-term](#)  
December 21, 2019
15. **Recharge:** [Vineyard lands Connecticut offshore wind bid with Park City](#)  
December 8, 2019
16. **SouthCoast Today:** [Port of New Bedford gets \\$50,000 from Vineyard Wind](#)  
November 25, 2019
17. **Riviera Maritime Media:** [New England leaseholders adopt common approach to allay concerns](#)  
November 19, 2019
18. **Offshore Wind biz:** [Vineyard Wind Appoints Fisheries Liaison for Connecticut](#)  
October 28, 2019
19. **Riviera Maritime Media:** [Vineyard Wind project the focus for Massachusetts training facility](#)  
October 28, 2019
20. **North American Wind Power:** [Vineyard Wind To Partner With CT Manufacturer For Offshore Components](#)  
October 21, 2019
21. **Cape Cod Times:** [Vineyard Wind project gains bipartisan support from federal lawmakers](#)  
August 20, 2019
22. **Cape Cod Times:** [Community Leaders rally for Action on federal permit for Vineyard Wind](#)  
August 15, 2019
23. **Utility Dive:** [Vineyard Wind shareholders commit to Mass. Offshore wind project despite federal delays](#)  
August 13, 2019

24. **Associated Press:** [Vineyard Wind CEO says company remains committed to project](#)  
August 12, 2019
25. **Windpower:** [Vineyard Wind offers interns project management & business experience in offshore wind](#)  
August 5, 2019
26. **The Herald News:** [Baker eyeing 'cure plan' for Vineyard Wind project](#)  
July 29, 2019
27. **Energy News Network:** [Scientists say Vineyard wind project poses little risk to endangered whales](#)  
July 29, 2019
28. **Windpower:** [Vineyard Wind gains approval for Cape Cod Transmission](#)  
July 23, 2019
29. **SouthCoast Today:** [On board survey ship Geobay, crew tests Vineyard Wind seabed](#)  
July 1, 2019
30. **Cape Cod Times:** [Vineyard Wind moves turbines to aid fishing vessels](#)  
June 24, 2019
31. **Windpower:** [Vineyard Wind celebrates opening of Boston office](#)  
June 19, 2019
32. **Wicked Local Orleans:** [Training an offshore wind workforce](#)  
June 10, 2019
33. **Patch:** [Vineyard Wind Praises Historic Wind Legislation](#)  
June 9, 2019
34. **Cape Cod Times:** [Vineyard Wind seeks proposals for whale-detection technology](#)  
May 21, 2019
35. **SouthCoast Today:** [Offshore wind project wins OKs for transmissions](#)  
May 9, 2019

36. **Vineyard Gazette:** [MVC approves undersea cable for Vineyard Wind](#)  
May 4, 2019
37. **Wired:** [Offshore wind farms are spinning up in the US- at last](#)  
April 17, 2019
38. **Cape Cod Times:** [DPU approves Vineyard Wind contracts](#)  
April 17, 2019
39. **Cape Cod Times:** [Vineyard Wind commits to fisheries monitoring](#)  
April 7, 2019
40. **MV Times:** [Vineyard Wind and R.I. strike bargain](#)  
March 4, 2019
41. **MV Times:** [Overwhelming support for Vineyard Wind at hearing](#)  
February 13, 2019
42. **SouthCoast Today:** [State: Vineyard Wind can seek local permits for cable](#)  
February 6, 2019
43. **Bloomberg:** [Whales Will Get Right of Way at Huge Martha's Vineyard Wind Farm](#)  
January 23, 2019
44. **Wicked Local Cape Cod:** [Climate collaborative endorses Vineyard Wind](#)  
January 18, 2019
45. **North American WindPower:** [MHI Vestas Offshore Wind Sets up Shop in Boston](#)  
January 14, 2019
46. **Bloomberg:** [Martha's Vineyard Wind-Farm Sites Spur \\$405 Million Bids](#)  
December 14, 2018
47. **Windpower:** [Vineyard Wind enters host community agreement with the Town of Barnstable](#)  
October 5, 2018
48. **The Boston Globe:** [Vineyard Wind has a big selling point for its power: cheaper prices](#)  
August 14, 2018



**49. Bloomberg:** [First Big U.S. Offshore Wind Farm Offers \\$1.4 Billion savings to Customers](#)  
August 1, 2018

**50. CommonWealth:** [Study gauges economic impact of offshore wind](#)  
March 12, 2018



## Challenge participants announced by Greentown Labs and Vineyard Wind

Published by [Lydia Woellwarth](#), Deputy Editor  
[Energy Global](#), Thursday, 20 August 2020 09:20

Greentown Labs, the largest climate-tech start-up incubator in North America, and Vineyard Wind, developer of the first utility-scale offshore wind energy generation facility in the US, have selected three start-ups for the Offshore Wind Challenge. The start-ups will focus on innovations in marine mammal monitoring through data collection, real-time transmission, and analysis. The advancement of their technologies will support the responsible development of the offshore wind industry off the coast of Massachusetts, and beyond.

The challenge, run by Vineyard Wind and Greentown Labs, with support from the Massachusetts Clean Energy Centre (MassCEC), received more than 60 applications from around the globe. After a highly competitive recruitment and deliberation process, the partners are pleased to announce that the following three companies have been selected to participate in the Offshore Wind Challenge and apply their technologies to near, real-time marine mammal detection:

- SICdrone, based in Massachusetts, US, builds offshore-capable aerial drone systems that can fly in harsh weather conditions, eliminating weather delays for critical inspection and monitoring at sea.
- Night Vision Technology Solutions, based in Rhode Island, US, is a high-technology provider of thermal and visible camera systems designed for offshore wind, search and rescue, threat detection, and situational awareness.
- Open Ocean Robotics, based in British Columbia, Canada, makes it cheaper, easier, and safer to understand our oceans using solar-powered, self-driving boats that travel oceans for months at a time while collecting ocean data.

Based at Greentown Labs, which is headquartered in Somerville, Massachusetts, the Offshore Wind Challenge is a six-month accelerator programme focused on providing entrepreneurs with the connections, business and technical resources they need to commercialise their technologies. In addition to receiving direct support from Vineyard Wind and the Massachusetts Clean Energy Centre, the Challenge also draws on the knowledge and expertise of the Woods Hole Oceanographic Institution (WHOI) and the New England Aquarium.

Vineyard Wind is pioneering the US' first utility-scale offshore wind project off Massachusetts' coast, which will provide clean power for over 400 000 homes and businesses and eliminate 1.68 million t of carbon dioxide emissions annually. Vineyard Wind is committed to responsibly developing and operating the project, including by protecting North Atlantic right whales and other marine species that live off the Northeast's coast.

"We take our responsibility as 'first movers' in the US offshore wind industry very seriously and are always looking for ways to implement new technologies that reduce impacts to the environment and marine life," said Lars T. Pedersen, CEO of Vineyard Wind. "We're grateful to Greentown Labs for their partnership and to all of the applicants for their work and passion. We look forward to seeing the development of these technologies and how they can assist our work and mission."

Over the next six months, the start-ups participating in the Offshore Wind Challenge will benefit from mentoring, networking opportunities, educational workshops, and partnership-focused programming through Greentown Launch, Greentown Labs' flagship corporate partnerships accelerator platform. Within this framework, the Offshore Wind Challenge will help start-ups explore potential partnership outcomes with Vineyard Wind, including piloting their technologies in Vineyard Wind's Massachusetts lease waters. Furthermore, participants will receive Greentown Labs membership for the duration of the programme.

"We're thrilled to receive more than 60 applications from around the world and we are excited to support the three selected start-ups as they work alongside experts from Vineyard Wind, MassCEC, and other leading organisations in the marine and offshore wind industries," said Emily Reichert, CEO of Greentown Labs. "The success of the burgeoning offshore wind industry is critical to our progress toward a decarbonised future, and the Offshore Wind Challenge will drive the development and ultimate deployment of new innovations that will simultaneously protect marine life in our oceans and accelerate the new industry's growth on the US East Coast, and beyond."

MassCEC, a pillar in Massachusetts' clean-tech ecosystem, has been leading the state's offshore wind initiatives and technical analyses in close collaboration with policymakers, regulators, developers, industry, and stakeholders since 2009. MassCEC is an enabling partner for the Offshore Wind Challenge, providing grant funding, expertise, and in-kind support for start-up pilot projects in Vineyard Wind's lease areas in Massachusetts' waters.

"Research and innovation are critical components in our toolkit for advancing the responsible development of offshore wind," said Steve Pike, CEO of MassCEC. "We are pleased to support the testing and validation of these new technologies for marine mammal protection in real-world conditions."

WHOI and the New England Aquarium will also support the programme, including through participation in major programme events and workshops.

“With the offshore wind industry emerging right in our backyard, WHOI is looking forward to participating in the research, technology, and entrepreneurship accelerated by the Offshore Wind Challenge to help drive forward the responsible development of the offshore wind industry in the Northeast US and beyond,” said Dr. Rick Murray, WHOI’s Deputy Director and Vice President for Research.

“The New England Aquarium is committed to environmentally responsible offshore wind development and believes innovative technologies are a critical part of both monitoring and safeguarding ocean animals during turbine construction and their ultimate operations,” said Dr. John Mandelman, Vice President and Chief Scientist for the Anderson Cabot Centre for Ocean Life at the New England Aquarium. “We are pleased to offer our ocean science expertise to help guide innovators in this Offshore Wind Challenge to better understand and minimise potential impacts.”

All participants in the programme will receive:

- Acceptance into Greentown Launch, a six-month partnerships acceleration program for start-ups, hosted at Greentown Labs, the largest climate-tech incubator in North America.
- A structured platform to explore potential partnership outcomes with Vineyard Wind.
- Exclusive access to the Greentown Labs and Vineyard Wind networks.
- Funding and access to MassCEC’s New Bedford Marine Commerce Terminal for ocean validation of technologies.
- Greentown Labs membership for the duration of the six-month accelerator programme.
- Mentorship, networking opportunities, and partnership-focused programming from the Greentown Labs ecosystem of cleantech and climate-tech start-up experts.
- Access to mentorship from the world’s leading offshore wind engineers, scientists, and permitting specialists.
- Access to various offshore wind organisations and suppliers.

The Offshore Wind Challenge will feature over 40 hours of intensive business training, hands-on mentorship from industry experts, and a unique model of start-up and corporate relationship building. The Offshore Wind Challenge partners will host a final showcase in 2021 to share start-up progress, accomplishments, and successful results of working closely with Vineyard Wind, Greentown Labs, and MassCEC throughout the programme.



## Two Cape Lawmakers Call For Vineyard Wind Proposal Approval

July 23, 2020

(OAK BLUFFS) – State legislators teamed up earlier this month to advocate for the Vineyard Wind project and the broader implementation of offshore wind technology.

In a letter, the lawmakers called upon the Bureau of Ocean Energy Management to approve the Vineyard Wind 1 proposal and move forward in the permitting process.

Falmouth State Representative Dylan Fernandes and Cape and Islands State Senator Julian Cyr led the efforts.

“Massachusetts has no fossil fuels and survivors of our winters know that the sun is not our strongest resource,” said Fernandes.

“We do have wind, and a lot of it, and to transition to a clean energy future and energy independence we must move forward with deep-water offshore wind, the future of our planet is at stake and it’s beyond time to move this project forward.”

“Offshore wind projects present a cutting-edge opportunity for both economic growth in our region and long-term sustainability in our energy production,” said Cyr.

“Representative Fernandes and I would like to thank the large, bipartisan coalition of legislators who lent us their support in urging the Bureau of Ocean Energy Management to approve the first utility-scale wind farm in our nation with the urgency that it deserves.”

The permitting process for the Vineyard Wind 1 project has taken more than six years and involved more than 35 public hearings.

The project is expected to create more than 3,600 jobs locally and generate enough clean energy to power over 400,000 homes.

The Massachusetts Department of Energy Resources estimates that Vineyard Wind 1 will reduce costs for ratepayers by an estimated \$1.4 billion.

The Bureau of Ocean Energy Management will issue a decision on the permitting by December of this year.



## **Island Residents Express Support for Vineyard Wind**

July 13, 2020

By TIM FAULKNER/ecoRI News staff

The [Bureau of Ocean Energy Management](#) (BOEM) controls the floodgates to the offshore wind industry with its forthcoming environmental analysis of the 800-megawatt Vineyard Wind project.

The determination, due in November, will establish the layout for up to 100 wind turbines and perhaps the future of a dozen other proposed offshore wind facilities planned between Cape Cod and Cape Hatteras, N.C.

BOEM says it wants the projects to be done right to satisfy the varying needs of the offshore wind industry, commercial fishing, maritime navigation, and other uses.

“There will be impacts, but our goal is for all users to coexist successfully,” BOEM’s chief environmental officer, William Brown, said during a July 2 online public comment session for Vineyard Wind’s supplement to the [draft environmental impact statement](#).

BOEM concluded that most of the direct, indirect, and cumulative impacts of the wind facility on sea life, birds, bats, tourism, and recreation are considered minor to moderate. Construction, cable protection measures, and foundation activity are expected to cause moderate short-term harm. Long term, the restricted access of some proposed wind facility designs are expected to hinder scientific research and increase the risk of collisions. These designs will limit commercial fishing and military and national security actions and increase the difficulty for search-and-rescue activity.

These impacts and the future of Vineyard Wind — along with 22 gigawatts of planned offshore wind facilities — boils down to the spacing between the turbines and the so-called “transit lanes” for commercial fishing vessels.

BOEM is considering a confusing sequence of alternative layouts for the [Vineyard Wind](#) project that focus on two primary designs: a 1-mile spacing between turbines and a 1-mile spacing with a series of 4-mile-wide transit lanes for vessels.

Vineyard Wind and other offshore wind developers have [urged BOEM](#) to adopt the one-mile spacing layout, which they say would create 200 vessel lanes between the turbines. The 4-mile-wide transit lanes, they say, would reduce the energy capacity of the facilities. Vineyard Wind noted a [report](#) by the Coast Guard that endorses the 1-mile spacing and includes an east-west and north-south alignment.

On July 9, Rhode Island's Coastal Resources Management Council (CRMC) declared that it also favors the Coast Guard design, along with the installation of special transmitters on all structures that would help vessels navigate the facility in the event radar is compromised.

Public commenters calling into the online BOEM meetings also supported the 1-mile spacing endorsed by the Coast Guard and CRMC. But commercial fishermen, as represented by the [Responsible Offshore Development Alliance](#) (RODA), seek an overlay of six 4-mile transit lanes that intersect Vineyard Wind and other proposed offshore wind facilities.

RODA's last-minute design change led BOEM to delay its initial environmental impact statement for the Vineyard Wind project.

On June 29, RODA [called for](#) the Coast Guard to amend its turbine layout report, claiming the Massachusetts and Rhode Island Port Access Route Study (MARIPARS) contains mathematical errors, lacks supporting evidence, and relies on inappropriate data.

"Correction of the MARIPARS will improve certainty regarding the efficacy of safety measures and the public's understanding and implementation of those measures, directly benefiting our members and all ocean users," according to a letter signed by Annie Hawkins, RODA executive director; Fiona Hogan, RODA research director; and Lane Johnston, RODA programs manager.

The Coast Guard said the letter is being evaluated by its Navigation Standards Division.

It likely won't be known whether the decision on the layout and environmental impact study is decided by BOEM, a higher-up within the Department of Interior, or President Trump.

Trump has shown a clear disdain for wind turbines and renewable energy, and delays for the Vineyard Wind permit have been [blamed by some elected officials](#) as favoritism for the fossil-fuel industry, which has been the recipient of numerous favors during Trump's presidency.

A [June report](#) by the Center for American Progress recounts how the Department of Interior, which oversees BOEM, has granted lease extensions and reduced royalty fees for companies extracting oil and gas on public land and in public waters. Meanwhile, renewable-energy leaseholders were sent steep bills for leasing public land. Also, as part of federal COVID-19 relief, the oil and gas industry was granted access to 78 million acres of new public waters for leasing while the offshore wind industry was offered nothing.

"While offshore wind development's potential impacts, including to fisheries and protected species, must be considered and mitigated, the Trump administration has shown little interest in proactively resolving the issues," according to the report.

### **Public comment**

Callers to the initial hearings reflected on Martha's Vineyard's closeness to the Vineyard Wind lease area. Most were island residents speaking in favor of the project and its environmental and economic benefits. They represented groups such as the [Island Climate Action Network](#), [Edgartown Energy Committee](#), Oak Bluffs Energy Committee, Tisbury Planning Board, [Vineyard Power Cooperative](#), and local wind engineers and job seekers.

Other groups included [Anglers for Offshore Wind Power](#), Southeastern Massachusetts-Cape Cod and Islands Building Trades Union and Pile Drivers Local Union 56, [350 Cape Cod](#), and the [Environmental League of Massachusetts](#).

Massachusetts Sen. Marc Pacheco, D-Taunton, chair of the Senate Committee on Global Warming and Climate Change, said he expects Vineyard Wind to have little impact on the region's fishing industry, compared to the harm caused by ocean acidification and warming water temperatures.

“We are on the cusp of a sustainability revolution,” Pacheco said.

Many callers pointed to the benefits of local renewable energy, such as well-paying technical jobs, price consistency, ending fossil-fuel shortages, and the importance of addressing the climate crisis.

“This is the only solution to our climate-change problem,” said Richard Toole, a 50-year resident of Martha’s Vineyard and chair of the Oak Bluffs Energy Committee. “If we don’t go to clean, renewable energy as soon as possible and stop burning fossil fuels we are going to be in big trouble.”

Others directly addressed the discord with the commercial fishing industry.

“The ocean is a shared resource and other people have to make their living on the ocean, such as marine construction workers, as well,” said David Borrus of [Local Union 56](#) representing pile drivers and divers. “We feel that’s the choice BOEM should make to move this project forward.”

[Public comment](#) on the environmental impact study is being taken through July 27.





# Vineyard Wind Offshore Development Garner's Public Support

By [Matthew Mercure](#) July 9, 2020

[RENEW Northeast](#), a regional renewable organization governed by both environmental and industry interests, has touted the tremendous public support [Vineyard Wind](#) and offshore wind development more broadly are receiving during the [Bureau of Offshore Energy Management's \(BOEM\)](#) public hearing process.

RENEW Northeast also says it has joined with the [Massachusetts Business Roundtable](#), [WindSTAR Center at UMass Lowell](#) and the [National Wildlife Federation](#) to express appreciation to BOEM for releasing its Supplement to the Draft Environmental Impact Statement for the Vineyard Wind 1 Offshore Wind Energy Project and to urge decisive action that will allow the offshore wind industry to move forward.

The group is making a public call to action to other organizations, businesses and institutions to express their support to BOEM either through public comments at the hearings or by submitting written testimony. The last public hearing is July 9, at 5 p.m. and the deadline for written comments is July 27.

Vineyard Wind 1, located in federal waters off the coast of Massachusetts, will be the first large-scale offshore wind project in the U.S. providing 800 MW of clean and reliable electricity into the New England power grid. RENEW, together with Massachusetts Business Roundtable, WindSTAR Center at UMass Lowell and the National Wildlife Federation will be filing formal comments. The organizations will highlight offshore wind's dual economic and environmental benefits to the region and the need to accept the 1×1 nautical mile transit lanes endorsed by the U.S. Coast Guard.

At sites located on the Outer Continental Shelf, the Department of Energy estimates offshore wind's technical potential at over 2,000 GW (or double the amount of all existing installed U.S. electricity), 86 GW of which could be developed by 2050. Atlantic coastal states, recognizing the economic and environmental opportunities afforded by the technology, have collectively issued procurement targets for 29 GW of offshore wind. A recent economic development study from the [American Wind Energy Association](#) reported that

offshore wind development off the Atlantic Coast could translate into \$57 billion in direct investment, add \$25 billion in annual economic output and create 83,000 well-paying jobs by 2030, all while stabilizing retail electricity rates and emitting no climate-altering greenhouse gases.

“The National Wildlife Federation is eager for BOEM to advance the Vineyard Wind project and for responsibly sited, developed and operated offshore wind power to be a pillar of the nation’s clean energy future,” says Catherine Bowes, offshore wind energy program director for the National Wildlife Federation.

“We were proud to reach agreement with Vineyard Wind on measures to protect the endangered North Atlantic right whale during project construction and operation. It is time to harness this critical climate solution while protecting wildlife every step of the way,” she adds.

BOEM has now completed four of its five scheduled virtual meetings. The vast majority of commenters have expressed strong support for the Vineyard Wind project and the responsible development of offshore wind. Support has come from diverse stakeholders, including residents of Martha’s Vineyard, elected officials, labor union representatives, business owners, investors, commercial fishermen, climate activists, scientists and students. Commenters cite the urgency to stem climate change and harness economic benefits as among the reasons they approve of offshore wind development.

One of the pivotal outstanding items being reviewed by BOEM is that of transit lanes. RENEW Northeast, the Massachusetts Business Roundtable, WindSTAR Center at UMass Lowell and The National Wildlife Federation support the uniform 1×1 nautical mile layout that the U.S. Coast Guard determined, after a robust public input process, would “maximize safe navigation.” The 1×1 nautical mile layout, agreed to by all New England offshore wind leaseholders to provide ample and uniform navigation transit lanes, is larger spacing than in any other wind facility currently operating in the world.

An alternative layout requiring additional transit lanes over four times wider than the U.S. Coast Guard reviewed 1×1 design is under consideration by BOEM and has been widely criticized in public comments received during the four meetings.

RENEW Northeast, the Massachusetts Business Roundtable, WindSTAR Center at UMass Lowell and The National Wildlife Federation encourage members of the public to share their comments about the urgent climate and economic need for offshore wind and support the 1 x 1 nautical mile navigation lanes. BOEM is

accepting comments during one additional public meeting, online and by mail through July 27.



## Vineyard Wind sails forward

*Project has support of legislators.*

By **Rich Saltzberg**

July 21, 2020

Atlantic waters 14 miles south of Martha's Vineyard are again poised to be the site of a milestone that potentially rivals Pennsylvania's Oil Creek Valley in U.S. energy significance.

In June, the U.S. Department of the Interior's Bureau of Ocean Energy Management (BOEM) published a [supplemental environmental impact statement \(SEIS\)](#) on Vineyard Wind 1, America's first industrial-scale offshore wind farm. In doing so, BOEM effectively resuscitated the 84-turbine wind project, after it signaled last summer it wasn't ready to sign off on a draft environmental impact statement published in December 2018. The SEIS came as a result of public commentary and governmental input received on that draft environmental impact statement.

One of the more contentious issues about the project has been the subject of turbine spacing, and the corridors through the turbines used for vessel traffic. Vineyard Wind previously agreed to spacing of one nautical mile in width, and was subsequently joined by the other wind developers who won federal leases off Massachusetts and Rhode Island. This spacing would be oriented in north-south, east-west columns. Diagonal transit lanes for fishing vessels slightly narrower than one mile were also supported by Vineyard Wind and fellow leaseholders.

A U.S. Coast Guard study completed in January found one-mile widths to be adequate for search and rescue as well as fishing purposes. The study also found "0.6- to 0.8-nautical-mile-wide northwest-to-southeast paths would allow commercial fishing vessels to continue their travel from port, through the lease areas, and to fishing grounds," according to the SEIS.

The Responsible Offshore Development Alliance (RODA), an advocacy group for fishing interests, along with other fishing organizations, has pushed for four-mile-wide transit lanes through the turbines for safe mobile gear fishing and safe general navigation. In general, fishermen have been the strongest critics of the project. Among the “potential unavoidable adverse impacts” to the fishing industry cited in the SEIS are “disruption to access or temporary restriction in harvesting activities due to construction of offshore project elements, disruption to harvesting activities during operations of offshore wind facility,” and “changes in vessel transit and fishing operation patterns.”

On the other hand, the fishing city of New Bedford, which will be the hub for the construction of Vineyard Wind 1, is roundly considered to be on the verge of an economic boom as a result. In Vineyard Haven, an operation and maintenance facility to service Vineyard Wind 1 and other wind farms that follow is progressing through the permitting process. [ACE MV students have begun courses](#) to prepare themselves for careers as wind farm technicians, and are likely to find themselves with well-paid on-Island work as a result.

In a comment letter to BOEM, state Sen. Julian Cyr (D-Truro) and state Rep. Dylan Fernandes (D-Falmouth) topped a group of state legislators in support of Vineyard Wind 1.

“Vineyard Wind alone will generate at least 3,600 jobs, and reduce costs for ratepayers by an estimated \$1.4 billion, according to the Massachusetts Department of Energy Resources,” the letter states. “A recent report from the American Wind Energy Association found that by 2030, the offshore wind sector will employ more than 80,000 people from North Carolina to Maine, and lead to \$25 billion in annual economic output. That kind of economic potential, if realized, would be a game changer for people in our region and across the country, the kind of investment that can rebuild communities and create new opportunities for families.”

The SEIS remains open to [public comment until July 27](#). Thereafter, BOEM will access commentary and make a determination on whether it will approve a final environmental impact statement. This is the penultimate step before offshore construction.

# WORKBOAT

## Support for 1-mile offshore wind turbine spacing in BOEM's first 'virtual' public hearing

By [Kirk Moore](#) on JUNE 29, 2020

Supporters of the **Vineyard Wind** offshore wind energy project came out online June 26 to call on the federal Bureau of Ocean Energy Management to approve the 800-megawatt plan in southern New England waters, with spacing turbine towers in a one nautical mile grid.

"Vineyard Wind 1 is the most significant step we can take" for reducing carbon emissions in Massachusetts, said Tom Soldini of Edgartown on Martha's Vineyard, Mass., adding that the company will provide 40 to 50 permanent jobs to the island community.

Friday's public hearing – staged using the Zoom virtual meeting app with public comment by telephone – was the first step in a 45-day public comment period on BOEM's new supplemental environmental impact statement on the Vineyard Wind project, and its broader look at the cumulative impacts of 15 more offshore wind projects planned along the U.S. East Coast.

The agency plans to arrive at recommended alternatives for Vineyard Wind in November and finalize those with a formal record of decision by Dec. 18.

BOEM is looking at one scenario for four-mile-wide vessel transit lanes through wind energy leases off southern New England – referred to as alternative F in its supplemental environmental impact statement. That concept was proposed in January by the **Responsible Offshore Development Alliance**, a coalition of commercial fishing groups.

The axis of one lane in the RODA plan would be a pathway between New Bedford, Mass. and the Georges Bank fishing grounds. But at the end of May, the Coast Guard released its own port access study that recommended against wide transit lanes.

The Coast Guard instead endorsed a consistent one nautical mile grid layout for wind turbines proposed by Vineyard Wind and the developers of neighboring leases. The Coast Guard study concluded that setting aside wider designated traffic lanes would funnel vessels closer to each other and would result in turbines being built closer together outside of the lanes. That would complicate navigation within the turbine arrays, and the Coast Guard's search and rescue mission when its vessels and aircraft need to go in and rescue mariners, the study concluded.

As an alternative to the RODA proposal, the one nautical mile spacing between turbines still offers a "predictable course" and "traffic dispersal" for fishing fleets that transit the arrays, said Arianna Baker, a

navigation analyst for BOEM. The Coast Guard has concurred with BOEM's findings in the supplemental environmental impact statement, she said.

In the virtual public hearing, Vineyard Wind supporters said the Coast Guard's acceptance of one nautical mile turbine spacing shows the wind and fishing industries can coexist. Reducing the numbers of turbines planned by Massachusetts state energy officials and developers could threaten the viability of those projects and the state's goals for clean energy, they said.

"The professionals have spoken," said Soldini.

"The success of Vineyard Wind is crucial to the success of the U.S. offshore wind industry," said Abby Watson, head of government affairs for turbine manufacturer **Siemens Gamesa North America**. Requiring the four-mile transit lanes "will substantially reduce the area available for development without substantially improving the safety of navigation," she said.

BOEM officials heard from others who see a revitalization of New England's maritime industry on the horizon.

Wind energy can "foster and grow an entire new U.S. workforce, particularly in New England," said Maria Hanna, president and CEO of **Survival Systems USA Inc.**, Groton, Conn., a marine and aviation training company that has already added wind energy training to its offerings.

David Borrus, business manager for **Pile Drivers and Divers Local 56** of Massachusetts – which is using a \$100,000 grant from Vineyard Wind in 2019 to train its members – said the environmental impact statement shows southern New England's commercial fishing and other maritime industries can coexist.

"I can tell you the first two divers on that initial project at the (New Bedford) marine terminal were born and raised in New Bedford," said Borrus.

"We're looking at probably between 20 and 30 years of work," and wind power employing the future generations just in school today, said David Araujo, president of the **Southeastern Massachusetts Building Trades Council**.

"Hopefully the goalposts will not be moved again," Araujo added. "We're at the goal line and we've got to get over it."

BOEM will hold four more virtual public hearings on Tuesdays and Thursdays this week and next: June 30 at 1 p.m. eastern, July 2 at 5 p.m., July 7 at 1 p.m., and July 9 at 5 p.m.

For instructions on how to join the meetings, including links to the scheduled Zoom meetings and call-in telephone numbers, go to BOEM's virtual meeting page at <https://www.boem.gov/Vineyard-Wind-SEIS-Virtual-Meeting>

## Vineyard Wind launches boat from New Bedford to do geotechnical surveys

---

NEW BEDFORD – Vineyard Wind announced that the company has once again partnered with Geoquip Marine to begin geotechnical surveys of the 501 North Federal Lease Area. The site will be the eventual location of Vineyard Wind 1, an 804 megawatt project that will power roughly 400,000 homes in Massachusetts. Geoquip’s first engagement with Vineyard in 2018 was for a similar extensive geotechnical scope.

“Getting to this step would have been a milestone under normal circumstances,” said Lars Pedersen, CEO of Vineyard Wind, “but to do so now in light of the current pandemic makes reaching this point all the more significant and rewarding. We look forward to working with Geoquip as we begin to gather the data necessary to get the first largescale offshore wind project in the United States up and running.”

Using two separate vessels, Geoquip Marine’s geotechnical experts will gather information on the ground conditions for prospective turbine and substation locations, providing necessary data to the project design. The survey work will be done in two phases, with the first slated to begin in late May and the second to begin in late July. Work is expected to finish by September this year.

“In order to ensure a timely delivery of Vineyard Wind having geotechnical data as early as possible is key to success. We are very pleased that Geoquip once again has agreed to support us” said Rasmus Miller, EPC director of Vineyard Wind.

“Leading offshore geotechnical survey company Geoquip Marine is proud to be returning once more to Martha’s Vineyard to assist with this survey,” said Stewart Higginson CEO of Geoquip Marine. “We can’t wait to bring our expertise to a project that has such tremendous potential to lower energy costs and drastically cut harmful carbon emissions.”

The crews are all following enhanced safety precautions to limit any and all exposure to COVID-19, including health and temperature checks prior and during the survey, strict on-boarding procedure, enhanced separation in addition to extensive cleaning and sanitation on each vessel.





## Vineyard Wind's Permitting On Track Despite Coronavirus, BOEM Says

The federal agency is sticking to its already-delayed timeline for approving the 800-megawatt offshore wind project — at least for now.

[KARL-ERIK STROMSTA](#) APRIL 21, 2020

Despite the coronavirus pandemic, the Bureau of Ocean Energy Management is sticking to its already-delayed timeline for deciding whether to approve Vineyard Wind's 800-megawatt offshore wind project. At least for now.

BOEM, the agency within the Interior Department that oversees seabed leases for offshore energy development, stunned the emerging U.S. offshore wind industry last summer by delaying its decision on Vineyard's project, originally scheduled for completion in two 400-megawatt phases in 2021-2022. Vineyard Wind is a joint venture of Iberdrola's Avangrid utility and Copenhagen Infrastructure Partners.

In delaying the process, BOEM said the proliferation of big offshore wind projects and aggressive state targets along the Atlantic Coast had necessitated additional "cumulative impact" studies. A revised timeline published by BOEM now sees it issuing the final record of decision by December 2020.

According to Avangrid, that means the project will not reach commercial operation until 2023 at the earliest. That's a blow to the project's economics and supply chain, but Vineyard Wind has indicated it will press on with the project under BOEM's revised timeline.

On Tuesday, James Bennett, manager of BOEM's renewable energy program, said his team is in a "full telework arrangement right now" as a result of the COVID-19 shutdown. Bennett said BOEM is sticking to the timeline that would see Vineyard get its final decision by the end of this year, but he cautioned that the pandemic could knock things further off course.

"We don't anticipate any schedule slips just yet," Bennett told the International Partner Forum, organized by the Business Network for Offshore Wind and held virtually this year because of the pandemic.

“A lot of it will depend on how things work out with COVID and whether we’re able to have the stakeholder involvement at the level that we’d like to,” Bennett added. “But overall we’re on track and on schedule, and we’re continuing on for Vineyard Wind and the other projects as well.”

In addition to Vineyard, there are questions about the 132-megawatt South Fork offshore wind project being developed by Ørsted and Eversource Energy for New York.

With Vineyard delayed, South Fork is supposed to cross the finish line first — beginning construction in 2021 and reaching commercial operation in 2022. But South Fork still needs a variety of permits, running from the local to the federal level. A recent press report said New York state’s review of the project has been [delayed due to COVID-19](#).

Among the myriad impacts the pandemic is having on the global renewables industry, it has shut many government offices or forced officials to work from home. The extent to which that results in delayed projects remains to be seen and will vary by sector and market. Many permitting processes — including those for U.S. offshore wind projects — require public hearings and local outreach that will be difficult or impossible under the current circumstances.

Beyond BOEM’s ability to issue permits for existing offshore wind projects, the pandemic could also slow the rollout of new lease auctions for additional project sites.

# The Barnstable Patriot

## YMCA receives \$20K from Cape Cod Foundation; nine other Cape nonprofits given \$10K each

---

Posted Apr 21, 2020 at 5:05 PM Updated Apr 21, 2020 at 5:05 PM

SOUTH YARMOUTH – The Cape Cod Foundation has awarded \$110,000 from its newly created Strategic Emergency Response Fund to 10 local nonprofits that address basic human needs, including food, healthcare, and childcare for essential workers.

The first round of grants awarded \$20,000 to the YMCA of Cape Cod, and \$10,000 each to the following: Cape Cod Healthcare Foundation General Fund; the Cape Cod Council of Churches; Community Health Center of Cape Cod; Duffy Health Center; Elder Services of Cape Cod and the Islands; The Family Pantry of Cape Cod; Falmouth Service Center; Harbor Health for Harbor Community Health Center; and Outer Cape Health Services.

“Our community’s solidarity is both powerful and uplifting,” said Kristin O’Malley, the foundation’s president and CEO. “We have received generous support on the local level and additional support from larger foundations and corporate partners that are donating to community foundations like ours because we have the experience and infrastructure to deploy resources strategically into our communities.”

O’Malley said the foundation’s grantmaking from this fund would be “proactive, tiered, and ongoing.”

“We have and will continue to gather information from multiple sources—local organizations, community leaders, other funders, and regional collaboratives—to assess the rapidly evolving needs of the community and direct our grantmaking for maximum impact,” she said.

In addition, O’Malley said, the foundation is working with nonprofits to release them from restrictions on previously awarded grants, if needed; releasing regular 2020 distributions from other discretionary funds earlier than scheduled; and sharing information about community needs with its donor-advised fundholders and other funding partners to expand opportunities to leverage resources and fill unmet needs.

Since launching the fund in late March, the foundation has raised over \$500,000 in committed funds to support the continued operation of local nonprofit organizations as they address the impacts of COVID-19 on the Cape.

In addition to numerous individual donations, the following foundations and corporate partners have contributed to the fund: Eastern Bank Charitable Foundation; The Barr Foundation; the Peter and Elizabeth C. Tower Foundation; the Amelia Peabody Charitable Fund; The Cooperative Bank of Cape Cod and The Cooperative Bank of Cape Cod Charitable Foundation Trust; and Vineyard Wind.

Donate to The Cape Cod Foundation Strategic Emergency Response Fund by visiting [capecodfoundation.org](http://capecodfoundation.org). Or email Kristin O'Malley at [komalley@capecodfoundation.org](mailto:komalley@capecodfoundation.org).



## Vineyard Wind Biologist Talks Common Ground with Fishing Industry

BY [CATE HEWITT](#)

FEBRUARY 21, 2020 MARCH 16, 2020

NEW BEDFORD — With about 20 years of experience on the seas, Crista Bank has worked in academia as a fisheries biologist, conducted research with commercial fishermen, earned her 100-ton U.S. Coast Guard captain's license, journeyed across the globe aboard traditional sailing vessels and taught marine science in New England, Southern California and the Florida Keys.

In May 2018, she became a fisheries liaison for Vineyard Wind, an offshore wind developer based in New Bedford where she grew up and now lives. The company has two projects in the works — Vineyard Wind I, a 800-megawatt project off the coast of Massachusetts and [Park City Wind](#), an 804-megawatt project for the Bridgeport region.

According to Bank, the “big objective” is communication between fishermen and Vineyard Wind.

“Some of it is teaching two industries about [each other] because the fishermen don't totally understand offshore wind and developers don't understand the fishing industry, so my job is to try to have both industries understand the other a little bit better,” she said.

The main purpose of her job is to make sure the developers at Vineyard Wind are receiving accurate information about the fishermen's concerns and how the fishing industry might be impacted by offshore wind. She also relays information to the fishermen about offshore wind projects and Vineyard Wind's work “to make sure that the fishermen are not going to be pushed out of their industry,” which she said has been beleaguered by multiple challenges.

“The developers are going to want to work with the fishermen to do everything they can to make sure they can work together, that the fishing industry can still be prosperous [while] understanding that it's another challenge on the fishing industry that already faces significant challenges from other areas — climate change, regulations, fish stocks and the nature of fishing itself is challenging, forget all the other things we throw on top of it,” she said.

Bank explained that fishermen are already restricted from specific ocean areas during certain times, making the prospect of offshore wind a concern, she said.

“The way the ocean is already already carved up, there are areas the fishermen cannot fish in, whether it’s from seasonal closures that have to do with spawning times of year, whether it’s habitat management areas closures, whether it’s just wide-sweeping ocean national monument closures, so there’s already a lot of restrictions on where fishermen can and can’t fish,” she said. “So when a big footprint of the ocean space is now dedicated for offshore wind, right off the bat that is another challenge and another ocean user that is making the available space to fish even smaller, so it’s continually shrinking.”

Bank said that the goal is to have fishermen fish within the offshore turbines grid, but with all of the industry regulations, “it’s still met with some skepticism because of areas that have been opened before and then closed.”

Fishermen are concerned about the difficulty and safety of fishing around the turbines, she said.

“The goal from the developers’ side is to try to make spacing as wide as possible to still maximize the wind potential but still allow the fishermen to fish safely around them,” Bank said, adding that developers have agreed the grid will be one-mile-by-one-mile in the footprints off of Rhode Island and Massachusetts.

These wind projects are regulated by the Bureau of Ocean and Energy Management, but Bank said that the issue of turbine spacing has been left for the developers, the fishing community and other users to try to figure out.

“There’s been a lot of conversations about what the appropriate layout is and even the direction and orientation of the grid and back-and-forth meetings and discussions about the appropriate layout and spacing and again there’s a lot of different input from the different fishing groups for what the appropriate spacing is and it’s from all over the board,” she said.

A dragger fisherman might want more spacing between turbines, while a fixed-gear fisherman might not require as much space because they are setting their gear in the water and coming back to it at a later time, she explained.

“There’s a lot of different information from different fishing groups, from regulators, from what the best wind capacity for the developers at that site is. So there’s a lot of different information going into what the correct layout is,” she said. “The short answer is there are no definitive regulations about it.”

According to Bank — who previously worked as a UMass field biologist and who holds a master’s degree in fisheries oceanography from UMass Dartmouth — fishery science is the big issue now for the fishing community.

“The fishermen as a group, no matter what type of gear type [they use], are very concerned with collecting better data for their fishery because data is what drives management

decisions,” she said. “That means collecting better information on spawning cod species, on the halibut population, on monkfish age and growth.”

Bank acknowledged that long before offshore wind entered the market, there was mistrust between fishermen and scientists, but her past experience working with fishermen on fisheries research projects has helped her build trust with the fishing community.

“Are the scientists doing the right studies? Are they sampling in the right places? Working together with the fishermen on answering those questions is the best way to have the data believed or accepted by the fishing community and that’s how I became involved with the fishing industry, so I take that with me to offshore wind,” she said. “And I explained to the developers, that fishery science data is very important to the fishing community so any way that the developers can help to support better research and fisheries data collection...’

The idea is to make the collected data available to regulators, both state and federal, who make the decisions on how healthy the fish stocks are, she said.

“We really need to support fisheries research and, again, I come from academia where the whole point of research is to share it, to publish it and to share it with everybody,” she said. “In the corporate world, that’s not really how they approach research. They approach it to get the data to do their permits or do what they need to do, but Vineyard Wind has been very receptive to sharing this data publicly.”

Bank said that with offshore wind entering the market, she hopes that her role will build a better bridge between the two industries.

“I knew I was walking into a very difficult job. I knew exactly what I was getting into,” she admitted. “There’s a lot of unknowns and a lot of change that’s coming with offshore wind and as they say, ‘hope for the best,’ but I have to prepare for the worst and [the fishermen] have already had some pretty tough challenges thrown at them that they’ve had to recover from, so their skepticism is not surprising.”



# Right Whale Protection At Heart Of New Vineyard Wind Partnership

By Colin A. Young | State House News Service

February 20, 2020

Hoping to have a hand in the development of monitoring technologies that will protect marine life like endangered Right whales, offshore wind developer Vineyard Wind is partnering with Somerville's Greentown Labs to launch a new program to support cleantech entrepreneurs.

The Greentown Labs and Vineyard Wind Launch program will be modeled after Greentown's flagship program that seeks to make connections between innovative entrepreneurs and various clean energy-related companies. Together, the two companies plan to "support early-stage startups developing technologies to improve the offshore wind energy and marine life value chains by providing the resources, training, and expert mentorship they need to advance their innovations."

Vineyard Wind CEO Lars Pedersen said he is hopeful that the innovation accelerator will lead to new technologies that add significant value to the billion-dollar projects his company and others plan to grow the burgeoning American offshore wind industry.

"Our company and dozens of others are poised to invest billions of dollars in construction and technology on projects that will only be improved by new marine data monitoring technologies," Pedersen said. "We look forward to working with Greentown to engage talented cleantech entrepreneurs and startups to develop technologies that will make offshore wind projects safer and more efficient."

More details on the partnership will become available in March when the companies plan to release a detailed request for proposals. A public kickoff event, featuring the announcement of the startups selected to participate in the launch program, is in the works for July, the companies said. An event to showcase the results of the 10-month program is planned for February 2021.

"We're thrilled to add Vineyard Wind to our network of Launch partners and we know offshore wind presents a tremendous opportunity to bring more clean energy to homes and businesses across the Northeast region and beyond," Emily Reichert, CEO of Greentown Labs, said. "We're confident that by working closely with Vineyard Wind we'll be able to help deploy solutions to advance the industry and protect the environment."



Utility companies and the state tapped Vineyard Wind to construct an 800-megawatt wind farm 15 miles south of Martha's Vineyard and 34 miles from the mainland to fulfill the first half of a 1,600-megawatt procurement called for in a 2016 clean energy law.

As it works to develop the country's first utility-scale offshore wind installation for Massachusetts and projects for other states, the developer last year struck an agreement with conservation groups to protect the critically endangered Right whales from harm associated with wind turbine construction and operation, and employs a small team of scientists. Earlier this month, Vineyard Wind hired Dr. Christopher Clark, a scientist and researcher who has written about the need for offshore wind development to take the protection of endangered Right whales and other marine species into account, to serve as a senior scientist on its team.

"Vineyard Wind has demonstrated its commitment to harmonizing protections for the iconic North Atlantic Right Whale and other marine life with ambitious efforts to bolster offshore wind," Nathanael Greene, a senior renewable energy policy analyst for climate and clean energy at the Natural Resources Defense Council, said. "We're optimistic that this latest effort will similarly help advance innovation in the offshore wind industry and strengthen a host of vital environmental protections -- from monitoring wildlife, picking sites for offshore wind farms through to construction and operations."

Greentown Labs started its launch programs in 2015 and has led them for a variety of clean energy sectors, including solar, hydrogen and digital energy. The company said it is the largest cleantech incubator in North America and has supported more than 250 startups since its 2011 inception. Those companies, Greentown said, have raised more than \$750 million in funding and created more than 6,500 direct jobs.

The announcement of a partnership with Greentown Labs is the latest indication that Vineyard Wind plans to forge ahead with its Massachusetts project despite confirmation from federal officials last week that the ongoing federal review of the Vineyard Wind project and the offshore wind sector generally is not expected to be wrapped up in time for Vineyard Wind to become operational by 2022, as had been planned.

The new federal permitting timeline envisions the issuance of a final permit by Dec. 18, 2020. Before the feds launched the broad review of wind projects last summer, a decision on permit approval had been expected by Aug. 16, 2019.

Vineyard Wind had originally planned to financially close on its project and begin on-shore construction work in 2019, put the first turbine into the seabed in 2021 and have the 84-turbine wind farm generating electricity in 2022.

Though the new timeline may lead to more headaches for Vineyard Wind and other offshore wind developers, Baker administration officials last week pointed to continued activity among Vineyard Wind, Mayflower Wind and other developers as evidence that the age of offshore wind energy is not over before it even began.

"There certainly has not been a chilling effect on the industry here," Massachusetts Energy and Environmental Affairs Secretary Katie Theoharides said last week after unveiling details of the state's second offshore wind energy procurement. "We saw very competitive bids come in for this solicitation. I think other states are seeing the same thing and Vineyard Wind has doubled down in Connecticut now at this point. There's a continued growth and momentum in the industry."



## Leading Marine Mammal Acoustic Expert Joins Vineyard Wind

NEW BEDFORD – Vineyard Wind today announced that Dr. Christopher Clark will be partnering with the Company as a Senior Scientist. Dr. Clark is a renowned bioacoustician with over forty years of experience studying the potential influences of man-made sound on endangered species, with particular expertise with marine mammals and whales. The addition of Dr. Clark will advance Vineyard Wind's commitment to protecting all marine life and further builds on an existing agreement with leading conservation groups to protect critically endangered North Atlantic Right Whales.

"Dr. Clark has built an impressive career working with marine mammals and whales for several decades," said Rachel Pachter, Chief Development Officer for Vineyard Wind. "He is highly regarded not only in the northeast, but throughout the scientific community for his expertise on a variety of marine issues, most notably his pioneering work to design and develop the first passive acoustic monitoring systems still used to protect North Atlantic right whales near shipping lanes. We are excited to work with Dr. Clark and look forward to his expertise as we work to responsibly build and operate the first large-scale offshore wind energy project in the US."

"I am excited to work with a Vineyard Wind team that is already committed to developing offshore wind technology as safely and responsibly as possible," said Dr. Chris Clark regarding his engagement as Senior Scientist for Vineyard Wind. "I spent much of my career working at the intersection of marine science, industry, and regulation, and I look forward to providing my expertise to a team at the forefront of an evolving industry that is new to the waters off the east coast."

Vineyard Wind plans to partner with universities, technology companies, or other innovators to implement passive acoustic monitoring systems (PAMS) to be deployed alongside transit routes to the offshore wind areas. Once implemented, the systems will transmit monitoring data in near-real-time to project staff so that enhanced mitigation measures can be effectively implemented. Dr. Clark was a pioneer in the design and development of long-term PAMS, which includes a system that is still operational off the coast of Boston listening for North Atlantic right whales to alert mariners of whale presence near the shipping lanes.

"Dr. Chris Clark is a world-renowned expert on ocean acoustics whose ideas have driven our understanding of how anthropogenic sounds impact marine mammals, particularly whales," said Peter Corkeron, Senior Scientist and Chair of the Kraus Marine Mammal Conservation Program at the New England Aquarium. "He has led much of the ground-breaking research on whales and noise, and has mentored many of the scientists who are now leading the next generation of this work."

In January, 2019 Vineyard Wind and Natural Resources Defense Council, National Wildlife Federation, and Conservation Law Foundation entered into a landmark agreement to protect critically endangered North Atlantic right whales. Under this initiative, Vineyard Wind has agreed to implement a variety of protective measures to safeguard right whales while installing and operating turbines in the company's lease areas off the southern coast of Massachusetts. Protective measures include strict vessel speed limits, comprehensive acoustic and visual monitoring, and construction times limited to periods when North Atlantic right whales are not expected to be present.

## **About Dr. Christopher Clark**

Dr. Clark was the founding Director and Emogene P. Johnson senior scientist of the Cornell Lab of Ornithology's Bioacoustics Research Program (BRP) from 1987 to 2017 as well as graduate research professor in the Department of Neurobiology and Behavior at Cornell University. Under his leadership, BRP initiated a suite of acoustic monitoring projects for the critically endangered North Atlantic right whale and other marine mammals along the U.S. Atlantic Coast. These monitoring projects have evolved into the premier method for documenting when and where whales occur along the east coast, and they provide critical data for evaluating and measuring biological impacts of human activities on whales and marine life. As a biologist and engineer, Dr. Clark is an expert in both marine mammal science and biological acoustics. He has published more than 300 peer reviewed papers throughout his career. Dr. Clark is presently a part-time senior research scientist at Marine Acoustics, Inc. Throughout his career, Dr. Clark has engaged in numerous collaborative research projects promoting the application of scientific knowledge for responsible conservation of marine mammals and endangered species. These initiatives have explicitly involved balancing environmental, societal, regulatory and offshore energy components.

Dr. Clark's leadership in this form of applied, scientific conservation research began in the Arctic where he has worked for decades at the interface between endangered bowhead whales, Inupiat subsistence hunters, NOAA and major oil companies. These earlier experiences continued in the early 1990's, when he was chosen as a lead scientist investigating the potential impacts of U.S. Navy sonars on whales and later investigating the impacts of the Macondo Deepwater Horizon crisis in the Gulf of Mexico. His current research continues to focus on understanding the influences and consequences of cumulative man-made noise sources on marine mammals, and promoting an ecologically based paradigm for evaluating and measuring biological risks from anthropogenic activities at individual and population levels.

Dr. Clark's contributions to marine mammal science are extraordinary, and his expertise will be utilized to ensure responsible development and operation of the Vineyard Wind Projects.

## Park City Wind job creation in Bridgeport modest but focused on long-term

By Jordan Grice Dec. 21, 2019

There is still plenty that needs to happen before Vineyard Wind breaks ground in Bridgeport, but the future employment picture in the Park City is getting a bit clearer.

"Park City Wind will create hundreds of good paying jobs with good benefits, most of them based right in Bridgeport," said Vineyard Wind CEO Lars Pedersen in an emailed statement to Hearst Connecticut Media. Vineyard Wind wants to transform 18.3 acres at the former Turbana Corporation property into its staging facility for a wind farm that it plans to build in federally leased waters south of Martha's Vineyard and Nantucket.

Initial employment predictions for harbor-front development were big, but the reality of the trailblazing project is slated to be more modest. Instead, the company is focusing on the positives that will kick in while its project is built.

"From locating a Connecticut headquarters to establishing a long-term operation and maintenance facility, we look forward to this project having a significant economic impact for the City of Bridgeport and surrounding areas throughout the development, construction and operation phases." Pederson said.

Company estimates reported that development and construction of Park City Wind over the next five to six years is slated to support between 100 and 160 direct full-time jobs with some of the jobs being in the project's organization directly. Other jobs are expected to come from the project's supply chain, consultants and sub-contractors. Duration of employment will also vary depending on the positions and phases of development the project is in, officials said.

At its peak during the construction phase, the company estimated that there would be up to 400 people primarily living in and around Bridgeport working at the site.

Beyond initial construction and usage of the site, Vineyard Wind has said that it plans to use the facility for future projects, including having the Bridgeport site serve as the operations and maintenance hub for its offshore turbines for the next 30 years. During that phase, the project will directly create up to 80 permanent jobs for operations and maintenance services, which will be based out of Bridgeport, according to company.

### Playing the long game

Vineyard Wind's current estimates are much lower than the 12,000 direct and indirect jobs the company predicted in its September bid, but analysts say that doesn't mean the SignIn "To an extent, Bridgeport is kind of a first mover (in offshore wind)," said Gregory Remec, senior director in Fitch's Global Infrastructure group. "I think it naturally gives them an edge for future development in the future in that region." Regardless of the number, the city could use the boost in its labor force. Census data reported that Bridgeport had a 5.5 percent unemployment rate in August, which is higher than Fairfield County, the state and U.S. levels — which are all within the 3 percent range.

Remec said jobs for a project like Park City Wind traditionally range from roles as a dockworker to other specialized manufacturing and engineering skillsets associated with offshore construction.

The average salary for dock workers lies between \$23,000 and \$42,000 a year, based on data from Glassdoor. Jobs in offshore wind projects can hit median incomes of 58,000 euros — which translates to roughly \$64,000 in the United States — or higher depending on experience.

"I would say these jobs are certainly not at the low end of the pay spectrum and are more mid-range to high end for construction folk...the maintenance will be specialized, too," Remec said.

Bridgeport has seen some growth in its labor force in recent years, but it hasn't been substantial, according to Kevin Dolan, director in Fitch's U.S. public finance group.

The city recorded more than 412,000 jobs in August, according to census data, up 4,900 jobs from the same period last year.

While the initial job growth from the Park City Wind project won't be a huge improvement, Dolan said that may be a different story in the long term.

"I can't speak to the numbers of new employment, but clearly it could provide additional improvement in the unemployment rate, depending on who they are trying to attract to do the work and if they are actually residents in the city," he said.

"I think this further cements us as a leader as it relates to wind in particular and renewables relative to the size of our state and our energy need, and if we continue down this path, you'll see that industry increase," said David Lehman, Commissioner of the state's Department of Economic and Community Development.

With a large portion of the new jobs slated to be in the manufacturing sector, Lehman said workforce development is going to be crucial. Workforce development — especially in manufacturing — has been an ongoing state priority this year, following Gov. Ned

Lamont's appointment of Connecticut's first chief manufacturing officer and creating the Governor's Workforce Council. That's also coupled with \$50 million the Connecticut Department of Labor earmarked for an apprentice initiative to help support the state's manufacturing sector.

"We're going to look to Park City Wind, Avangrid and Copenhagen for a lot of their expertise in how to train the workers that they need," Lehman said, adding that Vineyard Wind is looking to use a variety of career training and academic institutions in coming years to develop its "wind-ready workforce."

"After years without major industry to rally behind, some officials say a little patience will go a long way for the city."

"This is a big win for Bridgeport," said state Rep. Christopher Rosario. "Usually Bridgeport is in a position where we are the bridesmaid, and we are finally the bride."

"According to Rosario, the members of Bridgeport's legislative delegation are "cautiously optimistic" that the project will bring a surge of life into the city's economy. "With that being said, we want to make sure that we work with all the partners involved to make sure that all the people in Bridgeport that are desperate for work and desperate for opportunities that they are taking advantage of the opportunities," Rosario said. "I think that's the industry that ultimately, when you look at Bridgeport 20 years from now, you're going to say, 'Bridgeport is on the cutting edge of a green and sustainable future.'"

# Vineyard lands Connecticut offshore wind bid with Park City

Online in 2025, the developer's 804MW project will supply almost 15% of Constitution State's power

8 December 2019 17:45 GMT *UPDATED 8 December 2019 17:45 GMT*

By **Darius Snieckus**

The state of Connecticut chose Vineyard Wind's 804MW Park City project as the winner of its latest competitive solicitation for offshore wind capacity, citing its economic development benefits and lowest price to date in the rapidly growing US market.

Vineyard will build the facility, which will supply the equivalent of 14% of the state's electric power, in the same lease area in federal waters off the southern coast of Massachusetts as its pioneering 800MW project – the nation's first at utility-scale.

Vineyard – a 50-50 joint venture of Iberdrola's 81.5% owned Avangrid and Denmark's Copenhagen Infrastructure Partners - will now negotiate 20-year contracts with Connecticut's two electric utilities. It will deliver the electricity to shore for a connection with the ISO New England grid utilising the same transmission corridor as the Massachusetts array.

State regulators did not disclose the winning price submitted by Vineyard. Last year, the developer won Massachusetts' initial offshore wind tender by bidding \$74/MWh in the first year for the initial 400MW capacity and \$65/MWh for the 400MW balance over 20 years. Those are the industry's lowest contracted prices thus far.

In 2018, Connecticut in its first offshore wind tender selected the Orsted-Eversource joint venture to supply 204MW capacity at a leverlised price of \$94/MWh over 20 years from the planned 704MW Revolution Wind to face the coasts of Rhode Island and Massachusetts. State utilities later contracted an additional 100MW capacity.

For Connecticut, Vineyard hopes to capture some benefit from the federal investment tax credit - now worth 12% of capital expenditure for offshore wind projects - that is set to expire at the end of this month.

Slated for switch-on in 2025, Park City will replace fossil-fuel plant that would have produced 25 million tonnes of CO<sub>2</sub>. Vineyard Wind estimates that the project will generate \$890m in direct economic development in Connecticut and 2,800 direct full-time employment years.

Vineyard [in October unveiled](#) a plan to re-develop waterfront industrial property in Bridgeport, to fabricate transition pieces for Park City and a base for an operations and maintenance facility.

Park City represents the largest purchase of renewable energy in Connecticut's history, more than doubling the volume of new zero-carbon renewable energy procured by the Department of Energy and Environmental Protection (Deep) to date.



“Connecticut is diversifying its offshore wind portfolio with this latest procurement selection, which sets up Connecticut as a regional leader in the creation of a thriving industry that will bring tangible benefits for our state and the entire region,” said governor Ned Lamont, who in June signed into law the public act that cleared the way for the RPF.

Deep commissioner Katie Dykes stated: “The climate crisis is no longer a future problem, and the time for action is now. The selection of this project demonstrates that a zero-carbon electric future is attainable in a relatively short period of time. By leveraging competition, Deep is securing the best value for ratepayers as we advance climate solutions and grow clean energy jobs here in our state.”

Lars Pedersen, CEO of Vineyard Wind, said: “Today’s announcement takes Connecticut one step closer to being the epicenter of the new offshore wind industry, with thriving ports in both Bridgeport and New London.

“We look forward to building on the work already underway with a network of project partners, local officials, the maritime community, other developers, and all stakeholders involved to make Connecticut a hub for the offshore wind industry in the US for decades to come.”

Liz Burdock, CEO of US offshore wind business network BNOW, said: “This project takes the US offshore wind industry over 9000MW of energy under-development, and is more proof that New England is moving forward on a state and regional basis to drive the industry. This will add significantly to the development of the offshore wind supply chain and economic development all along the coast of New England.”

Burdock noted that in making the award, Connecticut Deep said Vineyard offered a price for Park City that is “lower than any other publicly announced offshore wind project in North America”.(Copyright)

## Port of New Bedford gets \$50,000 from Vineyard Wind

By: Jeannete Barnes

Posted Nov 25, 2019 at 2:40 PM

Updated Nov 25, 2019 at 2:40 PM

NEW BEDFORD — The New Bedford Port Authority has received \$50,000 from Vineyard Wind to help ready the port for offshore wind.

Port officials have heard that an additional 50 vessels could be coming in and out of the harbor each day during construction of the wind farm, according to Edward Anthes-Washburn, Port Authority executive director. He said the port will use the money to help identify ways to accommodate more boats, determine what new infrastructure might be needed, and figure out how the port can leverage its existing infrastructure to take advantage of the opportunity.

“We appreciate the partnership with Vineyard Wind,” he said in an interview.

Vineyard Wind said in a press release that the grant will support technical consultants and industry experts to conduct engineering studies necessary for growth and development along the waterfront.

Erich Stephens, chief development officer for Vineyard Wind, said Greater New Bedford is uniquely positioned to capitalize on offshore wind because of the city’s proximity to the lease areas, its skilled workforce, and its existing maritime economy.

Vineyard Wind was selected in May of 2018 as Massachusetts’ first provider of offshore wind energy. Its permitting has been held up by the federal government. The 800-megawatt wind farm would be located about 14 miles south of Martha’s Vineyard.

## UPDATED: New England leaseholders adopt common approach to allay concerns

**19 Nov 2019** by David Foxwell

Five New England offshore wind leaseholders – Equinor, Mayflower Wind, Ørsted/Eversource, and Vineyard Wind – have announced that a uniform turbine layout has been submitted to the US Coast Guard with one nautical mile spacing between wind turbines

The companies issued a joint statement, in which they said, “In response to feedback from key stakeholders, we have proposed to adopt a uniform turbine layout across our adjacent New England lease areas. This uniform layout has been subsequently proposed to the United States Coast Guard (USCG) for its review.

“This uniform layout is consistent with the requests of the region’s fisheries industry and other maritime users. The proposed layout specifies that turbines will be spaced one nautical mile apart, arranged in east-west rows and north-south columns, with the rows and columns continuous across all New England lease areas.

“In addition, independent expert analysis provided to the USCG confirmed that this uniform layout would provide for robust navigational safety and search and rescue capability by providing hundreds of transit corridors to accommodate the region’s vessel traffic.

“We look forward to continuing to work with the USCG, the Bureau of Ocean Energy Management, coastal states, the fisheries industry, and other stakeholders involved to ensure continued coexistence of every ocean user in the region, including offshore wind.”

A uniform layout reflects considerable written and oral public comments from New England maritime stakeholders and will allow mariners to safely transit from one end of the New England Wind Energy Area (NE WEA) to the other without unexpected obstacles.

The five New England offshore wind leaseholders’ proposal to the USCG addresses four principal concerns: navigational safety; the fisheries community’s request for uniform and consistent spacing between turbines throughout the NE WEA; creation of distinct transit corridors; and facilitation of search and rescue operations conducted by both vessel and aircraft.

The New England offshore wind leaseholders also submitted a [report prepared by WF Baird & Associates Ltd](#) to the USCG that analyses the uniform layout using international vessel safety guidelines. The company's analysis was based on automatic identification system data between 2017 and 2018.

The key findings in their report include that most traffic in the general region is transiting around, or along the outside edges, of the NE WEA. Most of the transiting vessels are fishing vessels, and they follow a wide range of transit paths through the NE WEA as they are coming from several different ports and heading to a variety of fishing grounds.

Vessels up to 400ft in length can safely operate within the proposed 1 x 1 nautical mile layout, and historical transit data shows vessels over this length tend to follow existing Traffic Separation Schemes already outside the NE WEA.

The uniform 1x1 nm layout will provide ample navigation transit corridors throughout the NE WEA.

The New England lease holders said they believe the plan accommodates all ocean users in the region. The proposal is a result of the distinct solution and response to specific challenges in New England and would not be applicable to offshore wind leases in other geographies where challenges are different.

Responding to the announcement, National Ocean Industries Association president Erik Milito said, "By bringing to the table a uniform turbine layout, the New England offshore wind leaseholders are offering a viable solution to questions regarding navigational safety, fisheries, transit corridors and the facilitation of search and rescue operations. The leaseholders are developing a collaborative approach to problem solving that will benefit all stakeholders."



## Vineyard Wind Appoints Fisheries Liaison for Connecticut

October 28, 2019, by Nadja Skopljak

Vineyard Wind has appointed Caela Howard as the Fisheries Liaison for Connecticut.

Howard, who has most recently worked with fisheries in Connecticut and Rhode Island, will in her new role serve as the primary point of contact for fishing industry representatives in Connecticut.

According to Vineyard Wind, Howard is the latest addition to the company's network of Fisheries Liaisons and Representatives and will be reporting to lead Fisheries Liaison Crista Bank.

*"I am thrilled to join Vineyard Wind at such an exciting time for the company and their Connecticut-based proposal," said Howard. "I look forward to using my background working with fisheries to build mutually beneficial relationships and maintain good lines of communication between the fishing industry and Vineyard Wind."*

As reported, Vineyard Wind [submitted](#) the proposal to develop the up to 1.2GW Park City Wind offshore wind project at the beginning of October in response to Connecticut's recent [Request for Proposals \(RfP\)](#).

Part of the proposal calls for Vineyard Wind to fund research in partnership with the Mystic Aquarium and the University of Connecticut's Department of Marine Sciences to further understand the underwater noise generated by offshore wind projects and its effects on protected marine species and potential impacts on commercial fisheries.

The company recently revealed [its plans](#) to transform Bridgeport in Connecticut into an offshore wind hub and O&M home to Park City Wind for the lifetime of the project.



## Vineyard Wind project the focus for Massachusetts training facility

By David Foxwell 28 Oct 2019

Massachusetts Governor Charlie Baker has launched the first US training facility for workers using crew transfer vessels

The facility, which received US\$1.73M from the Baker administration and Massachusetts Clean Energy Center, will provide education, training and certification.

It will support construction and operation of Vineyard Wind's 800-MW offshore wind project, which was selected by the Commonwealth's electric district companies in May 2018 under the state's first competitive procurement for offshore wind.

Governor Baker said, "As Massachusetts heads toward building the first large-scale offshore wind project in the US, we are pleased that Massachusetts Maritime Academy will be home to this first-in-the-nation training facility.

"With important training infrastructure like this crew transfer facility workers will gain the skills and knowledge necessary to be a part of the growing clean energy industry and can take advantage of the highly skilled jobs it will create."

Lt Governor Karyn Polito said, "Offshore wind is a crucial part of our administration's climate strategy, and it is vital we have a skilled workforce ready for jobs that will bring new opportunities to many residents in the Commonwealth."

The project is a partnership between Mass Maritime, state government and industry, including Vineyard Wind. Before the Mass Maritime training facility opened, there was no other organisation in the US accredited to provide a full safety training programme for workers in offshore wind.

Vineyard Wind chief executive Lars Thaaning Pedersen said, "Vineyard Wind is excited to partner with the Baker-Polito Administration, Mass Maritime and other academic institutions to invest in workforce training and safety programs that will be crucial to a successful US offshore wind industry.

“We look forward to Mass Maritime’s facility serving as a catalyst for developing an American-led workforce equipped with the skills to lead offshore wind projects up and down the east coast.”

Initially, MMA will focus on basic safety training for the offshore wind industry with a course comprised of five modules: first aid, manual handling, fire awareness, working at height and sea survival.

Some of the training will take place in MMA’s newly-constructed indoor climbing facility and at a crew transfer training unit on the MMA’s pier in Buzzard’s Bay. Instructors will teach students how to safely transfer from the vessel to an offshore wind turbine. Relyon Nutec helped train MMA instructors to deliver the courses using the Global Wind Organization-approved and globally recognised curriculum.





## Vineyard Wind To Partner With CT Manufacturer For Offshore Components

Vineyard Wind has announced a partnership with Marmon Utility, a Marmon/Berkshire Hathaway company headquartered in Seymour, Conn.

The agreement calls for Marmon Utility to establish manufacturing capabilities at its Connecticut facility to produce Kerite cables for Vineyard Wind's proposed Park City Wind project. The agreement will go into effect if Vineyard Wind is awarded long-term contracts from Connecticut to provide 800 MW or greater of offshore windpower in response to the state's 2019 solicitation.

Under the planned partnership, Marmon Utility will invest up to \$4 million to hire personnel and make equipment upgrades at the facility. In turn, Vineyard Wind is committed to selecting Kerite cable brand as its preferred cable supplier for at least 50% of the offshore wind project.

According to the partners, the supply contract could lead to nearly \$40 million in direct expenditures in Connecticut, while the Seymour facility expansion could create an estimated 35 permanent jobs. Over the next decade, the expanded facility could create up to 350 jobs and almost \$400 million indirect revenue in Connecticut.

"The partnership between Vineyard Wind and Marmon Utility to establish the first American Tier 1 Offshore Wind Supplier in Connecticut is an incredible opportunity for the state to truly develop a world-class offshore wind industry," says Lars Thaaning Pedersen, CEO of Vineyard Wind. "Today's announcement is an exciting step in the right direction, but it is only the beginning. Similar to the aerospace sector, we believe that manufacturers all over the state can be a part of this emerging industry, creating long-term jobs and economic opportunity for Connecticut residents."

The Park City Wind proposal includes options to develop an up-to 1,200 MW project, which would generate enough electricity to power 600,000 Connecticut homes.



# CAPE COD TIMES

## Vineyard Wind project gains bipartisan support from federal lawmakers

---

By **Mary Ann Bragg** August 20, 2019

Delays on 84-turbine project concern lawmakers, conservationists.

A bipartisan call for federal officials to move quickly on permits for the Vineyard Wind offshore wind project came Monday from the state's congressional leaders along with colleagues from Louisiana.

"We believe it is possible for multiple industries to coexist in mixed use regions offshore," the lawmakers said in their letter to Interior Secretary David Bernhardt and Commerce Secretary Wilbur Ross. "We urge your departments to work together to find a solution that will address concerns raised by stakeholders, protects the environment, and allows the Vineyard Wind project to remain viable."

The call from federal officials echoes the intent of a rally held Thursday at Cape Cod Community College in West Barnstable, where conservationists joined with other Vineyard Wind supporters — such as union members, business people and faith groups — in a call for a break in the logjam.

"We believe that this is a moral issue among other issues," the Rev. Brian McGurk of the Faith Communities Environmental Network said at the college rally.

McGurk said to the 75 attendees that the current status is one of a lack of responsibility for the Earth, for nature and for generations to come.

"We believe that Vineyard Wind is a change in consciousness, a change in the way we live our lives that will bring us close to what ought to be," he said.

A final environmental impact statement and a record of decision on Vineyard Wind's 84-turbine construction and operations plan was expected Aug. 16, based on a schedule laid out by the Bureau of Ocean Energy Management in March 2018. The company, which has signed contracts to sell 800 megawatts of power per year to three Massachusetts electric utilities, planned to begin construction later this year.

But the bureau has since said it will need at least another six months to prepare a supplement to its draft environmental impact statement for Vineyard Wind's plan. The extra time is needed to explore the cumulative effects of Vineyard Wind and other potential

industrial-sized wind farms on the 1 million-acre federal lease area south of Massachusetts and Rhode Island.

As of Monday, the bureau had not produced a new timeline for the Vineyard Wind project federal permits.

“We have received the letter and will respond through the proper channels,” a spokeswoman for the Bureau of Ocean Energy Management said in an email Monday.

In public comments on the draft environmental impact statement, the National Marine Fisheries Service, the U.S. Coast Guard and the Environmental Protection Agency called for an improved cumulative analysis. In particular, Michael Pentony, the regional administrator of National Marine Fisheries Service, asked the bureau to consider the likely development of adjacent offshore wind lease areas in a cumulative assessment to allow for a meaningful understanding of the impact of wind energy on natural resources and fishing communities.

“One of the Coast Guard’s paramount concerns is the ability of mariners to safely and routinely transit from one end of the Massachusetts/Rhode Island wind energy area to the other on a relatively straight track-line at a relatively consistent speed,” Capt. Chris Glander, Coast Guard commander in southeastern New England, wrote in his comments on the draft statement.

The lawmakers want the federal agencies to “judiciously evaluate impacts to the New England commercial fishing industry, finalize the supplemental Environmental Impact Statement promptly and mitigate any additional delay that may threaten the nation’s first utility-scale offshore wind project.”

Sen. Edward Markey, Sen. Elizabeth Warren, Rep. William Keating, Rep. Richard Neal and Rep. Joseph P. Kennedy III, all Massachusetts Democrats, signed the letter in addition to three Republican colleagues from Louisiana.



# CAPE COD TIMES

## Community leaders rally for action on federal permit for Vineyard Wind

---

By **Mary Ann Bragg** August 16, 2019

WEST BARNSTABLE — A dozen community leaders who support the promised benefits of offshore wind energy projects in the region called for action Thursday to help Vineyard Wind obtain a critical federal permit that is now expected to be delayed through the end of the year.

“We all have our personal stories to tell of climate change, personal and close to the heart,” said Dan Wolf, Cape Air founder and chief executive officer, who lives in Harwich. In his town, he said, neighborhoods were devastated by recent tornadoes.

Wolf told the crowd of about 75 people at Cape Cod Community College that while their interests vary — job opportunities, protection of the environment, boosting the local economy — they were unified in the belief that the Vineyard Wind project and offshore wind energy in general needs to move forward.

“Justice delayed will be justice denied in this case,” Wolf said. “We have to get this done.”

Jack Clarke, Massachusetts Audubon Society’s director of public policy and government relations, called on the Trump administration to release the final environmental impact statement and record of decision, which was scheduled for release Friday. In turn, Vineyard Wind intended to begin construction on the 84-turbine wind farm, to be built 14 miles south of the Islands, by the end of this year.

Now the Bureau of Ocean Energy Management has said it will need at least six months to prepare a supplemental statement that further explores the cumulative effects of Vineyard Wind plus other industrial wind farms planned in a federal lease area south of Massachusetts and Rhode Island.

In the case of concerns about the cumulative analysis brought forward by the National Marine Fisheries Service on behalf of commercial fishermen who have used the lease area, that agency should have considered the cumulative effects of its own change in regulations from 40 years ago that led to the collapse of the ground fishery, Clarke said.

“It’s outrageous that it’s being delayed even a year,” said Mon Cochran of the Cape Cod Climate Change Collaborative. “We must come together to put pressure wherever we can to move it ahead.”

Leaders from the Cape Cod Chamber of Commerce, National Resources Defense Council, Barnstable Town Council, Center for Coastal Studies, Faith Communities Environmental Network, Sierra Club, 350 Cape Cod and Cape Cod Technology Council spoke. The rally was organized by the Association to Preserve Cape Cod and hosted by the college.

“We’re actually in the process now of rolling out our first course for the fall in renewable energy, and we’re going to be rolling out a certificate program in the spring semester to support the workforce development associated with this initiative,” said John Cox, president of the college.

In the audience was Mickey Kerns, of Harwich, whose longtime concern for the environment began with her reading of Rachel Carson’s works. Kerns was on the recycling committee in Waltham, where she lived for 40 years. She’s a new member of 350 Cape Cod, a group dedicated to addressing the challenges of climate change.

“I’m here to support the wind farm,” Kerns said. “We have such a beautiful, pristine land here on the Cape. I would like to see it protected but I want to see renewable energy.”

Offshore wind energy “seems like a win-win situation,” she said, despite some of its problems. Kerns said she had supported Cape Wind, an offshore wind project that was proposed to be built in the middle of Nantucket Sound, but foundered after losing necessary contracts with Eversource and National Grid.

New England Carpenters Union Local 346 carpenter Joe Sullivan, of East Wareham, was joined by several fellow union members at the rally.

“A lot of people in my community will not only get work out of it, but my entire community will benefit from it,” Sullivan said.



## Vineyard Wind shareholders commit to Mass. offshore wind project despite federal delays

AUTHOR: [Iulia Gheorghiu](#)

UPDATE August 13, 2019: Vineyard Wind announced on Monday that shareholders affirmed their support for the first large-scale U.S. offshore wind project, despite the delay of the project's Final Environmental Impact Statement (FEIS).

Shareholders will revise the project based on a public statement issued on Friday by the Secretary of the Interior, as the original timeline will not be feasible.

### Dive Brief:

- Secretary of the Interior David Bernhardt has ordered additional study for the Vineyard Wind offshore wind project, to the "surprise and disappointment" of the developer.
- The federal Bureau of Ocean Energy Management (BOEM) is extending the mandatory environmental review of the 800-MW proposed project off the coast of Massachusetts, [Bernhardt told Bloomberg News on Friday](#). BOEM will also expand its analysis of other large offshore wind plans for the East Coast.
- The \$2.8 billion project "remains viable and continues to move forward," Vineyard Wind said in a statement. The first phase of the project was supposed to come online in late 2019. Dive Insight:

### Dive Insight:

Further delay on Vineyard Wind could impact an additional revenue stream for the project. The clean energy investment tax credit, which is integral to financing the project, will not be available for projects that start construction after the end of 2019.

BOEM needs to complete its Environmental Impact Statement (EIS) within two years of a developer's submission of its Construction and Operations Plan (COP).

"For Vineyard Wind, that is March 2020. That being said, we are focusing on the supplemental EIS, and not yet prepared to set a schedule for the Final EIS," Tracey Blythe Moriarty, BOEM's Office of Public Affairs deputy chief, said in an e-mail.

Vineyard Wind is the first large-scale offshore wind project expected online in the U.S., where the technology remains in the nascent stages of deployment. Other large projects are expected in the next 5 years off the coasts of Rhode Island, New York, New Jersey, Maryland, Virginia and more.

As East Coast states continue announcing offshore wind procurements and stakeholders for the Vineyard Wind project request more analysis, "BOEM is expanding its cumulative analysis of projects within its draft [EIS] to also include projects that have been awarded power purchase agreements, but may not have submitted [COPs], and potential scenarios based on state procurements that are expected to be awarded," Moriarty said.

Bernhardt, a former oil and gas lobbyist who had served under former Interior Sec. Ryan Zinke, has met with Vineyard Wind and with Massachusetts Gov. Charlie Baker, R, in recent weeks regarding the project.

The Interior Department did not respond to requests for comment regarding the delay.

Vineyard Wind expected BOEM approval for a final EIS by July 12. The project developers previously said the final federal environmental study needs to be issued by early September for the project to advance under its current financing.

"While we appreciate that the discussion on cumulative impacts is driven by rapid growth of the industry beyond our project, we urge the federal government to complete the review of Vineyard Wind 1 as quickly as possible," the company said in a statement.



**Associated Press**

## **Vineyard Wind CEO says company remains committed to project**

by THE ASSOCIATED PRESS

Monday, August 12th 2019

NEW BEDFORD, Mass. (AP) — Vineyard Wind says it's committed to building an 800-megawatt wind farm off the Massachusetts coast despite a decision by federal regulators to delay issuing a key environmental impact statement.

Vineyard Wind CEO Lars Pedersen said Monday the company is disappointed it won't be able to deliver the project on the original timeline.

Pedersen said more than 50 U.S. companies have been awarded a contract or are currently bidding on contracts associated with the 84-turbine wind farm.

Bureau of Ocean Energy Management spokeswoman Connie Gillette said Friday the agency took the action after deciding to include in their analysis projects that have been awarded power purchase agreements, but which may not have submitted construction plans.





## Vineyard Wind offers interns project management & business experience in offshore wind

By Michelle Froese | August 5, 2019

Vineyard Wind hired six area students as interns in New Bedford and Boston offices this summer. Vineyard Wind's paid internships emphasize a unique experience in America's emerging offshore wind sector, including project management, bid development support, and community outreach activities.

Three Vineyard Wind interns were participants in the Massachusetts Clean Energy Center (Mass CEC) internship program, which connects Massachusetts residents and students who attend Massachusetts colleges with local clean energy companies that are located in the Commonwealth.

Summer internships are just a small part of Vineyard Wind's commitment to support offshore wind technical training and career development programs for local residents. Vineyard Wind is at the forefront of a national effort to attract billions of dollars of private investment in emerging U.S. offshore wind sector that will help diversify and grow the economy through modernization of local ports, new services such as transport vessels, ongoing research offshore, and skilled workforce training that is needed to construct and operate wind farm facilities.

Vineyard Wind was selected in May 2018 by Massachusetts electric utilities to provide 800 MW of wind generation capacity from a project located 15 miles south of Martha's Vineyard. The project is projected to generate enough electricity to supply six percent of Massachusetts's electricity usage.

The project continues to move ahead with public and regulatory review through more than 25 federal, state, and local approval processes. Once operational in 2021, the Vineyard Wind project will reduce Massachusetts' carbon emissions by over 1.6 million tons per year, the equivalent of removing 325,000 cars from state roads.

To date, Vineyard Wind has received permits or approvals from the Massachusetts Energy Facilities Siting Board (EFSB), an independent state board responsible for review of proposed

large energy facilities, the Massachusetts Environmental Policy Act office, the Cape Cod Commission, the Barnstable Conservation Commission, the Martha's Vineyard Conservation Commission, and the Nantucket Conservation Commission.

The state Natural Heritage and Endangered Species Program has also determined that the project will not have an adverse effect on rare, threatened, or endangered species. In April, the Massachusetts Department of Public Utilities approved long-term power purchase contracts between Vineyard Wind and Massachusetts' electric distribution companies (EDCs) for the delivery of clean offshore wind energy. Vineyard Wind also has entered into a Host Community Agreement with the Town of Barnstable, and a Community Benefits Agreement with the non-profit energy cooperative Vineyard Power, which serves Martha's Vineyard.

Fishing representatives for the project include the New Bedford Port Authority, the Massachusetts Lobsterman's Association, and the Martha's Vineyard Fishermen's Preservation Trust.

# The Herald News

## Baker eyeing 'cure plan' for Vineyard Wind project

By Colin A. Young / State House News Service

Posted Jul 29, 2019 at 6:30 PM

BOSTON -- After a "really productive and substantive" meeting with new U.S. Interior Secretary David Bernhardt in Washington, D.C., on Monday morning, Gov. Charlie Baker said his administration will be working with Vineyard Wind to address the federal government's concerns with the project in line to be the nation's first commercial-scale offshore wind development.

The federal government injected a level of uncertainty into Vineyard Wind, a \$2.8 billion, 800-megawatt offshore wind project planned for the waters off Martha's Vineyard, earlier this month when the Department of the Interior and the Bureau of Ocean Energy Management notified project officials that the government was "not yet prepared" to issue a final environmental impact statement, which had been expected this month.

"What I was really seeking was some clarity so that we can work with Vineyard Wind and with our colleagues in the Congressional delegation and others to cure whatever the concerns are," Baker said Monday afternoon after his meeting with Bernhardt and before returning to D.C. for more meetings. He added, "Our goal is going to be to get as much clarity as we can over the next several days and then work with Vineyard Wind to put together a cure plan, because we really want this project to happen."

Project officials have indicated that the entire Vineyard Wind effort is at risk without a favorable federal response by the end of August. Federal officials say they are operating within a review window that extends to March 2020.

Asked if Monday's meeting provided any insight into what the federal government's concerns are, Baker did not specify but said they "pretty much came straight out of" the public comment period on the project.

"In particular, the ones that seemed of most interest to them, not surprisingly, are the ones that involve other federal agencies. So that's really where our focus is going to be," he said.

On Monday, Reuters reported that the National Marine Fisheries Service "triggered the delays by declining to sign off on the project's design, as proposed by the Bureau of Ocean Energy Management" and that a regional director for the agency "said his agency could not support the environmental permit for Vineyard Wind because the project failed to fully address the concerns of the fishing industry."

When asked directly on Monday whether the concerns stem from Vineyard Wind's impact on the fishing industry, Baker said, "I would describe it as a series of issues that involve a number of federal agencies."

Pressed by a reporter as to why he would not say fishing was among the concerns, Baker responded: "Can you read the comments? They're not that hard to find. Certainly, there were issues that were raised by fishing. There were issues that were raised by a number of other federal agencies as well."

At a forum in March, Baker talked about the importance of states and offshore wind developers forging relationships with commercial fishing organizations, recreational boating groups and other stakeholders to more smoothly address concerns they might have with the wind developments.

"If you really do deal with some of the storage opportunities that are attached to this, it could become much more significant and much more important than I think anybody ever imagined or appreciated when these conversations began four, five, six, seven years ago," Baker said. "But we also need to take very seriously the issues related to the fishing community, the recreational community and the environmental issues that are associated with offshore wind as well."

Vineyard Wind had been planning to financially close on its project and begin on-shore construction work this year, put the first turbine into the seabed in 2021 and have the 84-turbine wind farm operational in 2022. The project is backed by Copenhagen Infrastructure Partners and Avangrid Renewables.

# ENERGY NEWS NETWORK

## Scientists say Vineyard Wind project poses little risk to endangered whales

Sarah Shemkus July 29, 2019

*Any potential disruptions would be small compared to other hazards, including the threat of climate change, experts said.*

Marine scientists say concerns expressed by opponents of a Massachusetts offshore wind project overstate the potential risk to endangered North Atlantic right whales.

“There are so many other things that we cumulatively are doing that are having a much more profound and direct impact on the population,” said Chris Clark, a scientist in the bioacoustics research program at the Cornell Lab of Ornithology in Ithaca, New York.

The Vineyard Wind project is a planned 84-turbine wind farm to be sited about 15 miles southwest of Nantucket. It is expected to be the first major offshore wind installation in the United States. The state of Massachusetts has chosen the project to provide up to 800 megawatts of power.

The project needs more than 25 local, state, and federal permits to begin construction. Among these is an Incidental Harassment Authorization from the National Oceanic and Atmospheric Administration’s Fisheries division, which would establish limits on the numbers of marine mammals that could be injured or whose activities could be disturbed by the construction.

Of specific concern to regulators, environmentalists, and project planners is the endangered North Atlantic right whale. Only about 400 individuals of the species remain, and it is estimated that fewer than 30% of those are females. In June, the [deaths](#) of six North Atlantic right whales were recorded.

“We are dealing with a really small population size,” said Diane Borggaard, right whale recovery coordinator for the National Marine Fisheries Service. “They have a very low annual birth rate. Any cause of human mortality is really going to affect this population.”

In recent years, more right whales have been known to intermittently congregate in the waters south of Nantucket and Martha’s Vineyard.

Because of these ongoing concerns, Vineyard Wind struck a deal in January with three environmental groups — the Natural Resources Defense Council, the Conservation Law Foundation, and the National Wildlife Federation — in which the developer promises to adhere to mitigation measures. According to the agreement, no pile driving will occur from January to April, and careful visual and acoustic monitoring will be required before any pile driving activities for the rest of the year. Vessels associated with construction will also be required to keep to speeds slower than 10 knots, with certain exceptions.

“We’re seeing this as a precedent-setting move,” said Francine Kershaw, a project scientist for marine mammal protection at the Natural Resources Defense Council.

Nonetheless, in May, a Nantucket group called ACK Residents Against Turbines (“ACK” is a nickname for the island derived from the official code for the local airport) filed a letter with the fisheries division asking that the harassment authorization not be granted. The letter argues that the agency has a “poorly-disguised policy preference for the Vineyard Wind project” over the protection of whales. The draft authorization, the group contends, does not address the impact noise from the project will have when it is in operation, does not fully consider the problem of potential collisions with boats, and places too much faith in Vineyard Wind’s stated plans for mitigating its impact.

Ultimately, the letter concludes, the North Atlantic right whale in particular “will continue to be threatened and pushed ever-closer to extinction, all for the sake of a wind energy project that will only encourage more growth and consumption and will, in the end, do nothing to reverse climate change.”

Scientists with right whale expertise, however, say that the scale of these concerns is not warranted, based on current evidence.

Charles Mayo, director of the right whale ecology program at the Center for Coastal Studies in Provincetown, Massachusetts, generally opposes industrial use of the ocean floor and is wary of potentially interfering with marine habitat. Yet he is reassured by the mitigation agreement.

“You want to err on the side of caution. I think we should be particularly cautious about what we do and particularly in right whale areas,” he said. “But the agreement seems about as rational and conservative as you could come up with.”

Furthermore, the noise issues raised by the island group are essentially insignificant, said Clark, the bioacoustics expert. At any given moment, noise from shipping vessels and seismic exploration of the seafloor creates massive amounts of ongoing underwater noise, which can interfere with whales’ communication and increase their stress, he said. In contrast, the sound produced by pile-driving into a sandy surface in relatively shallow water would be only of a short duration and very localized.

“It’s so profoundly different that it is incomparable,” he said. “Given all the mitigation and monitoring requirements that are going to be imposed in the licensing, there is almost no chance that these activities will harm whales.”

There are many unknowns about how the movements of whale populations are changing and how new disturbances to their habitats might affect the species, said several scientists. No mitigation plan can be foolproof. However, the dangers of climate change are so pressing for all species, that taking careful steps to move toward renewable energy is the right environmental move, Mayo said.

“I recognize the overriding importance of bringing carbon emissions under control,” he said. “To me, that is the solution.”



## Vineyard Wind gains approval for Cape Cod transmission

By Michelle Froese | July 23, 2019

Vineyard Wind has passed another hurdle. The Massachusetts Legislature enacted bi-partisan legislation authorizing the Barnstable Town Council to grant an easement for a portion of Covell's Beach — which will allow for construction of the interconnection between Vineyard Wind.

“Following more than a year of close collaboration between Barnstable and Vineyard Wind, we’re grateful for the efforts of Cape Cod lawmakers to enact bi-partisan legislation that allows for construction of America’s first large-scale offshore wind farm,” said Erich Stephens, Chief Development Officer for Vineyard Wind. “With the easement, Vineyard Wind can move forward with a program that features minimally invasive burial techniques 30 feet below the tideline with no disruption to the shoreline.”

The vote follows a Host Community Agreement (HCA) between the Town of Barnstable and Vineyard Wind, which was unanimously supported by the Barnstable Town Council in October 2018. The HCA includes annual payments to the Town of at least \$1.534 million each year in combined property taxes and host community payments, totaling a guaranteed \$16 million in Host Community Payments. The Town Council has dedicated those resources to municipal water protection efforts.

The HCA also includes \$80,000 for reconstruction of a bathhouse at Covell's Beach, repaving of an aged parking lot at the beach, barring construction between Memorial Day and Labor Day, and collaboration on design features. The company and the town are working in close collaboration to aid the Town's sewer needs by co-locating sewer infrastructure in conjunction with Vineyard Wind construction, which will save costs to the town and reduce the need for future road openings.

“The landing of the Vineyard Wind underwater transmission cable in Centerville will bring clean renewable electricity for thousands of local homes and businesses, and further establish our region on the leading edge of a clean energy future,” said State Senator Julian Cyr (D-Truro). “Swift action on this legislation has been a priority for the entire Cape and Islands legislative delegation. With our vote, the Town of Barnstable will receive significant financial benefits and electric infrastructure improvements as a result of the project's landing site.”



“I am very pleased the House has unanimously approved the Vineyard Wind easement for the Town of Barnstable,” said Representative Crocker. “This is another step in the legislative process that will eventually allow for the production of clean and renewable energy off Martha’s Vineyard. This legislation will allow for the creation of 3,600 new jobs for the Commonwealth and will annually reduce carbon dioxide emissions by 1.68 million metric tons; this is a win-win for all of Massachusetts.”

Vineyard Wind expressed appreciation for the efforts of all Cape Cod officials, including the bi-partisan coalition of legislators who co-sponsored the effort.

Vineyard Wind continues to undergo an extensive and comprehensive public and regulatory review process that involves evaluation by more than 25 federal, state, and local regulatory bodies, including the U.S. Bureau of Ocean Energy Management, the Army Corps of Engineers, Massachusetts Department of Environmental Protection, the Cape Cod Commission, the Martha’s Vineyard Commission, and local conservation commissions.

To date, Vineyard Wind has received permits or approvals from the Massachusetts Energy Facilities Siting Board (EFSB), an independent state board responsible for review of proposed large energy facilities, the Massachusetts Environmental Policy Act office, the Cape Cod Commission, the Barnstable Conservation Commission, the Martha’s Vineyard Conservation Commission, and the Nantucket Conservation Commission.

In April, the Massachusetts Department of Public Utilities approved long-term power purchase contracts between Vineyard Wind and Massachusetts’ electric distribution companies (EDCs) for the delivery of clean offshore wind energy. Vineyard Wind has entered into a Host Community Agreement with the Town of Barnstable, and a Community Benefits Agreement with the non-profit energy cooperative Vineyard Power, which serves Martha’s Vineyard. Fishing representatives for the project include the New Bedford Port Authority, the Massachusetts Lobsterman’s Association, and the Martha’s Vineyard Fishermen’s Preservation Trust.

## On board survey ship Geobay, crew tests Vineyard Wind seabed

By [Jennette Barnes](#)

July 1, 2019

NEW BEDFORD — The survey ship Horizon Geobay motored out of New Bedford Harbor on Thursday, ready to bore holes in the ocean floor and see just how easy, or difficult, anchoring wind turbines to the seabed will be.

The ship should be out for a month, working on behalf of Vineyard Wind.

The crew of 50 hails from around the world — geotechnical engineers from the United Kingdom, drilling staff from the Philippines and Malaysia, species-protection and fishery observers and Vineyard Wind representatives from the United States, and other crew members from India, Lithuania, the Netherlands and Poland.

“This is definitely a milestone,” Vineyard Wind Chief Development Officer Erich Stephens said.

The company has done similar testing before, but the latest trip will be more detailed and test more locations, he said.

Ashley Tarr, senior engineering geologist for vessel owner Horizon Geosciences, gave a reporter a tour Wednesday of the 87-meter ship docked at the New Bedford Marine Commerce Terminal. Crew members were moving equipment and readying for the trip.

Tarr serves as project manager. He led the way to the bridge, which overlooks a massive drill rig. The ship conducts cone-penetration testing. It records resistance against the tip of the drill and friction on the sides. Additional tools deployed through a hollow drill pipe collect samples from about one meter below the sea floor.

In an on-board laboratory, the crew tests samples for density, grain-size distribution and other characteristics. They log and photograph the samples to create a preliminary profile.

More sensitive testing in an on-shore laboratory rounds out the evaluation of the most economic and effective locations for the turbines, Tarr said.

Vineyard Wind won the state's first contract for offshore wind and plans to install 84 turbines of 9.5 megawatts each.

Tarr said his company looks forward to a new market for offshore wind in the United States.

"We're very happy to support them in achieving clean energy goals," he said.

Although the majority of the crew are men, Tarr said four of the U.S. species-protection observers and one Horizon engineer are women.

Based in the UK, Horizon Geosciences conducts surveys for a variety of offshore infrastructure, including pipeline routes, platforms and more. The company has worked on about 27 wind farms, Tarr said.

Stephens said the 800-megawatt project remains on track to begin operating in 2021. Permits should be wrapped up in the next few months.

"We're really excited. We're looking forward to starting work," he said.



# CAPE COD TIMES

## Vineyard Wind moves turbines to aid fishing vessels

---

By **Mary Ann Bragg** June 24, 2019

NEW BEDFORD — Vineyard Wind announced Monday that it has adjusted the layout for its 84-turbine wind farm to give more room for fishing vessels operating south of the Islands.

The company has moved the planned location of three 9.5 megawatt turbines farther away from the Nantucket Historic District and Chappaquiddick to create additional distance between the wind farm and commercial fishing areas just south of Martha's Vineyard and Nantucket. The redesign also aids fishing vessels traveling around Nomans Land and heading toward fishing grounds southeast of the wind farm, the company said.

The project's plan to deliver 800 megawatts of electricity annually to three Massachusetts utilities is not affected by the adjustments, according to the company.

"Where possible, we have a responsibility to minimize the project's footprint with respect to the history and culture of the Cape and Islands, and existing uses of these waters," said Erich Stevens, Vineyard Wind's chief development officer.

The company has proposed to install an automatic detection and lighting system that would reduce the use of red, flashing aircraft warning lights to what would amount to a few hours per year, according to Monday's statement. The company also has agreed to reduce the visibility of the turbines during daylight hours through the use of white-gray paint.

The company, currently in the midst of federal permitting for the \$2 billion construction project and a long-term operations and maintenance plan for the wind farm, has said it expects to begin construction later this year.



## Vineyard Wind celebrates opening of Boston office

By Michelle Froese | June 19, 2019

Vineyard Wind, which is developing the United States' first-utility-scale wind farm, celebrated the opening of a permanent Boston office yesterday. The company's new, larger workplace, located in the historic Back Bay neighborhood, will accommodate a growing staff and provide a range of offshore wind services.

These include contractor management, regulatory affairs, and financing — and similar activities needed to support construction of a proposed offshore wind farm that will be located 15 miles south of Martha's Vineyard, as well as other projects in earlier stage of development.

The 800-MW wind farm, under development by Vineyard Wind, will be the first utility-scale wind farm in the U.S. It remains on schedule to begin on-shore construction in 2019 and become operational by 2022.

The Vineyard Wind project continues to move ahead with public and regulatory review through more than 25 federal, state, and local approval processes. These include US Bureau of Ocean Energy Management (federal Environmental Impact Statement), Massachusetts Department of Environmental Protection and Coastal Zone Management, as well as local and regional conservation commissions.

Yesterday's opening event featured a ribbon-cutting and remarks by Massachusetts Governor Charlie Baker, AVANGRID CEO James P. Torgerson, and Vineyard Wind CEO Lars Pedersen.



## Training an offshore wind workforce

---

By Bronwen Howells Walsh

6/10/19

Vineyard Wind is partnering with regional colleges to train an offshore wind workforce on the Cape and Islands, and it's getting a funding boost from the Commonwealth.

Stephen Pike, executive director and CEO of the Massachusetts Clean Energy Center (MassCEC), recently announced a state award of \$721,500 in educational seed money. That's in addition to \$2 million that the Vineyard Wind contract committed to workforce development and public safety.

"The offshore wind industry is poised to create new renewable energy jobs, and these programs represent an important development as the Commonwealth readies for the first large-scale project in the nation," Pike said. "With Massachusetts' proud maritime heritage, robust innovation economy and academic and training assets, the state is very well positioned to grow a workforce that will contribute to this new American industry for years to come."

Proposed for siting 14 miles off the coast of Martha's Vineyard, the Vineyard Wind project intends to bring 800 megawatts of electricity to the Cape and Islands and generate clean, renewable, cost-competitive energy for 400,000 residents of the Commonwealth. Its staging area is being constructed in New Bedford.

Grant funding recipients include:

**Bristol Community College** – \$200,000 to establish basic safety training and basic technical training to Global Wind Organization standards at its campus in New Bedford.

**Cape Cod Community College** – \$66,570 to develop and deliver a suite of courses to introduce students and workers to careers in offshore wind.

**Massachusetts Maritime Academy** – \$184,000 to establish all five modules of GWO basic safety training at its campus and develop an “introduction to offshore wind” course for MMA cadets. A crew transfer training facility, supported by MassCEC, will be operational in Summer 2019.

**UMass Amherst** – \$105,500 to complete initial design and develop most of an offshore wind professional certificate program to be offered at the Mt. Ida campus in Newton.

**Pile Drivers and Divers Local 56** – \$100,000 to sponsor trade union members for GWO basic safety training at Massachusetts Maritime Academy.

**Adult Continuing Education** – Martha’s Vineyard (ACE MV) – \$65,000 to partner with BCC and MMA to provide on-island courses and training that supports basic safety and technical certification, as well as offshore wind technician certificates.

In April 2018, MassCEC released a report on the workforce needs and economic impact of the emerging offshore wind industry, finding that the deployment of 1,600 MW of offshore wind is estimated to support between 2,300 and 3,100 direct job years over the next 10 years and generate a total economic impact in Massachusetts of between \$678 million and \$805 million.

The investments will help ensure that the Commonwealth’s thriving green economy has access to workers with the skills and training necessary to facilitate growth in this high-demand job sector, said Rosalin Acosta, Massachusetts Labor and Workforce Development Secretary. “That’s good for the environment and good for the health of the Massachusetts economy.”

The funding builds on the state’s efforts to support a clean energy industry, including recently securing 9,450,000 MW of hydroelectric energy and 800MW of offshore wind energy, the largest procurement in offshore wind by any state in the country.

“Vineyard Wind is proud to support this significant next step forward in preparing Massachusetts workers for construction of the nation’s first commercial scale offshore wind farm,” said Erich Stephens, Vineyard Wind Chief Development Officer. “The programs announced today provide a strong foundation to our commitment that every Massachusetts’ resident will have a meaningful opportunity to access careers in the Commonwealth’s newest industry, offshore wind.”

State Sen. Julian Cyr (D-Truro) said the grant is “a clear indication that Vineyard Wind is following through on its promise to be a responsible partner to our community.”

“By working together with the Commonwealth to provide workforce training that will create good-paying, year-round, high-skilled jobs on Cape Cod and Martha’s Vineyard, the economic benefit of Vineyard Wind’s investment in the new off-shore wind industry is an important piece of economic development that will strengthen our local economy for the foreseeable future,.” he added.





## Vineyard Wind Praises Historic Wind Legislation

**House Bill 7156 will allow up to 2,000 MW of wind energy to be procured in CT.**

By [Press Release Desk, News Partner](#)  
Jun 9, 2019

**From Vineyard Wind:** Vineyard Wind LLC, a leading offshore wind developer based in New England, congratulated Governor Lamont for his signing of House Bill (HB) 7156, a bill that will allow for as much as 2,000 megawatts of offshore wind power to be procured by the state.

"With the stroke of a pen today, Governor Lamont made history," said Erich Stephens, Chief Development Officer for Vineyard Wind. "This legislation has the potential to make Connecticut a major player in offshore wind power, an industry that's poised for tremendous growth in the coming years. Our plan, which will invest millions into the city of Bridgeport, would turn offshore wind into statewide industry and create good paying jobs with good benefits."

Vineyard Wind is looking to work with the city of Bridgeport and an existing Connecticut business along the city's harbor, Bridgeport Boatworks. If the company is accepted as a supplier of wind energy for the state, it will invest millions of dollars in the revitalization of Bridgeport Harbor, so that the harbor can be used as a staging area for the ongoing construction of a facility off the coast of Martha's Vineyard.

Vineyard Wind is a New England-based company and the leading US offshore wind developer, currently developing and financing the nation's first commercial-scale offshore

wind farm - an 800 MW project in federal waters south of Martha's Vineyard.

The project is set to begin construction later this year. Vineyard Wind is backed by two of the world's most successful and experienced offshore wind project developers and investors - Copenhagen Infrastructure Partners (CIP) and Avangrid Renewables. CIP manages over \$8 billion in clean energy investments worldwide, and its partners are some of the world's pioneers in the offshore wind industry. Avangrid Renewables is a subsidiary of AVANGRID, Inc. (NYSE: AGR), and one of the leading providers of wind energy in the US. It is part of the Iberdrola Group, one of the world's largest wind project developers with more than 15 GW of wind power capacity installed.



# CAPE COD TIMES

## Vineyard wind seeks proposals for whale-detection technology

---

By **Mary Ann Bragg** May 21, 2019

NEW BEDFORD — Offshore wind developer Vineyard Wind announced Tuesday it is seeking proposals from universities, technology companies and others to implement acoustic monitoring along the company's transit routes off Southeastern Massachusetts to help protect critically endangered North Atlantic right whales.

The organizations submitting the proposals would be asked to provide and operate the equipment, which would detect the presence of right whales and immediately transmit the information to Vineyard Wind.

The acoustic monitoring is part of the company's Jan. 22 agreement with three conservation groups to adopt seasonal restrictions on pile driving when right whales are likely to be in the area, based on on-board observers, acoustic monitoring and boat and airplane surveys.

The company agreed to seasonal restrictions on geophysical surveys during and after construction, and slower boat speeds, all tied to the presence of right whales in the area. The company also committed to report observations and acoustic detection of right whales to federal officials and to use technology that minimizes noise.

In the agreement, Vineyard Wind also committed \$3 million to develop and use technologies to protect the whales and other marine mammals that could be adopted for future offshore wind projects. The company is on track to start construction this year on an 84-turbine wind farm about 15 miles south of Martha's Vineyard, according to company officials.

The right whales, estimated with a total population of 411, migrate annually along the East Coast from Florida to Canada and are considered at risk of extinction within several decades due to injuries and deaths from ships strikes and becoming wrapped in fishing rope, according to researchers and federal regulators responsible for the whales' protection.

## Offshore wind project wins OKs for transmission

---

By Colin A. Young / State House News Service

5/9/19

BOSTON — The 84-turbine wind farm planned for waters off Martha’s Vineyard on Thursday secured approval from the state board that reviews proposed energy facilities for the transmission cables that will deliver its renewable energy and the substation that will connect the project to the power grid.

Vineyard Wind said the Massachusetts Energy Facilities Siting Board approved the three petitions it filed to construct and operate 27 miles of on- and off-shore 220-kilovolt electric transmission line, a substation in Barnstable and a 0.1-mile 115 kV underground transmission line between the substation and an existing facility in Barnstable.

“Approval by the Massachusetts EFSB is another affirmation of the collaborative, community-focused approach that Vineyard Wind has taken in designing and developing the nation’s first commercial scale offshore wind project,” Erich Stephens, chief development officer of Vineyard Wind, said. “We want to thank the residents and officials of the Town of Barnstable who took the time to explore opportunities to address local concerns while simultaneously delivering enough cost-competitive, carbon-free energy to serve six percent of the Commonwealth’s electricity demand, making the project a real win-win-win.”

In its notice advising the public that it would consider Vineyard Wind’s petitions, the EFSB said its role was “to determine whether the Project would provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost ... whether the proposed Project is necessary, serves the public convenience, and is consistent with the public interest ... whether zoning exemptions are

required for the Project and whether the present or proposed use of the land or structures is reasonably necessary for the convenience or welfare of the public.”

Officials at the Energy Facilities Siting Board were not immediately available Thursday to confirm the approval, and the ruling was not listed among the agency’s recent decisions on its website.

According to the agency’s notice, Vineyard Wind was seeking approval of two proposed routes and variations for transmission cables though it plans to ultimately build only one. Both proposed routes “begin at the outer limit of Massachusetts waters approximately six miles southeast of Chappaquiddick Island, and six miles southwesterly of Muskeget Island, and run northerly to shoreline landing areas in Yarmouth or Barnstable,” the EFSB said.

Depending upon which offshore route Vineyard Wind selects, it identified two possible routes to carry the power generated at sea from the shoreline to a substation Vineyard Wind plans to build 5.5 to 6 miles inland at the Independence Park commercial/industrial area in Barnstable.

EFSB said the proposed onshore routes “are all entirely underground and are located primarily within public roadways, with some shorter stretches in existing utility transmission rights-of-way (‘ROW’), a MassDOT-owned railroad ROW, and, in some instances, along a MassDOT-proposed bike path corridor and/or unpaved access roadways.”

Utility companies and the state tapped Vineyard Wind to construct an 800-megawatt wind farm 15 miles south of Martha’s Vineyard and 34 miles from the mainland to fulfill the first half of a 1,600 MW procurement called for in a 2016 clean energy law.

Massachusetts environmental officials completed their review of the Vineyard Wind project, which is expected to be operational by 2022, in February. The EFSB was looking only at the transmission aspects of the project, not the wind farm itself.

Vineyard Wind is planning to financially close on its project and begin on-shore construction work this year, put the first turbine into the seabed in 2021 and have the 84-turbine wind farm operational in 2022.

# MVC Approves Undersea Cable for Vineyard Wind

[Holly Pretsky](#)

*Saturday, May 4, 2019*

Vineyard Wind, the company that plans to build a massive offshore wind farm south of the Vineyard, won approval from the Martha's Vineyard Commission Thursday night for its undersea cables that will transmit electricity to mainland.

The commission was reviewing the project as a development of regional impact (DRI) because part of the cable will through Vineyard waters off the eastern shore of Chappaquiddick. A [public hearing](#) opened in February.

The approval comes with two conditions: the company must return to the commission if it decides to decommission the wind farm, and the commission reserves the right to require a modification if there are unforeseen environmental impacts.

Out the outset of deliberations Thursday night, MVC executive director Adam Turner urged continued oversight of the cables, which will be buried five to eight feet deep about 1.2 miles from the Edgartown shoreline. He said he supports Vineyard Wind, but he expressed doubts that federal agencies including the Bureau of Ocean Energy Management (BOEM) could be trusted to adequately protect the ocean and its wildlife.

“[BOEM] consistently puts the natural environment and sea animals way behind the economic development of energy,” Mr. Turner said. “We are the ones responsible to protect this place, whether BOEM protects it or not.”

Commissioners agreed.

“It may be that evidence comes back that is inconsistent with what their proposal and their testimony said,” said commissioner Joan Malkin of information provided by the company. “If it turns out there are impacts, that would constitute a change.”

Responding to concerns raised during the hearings, Vineyard Wind has promised to share approvals from federal and state agencies with the commission, including a copy of BOEM’s federal environmental impact statement. The company also committed to modifying the cable installation process to protect the North Atlantic Right Whale. In a final offer Thursday night, Vineyard Wind committed to continued monitoring of the benthic habitat to document potential disturbances and recovery.

Based in New Bedford, the company was formed through a partnership between Avangrid Renewables and the Danish company Copenhagen Infrastructure Partners.

The Cape Cod Commission also approved underground cables Thursday in Barnstable. The regional decisions marked a milestone for the proposal, but by no means conclude the permitting process. The project still awaits a sign-off from the Edgartown conservation commission among other local authorities. And multiple state and federal regulatory agencies, most prominently BOEM, still need to grant approvals before the project can begin. In the end, the vote to approve the project was 14-0-1. Clarence A. (Trip) Barnes 3rd abstained, citing concern for wildlife.

Chairman Douglas Sederholm acknowledged Mr. Barnes’s concerns, but said the conditions are designed to monitor unforeseen impacts.

“I think a lot of this is, we don’t know, but we’re going to keep our hook in.” Mr. Sederholm said.





# OFFSHORE WIND FARMS ARE SPINNING UP IN THE US—AT LAST

CHRISTOPHER FURLONG

4/17/19

ON JUNE 1, the Pilgrim nuclear plant in Massachusetts will shut down, a victim of rising costs and [a technology](#) that is struggling to [remain economically viable](#) in the United States. But the electricity generated by the aging nuclear station soon will be replaced by another carbon-free source: a fleet of 84 offshore wind turbines rising nearly 650 feet above the ocean's surface.

The developers of the [Vineyard Wind](#) project say their turbines—anchored about 14 miles south of Martha's Vineyard—will generate 800 megawatts of electricity once they start spinning sometime in 2022. That's equivalent to the output of a large coal-fired power plant and more than Pilgrim's 640 megawatts.

“Offshore wind has arrived,” says Erich Stephens, chief development officer for Vineyard Wind, a developer based in New Bedford, Massachusetts, that is backed by Danish and Spanish wind energy firms. He explains that the costs have fallen enough to make developers take it seriously. “Not only is wind power less expensive, but you can place the turbines in deeper water, and do it less expensively than before.”

Last week, the Massachusetts Department of Public Utilities [awarded](#) Vineyard Wind a 20-year contract to provide electricity at 8.9 cents per kilowatt-hour. That's about a third the cost of other renewables (such as Canadian hydropower), and it's estimated that ratepayers will save \$1.3 billion in energy costs over the life of the deal.

Can offshore wind pick up the slack from Pilgrim and other fading nukes? Its proponents think so, as long they can respond to concerns about potential harm to fisheries and marine life, as well as successfully connect to the existing power grid on land. Wind power is [nothing new](#) in the US, with 56,000 turbines in 41 states, Guam, and Puerto Rico producing a total of 96,433 MW nationwide. But wind farms located offshore, where wind blows steady and strong, unobstructed by buildings or mountains, have yet to start cranking. In recent years, however, the turbines have grown bigger and the towers taller, able to generate three times more power than they could five years ago. The technology needed to install them farther away from shore has improved as well, making them more palatable to nearby communities. When it comes to wind turbines, bigger is better, says David Hattery, practice group coordinator for power at K&L Gates, a Seattle law firm that represents wind power manufacturers and developers. Bigger turbines and blades perform better under the forces generated by strong ocean winds. "Turbulence wears out bearings and gear boxes," Hattery said. "What you don't want offshore is a turbine that breaks down. It is very expensive to fix it."

In the race to get big, Vineyard Wind plans to use a 9.5 MW turbine with a 174-meter diameter rotor, a giant by the standard of most wind farms. But GE last year unveiled an even bigger turbine, the 12 MW Haliade-X. When complete in 2021, each turbine will have a 220-meter wingspan (tip to tip) and be able to generate enough electricity to light 16,000 European homes. GE is building these beasts for offshore farms in Europe, where wind power now generates [14 percent](#) of the continent's electricity (compared to 6.5 percent in the US). "We feel that we have just the right machine at just the right time," says John Lavelle, CEO of GE Renewable Energy's Offshore Wind business.

US officials say there's a lot of room for offshore wind to grow in US coastal waters, with the potential to generate more than 2,000 gigawatts of capacity, or 7,200 terawatt-hours of

electricity generation per year, [according](#) to the US Department of Energy. That's nearly double the nation's current electricity use. Even if only 1 percent of that potential [is captured](#), nearly 6.5 million homes could be powered by offshore wind energy.

Of course, getting these turbines built and spinning takes years of planning and dozens of federal and state permits. The federal government made things a bit easier in the past five years with new rules governing where to put the turbines. The Bureau of Ocean Energy Management (a division of the Department of Interior) now sets boundaries for offshore leases and accepts bids from commercial enterprises to develop wind farms.

The [first offshore project](#) was a 30 MW, five-turbine wind farm that went live at the end of 2016. Developed by Deepwater Wind, the installation replaced diesel generators that once serviced the resorts of Block Island, Rhode Island. Now there are [15 active proposals](#) for wind farms along the East Coast, and others are in the works for California, Hawaii, South Carolina, and New York.

By having federal planners determine where to put the turbines, developers hope to avoid the debacle that was Cape Wind. Cape Wind was proposed for Nantucket Sound, a shallow area between Nantucket, Martha's Vineyard, and Cape Cod. Developers began it with high hopes back in 2001, but pulled the plug in 2017 after [years of court battles](#) with local residents, fishermen, and two powerful American families: the Kennedys and the Koch brothers, both of whom could see the turbines from their homes.

Like an extension cord that won't reach all the way to the living room, Cape Wind's developers were stuck in Nantucket Sound because existing undersea cables were limited in length. But new undersea transmission capability means the turbines can be located further offshore, away from beachfront homes, commercial shipping lanes, or whale migration routes.

Even though cables can stretch further, somebody still has to pay to bring this electricity back on land, says Mark McGranaghan, vice president of integrated grid for the Electric Power Research Institute. McGranaghan says that in Denmark and Germany the

governments pay for these connections and for the offshore electrical substations that convert the turbine's alternating current (AC) to direct current (DC) for long-distance transmission. Here in the US, he predicts these costs will likely have to be paid by utility ratepayers or state taxpayers. "Offshore wind is totally real and we know how to do it," McGranaghan says. "One of the things that comes up is who pays for the infrastructure to bring the power back."

It's not just money. Offshore wind developers must also be sensitive to neighbors who don't like power cables coming ashore near their homes, fishermen who fear they will be shut out from fishing grounds, or [environmental advocates](#) who worry that offshore wind platform construction will damage sound-sensitive marine mammals like whales and dolphins.

Still, maybe that's an easier job than finding a safe place to put all the radioactive waste that keeps piling up around Pilgrim and the nation's 97 other nuclear reactors.



# CAPE COD TIMES

## DPU approves Vineyard Wind contracts

---

By Mary Ann Bragg April 17, 2019

BOSTON — State public utility regulators have approved long-term offshore wind contracts between Vineyard Wind and electric distribution companies in Massachusetts, giving the offshore wind farm developer a crucial approval needed to start construction by the end of the year.

“The approval of these contracts is an important step toward the completion of the largest offshore wind project in the country,” Gov. Charlie Baker said in a statement issued by the state Department of Public Utilities. The project will “significantly reduce greenhouse gas emissions, provide Massachusetts residents and businesses with cost-effective clean energy and promote economic development,” Baker said.

In mid-July, Eversource, National Grid and Unitil each filed a petition with the department for approval of long-term contracts to purchase offshore wind energy and associated renewable energy certificates. Two months earlier, Vineyard Wind’s bid on the long-term power contracts for 800 megawatts a year was selected for contract negotiation by the three electricity distribution companies.

“This approval ensures that this project offering competitively priced and locally produced offshore wind energy to the Commonwealth can move forward,” state Energy and Environmental Affairs Secretary Matthew Beaton said in the statement. A spokesman for Vineyard Wind declined comment Tuesday, citing previously agreed-upon legal constraints.

The company intends to start construction of the \$2 billion wind farm later this year to take advantage of a one-time federal investment tax credit program. Use of the tax credit within a long-term power purchase agreement was a key factor in the company’s ability to make a competitive offer for the contracts, the company’s CEO, Lars Pedersen, said previously.

An approval of Vineyard Wind’s plan to land its high-voltage cable on the southern coast of Barnstable still needs to be approved by the state’s Energy Facilities Siting Board,

which had been delayed after initial estimates pegged that decision for March 1. The board is expected to meet May 9 in Boston. Likewise, the Cape Cod Commission has continued to May 2 its public hearing on its review of the cable-laying as a development of regional impact.

In the contracts, Vineyard Wind has committed to contributing \$15 million to a fund that will invest in projects designed to promote the use of battery storage in low-income communities and support the state's goal to further the development of energy storage systems across the state, according to the statement.

Criteria used in the evaluation of the bids — where Vineyard Wind emerged the winner, in May — included an economic evaluation of the benefits for ratepayers, the project's ability to foster employment and economic development in Massachusetts, and the project's environmental impacts and the extent to which a project demonstrates that it avoids or mitigates impacts to natural resources and tourism, according to the statement.

The department's order on Tuesday approved the selection of Vineyard Wind — which plans to build 84 turbines south of Martha's Vineyard — and found that the contracts are cost-effective as well as in the public interest, according to the statement.

In August 2016, Governor Baker signed into law an energy diversification measure requiring utilities to competitively solicit and contract for approximately 1,600 megawatts of offshore wind and approximately 1,200 megawatts of clean energy.

The solicitation of the second 800 megawatts of offshore wind energy is expected later this year, with a proposed deadline for submission of confidential proposals set for Aug. 9. However, the request for proposals has not yet been approved by the Department of Public Utilities, a department spokeswoman said.



# CAPE COD TIMES

## Vineyard Wind commits to fisheries monitoring

---

By **Mary Ann Bragg** April 7, 2019

NEW BEDFORD — Vineyard Wind has announced that it will adopt research measures recommended by a local university to monitor the effects on fisheries of the 84-turbine offshore wind farm, which when operational could be the first industrial-sized installation in the country.

The company, which intends to begin construction later this year of an 84-turbine wind farm south of Martha's Vineyard, entered into a multi-faceted agreement in 2017 with the University of Massachusetts Dartmouth School for Marine Science and Technology. Part of the agreement was for the school to design an approach to research that would be capable of monitoring the effects on fisheries of the one-time construction of the wind farm. The approach also needed to be capable of handling longer-term, regional studies.

“The fishing industry has raised important questions about the impacts of offshore wind development on the marine environment and on sea life,” the company said in a statement released Friday.

While Rhode Island fishermen in February approved a mitigation package that includes \$4.2 million in payments over 30 years for direct impacts to commercial fishermen as a result of the wind farm, as well as the creation of a \$12.5-million trust set up over five years that could be used to cover additional costs to fishermen resulting from the project, tensions continue to exist.

“It’s this industry against the world,” Lanny Dellinger, a leader in the Rhode Island commercial fishing community, said at a February meeting. “Look around and see what you’re up against. That’s what we had to weigh as a group. There is no choice here.”

The methodology the school is recommending is based on workshops held in November and December, and pilot projects. The procedures should encompass an array of fish

species, and an integration of methods that can support additional and on-going fisheries research; the use of a “nested and modular” study design for both a relatively small construction site as well as a wider region; the creation of a standing committee of commercial fishermen to review findings and make recommendations; and the use of local fishermen to provide vessels to support the studies.

The research is meant to be used by the growing U.S. offshore wind industry and fishing communities, beyond its application to the Vineyard Wind project, the company said.

As part of the 2017 agreement, the school will also conduct the studies, which are expected to begin later this spring.

“SMAST worked with Vineyard Wind as well as fishing industry representatives and government regulators to conduct a series of workshops that culminated in the recommendations,” Steven Lohrenz, the school’s dean said in an email. “Key aspects are that the monitoring will cover a range of spatial scales and will include ongoing interactions with the fishing industry throughout the course of the monitoring effort.”

Last May, Vineyard Wind was selected to negotiate what could be the first contracts in the country for a large-scale, offshore wind farm, to provide 800 megawatts of electricity to three power distributors in Massachusetts. The contracts are now signed and are pending approval before the state Department of Public Utilities. The power cables from the wind farm are to land at a south-facing beach in Barnstable and then snake underground to a new substation off Independence Drive in Hyannis, to connect to the regional power grid. Those cable connection plans, too, are pending approval before the state Energy Facilities Siting Board.

The final environmental impact statement on the project’s construction and operations plan is expected to be completed this summer.





## Vineyard Wind and R.I. strike bargain

*R.I. Fishery Advisory Board chairman doesn't like settlement.*

By **Rich Saltzberg**

March 4, 2019

Vineyard Wind recently announced a \$16.7 million deal with the Rhode Island Fisheries Advisory Board. The deal was made on behalf of Rhode Island fishermen who ply the waters where a farm of 84 wind turbines is slated to be built by Vineyard Wind. The farm will be situated about 14 miles south of Martha's Vineyard.

“The package agreed to today by the [Rhode Island Fisheries Advisory Board] includes \$12.5 million in funding to a trust fund that would be managed by Rhode Island fishermen for the purpose of ensuring safe and effective fishing in and around Vineyard Wind’s project area and future wind farms generally,” a release states. “Vineyard Wind will pay \$2.5 million per year for five years into this fund. In addition to this fishermen-directed fund of \$12.5 million, a separate fund totaling \$4.2 million would be established to compensate for any direct impacts to Rhode Island fishermen or other sectors of the Rhode Island fishing industry.”

“I just think it was a [expletive] deal for the industry, but it’s the deal that we got,” Newport, R.I., lobsterman Lanny Dellinger, chairman of the Rhode Island Fisheries Advisory Board, told The Times.

“I just don’t think the negotiations were set up fairly,” he said. Dellinger said that he and his fellow advisory board members were pressured with unreasonable timelines and forced to negotiate with an entity backed by a multibillion-dollar energy company, all the while

running their own small businesses without any sort of compensation or help to offset the time and energy they spent.

Dellinger said the board felt it had to take the deal because, he said, Vineyard Wind could have appealed to the federal government, the National Oceanic and Atmospheric Administration (NOAA), and the Bureau of Ocean Energy Management (BOEM) for a lesser sum or no compensation at all.

“We were between a rock and a hard place,” he said. “No other way to put it.”

Richard Fuka, Rhode Island Fishermen’s Alliance president, said squid fishermen, who comprise the most lucrative part of the Rhode Island fishing industry, weren’t represented on the board and were therefore cut out of negotiations.

When asked if Vineyard Wind was aware squid fishermen might have not had a seat at the table for negotiations, Vineyard Wind spokesman Scott Farmelant declined to talk about any part of the deal, and referred The Times to the Vineyard Wind release.

Fuka said the immediate area around the Vineyard Wind turbine farm produces \$400 million of annual revenue for the squid fishery. He said the turbines threaten that revenue. Among other concessions, Fuka wants transit corridors between wind turbines to be four miles wide. To date, Vineyard Wind has assented to [two-mile-wide corridors](#). Fuka said that width is insufficient for mobile-gear fishing boats, like squid boats. He said the gear those boats trail behind them stretches a long way: “Smaller boats, a quarter- to half-mile — bigger boats twice that. It’s quite a bit of wire and net.”

John Keene, president of the Martha’s Vineyard Fishermen’s Preservation Trust, said his organization maintains its support for a four-mile-wide corridor.

Meghan Lapp, fishery liaison for Sea Freeze, Ltd., a commercial fishing enterprise with a squid fleet, told The Times she wants to see a study about transit corridors because the

scale of the Vineyard Wind project has no precedent and because the scope of radar interference, if any, remains undetermined. “How far does that radar interference extend?” she asked.

The Times posed several radar questions to BOEM officials when they came to the Vineyard on [Feb. 12](#) to hold a hearing on a draft environmental impact statement for the Vineyard Wind project. The Times was told the BOEM engineering specialist was not present, and nobody else on their team could field the inquiries.

Calls to their Washington, D.C., media office weren’t immediately returned on Friday.

Lapp also alleged the impacts to commercial fisheries were first categorized as “major” in the draft environmental impact statement for the project, but since BOEM expects mitigating measures, it reduced the impact to “moderate.”

Lapp criticized the transparency of the negotiations between Vineyard Wind and Rhode Island Fisheries Advisory Board, alleging the public was kept out of key parts of the process and that some of the economic data used in crafting the deal hasn’t been made publically available. “This sets the precedent for how other projects could go,” she said.

“People don’t seem to realize you’re talking about over 1,400 square miles of uninterrupted turbines between Rhode Island and Massachusetts,” Dellinger said.

Menemsha fisherman Stanley Larsen told The Times he was unconcerned about the potential for piloting problems in and around Vineyard Wind’s project area, citing the sophistication of modern navigation equipment.

Keene said he is in support of Vineyard and other Massachusetts fishermen receiving just compensation for “known” or “expected losses” stemming from wind farms.

Larsen, who is about to return squid fishing to Menemsha in the next two weeks aboard the wooden dragger Richard and Arnold, waxed optimistic about the ramifications of the Vineyard Wind project. "Hope it will drive the price up," he said.



## Overwhelming support for Vineyard Wind at hearing

*BOEM officials learn climate change and jobs drive local support.*

By: Rich Saltzberg

February 13, 2019

A team from the Bureau of Ocean Energy Management (BOEM) came to the Vineyard Tuesday night to gather public comment on a draft environmental impact statement (EIS) for Vineyard Wind's proposed wind farm some 15 miles south of Aquinnah, and got an earful of enthusiastic support.

Bill Lake, director of Vineyard Power, a Vineyard green energy company affiliated with Vineyard Wind, said the project would be impactful in the quest to combat climate change.

"I think my principal point is in considering the environmental impact statements of the project, it's very important to keep them in perspective," he said. "Any project of this size will have some local impacts. The draft impact statement identifies those impacts and the steps that are possible to minimize them. But the far greater impact of this project will be the positive contribution it will make to meeting the existential threat posed by climate change. The speed at which our climate is changing and the effects, both those we're feeling now and those that are predicted, are just staggering. Few things could be as important as reducing carbon emissions by moving from fossil fuels to renewable energy, and this project will be a huge step in that direction."

Greer Thornton, co-owner of Atria in Edgartown, said she spoke on behalf of her family in support of the Vineyard Wind project.

“As a year-round resident and business owner on Martha’s Vineyard for 20 years, I would like to express my total support for the Vineyard Wind project,” she said. “This project is so needed at this critical time, a time when we may be able to repair, may be able to repair, the severe damage we’ve made to our planet through irresponsible use and production of fossil fuels. In addition to creating much-needed year-round jobs for this Island and its residents, this project could catapult us to compete with the global initiative to be more sustainable and economically viable. If we do not do this now, we will lose on all fronts.”

Nicola Blake, an environmental scientist at the University of California, said the project was particularly right for the commonwealth. “In terms of mitigating climate change, as you know the scientific consensus is that the ocean-atmosphere-terrestrial climate system has already absorbed dangerously large amounts of extra heat, energy, and CO<sub>2</sub>, which is an acid, a weak acid, because of fossil fuel emissions such that it’s probably at a tipping point in terms of extreme weather, sea level rise, ocean health, et cetera,” she said. “So also I want to lend my voice to the fact that we cannot afford to wait longer for the transition to renewable offshore wind energy — wind energy is our best option for Massachusetts, given its abundance.”

Rob Hannemann, chairman of Chilmark’s energy and finance committees and a former Tufts engineering professor, said the project was an important step in reducing dependency on fossil fuels. “It’s very clear we will need to cut our fossil fuel usage by 50 percent by the year 2030 from where we sit today,” he said. “That is not going to happen without many projects such as the Vineyard Wind project.”

Speaking on behalf of Tisbury’s board of selectmen, selectman Melinda Loberg said the town was pleased to welcome Vineyard Wind’s yet-to-be-built operation and maintenance facility to the Packer marine terminal on Beach Road, and emphasized the “positive economic impact of jobs, of training our young people,” the facility would bring.

“We are enthusiastic. We can’t wait for this to happen,” she said of the facility and the overall wind farm project.

Loberg described Tisbury as “the gateway town to the Island,” and said it’s especially susceptible to climate change.

“We feel the effects of climate change early in our harbor,” she said. “We’re very vulnerable to storm[s] and sea level rise. As a matter of fact, I think we should all pay attention to the roadway through which all visitors who arrive to the Island on the ferry and material that comes to Packer’s wharf has to travel. This is a roadway that takes people to our hospital and to our neighboring town, and it’s already being undermined by high tides and rainstorms.”

Hunter Moorman, a West Tisbury resident and member of the Massachusetts Chapter of Elders Climate Action, said two recent news items are omens of climate change and underscore the urgency of tackling it.

“Polar bears driven south by the premature breakup of polar ice are now marauding in Russian islands in the Arctic,” he said, disrupting community life, threatening children on their way to school, and even mauling two residents to death. This phenomenon is the result of the melting polar ice cap, which contributed to the steady rise in global sea levels and also to the diminished ability of the ice sheet to reflect the sun’s heat back into the atmosphere.”

He went on to say the world insect population is in peril, based on reports of “a more than 40 percent decline in the world insect population that ‘threatens the collapse of nature,’ and signals unmistakably the launch of the sixth great extinction.”

Moorman said Vineyard Wind could offer some regional and global relief. “Vineyard Wind addresses one of the chief causes of such calamities, global warming caused in large part by greenhouse gases emitted into the atmosphere,” he said. “This project, this Vineyard Wind project, will achieve over 1.6 million tons of carbon dioxide reductions. That’s the equivalent of taking 325,000 cars off the road, along with sizable reductions in nitrous and sulphur dioxides.”

There were a few words of caution, however. Megan Ottens-Sargent of Aquinnah and Wes Brighton of Chilmark both warned that wind farm construction could be perilous for the critically endangered right whale.

Brighton, a commercial fisherman and board member of the Martha's Vineyard Fishermen's Preservation Trust, said pile-driving for monopiles could negatively impact both right whales and recently rebounded haddock stocks. He said the project lease area is a type of haddock nursery.

"That exact area is called the Old Haddock Grounds. If you talk to old-timers, that was where a lot of great fishing occurred, and it's a reproductive area for them." Brighton advocated for the use of bubble shields or walls as a way to mitigate the acoustic shock generated by pile-driving.

Ottens-Sargent asked if there was a way to put the brakes on the project should some critical flaw be discovered late in the process. While BOEM officials generally kept silent during the commentary period, Krevor said BOEM has the authority to halt construction if something dire is unearthed after the EIS is finalized.

Alice Berlow expressed her support for the project, but said also, "BOEM, B-O-E-M, you guys and Vineyard Wind, we're watching you. We want you to do this right and we will continue to watch you — hold you accountable to our communities ... So I support you, but I want to say that we're not stopping here, OK?"



## State: Vineyard Wind can seek local permits for cable

---

By Mary Ann Bragg / Cape Cod Times

2/6/19

Vineyard Wind can now move forward with regional and local permitting for its planned offshore wind farm after receiving a critical certificate from state environmental officials, and regulators on the Cape and Islands say they are ready.

“We’ve looked at cables before,” said Paul Foley, the development of regional impact coordinator with the Martha’s Vineyard Commission.

The commission will hold its first public hearing Feb. 21 on Vineyard Wind’s cable-laying plans after receiving a referral from the Edgartown Conservation Commission. The hearing is only on the cables but Foley said he expects community members to be curious about the entire project, which could be the first industrial scale offshore wind farm in the country.

As planned, the two undersea cables would start at an 84-turbine wind farm 15 miles south of the Vineyard and then run north between the Vineyard and Nantucket, in Muskeget Channel, to William H. Covell Memorial Beach in Barnstable, which is the company’s first choice for landfall. The cables would then run underground for about five miles to a new substation off Independence Drive, where they will connect to an existing substation that leads to the regional electricity grid.

On Feb. 1, state Energy and Environmental Affairs Secretary Matthew Beaton issued a certificate determining that the cable-laying project as described in Vineyard Wind’s final environmental impact report complies with state environmental policy law and regulations. But Beaton raised several issues that he said should be addressed as the company seeks its permits. These include better protection of piping plovers at Covell Beach, further analysis for protection of sand lance, and better monitoring and protections for rare birds. In addition, Vineyard Wind must come up with a better plan

to document disturbances and recovery of marine and ocean-floor life, according to the certificate.

Beaton offered specific expectations, based on the company's filing, for the protection of wetlands, waterways, rare species, marine mammals — including critically endangered North Atlantic right whales — shellfish, water and air quality, and historical and archaeological materials. The expectations for mitigation extended to dampening the effects of noise and reducing the effects of construction, including the company paying for a construction monitor, to act on the towns' behalf, to ensure expectations are met.

The company will be expected to pay at least \$240,000 under the state Oceans Act to compensate the state and the public for the project's footprint and anticipated effects, according to the certificate. The fee could increase, with no cap, if the cable laying exceeds estimates. The company will be expected to pay a tidelands occupation fee, under state Chapter 91 licensing, which will be determined after construction is completed.

The two cables will cross both state and federal waters but the certificate applies only to the 23 miles of state waters affected. "The project may proceed to state permitting," Beaton wrote.

His agency considered 84 public comments, some with multiple individuals and groups named, received between Dec. 19 and Jan. 28 in evaluating the Vineyard Wind final environmental impact report.

"The environmental review process provided a significant benefit to the project, allowing numerous stakeholders, advocacy groups, and interested citizens to help identify and address impacts so they can be effectively managed or mitigated," Vineyard Wind's chief development officer Erich Stephens said Tuesday. The company is in the process of asking for permit reviews from the Martha's Vineyard Commission, the Cape Cod Commission, the Barnstable Conservation Commission and others, Stephens said.

The Nantucket Conservation Commission is scheduled to hold its public hearing Wednesday Feb. 6 on Vineyard Wind's notice of intent application for the proposed cables, which will be about three miles from the Nantucket shoreline, at their closest. The effects will be similar to those from other submarine cable installations reviewed by the conservation commission in 1995 and 2005, according to the application.

At their closest point, the proposed offshore export cables will be approximately 1.2 miles from the Edgartown shoreline. Two possible routes are still under consideration through Muskeget Channel, the company said in its application for a development of regional impact review by the Vineyard commission.

So far on Cape Cod, Vineyard Wind has filed no specific application with the Barnstable Conservation Commission, a department spokeswoman said Tuesday. No specific application from the company has crossed the desks of the Yarmouth Conservation Commission either, board Vice Chairman Thomas Durkin said Tuesday. The company listed an alternative landfall for the cable in West Yarmouth in its final environmental impact report.

The Cape Cod Commission will open a development of regional impact public hearing period within 45 days of the Feb. 1 certificate issued by Beaton, said Jonathon Idman , the agency's chief regulatory officer.

Vineyard Wind was chosen in May to sell 800 megawatts of electricity to three distributors in Massachusetts as part of a mandate in the 2016 Act to Promote Energy Diversity. A state review of the power purchase agreements the company signed with the distributors is expected to conclude in March.

Public meetings hosted by the federal Bureau of Ocean Energy Management start Monday, Feb.11, on Nantucket for Vineyard Wind's draft environmental impact statement for its construction and operations plan. The company intends to start construction onshore this year. The state's Energy Facilities Siting Board is expected to make a decision in April on the cable landing site.

# Bloomberg

## Whales Will Get Right of Way at Huge Martha's Vineyard Wind Farm

By Chris Martin

January 23, 2019

Migrating whales will have the right of way off the coast of Martha's Vineyard starting this month under a new agreement between a wind developer and environmental groups.

Vineyard Wind, which is building the first commercial-scale offshore wind farm in the U.S., has agreed to halt some construction activity between January and April, during the period when some endangered North Atlantic right whales are most likely to pass through the area. Extra protocols, including whale spotting, will be in place in November, December and May.

Vineyard Wind agreed to stop pile driving for the 800-megawatt offshore wind farm during peak whale-traffic periods, according to a joint statement Wednesday with the Natural Resources Defense Council, National Wildlife Federation and Conservation Law Foundation. That means it won't insert foundation poles for the arrays into the seabed when whales might be around.

"The right whale protection provides an important template other offshore wind projects should consider," Mark Drajem, an NRDC spokesman, said in an email. Vineyard Wind, a partnership of Avangrid Inc. and Copenhagen Infrastructure Partners, will also reduce boat speeds and curtail some work during nearby whale sightings, according to the agreement.

More than 10 gigawatts of offshore wind is expected to be built along the U.S. East Coast over the next decade, according to BloombergNEF.



# Climate collaborative endorses Vineyard Wind

Jan 18, 2019

The Cape Cod Climate Change Collaborative board of directors has formally endorsed the Vineyard Wind project, a large-scale offshore wind energy project.

Proposed for siting 14 miles off the coast of Martha's Vineyard, the project intends to bring 800 megawatts of electricity to the Cape and Islands and generate clean, renewable, cost-competitive energy for 400,000 residents of the Commonwealth.

“With climate change posing the biggest global threat of our time and recent federal reports describing acceleration and increased severity of climate change, we must take immediate action to generate clean renewable energy for the Cape Cod region, Massachusetts, and beyond. We believe the Vineyard Wind project will make major strides in advancing this goal,” said Mon Cochran, executive director of the collaborative.

“Climate change poses existential threats to our environment, human health, and the economy—indeed, our entire way of life on Cape Cod.” Cochran continued.

“The Cape’s fishing industry will be especially impacted by warming water, which means cold water fish species will leave the area in search of cooler water or become extinct. It’s imperative that we change our energy sources to a low-carbon mix containing a significant amount of renewable energy, starting yesterday,” Cochran said.

The collaborative noted that Vineyard Wind has developed community agreements with municipal partners on the Vineyard and town of Barnstable, committing \$15 million for numerous initiatives that benefit Cape and Islands residents, including programs to recruit, mentor and train Massachusetts workers, particularly those in southeastern Massachusetts, for careers in the new offshore wind industry.

According to the National Climate Assessment, “Without substantial and sustained efforts to reduce greenhouse gas emissions and regional initiatives to prepare for anticipated changes, climate change is expected to cause growing losses to American infrastructure and property and impede the rate of economic growth over this century.”

Established in 2015, the Cape Cod Climate Change Collaborative is a consortium of Cape and Islands-based organizations and individuals whose mission is to unite available resources, organizations and intelligence to mitigate climate change impacts on Cape Cod, reduce greenhouse gas emissions, and work toward achieving “net zero”-based goals for the region.

Board members represent organizations such as the Association to Preserve Cape Cod, Cape Air, Cape Light Compact, Center for Coastal Studies, Friends of Pleasant Bay, Outer Cape Energize, Woods Hole Research Center, among others.



## MHI Vestas Offshore Wind Sets Up Shop In Boston

Posted by: Michael Bates

January 14, 2019

Manufacturer and service provider MHI Vestas Offshore Wind is establishing its first U.S. office in Boston, enabling the company to focus closely on sales and strategy in the region.

"I am very pleased that MHI Vestas has chosen the Commonwealth of Massachusetts as the location for their corporate offices in America," says state Sen. Marc R. Pacheco. "This announcement is tremendous news for the commonwealth's promising offshore wind industry. Our commitment to a clean energy future will mean more clean energy jobs, improved public health and an overall reduction in statewide carbon emissions."

The new office will be led by wind industry veteran Jason Folsom, the company's U.S. national sales director. MHI Vestas Offshore Wind hired Folsom in November.

The company says additional administrative staff will be hired in the coming months as it continues with its plans for the 800 MW Vineyard Wind project off the coast of Martha's Vineyard, as well as exploring potential projects in nearby states.

"We believe that the U.S. offshore wind industry is starting a prosperous journey," says MHI Vestas Co-CEO Lars Bondo Krogsgaard. "Our office in Boston is our first step before establishing an actual supply chain."

# Bloomberg

## Martha's Vineyard Wind-Farm Sites Spur \$405 Million Bids

By Jennifer A Dlouhy

December 14, 2018

Three companies bid a record-shattering \$405.1 million to nab U.S. rights to build offshore wind farms near Massachusetts on Friday, a testament to the surging appeal of renewable power and investors' confidence in state demand for it.

Equinor Wind US LLC, Mayflower Wind Energy LLC and Vineyard Wind LLC each pledged \$135 million to secure individual leases from the U.S. government, drawn by state pledges to buy offshore wind power. Mayflower is a joint venture of EDP Renewables and Royal Dutch Shell Plc's Shell New Energies US LLC.

The auction raked in more than nine times the previous high-water mark: a 2016 sale of an offshore wind lease near New York to Equinor ASA for \$42.47 million. Each of the winning bids also approached the highest sum paid for oil drilling rights in the Gulf of Mexico since the start of area-wide leasing: \$157 million that Equinor spent nabbing a single 5,760-acre tract in 2012.

This time, the companies were jockeying over three leases spanning nearly 390,000 acres (157,800 hectares) south of the resort islands of Martha's Vineyard and Nantucket where they could install turbines to generate electricity from wind. The location gives them a chance to serve power-hungry cities along the U.S. East Coast and help satisfy state pledges to buy renewable energy.

"These \$100 million-plus bids reflect the strength of state commitments to offshore wind," Cheryl Wilson, an analyst at Bloomberg Intelligence. "They're creating momentum for an offshore industry in the Northeast."

Revenue from the wind auction flows to U.S. government coffers. There are parallels to offshore oil leasing, with energy companies bidding on drilling rights and paying royalties on eventual crude and natural gas production. But the wind leases sold Friday are at least 22 times the size of a typical U.S. offshore oil block, at 127,388, 128,811 and 132,370 acres.

The sale spanned two days and unfolded over 32 rounds, with companies submitting anonymous electronic bids that grew rapidly from \$254,776. Eleven companies were actively bidding at the beginning of the auction on Thursday morning, nearly twice the most-recent record for participation, in 2016, when six developers competed for the New York offering. But by Friday morning, just four remained.



## **Gust of Interest**

The frenzy reflects growing interest in U.S. offshore wind since 2016, when the nation's first such facility, a 30-megawatt facility development near Block Island, Rhode Island, went online.

"The intense competition we've seen in this offshore wind lease auction is completely unprecedented," said Nancy Sopko, director of offshore wind policy at the American Wind Energy Association. "Global businesses now recognize the potential of America's world-class offshore wind resources."

## **Playing Catch-up**

Wind developers are being lured to American waters by near-guaranteed demand, as coastal states ratchet up commitments to buy renewable electricity. Massachusetts doubled its goal for buying offshore wind to 3,200 megawatts in August. If fully developed, the Massachusetts leases could support approximately 4,100 megawatts of commercial wind generation, enough electricity to power nearly 1.5 million homes, according to the Bureau of Ocean Energy Management.

"Looking up and down the East Coast -- and specifically in the Northeast -- we see states with huge commitments to buying this power," Sopko said. "That is driving incredible demand for this energy."

Declining installation costs and uncertainty about the timing of the next U.S. sale of an offshore wind lease helped feed interest. Analysts also describe growing investor confidence in the stability and predictability of the market, as President Donald Trump continues making territory available for new projects. The U.S. has held eight auctions of federal offshore wind rights since the Obama administration started competitive lease sales in 2013, including two under Trump.

Equinor's victory gives the Norwegian energy company a second U.S. offshore wind lease, building on its existing holding east of New York. State requests to buy renewable power are key to the company's "great confidence in the U.S. market," Christer af Geijerstam, president of Equinor Wind US, said in a phone interview.

The acquisition "gives us a foothold to engage in the Massachusetts and wider New England market, a region notable for its strong commitment to offshore wind," af Geijerstam said. "This is a long-term bet, because it is relying on the states to actually act their ambitions when it comes to offshore wind, but we think that we will prove ourselves to be competitive."

Shell's collaboration with EDPR Offshore North America represents a chance to expand its U.S. wind portfolio beyond existing onshore facilities in California, Texas and Wyoming.

"Shell sees offshore wind in the U.S. as a great opportunity to grow our power business and bring clean energy and economic benefits to the people of Massachusetts," said Dorine Bosman, vice president of Shell Wind Development. The other victor, Vineyard Wind, is 50 percent owned by funds of Copenhagen Infrastructure Partners and 50 percent by Avangrid Renewables. In an emailed statement, the company said it was committed to working with the fishing industry, environmentalists and other

stakeholders “to build a new industry for the region and making substantial contributions to fighting climate change.”

### **Rising Demand**

U.S. offshore wind power is expected to surge over the next decade -- reaching 10,000 megawatts by 2030, compared to just 30 megawatts installed in the water today, according to Bloomberg New Energy Finance.

“Just three years ago, these lease areas had no bidders at all,” noted Liz Burdock, president of the Business Network for Offshore Wind. “This strong interest from the offshore wind marketplace demonstrates the economic potential of the offshore wind industry.”

To keep momentum, industry experts say the Trump administration needs to plan more offshore wind sales, beyond a possible auction of territory near New York in early 2020. The National Ocean Industries Association has pushed the government to conduct at least four auctions annually, arguing a reliable inventory of regularly scheduled sales is necessary to sustain interest.

“Today’s euphoria is tempered a bit by knowing that we had eight companies not win leases, including someone willing to invest \$120 million in America for a lease but instead left the sale empty handed,” said Tim Charters, vice president of the group.

Companies that participated in the auction included Cobra Industrial Services Inc., East Wind LLC, EC&R Development LLC, EDF Renewables Development Inc., Innogy US Renewable Projects LLC, Northeast Wind Energy LLC, PNE WIND USA Inc. and wpd offshore Alpha LLC.



# Vineyard Wind enters host community agreement with the Town of Barnstable

By [Michelle Froese](#) | October 5, 2018

Massachusetts offshore wind developer Vineyard Wind has entered into a host community agreement (HCA) with the Town of Barnstable. The agreement, which has been filed with the Massachusetts Energy Facilities Siting Board (EFSB), represents another milestone for the United States' first large-scale offshore wind farm as it advances through the permitting process to the onset of construction in 2019 and operations by 2021.



*The agreement with Barnstable follows the award and execution of long-term contracts between Vineyard Wind and Massachusetts' electric distribution companies to construct an 800 MW wind farm in federal waters south of Martha's Vineyard and approximately 34 miles south of the Cape Cod mainland.*

The HCA requires Vineyard Wind to make annual payments to Barnstable of at least \$1.534 million each year in combined property taxes and host community payments. The pact guarantees a total Host Community Payment of \$16 million, plus an additional \$60,000 (adjusted for inflation annually), for each year the project is in operation beyond 25 years.

The HCA also provides opportunity for detailed review of Vineyard Wind's specifications for a new substation by the Town, further ensuring protection of groundwater along with reliable delivery of clean energy to serve over 400,000 Massachusetts homes and businesses.

According to the company, transformers and other electrical equipment at the substation will be underlain by full volume, impervious containment systems. Transmission cables, which will not contain any fluids, will be sited under public roads or sidewalks connecting to an existing substation in an industrial park and requiring no changes to the existing electrical transmission system.

The agreement with Barnstable follows the award and execution of long-term contracts between Vineyard Wind and Massachusetts' electric distribution companies (EDCs) to construct an 800-MW wind farm in federal waters south of Martha's Vineyard and approximately 34 miles south of the Cape Cod mainland. When the Vineyard Wind's project becomes operational, it will reduce Massachusetts' carbon emissions by over 1.6 million tons per year, or the equivalent of removing 325,000 cars from state roads while offering billions in energy-related cost savings over the life of the project.

The Massachusetts Department of Energy Resources reported total net benefits of approximately \$1.4 billion for Massachusetts ratepayers.

In addition to federal and state permitting reviews, the project is actively consulting with tribal and local agencies, including the Conservation Commission and Planning Boards of the Towns of Barnstable and Yarmouth. The project will also be reviewed by the Cape Cod Commission.

In total the Vineyard Wind project will face substantial public review and consultations by nearly 30 federal, tribal, state, and local approval agencies, including from the Army Corps of Engineers, National Marine Fisheries Service, the Massachusetts Energy Facilities Siting Board, Massachusetts DEP and CZM, the Cape Cod Commission and local conservation commissions.

# The Boston Globe

## Vineyard Wind has a big selling point for its power: cheaper prices

By **Jon Chesto** GLOBE STAFF  
AUGUST 14, 2018

The first major offshore wind farm to be built off New England's coast has at least one big selling point, compared to the doomed Cape Wind project that preceded it: much cheaper electricity.

The new project, known as Vineyard Wind, is slated to begin construction next year, some 15 miles south of Martha's Vineyard. Vineyard Wind has generated less opposition than Cape Wind, which succumbed to years of litigation because of its proposed location in Nantucket Sound, as close as six miles to shore.

Cape Wind's high prices fueled some of the opposition, but that apparently won't be a problem for Vineyard Wind.

The state's three investor-owned electric utilities recently disclosed that they will pay Vineyard Wind about \$89 a megawatt hour, on average, over the course of a 20-year contract for the first phase of the project, scheduled to come online in 2021.

A second phase would cost less, an average of \$79 per megawatt hour.

"I'm somewhat speechless at that number," said Paul Flemming, managing director at ESAI Power LLC, an energy consultancy in Wakefield. "We've seen numbers like that in Europe. But they've got the infrastructure set up [already]."

Those prices are roughly one-third the rate of what the Cape Wind project would have charged, and at least half the cost of more recent offshore wind contracts in the United States. They are also about one-fourth the rate charged by Deepwater Wind's Block Island project, a much smaller installation with just five turbines. It's the country's first offshore wind farm.

It's hard to predict precisely how the Vineyard Wind contracts will translate into electric bills for homeowners, because the wholesale power markets fluctuate over time. But the state Department of Energy Resources says it sees the potential for modest savings to ratepayers over the life of the 20-year contracts.

So what gives? How is Vineyard Wind able to deliver such a better price, when its 800-megawatt wind farm would be located farther out to sea, in deeper waters, than Cape Wind's? Many factors make offshore wind more financially viable now than it was a decade ago:

■ **Competition:** Cape Wind was the only game in town when National Grid signed a contract in 2010 at prices that began at \$187 per megawatt hour, and escalated from there. Eversource signed a similar deal, but both utilities backed out when Cape Wind ran into trouble lining up financing.

In contrast, there were three development teams offering to sell off-shore power to the state's electric utilities in a bidding process set in motion by the state's 2016 energy law. Vineyard Wind had one key

advantage: It's furthest along in the permitting process, enabling it to be the one most likely to capitalize on federal tax credits that are scheduled to expire soon.

■ **Experience:** As the first proposed offshore wind farm in the United States, Cape Wind was a trailblazer. But company president Jim Gordon's experience was primarily in developing gas-fired plants, not wind farms.

Bloomberg NEF analyst Tom Harries noted that Vineyard Wind is being developed by more experienced investors: utility Avangrid and investor Copenhagen Infrastructure Partners. That experience, Harris said, is vital to managing expenses. It also lowers the perception of risk, which helps reduce financing costs.

"We had three companies that had real experience that had bid for these projects, [with] the technology and capital to build them," said Bob Rio, an energy expert at Associated Industries of Massachusetts. "The industry matured. It caught up to what we needed."

■ **Technology:** Cape Wind had proposed using 3.6-megawatt turbines, at the time considered cutting edge. Now, though, offshore turbines are bigger and more powerful. General Electric, for example, recently announced plans to make a 12-megawatt turbine. Vineyard Wind will use either 8- or 10-megawatt turbines.

Plus, the more advanced technology seen already in Europe allows wind farms to be built in deeper waters, enabling them to harness stronger winds. That means Vineyard Wind's 80 to 100 turbines will run more efficiently, more frequently approaching peak capacity.

"Our price is more of a reflection of where the global market has moved," said Lars Thaaning Pedersen, Vineyard Wind's chief executive.

■ **Financing:** It's a minor twist, but worth noting. Cape Wind could only secure 15-year contracts from utilities. These new contracts are for 20 years, which spreads costs over a longer period.

■ **Opposition:** Because its turbines will be larger, Vineyard Wind can be built farther from shore. Vineyard Wind does have issues — fishermen are concerned about the towers' impact, and Yarmouth residents worry about a transmission line that's proposed to come ashore in their town.

But Cape Wind would have been in sight of a far more populous area, and was ensnared by years of costly legal appeals. It's hard to know how much of a role, if any, that played in its price for electricity. But the opposition eventually sank that project, while Vineyard Wind has been generating much more support.

# Bloomberg

Climate-Changed

## First Big U.S. Offshore Wind Farm Offers \$1.4 Billion Savings to Customers

By Jim Efstathiou Jr

August 1, 2018, 1:41 PM EDT Updated on August 1, 2018, 4:16 PM EDT

Project expected to cut monthly power bills up to 1.5%

*Vineyard Wind project will be 18% cheaper than alternatives*

Massachusetts electricity users will save about \$1.4 billion over 20 years from the first commercial-scale offshore wind farm in the U.S.

Avangrid Inc. and Copenhagen Infrastructure Partners, joint developers of the 800-megawatt project south of Martha's Vineyard, expect to provide power and renewable energy credits for 6.5 cents a kilowatt-hour according to a letter Wednesday from the state Department of Energy Resources.

That's a levelized price in 2017 dollars over the term of the contracts, and makes the Vineyard Wind project about 18 percent cheaper than other alternatives, according to the letter. It's also lower than the wind industry expected and shows that offshore wind can be a competitive source of clean energy as costs continue to come down.

"That's pretty shocking for us," said Tom Harries, a wind analyst at Bloomberg NEF. "I think the wider industry expected much higher prices. The repercussions of this are it will probably awaken a lot of other coastal states to the value of offshore wind."

As prices continue to fall, offshore wind is expected to grow by 16 percent annually through 2030, driven by installations in the U.K., Germany, Netherlands and China, according to BNEF. The U.S. is a latecomer to the market, and early projects may cost more than those in Europe, in large part because developers will need to import components for the massive offshore structures, which can be as big as 600 feet (183 meters).

With Vineyard Wind, the U.S. is starting to close the gap, Harries said. While offshore wind is still more costly than onshore wind and solar, it offers other advantages, notably that the turbines will generate power in the winter when prices are high.

Federal tax credits and a long-term power-purchase agreement were part of the equation that helped the wind project “offer an attractive price to the benefit of consumers,” Lars Thaaning Pedersen, chief executive officer of Vineyard Wind, said in a statement.

### ‘Pretty Fast’

“The general consensus was that it would take a while for new markets to reach levels we’ve seen in Europe and the U.S. seems to be doing this pretty fast,” he said.

The wind farm 15 miles (24 kilometers) south of Martha’s Vineyard is expected to deliver power at a price that lowers monthly energy bills by about 0.1 percent to 1.5 percent, according to the letter. Construction is expected to begin in 2019, with the project in operation by 2021, the developers said in May. It will reduce the state’s carbon emissions by more than 1.6 million tons per year, the equivalent of removing 325,000 cars from the road.

The contracts between the developers and distribution companies National Grid Plc, Eversource Energy and Unitil Corp. were filed for review Tuesday with the Department of Public Utilities.

Massachusetts has set a goal of installing 1,600 megawatts of offshore wind, enough to power about 1 million homes, by 2027, and lawmakers approved legislation on Wednesday to double that figure. New York, New Jersey and Maryland are also targeting a combined addition of more than 6 gigawatts by 2030.

Deepwater LLC built the first U.S. offshore farm in 2016, the 30-megawatt, \$300 million Block Island project off the Rhode Island coast.

“The Vineyard Wind offshore wind generation long-term contracts provide a highly cost-effective source of clean energy generation for Massachusetts customers,” according to the Department of Energy Resources’ letter



# Study gauges economic impact of offshore wind

## Job, tax benefits for Mass. much greater than Canadian hydro imports



[BRUCE MOHL](#) Mar 12, 2018

**MASSACHUSETTS WON'T GAIN MUCH** economically by importing hydro-electricity from Quebec into New England, but a new report indicates the Bay State's upcoming procurement for offshore wind will have a positive impact.

A study commissioned by Vineyard Wind, one of three bidders on the procurement, said an 800 megawatt offshore wind project would yield between 1,180 and 1,633 direct, full-time equivalent jobs in Massachusetts, with most of them in southeastern Massachusetts. Most of the jobs would be in development and construction, with only about 80 in ongoing operations and maintenance.

The project is also expected to generate \$17 million a year in new state and local tax revenue, the report said.

Vineyard Wind commissioned the Public Policy Center at UMass Dartmouth to study the economic impacts of an 800 megawatt and 400 megawatt project. Only the report for an 800 megawatt project was released.

Michael Goodman, the executive director of the UMass Dartmouth center and one of the authors of the report, said the jobs will be high paying (wages ranging from \$77,671 to \$85,021) and located in a section of the state that needs them.

To meet its emissions targets, Massachusetts is in the midst of negotiating a contract for the import of hydro-electricity from Quebec. Most of the economic benefits of the imported electricity (jobs, taxes, and economic development) will flow out of state to Quebec and which ever state hosts the transmission line – either New Hampshire or Maine.

By contrast, the offshore wind procurement is focused on companies that will build wind farms off the coast of Massachusetts and use Massachusetts as a staging area. Goodman said the UMass analysis of

Vineyard Wind's proposal is unique to that project, but he acknowledged the ventures of the other two bidders (Bay State Wind and Deepwater Wind) would probably have a somewhat similar economic impact.

Massachusetts will procure 1,600 megawatts of offshore wind in stages. The initial stage could run anywhere from 250 megawatts to a maximum of 800 megawatts. All of the bidders were required to submit 400 megawatt bids.

The bidders have engaged in a heated behind-the-scenes debate over the optimum size of the initial procurement. Bay State Wind has indicated an 800 megawatt initial procurement would be best because it would deliver low prices for the power and signal to the offshore wind industry that Massachusetts is serious about garnering a large chunk of the emerging industry.

Deepwater Wind has taken a go-slow approach, urging the state to start small and go bigger over time. Officials at Deepwater Wind argue a smaller, initial procurement would give Massachusetts time to build up its capacity to serve the offshore wind industry and capture a greater chunk of the supply chain and more jobs. An 800 megawatt initial procurement, the company argues, could put a damper on bidding for future procurements and lead to more imports of equipment and labor from Europe.

Although the companies have made their arguments for big or small procurements, they have also hedged their bets with proposals of varying sizes.

Goodman said a bigger project is likely to prevail in the procurement because of its ability to offer a lower price due to economies of scale. "I don't follow the logic of smaller is better," he said.



**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-7: SUPPORTIVE OPINION PIECES AND  
LETTERS TO THE EDITOR (2019-2020)**



# VINEYARD WIND

## Letters to the Editor and Opinion Pieces (2019-2020)

1. **Newburyport News-** [Editorial: Huge potential for offshore energy](#)  
June 19, 2020
2. **Nantucket Inquirer and the Mirror-** [Opinion: Expediting offshore wind power should be a top energy priority](#)  
February 21, 2020
3. **CT Post-** [Opinion: State made right call on Vineyard Wind](#)  
December 8, 2019
4. **CT Post-** [Opinion: CT wins with Park City Wind](#)  
November 21, 2019
5. **Cape Cod Times-** [Opinion: Economic, environmental benefits power offshore wind](#)  
November 5, 2019
6. **Cape Cod Times-** [Opinion: Give our legislators our trust in supporting offshore wind](#)  
October 1, 2019
7. **Vineyard Gazette-** [From the Editor](#)  
September 1, 2019
8. **The Eagle Tribune-** [Opinion: Don't let Vineyard Wind lose momentum](#)  
August 31, 2019
9. **Cape Cod Times-** [Opinion: Support the Legislators Supporting Clean Energy](#)  
August 21, 2019
10. **Cape Cod Times-** [Opinion: No Logic in Delaying Offshore Wind Projects](#)  
August 17, 2019
11. **Cape Cod Times-** [Opinion: Vineyard Wind project has been upfront with us](#)  
August 15, 2019

- 12. Nantucket Inquirer & Mirror-** [Letter to the Editor: A sailor speaks up for Vineyard Wind](#)  
August 1, 2019
  
- 13. Cape Cod Times-** [Opinion: As stewards of the land we must embrace wind](#)  
July 31, 2019
  
- 14. Cape Cod Times-** [Opinion: Vineyard Wind pledges to protect right whales](#)  
July 16, 2019
  
- 15. Vineyard Gazette-** [Letter to the Editor: Acting as One](#)  
July 4, 2019
  
- 16. MV Times-** [Letter to the Editor: Vineyard Wind is needed](#)  
July 2, 2019
  
- 17. Cape Cod Times-** [Opinion: Region lucky to work with Vineyard Wind](#)  
June 17, 2019



## EDITORIAL: Huge potential for offshore energy

Jun 19, 2020

Add the three wind turbines towering over Blackburn Industrial Park in Gloucester, two turbines looming in Ipswich and a single spinning blade at Mark Richey Woodworking in Newburyport and multiply by 333. That's about the number of wind turbines we could see far off the Atlantic coastline in 10 years.

The U.S. Department of the Interior's Bureau of Ocean Energy Management last week issued a supplement to a draft environmental impact statement for the Vineyard Wind I project, planned 15 miles south of Martha's Vineyard. For anyone who has watched the starts and stops on wind turbine proposals off the New England coast this estimate -- 2,000 offshore wind turbines by 2030 -- must sound like a joke.

But in its supplement to a draft Environmental Impact Statement for the 800-megawatt Vineyard Wind I project -- 84 turbines -- the bureau did make that projection. Just last August the same bureau said it was withholding the impact statement so it could study the wider impacts of the wind turbine industry in mid-Atlantic waters also used by the commercial fishing industry.

The bureau won't make a final decision on the Vineyard Wind I permit until December, State House News Service reported, and there are a 45-day public comment period and five virtual public meetings planned in the interim.

Fishermen will be paying close attention as this permit for the first wind turbines off the U.S. coastline moves forward. The Bureau of Ocean Energy Management's supplement

concluded "major cumulative effects could occur on commercial fisheries" under Vineyard Wind I's proposal. Couple that with the bureau's projection that 22 gigawatts of offshore wind energy -- that's the 2,000 wind turbines -- could be developed along the outer Continental Shelf, and you see the reason for concern within the fishing industry.

In the long haul, New England needs the huge, untapped resource of electricity generated by wind turbines far offshore. And we also need to maintain a viable fishing industry in the process. Regulators and the fishing industry should look at the numerous large-scale wind turbine projects off the coast of Europe and elsewhere to help make this happen.

-

# The Inquirer and Mirror

## Expediting offshore wind power should be a top energy priority

---

Posted Feb 21, 2020 at 3:01 AM

The offshore Vineyard Wind connector that was scheduled to go into service in 2022 has been postponed because of the Trump administration's demand for more long-term impact studies. The project had been scheduled to begin construction in 2019.

Vineyard Wind wasn't the only group surprised by the news: Climate activists have been anticipating that offshore wind would help propel a reduction in greenhouse gases, a wellspring of lucrative jobs and reduced electricity rates for Massachusetts ratepayers.

It seems the president has been of two minds when it comes to wind energy. He was very proud to have his administration collect record millions of dollars from leasing ocean parcels to three major wind turbine companies, but on the other hand he has been musing that windmills "cause cancer."

Ironically, the American Association for Cancer Research has announced that the particulates from the burning of fossil fuels really do cause cancer and other serious illnesses. Climate change is an emergency but pollution is also deeply concerning. The burning of fossil fuels is the villain for both, and expediting offshore wind would be a giant step in the right direction.

**Jan Kubiak, Hyannis**



Opinion

## Editorial: State made right call on Vineyard Wind

By Hearst Connecticut Media Editorial Board  
Published 12:00 am EST, Sunday, December 8, 2019

The importance to Bridgeport of Vineyard Wind's successful bid to build components of a wind farm on the city's harbor is hard to overstate. This is an opportunity for a true manufacturing comeback on a waterfront long in need of revitalization, and it promises to bring many long-term benefits to the city.

It's also a big win for the state's clean-energy future.

On Thursday, the state said it has accepted a bid from Vineyard Wind to supply 804 megawatts of energy per year from a wind farm to be built in ocean waters off the coast of southern New England. It followed passage of a law that allows the state to purchase up to 2,000 megawatts of offshore wind and takes advantage of federal tax incentives that were set to expire at the end of the year.

Vineyard Wind beat two other competitors, including one that has committed to investing \$57 million in upgrades in New London to help create an offshore wind staging hub in Connecticut. Vineyard Wind came in at the lowest price and is lower than any other publicly announced offshore wind project in North America, according to the state.

Environmental groups were quick to laud the choice. "Connecticut has aggressive climate mandates, and this is a major step in meeting those requirements to decarbonize the electric sector," said Charles Rothenberger, climate and energy attorney for Connecticut Fund for the Environment/Save the Sound, in a representative reaction.

But while any awarding of a major wind-power project would benefit Connecticut, only this one promised help for its largest city. Vineyard Wind has estimated that thousands of jobs could be created through the project, with at least 100 of those jobs remaining after the construction phase. Also included would be an estimated \$890 million in direct

economic development in Connecticut, including Bridgeport Harbor and the local supply chain.

There are other local benefits, too. Vineyard Wind has partnered with Seymour-based power cable maker Marmon Utility and says it would use the company's Kerite cable brand as its preferred cable supplier for a large portion of the project.

In Bridgeport, it means new life for a long-neglected parcel on the city's harbor. Nearly every water-dependent use has moved elsewhere in recent decades, leaving the city to focus on housing and recreational uses for its waterfront. That can and should continue, but there's enough room for industry, as well. A balanced approach to future development promises the best future for the city's economy, and Vineyard Wind is a major step toward making that happen.

It's also worth questioning what this means for the city's long-running dreams of a waterfront casino. The promise there is jobs and economic growth, but the potential drawbacks, and legal challenges, are serious. The social harm caused by gambling cannot be overlooked.

A major wind energy development does not promise nearly as many jobs as a casino would, but it does offer an alternative path forward. Bridgeport can finally make use of its natural advantages, reclaim its status as a waterfront manufacturer and plan a balanced future of economic growth. That makes the state's decision one worth celebrating.

## Opinion: CT wins with Park City Wind

By Paul Formica, Dennis Bradley, Joe Ganim and Kurt Miller\

Published 9:48 am EST, Thursday, November 21, 2019

Vineyard Wind's Park City Wind proposal is more than a once-in-a-generation opportunity to transform the city of Bridgeport with thousands of jobs and more than a billion dollars in direct investment.

In fact, if the Department of Energy and Environmental Protection goes big and selects Vineyard's 1,200-megawatt proposal, it will make Connecticut the epicenter of the nascent offshore wind industry.

Up and down the East Coast, states are beginning to realize that offshore wind power is not only attractive because of the tremendous environmental benefits but also because the price is increasingly competitive.

If states follow through on the number of MWs that have already been announced, we're looking at a minimum of 25,000 MWs of clean, low-cost offshore wind power going online in the next 10 years.

That's enough energy to power 12.5 million homes and equates to roughly \$100 billion in investment.

While the tremendous upside is obvious, the industry does face some challenges. However, in both circumstances Connecticut is in a perfect position to be the antidote to those problems.

The first is a lack of sufficient port infrastructure. The construction of a large-scale wind farm requires ships with the ability to literally stand on the ocean floor and act as a base for the installation of the turbines. When those legs are not in use, they tower high above the ship and prevent it from accessing ports with height restrictions due to obstructions like a bridge. On the East Coast of the United States, that covers most of them.

In Connecticut, we're fortunate to have two ports free of obstruction — Bridgeport and New London. And while this is great news for the state's current Request for Proposals for 2,000 MWs of offshore wind, the real appeal is that these ports can and will be used to construct and maintain the many other projects that are coming down the pike, from Massachusetts to Virginia.

The second challenge is the lack of a U.S.-based supply chain, but here again we find another sign of Connecticut's potential strength in this industry. In the same way that our state is a leader in aerospace, we can lay the groundwork right now for the supply chain that's going to be necessary to lift the offshore wind industry off the ground.

Want proof? Look no further than Marmon Utilities' Kerite Co. in Seymour. Vineyard Wind has already reached an agreement with the company that will make Kerite the first tier one supplier for the offshore wind industry in the United States. The agreement ensures that roughly two-thirds of the cables needed to supply the Park City Wind project are made right here in Connecticut, and in order to fulfill the new demand, the company is going to have to expand and make new hires.

Why only two-thirds of the cables, you ask? Because that's literally the most Kerite can produce in its current facility. And that's why once certain targets are met, Kerite is going look to expand even further so it can increase production, which will lead to even more jobs.

Vineyard Wind has also proposed significant funding for delivering benefits beyond the project, including up to \$26.5 million worth of major workforce development initiatives, pilot programs and research opportunities in partnership with many longstanding Connecticut institutions like Connecticut's Center for Advanced Technology, the University of Connecticut's Department of Marine Sciences and Mystic Aquarium.

These are just some examples of the economic impact this industry can have in all corners of our state, which is why the best course of action is to get this industry going in both Bridgeport and New London.

It's not really a question of if this investment will occur, but rather when and where. With the selection of Park City Wind, the answer will be "right now in Connecticut."

*Paul Formica is a Republican state senator representing the 20th District, in East Lyme; Dennis Bradley is a Democratic state senator representing the 23rd District, in Bridgeport; Joe Ganim is mayor of Bridgeport; and Kurt Miller is first selectman of Seymour.*



# CAPE COD TIMES

Opinion

## **Economic, environmental benefits power offshore wind**

---

**By Robert O'Leary / and Wendy Northcross**

Posted Nov 5, 2019 at 4:01 AM

The environmental benefits of the Vineyard Wind project are widely known – 800 megawatts of renewable energy that will power up to 400,000 homes and reduce carbon emissions by 1.6 million tons every year at a cost below the current market price for fossil-fuel-generated electricity.

But equally compelling is the fact that Vineyard Wind, and the three additional projects scheduled to follow it, will create a unique maritime-based economy that does not exist today in southern New England or the coastal United States. Taken together, these four projects – which were competitively bid after extensive public input - will create thousands of jobs across the region and create a supply chain of products and services from New Bedford to the Cape and Islands to support the construction and maintenance of these turbines.

As the U.S. Department of the Interior prepares to complete its final review of the Vineyard Wind project, it is important to note that this nascent industry is not simply of beneficial value to our environment, but to our regional economy as well.

The offshore wind industry in Massachusetts fits squarely into what many call our “Blue Economy.” A recent report issued by the Public Policy Center at UMass Dartmouth, Bristol Community College and the Massachusetts Maritime Academy estimates that nearly 10,000 jobs will be created during the construction phase of the four projects slated to be built off the Massachusetts coast. These jobs range from laborers to project engineers and public policy experts and will create substantial salaries for the workforce, even higher for those with advanced degrees.

In the past, Cape Codders fished the North Atlantic, hunted whales in the South Pacific and built ships that engaged in maritime commerce around the globe. Today, much of that is no more.

Times have changed, but our connection to – and reliance upon – the sea has not changed. The maritime economy continues to play an important role in each New England coastal state, and nowhere is that impact greater than in Massachusetts where we employ more than 90,000 people, pay \$3.4 billion in wages and produce \$6.4 billion in gross state product. The port of New Bedford alone accounts for \$370 million in fish landings, the richest fishing port in the United States.

On Cape Cod, the Blue Economy accounts for 12% of our workforce in 1,872 businesses supporting over 20,000 jobs across eight industry sectors while generating \$1.4 billion in revenues. This is an economic engine that is driving commerce along our 1,500-mile coastline. We have a unique opportunity to expand our economic base and immediately benefit local institutions like the Woods Hole Oceanographic Institution, the Massachusetts Maritime Academy, Cape Cod Community College and UMass Dartmouth.

While industries such as textiles and computer manufacturing have come and gone, the ocean economy is forever and has remained durable and transformational as bygone eras such as whaling vanish. Our proximity to the ocean is an essential connection that is inextricable with our culture, workforce and educational institutions.

At a moment in our history when we are experiencing historic storms and global warming, we need to embrace the arrival of an industry that will offset carbon emissions and eliminate the need for fossil fuel-based power plants. But we also need to acknowledge that the offshore wind industry is the next big thing in a centuries-old tradition of the maritime economy, putting food on the tables of those who live or work near the ocean.

Resistance to change is understandable, but the economic and environmental benefits of this project are undeniable.

*Robert O'Leary is the former state senator for the Cape and Islands and author of the state's ocean management law. He is a professor at the Massachusetts Maritime Academy. Wendy Northcross is the chief executive officer for the Cape Cod Chamber of Commerce.*



# CAPE COD TIMES

## Opinion

### **Give our legislators our trust in supporting offshore wind**

---

In response to James Pritchard's Sept. 23 My View, "Knowledge about wind power taints Vineyard proposal," his concerns about the Vineyard Wind project appear cogent and even well-considered.

Mr. Pritchard provided a dizzying number of seemingly "researched" objections to wind power, but did so citing antiquated information and projects dating to the 1970s and 1980s. The current technology, however, based on the evolution of offshore wind projects in Europe, has advanced well beyond those early years and has become predictable and cost-effective.

The scientific and economic details, including risks and rewards, of a project as significant as Vineyard Wind are likely beyond the understanding of the average citizen. We elect people to represent us in government who become informed on complex issues and act in the best interests of our region. The Massachusetts Legislature voted 196-1 in favor of incorporating offshore wind into our energy supply grid, and Republican governor Charlie Baker also has supported the Vineyard Wind project.

Most Americans – and citizens worldwide – recognize that we are experiencing a climate crisis, with the need for action both immediate and urgent.

As the children who came out in force worldwide for the Sept. 20 climate strike said, "There is no Planet B."

This is a nonpartisan issue. Please work through our legislators to support this project. Vineyard Wind will bring both environmental and economic benefits to the Cape, Islands and Southeastern Massachusetts and will help mitigate the worldwide climate crisis.

**Paul Berry and Fran Schofield, Brewster**



# VINEYARD GAZETTE

From the Editor

Paul Schneider

Ahh Martha's Vineyard, where enduring values endure: small country roads lined with stone walls, the simple joy of time spent with family and friends, the siren call of "not in my backyard." You may have read how the Island's coastline is under assault from the rapid rise in sea level due to global climate change. And how the acidification of the ocean caused by the same carbon emissions driving climate change could devastate the shellfish industry. How warming waters may be changing the migration patterns of striped bass, lobsters, right whales, and other species. How Atlantic hurricanes are poised to become both more frequent and powerful. In other words, you, like I, may have read enough to conclude that with the Vineyard facing the front lines of climate change, we ought to be out front as well on efforts to slow or mitigate those effects. Or not. Recently the Edgartown Conservation Commission denied a permit to lay the cables needed to bring electricity to the mainland from Vineyard Wind's proposed offshore wind farm. After hearing concerns from commercial fishing interests, the commission – made up of unelected volunteers with varying backgrounds, such as real estate law, residential construction, and golf club management – came to a conclusion opposite that of the half-dozen other regulatory bodies that had already approved the project. The project suffered a bigger setback a few weeks later when the fossil fuel-friendly Trump Administration announced it was delaying indefinitely the publication of a required Environmental Impact Statement for the wind farm.

"Our cod stocks are finally coming back," said one fisherman at the Edgartown commission's hearing on the issue, "and all of a sudden you guys want to sit there on a boat and pile-drive the crap out of the ocean floor for God knows how long." Commercial fishing is time-honored work done by individuals with a personal love of the sea and a sincere stake in the health of the fish that live in it. As an industry, however, it doesn't have a lot of environmental credibility. What cod stocks are "finally coming back" from, after all, is relentless overfishing: far from an oceanic Eden, the seafloor has been scraped by trawlers for generations. The list of officially overfished species in the region also includes mackerel, bigeye tuna, yellowtail flounder, and striped bass. As Rip Cunningham reported in this magazine's Winter-Spring 2018-2019 issue on the underwater impact of wind farms, scientific studies suggest the effect on fish of piledriving will be temporary. Also, there are no known negative effects of the electricity transmission cables that already cross Vineyard Sound. Experience in Rhode Island and the Gulf of Mexico suggests the long-term effect of towers on fish stocks is likely to be a net gain due to the creation of restricted areas and additional benthic structure. But the fishermen are not wrong: there will always be

questions. "What you don't know, you don't know," said one of the commissioners explaining his vote to deny the permit. There's only one problem with his rationale. It's what we do know: the hour is late; it's getting hot in here.



## Our View: Don't let Vineyard Wind lose momentum

Aug 31, 2019

An important piece of the energy future of Massachusetts and New England lies somewhere in the water south of Martha's Vineyard, and it's up to federal officials who've slowed its progress to make sure the opportunity doesn't slip away.

Vineyard Wind is a \$2.6 billion plan for an 84-turbine, ocean wind farm 15 miles south of Martha's Vineyard. Once built and powering electricity — plans are to go online in 2022 — the turbine field is expected to produce up to 800 megawatts of electricity.

That's enough to power some 400,000 households — well more than either Lori Trahan or Seth Moulton represent in their congressional districts.

A wind farm on such a scale is unusual in the world of renewables, at least in New England. Here those are more typically represented by small clusters of turbines capable of powering a few blocks — not a few communities.

So the stakes are high, especially in light of constraints on Massachusetts leaders to come up with a blend of energy sources that will dilute the state's reliance on coal and natural gas. The state looks to eventually draw as much as 20% of its energy from offshore wind — a significant piece of which could be represented by Vineyard Wind.

The latest barrier to this long evolving project blew up this past week, when the Bureau of Ocean Energy Management announced plans for a deep dive into the impact of this and similar developments that will draw out permitting until next March. Among the questions are those relating to the effect on fisheries and commercial fishing, which are serious concerns, to be sure, albeit ones that have gotten significant attention.

Gov. Charlie Baker told Commonwealth Magazine that Interior Secretary David Bernhardt pointed to a list of similar projects on the boards as reason for a time of reflection. The Empire Wind project, south of Long Island, would draw power from 60 to 80 turbines. It

and the Sunrise Wind project, planned east of Long Island, would together generate up to 1,700 megawatts of power. Those are but two examples.

“He said, ‘For me to move forward without doing some sort of analytics around the cumulative impact of all this would be a mistake, because I’m only going to get one shot at this,’ Baker said. “At this point, he’s the regulator, he’s the decision maker. I’m taking him at his word on this stuff.”

Stretching the timeline is a disappointing, potentially disabling blow for Vineyard Wind -- so much that Baker and his counterparts in the governor’s offices in New Hampshire, Connecticut and Maine sent a letter to Bernhard and Commerce Secretary Wilbur Ross asking them to step it up. One worry is that federal tax credits that are sunseting will expire before construction can begin, though Baker is hopeful the project will still be included in the program.

An even bigger concern is that something else is lurking behind this recent announcement, perhaps signaled in President Donald Trump’s derision of renewables and wind energy as “dreams ... which, frankly, are not working all that well.” For what it’s worth, the U.S. wind industry that isn’t working that well last year added nearly 2,700 new turbines capable of producing 7,600 megawatts of power in a dozen states.

It hasn’t been lost on some that slowing offshore wind development stands in sharp contrast to the government’s posture toward oil and gas. For those industries, it is relaxing oversight for exploration and drilling. Rep. Joe Kennedy III, said to be weighing a run against Sen. Ed Markey, calls it a double standard.

We’ll hope this is not the government choosing up sides in energy, and that this delay really just amounts to the Interior Department getting a fix on which way the wind is blowing.

The wind farm off Martha’s Vineyard, for the sake of the Massachusetts economy and the energy infrastructure of New England, is far too important to allow to wither on the vine.



# CAPE COD TIMES

Opinion

## **Support the legislators supporting clean energy**

---

August 21, 2019

When extreme hurricanes Katrina and Rita landed, they destroyed 115 oil rigs, caused dozens of significant oil spills and damaged 52 other oil rigs. Extreme Harvey flooded two oil refineries and caused a tragic release of pollutants in the area.

It's the burning of fossil fuels that is primarily responsible for the exacerbation of warming oceans and extreme weather events that threaten life on earth. In 2018, Finland and Sweden had to curb their nuclear energy output because the water from the Baltic Sea was too warm to safely cool the reactors.

Renewable energy provides a safer source of electricity.

Vineyard Wind Connector is slated to generate enough clean energy to our electrical grid to power the equivalent of 400,000 homes, and it has been emphatically endorsed by Rep. Keating and Gov. Baker. The conservative Washington Times credits this administration with the current success of securing \$405 million in offshore leases for future wind turbines. Wind energy projects on the Eastern Seaboard will generate thousands of new jobs – 3,600 for Vineyard Wind alone.

I ask residents to please thank legislators who have crossed party lines to support solutions to this climate crisis: carbon pricing, solar access and wind energy. Energy efficiency is our job.

Jan Kubiak

Hyannis



# CAPE COD TIMES

Opinion

## **No logic in delaying offshore wind projects**

---

August 17, 2019

It's been a bad few days for American environmental sanity. On one hand, the Trump administration has announced it will gut key protections in the Endangered Species Act so that some of its favored logging and fossil fuel drilling projects can go forward. On the other hand, it has ground Vineyard Wind, the spearhead of U.S. offshore wind development, to a halt because of a professed concern about the cumulative impacts of developing this clean energy resource. Where's the logic?

Offshore wind has a 28-year track record in Denmark and is well under way in Germany, the UK, and other nations with waterways at least as heavily used as New England's. Shipping routes haven't suffered, fisheries have thrived, and the gains in reducing greenhouse gas emissions from electricity production have been momentous.

Incorporating offshore wind into New England's energy supply is long overdue. The federal government recognized this in granting long-term lease agreements to Vineyard Wind and other wind developers to deliver clean electrons to the New England grid.

We need to get serious about weaning New England's grid off fossil fuels. Holding offshore wind hostage to Trump's fossil fuel favoritism is a truly regrettable setback.

Philip Warburg

Newton

*The writer is former president of the Conservation Law Foundation.*



# CAPE COD TIMES

Opinion

## **Vineyard Wind project has been upfront with us**

---

August 15, 2019

I respond to those trying to disparage the Vineyard Wind project with claims of “quietly negotiating a contract” along with other misinformation.

There have been public meetings and hearings from 2017 through this year. There were multiple updates presented to the Barnstable Town Council that are always open to the public, extremely transparent and forthcoming. In addition to office hours, public sessions were held at Covell Beach, Centerville Public Library, Centerville and Hyannis Area Civic Associations, commissions, boards, committees, associations, councils, Barnstable High School, Cape Cod Community College and government entities. Newspaper coverage has been timely and complete.

Vineyard Wind has been transparent on every issue and has reached out to stakeholders to assure best practices. After extensive vetting of the project, it continues to receive the necessary approvals to produce clean, renewable energy that is good for our environment and our economy and will restore the Covell Beach parking lot and add an improved bathhouse.

Being against Vineyard Wind would be like early humans rejecting the benefits of fire and the wheel.

I encourage residents to reach out to Vineyard Wind representatives by calling 617-840-4045 or emailing Nate Mayo at [nmayo@vineyardwind.com](mailto:nmayo@vineyardwind.com). I applaud the Vineyard Wind project.

Paul Hebert

Centerville

*The writer is a member of the Barnstable Town Council.*

# The Inquirer and Mirror

Letter to the Editor

## **A sailor speaks up for Vineyard Wind**

August 1, 2019

To the Editor: I have been following the articles and discussions at civic events regarding the Vineyard Wind project. A few years ago, I was a member of the energy committee on the island that reviewed solar, wind and co-generation possibilities for the island. Very little got done. All of the possible solutions brought lots of controversy out.

Most people on the committee were against a wind farm in Nantucket Sound, as was I. I did support a wind generator at the dump and could see the benefits. Studies costing over \$300,000 were done to see the impacts on the airport, birds, endangered species and noise. All these studies cleared the way for a generator but controversy remained and it never became a reality. Many of us said, "the proper place for a wind farm is off the coasts of our islands where there is almost no commercial traffic."

Now that idea is becoming a reality and there is again controversy. I have sailed past the wind generators off Block Island. I have spoken to islanders there and they like them. I was just in Vinalhaven Island in Maine where there are three big ones on the island. I could not find a single person who was not in support of them on the island. I have visited giant wind fields in the middle of Ireland and spoken to the maintenance people that support the fields. All of the generators were in working order and there were over 40 of them. Some of them were over 30 years old.

I understand that the closest generator in the Vineyard Wind field is 14.5 miles from the tip of Madaket. I am on the car ferry top deck now as I write this and have just passed the Tuckernuck Shoal buoy, which is seven miles north of the Island. That means that I am 15 miles from Hyannis, the same distance as the wind farm will be from Madaket. It is a very clear day. The only thing I can see is the faint outline of three water towers and they are specks on the horizon. I can only deduce that a wind generator 14.5 miles away will look like a mosquito that you faintly see on a white wall from a distance of 10 feet. Most days you won't even know it's there.

Before we condemn this offshore farm, we should remember that we had windmills on our island. The offshore farm will generate enormous clean power that will make our lives better. It is a good place to start moving forward.

Chris Magee

PUBLIC





# CAPE COD TIMES

## Opinion

### **As stewards of the land we must embrace wind**

---

July 31, 2019

I am afraid of the climate crisis bearing down upon us.

One of my greatest joys while raising my daughters was taking them to the beautiful outdoor places all over Cape Cod. The joy of climbing trees at Wellfleet Bay, fishing for crabs at Dowses Beach and planting a community garden in Marstons Mills. If we don't immediately respond to the changing climate now we may move beyond the tipping point where ecosystems cannot recover.

Scientists suggest we have 12 years to act. I attended five community information sessions hosted by Vineyard Wind so I could learn about its proposed wind farm and its impact on our beloved environment. Each time I came away impressed by the group's integrity and willingness to work cooperatively with environmental organizations, fishing communities and educational institutions.

Individuals can only do so much. We need to move to large-scale renewable energy sources to stop greenhouse gas emissions. I fully support Vineyard Wind and hope the shortsighted opposition by some on Nantucket does not slow down this vital project. We are the stewards of this land and we need to ensure that our children and our children's children enjoy it also.

Michelle Sgarlat

Centerville



# CAPE COD TIMES

Opinion

## **Vineyard Wind pledges to protect right whales**

---

July 16, 2019

Given the precarious nature of the North Atlantic right whale and the potential harm to these majestic creatures from loud underwater noise and ship strikes, it makes perfect sense for Nantucket residents to ask for a close examination of offshore wind projects (“Islanders challenge Vineyard Wind authorization,” July 10, Page One). But it’s a mistake to ask for a delay of the Vineyard Wind project because of those concerns.

Vineyard Wind signed a landmark agreement to institute a comprehensive suite of measures to protect right whales during construction and maintenance of its much-needed offshore wind farm. It pledged to limit boat speeds and curtail underwater construction noise. These commitments are being incorporated into its official agreement with the federal government, which will ensure they are enforced. These are historic and necessary steps that other wind developers should also take. We need Vineyard Wind up and running to protect our climate and demonstrate that right whale protection and wind development can go hand-in-hand.

Nathanael Greene

Natural Resources Defense Council  
New York, New York

*This letter was also signed by Amber Hewett with the National Wildlife Federation and Priscilla Brooks with the Conservation Law Foundation.*

LETTERS TO THE EDITOR

## Acting As One

*Thursday, July 4, 2019*

The hearing last week about Vineyard Wind's offshore cables at the Edgartown Conservation Commission was heartbreaking. Heartbreaking if you were a fisherman who felt your livelihood is being threatened, and heartbreaking if you are worried about the future of this planet in the face of climate change. And finally, heartbreaking as a community divided amid the greatest challenge humans have ever faced. Life on earth and the oceans as we have known them is changing.

We all impact the health of the earth: by the choice of food we eat and what it has taken to make that food available to us; by our use of fossil fuels for heating and cooling our homes (and second homes), by our increasing thirst for electricity for computers, TVs and much more; by our use of transportation whether to drive a car or large truck, fly on a plane or take a motorized boat out into the ocean; by our never-ending desire for things which consume huge amounts of resources and create mountains of waste. Humans are damaging to the planet. But as Bill McKibben says in his latest book *Falter*, we can destroy but we can also decide not to destroy.

We live on an amazingly beautiful Island on a planet also so beautiful and amazing. We need to recognize that and start to give back. It is time to decide to change our behavior not in one way but in all possible ways to save ourselves and our precious planet. We are long past the day where we can choose one thing — solar, wind, energy conservation, meatless Mondays, composting, recycling or using fewer plastic bottles to help out. We need to do all of those things and everything else we can think of. This is a time for a WPA project for the earth. If we don't treat this as the emergency that it is, then we have chosen to end our time on earth.

Vineyard Wind's project offers one bright, glimmer of hope on the road to responding to this emergency. It will provide clean, renewable energy to our region and pave the way for more wind farms off the shores of the United States. It is much-needed and one big step we can be proud of. This is not a time to play it safe but to embrace all ways we can to save our planet.

We are going to experience some great challenges as an Island in the years to come.

At present, it seems, we can't see the forest for the trees. Please, let's get beyond that, unite as an Island — of both year-round and summer residents — and rise to the challenge. Let's do everything we can to adapt and be resilient in a changing time, do our part to help lessen the impacts of climate change on the earth and go beyond that to thrive in a changed world. That is what is being asked of us and we have to do it as one.

Kate Warner

West Tisbury



## Vineyard Wind is needed

July 2, 2019

To the Editor:

This letter was originally sent to the Edgartown conservation commission.

I am writing in strong support for the Vineyard Wind undersea cable, to be located offshore of Edgartown.

As background, I was formerly a professor of mechanical engineering at Tufts University, and taught graduate climate and energy systems courses for five years. My career has included both engineering and executive positions in several high technology companies. I was an Edgartown taxpayer for 15 years, and now am a full-time resident of Chilmark. At present, I chair Chilmark's energy committee, the Island-wide Vineyard Sustainable Energy Committee, and our town's finance advisory committee.

I am sure that at this point you have been apprised of the economic benefits associated with the Vineyard Wind project, including meaningful jobs and lower electricity prices for ratepayers. I am equally sure that you are aware of the extensive reviews of the cable project by the Martha's Vineyard Commission and the federal Bureau of Ocean Energy Management, as well as the care that has been taken by the developers to protect our coastal environment and sea life.

Instead of repeating the details of all these points, I would like to address the issue before the commission in its larger context.

From the New York Times, June 19: “Emissions need to be halved by 2030 to limit warming to 1.5° Celsius, but temperatures are on track to reach double that by the end of the century even if countries current plans are fully implemented, research by scientists shows ... However, energy-related carbon dioxide emissions were at a record high last year, and renewable power capacity has stalled after years of strong growth.”

I would also point out that in 2018, several studies showed that the negative impacts we once thought would occur at 2oC should in fact be expected at 1.5oC. Anthropogenic climate change is underway, and has escalated from an “issue” to a full-scale emergency.

There are a number of vital activities underway on the Island focused on adaptation to the changes that are expected from climate change. These are locally critical to our future. Also, planning for a more sustainable, resilient, and carbon-free energy ecosystem has begun under the auspices of the MVC. One might imagine that all this is nice to do, but will not impact the larger climate crisis.

However, I submit that if we keep Vineyard Wind on track, or don't, it will have a significant regional, national, even global impact, given that Vineyard Wind is the first major offshore wind project in the Western Hemisphere. We have an opportunity — no, a *responsibility* for true leadership.

For the sake of our children and grandchildren and the conservation and preservation of our Island environment and all that is unique about our home, we must move forward with the Vineyard Wind project.

Robert Hannemann

Chilmark



# CAPE COD TIMES

Opinion

## **Region lucky to work with Vineyard Wind**

---

June 17, 2019

I write in response to the June 7 front-page article “Vineyard Wind makes late pitch to residents,” which discussed an informational meeting held in Centerville June 6 by Vineyard Wind to keep residents up-to-date on the progress of the offshore wind project.

I attended this meeting and I would like to applaud the Vineyard Wind team for its diligence through every step of this process to make sure that the concerns of all stakeholders are addressed and that residents are informed about what is happening. I have met and communicated with several of the staff members over the past few months, and they are always happy to talk to me and answer questions.

The June 6 meeting reinforced that, and those at Vineyard Wind continue to make themselves available by holding office hours at Centerville Library for any residents who still have questions.

We are fortunate that our region has the chance to be a leader in offshore wind development, and even more so because of the amazing work Vineyard Wind has done to come to a mutually beneficial agreement with the town and to ensure that residents are receiving as much information as possible.

Lindsay Crouch

Hyannis



**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-8: COMMUNITY BENEFIT AGREEMENT WITH  
VINEYARD POWER**



Community Benefits Agreement Summary  
Vineyard Power Cooperative and Offshore MW

Vineyard Power Support Obligations

1. Advocate and support offshore wind legislation in Massachusetts
2. Support the offshore wind project through education and outreach
3. Provide advice and guidance to Offshore MW through permitting and financing process

Offshore MW Obligations

1. Provide reimbursement for operation costs in 2015 up to \$100,000

Mutual Obligations

1. Investigate local job creation opportunities and other benefits for Martha's Vineyard; such opportunities to be investigated include but are not limited to an O&M facility and on-going administrative support based on Martha's Vineyard and benefits that might be associated with transmission cable landing on Martha's Vineyard.
2. Investigate opportunities for Vineyard Power to finance, purchase, own, or take an equity position in up to 100MW of offshore wind capacity in the Lease Area so as to secure benefits to its members and residents of the Cape and Islands region, and / or investigate opportunities for Vineyard Power to otherwise secure for its members and residents of the Cape and Islands region benefits and values of offshore wind capacity.
3. The Parties will investigate opportunities for power purchase agreements (PPAs) that would enable financing of project development in the Lease Area, in particular PPAs that would benefit Vineyard Power's community or the Cape and Islands community generally. The Parties will investigate opportunities for debt financing that would facilitate development of an offshore wind projects in the Lease Area, including financing via US Department of Agriculture programs for which Vineyard Power may facilitate eligibility.
4. Consult on a regular basis with Vineyard Power with regard to other community benefits of an offshore wind project not previously identified, community relations, and project design, in particular with regard to means by which to enhance the benefits and value of the project, or mitigate detriments of the project, to the Martha's Vineyard community and stakeholders from within the Cape and Islands region.
5. Consult with Vineyard Power so as to receive input from community stakeholders with regard to the planning, permitting, construction, operation and maintenance, transmission and grid interconnection, financing, and procurement related to an offshore wind project, as well as to identify additional opportunities in which Vineyard Power and community residents could participate in project.



**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-9: COMMUNITY OUTREACH CASE BOEM  
PUBLIC MEETINGS FOR VINEYARD WIND 1 AND ONSHORE  
STAKEHOLDERS**

**Community Outreach Case:  
BOEM Public Meetings on the  
Draft Environmental Impact Statement  
February 2019**

In February 2019, Vineyard Wind conducted a community outreach campaign to encourage attendance at a series of public meetings held by the Bureau of Ocean Energy Management (BOEM) on the subject of the Vineyard Wind Draft Environmental Impact Statement (DEIS). BOEM seeks public comments on a DEIS to inform their findings in advance of issuing a Final Environmental Impact Statement. This section offers examples of the outreach conducted over a three-week period encompassing the week prior to, during, and after the five public meetings. The outreach campaign was a success with over 400 people attending the five meetings. BOEM recorded hours of public comments and, combined with written comments, 349 public comments were submitted by the Friday February 22, 2019 deadline.

Vineyard Wind uses a wide variety of outlets and methods to ensure community outreach is thorough and stakeholders have an opportunity to learn about the project and to offer public comments throughout the permitting process. Typical outreach efforts include paid print and digital advertising in local newspapers, public office hours, public forums, presentations to community groups, information booths at community events, direct mail, email communications, social media, social media advertising, press releases, information shared on the Vineyard Wind website, flyers, brochures, the Vineyard Wind newsletter, community newsletters, and more.

In December 2018, the Bureau of Ocean Energy Management published a federal notice to hold five regional meetings in January 2019 about the Vineyard Wind I Draft Environmental Impact Statement (DEIS). Those meetings were postponed due to a federal government shutdown, rescheduled to the week of February 11<sup>th</sup>, and a second public notice issued in the federal register. Five public meetings were held from February 11<sup>th</sup> – 15<sup>th</sup> on Nantucket, Martha's Vineyard, and in Hyannis, New Bedford, and Narragansett. Each meeting included an open house period to allow attendees to read informational posters and ask questions directly to BOEM and Vineyard Wind staff. BOEM began each meeting with a brief introduction about the BOEM process and the Vineyard Wind project, a summary of the Draft Environmental Impact Statement, and a description of how public participation informs regulatory review. Attendees were invited to sign up to give verbal comments directly to BOEM staff.

Vineyard Wind sought to increase local awareness about and public participation in the meetings beyond the required public notices issued by BOEM. Media examples from the community outreach campaign are described here and displayed below. On February 1<sup>st</sup>, Vineyard Wind issued a press release announcing the rescheduled meeting dates. This generated news stories in local newspapers in advance of the meetings. Vineyard Wind sent an email notice about the meetings on February 3<sup>rd</sup>. During the week of the meetings, Vineyard Wind used paid print advertisements in local newspapers including the Cape Cod Times, Martha's Vineyard Times, and the Nantucket Inquirer & Mirror. Vineyard Wind also posted on social media platforms Facebook, Twitter, and Instagram to promote attendance at the meetings and to encourage written comment submissions by those unable to attend in person. Select social media posts

were supplemented with paid promotions to increase reach. At the meetings, Vineyard Wind staffed an information table, offered print materials, displayed informational posters and visual simulations, and answered questions about the project. In the week after the meetings, Vineyard Wind continued posting on social media and sent email communications on February 19<sup>th</sup> and February 21<sup>st</sup> to encourage written public comments in advance of the deadline on Friday February 22, 2019.

# Paid Newspaper Advertisements

(Right) Color advertisement appearing in the February 7, 2019 Nantucket Inquirer & Mirror.

(Below) Color advertisement appearing in the February 12, 2019 Cape Cod Times.



### First Birthdays

By Marianne R. Stanton  
stanton@inquirer.com

The sun rose at 6:04 a.m. this morning and will set at 5:04 p.m. this evening.

My house smells like... planning an occasion since Thanksgiving now is in bloom, and a reminder of Spanish, frequent tulips and grape hyacinths sending their perfume into the air.

Spring bulbs blooming in February does give one reason to hope for brighter days ahead. While many of us are happy not to have had snow and ice to shroud and slip, the late Richard H. Cushman, Jr. and the late Mr. and Mrs. Robert Barker Jr.

### Here and There

By Marianne R. Stanton  
stanton@inquirer.com

The sun rose at 6:04 a.m. this morning and will set at 5:04 p.m. this evening.

My house smells like... planning an occasion since Thanksgiving now is in bloom, and a reminder of Spanish, frequent tulips and grape hyacinths sending their perfume into the air.

Spring bulbs blooming in February does give one reason to hope for brighter days ahead. While many of us are happy not to have had snow and ice to shroud and slip, the late Richard H. Cushman, Jr. and the late Mr. and Mrs. Robert Barker Jr.

**VALENTINE'S Chocolate Bundle**

- 1 Valentine Bar
- 1 Bundle Chocolate Caramels Pecan
- 1 Bar of Your Choice
- \$18 for 3 Bars NOW at Bookstore!

**Births**

I happy couple, a daughter was born Monday, Feb. 6, at the Nantucket Cottage Hospital to Alexander and Rebecca. Her grandparents are Paul and Nancy Long of Nantucket, and the late Arthur Blake Austin Baker and the late Carl H. Baker, Jr., and the late Mrs. Robert Barker Jr.

**Deaths**

Kathy MacDonnell, 61, of Greenwell, Conn., and Nantucket, died Monday, Jan. 28, 2019 at home in Connecticut.

David Parkash, a son, was born Monday, Jan. 28, 2019 at Nantucket Cottage Hospital, to Carlos and Kelly Thomas of Nantucket.

**KOHLER GENERATORS**

SALES • SERVICE  
INSTALLATION • RENTALS

508-238-4038  
www.kohler.com

**Marriage Intentions**

Kevin Scott Blum, 35, of Nantucket, and Marlene Anagnostou Blum, 35, of Nantucket, announced their intentions to marry on Saturday, Feb. 23, 2019 at the Nantucket Cottage Hospital.

**Marriage Intentions**

Kevin Scott Blum, 35, of Nantucket, and Marlene Anagnostou Blum, 35, of Nantucket, announced their intentions to marry on Saturday, Feb. 23, 2019 at the Nantucket Cottage Hospital.

**YEAR END SALE 70% off**

Open Thursday, Friday, Saturday

**POLLACKS**

5 South Water Street  
Nantucket Island  
508-228-9940

**Marriage Intentions**

Kevin Scott Blum, 35, of Nantucket, and Marlene Anagnostou Blum, 35, of Nantucket, announced their intentions to marry on Saturday, Feb. 23, 2019 at the Nantucket Cottage Hospital.

**Marriage Intentions**

Kevin Scott Blum, 35, of Nantucket, and Marlene Anagnostou Blum, 35, of Nantucket, announced their intentions to marry on Saturday, Feb. 23, 2019 at the Nantucket Cottage Hospital.

**VINEYARD WIND**

BOEM Draft Environmental Impact Statement Public Meeting

**\$3,400,000** purchase & construction

80% application to approval 30 days

National Mortgage Advice

781-820-1745

**Marriage Intentions**

Kevin Scott Blum, 35, of Nantucket, and Marlene Anagnostou Blum, 35, of Nantucket, announced their intentions to marry on Saturday, Feb. 23, 2019 at the Nantucket Cottage Hospital.

**Marriage Intentions**

Kevin Scott Blum, 35, of Nantucket, and Marlene Anagnostou Blum, 35, of Nantucket, announced their intentions to marry on Saturday, Feb. 23, 2019 at the Nantucket Cottage Hospital.

**Valentine's Day SALE**

10-50% OFF ALL GOLD & SILVER JEWELRY

STO. EWE!

SAHOB'S JEWELRY, DIAMOND, GEMSTONE, NAUTICAL & ISLAND JEWELRY

**JEWELERS GALLERY**

**Marriage Intentions**

Kevin Scott Blum, 35, of Nantucket, and Marlene Anagnostou Blum, 35, of Nantucket, announced their intentions to marry on Saturday, Feb. 23, 2019 at the Nantucket Cottage Hospital.

**Marriage Intentions**

Kevin Scott Blum, 35, of Nantucket, and Marlene Anagnostou Blum, 35, of Nantucket, announced their intentions to marry on Saturday, Feb. 23, 2019 at the Nantucket Cottage Hospital.

**BOEM Draft Environmental Impact Statement Public Meeting**

Monday, February 11

Nantucket Public Meeting  
Nantucket Athenaeum  
1 India Street  
Open House 5-7:30pm  
Presentation at 6pm

Please visit [VineyardWind.com/deis](http://VineyardWind.com/deis) for the most up-to-date information and to learn more.

### MARTIN

pressure to form a solid matrix of material without melting...  
To puff all the socks, those narrows are thousands of times thinner than a human hair...  
A true U.S. mobile will start in 2016, it will take

high-intensity light turns polymer into a "melted" state...  
The process of these devices...  
The researchers say they are

ways to keep us comfortable in our environment...  
The researchers say they are

working in the personal thermal management space...  
The researchers say they are

Let's say, these active fabric keep us dry...  
The researchers say they are

### 5G

will invest \$275 billion in 5G-related networks in the U.S...  
When will it be available?

with the Long Island Power Authority...  
The researchers say they are

What can 5G do?...  
The researchers say they are

high-speed connections could enable better remote surgery...  
The researchers say they are

Stapshots. We don't know what yet...  
The researchers say they are

### CALENDAR

THURSDAY, FEB. 28  
Networking  
The Dennis Chamber of Commerce will host a Business Before Hours event from 7:30 to 9 a.m. at the Cape Cod Mall Center, 17 State High Road.

discovery "Dimes and the Future of Automated Unmanned Aerial Systems."  
MONDAY, MARCH 4  
Workshop  
Case of the Islands SCORE, in conjunction with the Westport Chamber of Commerce, will hold a workshop, "The 4 Pillars of an Effective Website," from 8:30 to 11 a.m. at Seaman's Bank, 2746 Route 1 in Westport. Dale Shepley will lead a discussion in four parts: strategy, best practices, creativity and the daily checklist.

THURSDAY, FEB. 28  
Networking  
The Dennis Chamber of Commerce will host a Business Before Hours event from 7:30 to 9 a.m. at the Cape Cod Mall Center, 17 State High Road.

discovery "Dimes and the Future of Automated Unmanned Aerial Systems."  
MONDAY, MARCH 4  
Workshop  
Case of the Islands SCORE, in conjunction with the Westport Chamber of Commerce, will hold a workshop, "The 4 Pillars of an Effective Website," from 8:30 to 11 a.m. at Seaman's Bank, 2746 Route 1 in Westport. Dale Shepley will lead a discussion in four parts: strategy, best practices, creativity and the daily checklist.

THURSDAY, FEB. 28  
Networking  
The Dennis Chamber of Commerce will host a Business Before Hours event from 7:30 to 9 a.m. at the Cape Cod Mall Center, 17 State High Road.

### PLEASE RECYCLE THIS NEWSPAPER

PLEASE RECYCLE THIS NEWSPAPER

PLEASE RECYCLE THIS NEWSPAPER

PLEASE RECYCLE THIS NEWSPAPER

PLEASE RECYCLE THIS NEWSPAPER

PLEASE RECYCLE THIS NEWSPAPER

## News Coverage

(Right) News coverage appearing in the Martha's Vineyard Times on February 6, 2019 in advance of the BOEM meetings.

(Below) Front page news coverage appearing in the Nantucket Inquirer & Mirror on February 7, 2019 in advance of the BOEM meetings.

### Hebrew Center to host Vineyard Wind hearing

By Rich Saltzberg and Brian Dowd - February 6, 2019

The Bureau of Ocean Energy Management (BOEM) and the Army Corps of Engineers are coming to the Martha's Vineyard Hebrew Center to talk about Vineyard Wind on Feb. 12. BOEM is crafting an Environmental Impact Statement about Vineyard Wind's construction and operation plan and will seek public comment at the hearing regarding it. The Army Corps of Engineers will also be present to seek comment on a permit application from Vineyard Wind relative to the Rivers and Harbors Act and the Clean Water Act.

Vineyard Wind intends to install a wind farm 15 miles south of Martha's Vineyard, which will be comprised of between 80 and 100 turbines, two service platforms, and extensive submarine cable.

Vineyard Wind recently asked the Federal Energy Regulatory Commission to redo an energy capacity auction because the wind company's claimed status as a "renewable technology resource," a classification conferring the ability "to bid a lower prices," was not acknowledged, according to the industry site Utility Dive.

"The commission took no action," Vineyard Wind spokesman Scott Farmelant emailed. "The hope is the commission will accept [Vineyard Wind's] motion and redo the auction."

Farmelant went on to write the auction represents "a potential revenue stream for [Vineyard Wind] outside its PPAs (power purchase agreements) with the [Massachusetts] electric distribution companies. [Vineyard Wind] is seeking to participate in the auctions as a renewable resource, an option that's available to generators of solar, onshore wind, hydro etc."





## Photos of BOEM Public Meetings

(Above) The Nantucket Local Access Television station records the BOEM meeting at the Nantucket Athenaeum on Monday February 11, 2019

(Right) A woman gives comments to BOEM staff at the public meeting held in Hyannis on Wednesday February 13, 2019.

(Below Right) Martha's Vineyard residents examine information boards and speak with BOEM and Vineyard Wind staff prior to the start of the February 12, 2019 meeting.

(Below) A crowd gathers in New Bedford for the BOEM public meeting held on Thursday February 14, 2019



## Facebook Paid Promotion

Vineyard Wind used paid promotions on Facebook to increase awareness in advance of the BOEM public meetings.

**VINEYARD WIND**  
A NEW COURSE FOR OFFSHORE WIND

**MAKE YOUR VOICE HEARD!**

**FEB 11** BOEM Nantucket Public Meeting  
Public · Hosted by Vineyard Wind

✓ Going

Monday, February 11, 2019 at 5 PM – 7:30 PM  
about 5 months ago

Nantucket Atheneum  
1 India St, Nantucket, Massachusetts 02554

About

**VINEYARD WIND**  
A NEW COURSE FOR OFFSHORE WIND

**MAKE YOUR VOICE HEARD!**

**FEB 12** BOEM Vineyard Haven Public Meeting  
Public · Hosted by Vineyard Wind

...

...y 12, 2019 at 5 PM – 8 PM

... Hebrew Center  
... Box 692, Vineyard Haven, Massachusetts 02... Show Map

Discussion

**VINEYARD WIND**  
A NEW COURSE FOR OFFSHORE WIND

**MAKE YOUR VOICE HEARD!**

**FEB 15** BOEM Narragansett Public Meeting  
Public · Hosted by Vineyard Wind Rhode Island

★ Interested ✓ Going

...

Friday, February 15, 2019 at 5 PM – 8 PM  
about 5 months ago

Narragansett Community Center, 53 Mumford Road,  
Narragansett, RI 02882 Show Map

About Discussion

**VINEYARD WIND**  
A NEW COURSE FOR OFFSHORE WIND

**MAKE YOUR VOICE HEARD!**

**FEB 14** BOEM New Bedford Public Meeting  
Public · Hosted by Vineyard Wind

✓ Going

...

Thursday, February 14, 2019 at 5 PM – 8 PM  
about 5 months ago

Fairfield Inn & Suites by Marriott New Bedford, MA  
185 MacArthur Dr, New Bedford, Massachusetts 02740 Show Map

About Discussion

**VINEYARD WIND**  
A NEW COURSE FOR OFFSHORE WIND

**MAKE YOUR VOICE HEARD!**

**FEB 13** BOEM Hyannis Public Meeting  
Public · Hosted by Vineyard Wind

✓ Going

...

Wednesday, February 13, 2019 at 5 PM – 8 PM  
about 5 months ago


DoubleTree by Hilton Hotel Cape Cod - Hyannis  
287 Iyannough Rd, Barnstable, Massachusetts 02601 Show Map

About Discussion



**Vineyard Wind**  
Published by Vineyard Wind [?] · February 1 · 🌐

We are pleased to announce that the public meetings for Vineyard Wind's Draft Environmental Impact Statement have been rescheduled! And the comment period has been extended to February 22, 2019.  
<https://www.vineyardwind.com/deis>



VINEYARDWIND.COM  
**DEIS — Vineyard Wind**  
The United States' Bureau of Ocean Energy Management (BOEM) has...

387 People Reached      56 Engagements      [Boost Post](#)

👍 25      6 Shares

**Vineyard Wind**  
Published by Vineyard Wind [?] · February 12 · 🌐

Thank you to everyone who attended last night's public meeting in Nantucket! Reminder: Tonight, BOEM is holding a public meeting at the Martha's Vineyard Hebrew Center. If you are unable to attend, Vineyard Wind and BOEM are encouraging members of the public to submit written comments. You can find out more information here: <https://www.vineyardwind.com/deis>



TUE, FEB 12  
**BOEM Vineyard Haven Public Meeting**  
Martha's Vineyard Hebrew Center · Vineyard Haven, MA      [Going](#)

**Vineyard Wind**  
Published by Vineyard Wind [?] · February 13 · 🌐

We look forward to hearing your comments and questions tonight in Hyannis! If you are unable to attend, Vineyard Wind and BOEM are encouraging members of the public to submit written comments. You can find out more information here: <https://www.vineyardwind.com/deis>



WED, FEB 13  
**BOEM Hyannis Public Meeting**  
DoubleTree by Hilton Hotel Cape Cod · Hyannis · ...      [Going](#)

**Vineyard Wind**  
Published by Vineyard Wind [?] · February 4 · 🌐

"The Nantucket public meeting on Vineyard Wind's draft environmental impact statement for its offshore wind-energy project has been rescheduled to Feb. 11 after last month's meeting was postponed because of the partial government shutdown."  
<https://www.ack.net/.../vineyard-wind-nantucket-meeting-resch...>



ACK NET  
**Vineyard Wind Nantucket meeting rescheduled to Feb. 11**  
(Feb. 4, 2019) The Nantucket public meeting on Vineyard Wind's draft environmental impact statement for its offshore wind-energy project...

169 People Reached      13 Engagements      [Boost Post](#)

👍 2      1 Share

**Vineyard Wind**  
Published by Vineyard Wind [?] · February 14 · 🌐

There's no better way to spend your Valentine's Day than to attend a BOEM public meeting! ❤️ Hope to see you tonight in New Bedford!



THU, FEB 14  
**BOEM New Bedford Public Meeting**  
Fairfield Inn & Suites by Marriott New Bedford, MA · Ne...      [Going](#)

Twitter

 **Vineyard Wind**  
@VineyardWindMA

Cape Codders have turned out in force for a public meeting with @BOEM\_DOI #HappeningNow #offshorewind



6:36 PM · 2/13/19 from DoubleTree By Hilton Hotel Indoor Pool · Twitter for iPhone

View Tweet activity

3 Retweets 15 Likes

 **Vineyard Wind**  
@VineyardWindMA

BOEM Public Meeting in Vineyard Haven is about to start! You still have time to get to the Martha's Vineyard Hebrew Center - presentation and Q&A begin at 6:00pm. #happeningnow #offshorewind #RenewableEnergy



 vineyardwindma



**VINEYARD WIND**  
BOEM Draft Environmental Impact  
Statement Public Meetings

**Monday, February 11**

**Nantucket, Massachusetts**  
Nantucket Athenaeum  
1 India Street  
Open House 5-7:30pm  
Presentation at 5:30 pm



[View Insights](#) [Promote](#)

👍🗨️📍

Liked by darkolita and 17 others

**vineyardwindma** Find a BOEM meeting near you! We hope that you will participate in the dialogue. #makeyourvoiceheard #cleanenergy #renewable

**rayychela** Really excited for this! 🙌

February 7

 vineyardwindma



[View Insights](#) [Promote](#)

👍🗨️📍

Liked by gliddensislandseafood and 30 others

**vineyardwindma** Amazing turnout in #newbedford tonight. #cleanenergy #renewableenergy #offshorewind

February 14

 vineyardwindma



[View Insights](#) [Promote](#)

👍🗨️📍

Liked by at\_sealevel and 21 others

**vineyardwindma** Great meeting on Martha's Vineyard tonight! Thank you for the excellent comments and questions and for braving the snow!

February 12

## Facebook (after the hearings)

Vineyard Wind used several social media channels to raise awareness about the opportunity for those unable to attend the meetings to submit comments to BOEM.

**Vineyard Wind**  
Published by Vineyard Wind [?] · February 21 · 🌐

Thank you to Julius for speaking at the BOEM hearing last week. Missed a hearing? Submit online before the open comment period closes tomorrow!  
<https://www.regulations.gov/comment?D=BOEM-2018-0069-0122>

**VINEYARD WIND**

**JULIUS LOWE**  
MARTHA'S VINEYARD RESIDENT

“Our energy generation facilities are aging, nuclear power plants are heading towards their end of life. The forward thinking of a project like this is going to inspire people to think about a greener future.”



**Vineyard Wind**  
Published by Vineyard Wind [?] · February 20 · 🌐

Thank you to Melinda for speaking at the BOEM hearing last week. Missed a hearing? Submit online before the open comment period closes on Friday.  
<https://www.regulations.gov/comment?D=BOEM-2018-0069-0122>

**VINEYARD WIND**

**MELINDA LOBERG**  
MEMBER OF THE SELECTBOARD  
TOWN OF TISBURY

“This project will have a positive impact on year round jobs for our young people. We are enthusiastic. We cannot wait for this to happen.”



**Vineyard Wind**  
Published by Vineyard Wind [?] · February 19 · 🌐

We want to offer a sincere thank you to the over five hundred attendees at public meetings hosted by the federal Bureau of Ocean Energy Management (BOEM) last week. Public comment on Vineyard Wind's Draft Environmental Impact Statement (DEIS) is slated to close on Friday February 22nd. Public input is a critically important part of the permitting process, and Vineyard Wind encourages public participation.

Make your voice heard by submitting comments directly to BOEM:  
Online at <https://www.regulations.gov/comment?D=BOEM-2018-0069-0122>, and follow the instructions to submit public comments and view supporting and related materials.

Or by mail, enclose comments in an envelope labeled "Vineyard Wind COP Draft EIS" and postmarked by February 22nd to:

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road,  
Sterling, Virginia 20166

REGULATIONS.GOV  
[www.regulations.gov](http://www.regulations.gov)

**Vineyard Wind**  
Published by Vineyard Wind [?] · February 21 · 🌐

Thank you to Bill for speaking at the BOEM hearing last week. Tomorrow is the last day to submit public comments online! Submit your comments here:  
<https://www.regulations.gov/comment?D=BOEM-2018-0069-0122>

**VINEYARD WIND**

**BILL LAKE**  
MARTHA'S VINEYARD  
RESIDENT

“Few things could be as important as reducing carbon emissions by moving from fossil fuels to renewable energy, and this project will be a huge step in that direction.”





**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-10: HOST COMMUNITY AGREEMENT - TOWN  
OF BARNSTABLE**

## **Overcoming Opposition to Offshore Wind—Town of Barnstable, Massachusetts**

### **Case Study**

Constructive input from opponents is equally as important as encouragement from stakeholder supporters. Through the development and permitting of Vineyard Wind 1, Vineyard Wind has encountered uncertainty and direct opposition to offshore wind and built a reputation for respectfully working with both opponents and supporters. One example of building bridges in local communities around project development areas is highlighted by the cooperative agreement between Vineyard Wind and the Town of Barnstable, Massachusetts.

Vineyard Wind has entered into a Host Community Agreement (HCA) with the Town of Barnstable where onshore facilities for Vineyard Wind's first and second projects—Vineyard Wind 1 and Park City Wind—will be located. The HCA is the product of months of extensive work between Town staff and Vineyard Wind and was unanimously approved by the Town Council. Under the HCA, Vineyard Wind has committed to certain protections, development standards, benefits, and communication regimes requested by the Town to offset or mitigate any potential impacts associated with hosting offshore wind project infrastructure.

The cooperative agreement that Vineyard Wind and the Town of Barnstable have is, by all accounts, an unlikely occurrence. Community leaders, residents, and Town staff strongly opposed the failed Cape Wind project that was proposed for Nantucket Sound. When Vineyard Wind began investigating potential landfall locations for Vineyard Wind 1, the company and offshore wind, in general, were viewed with a great deal of skepticism; and Vineyard Wind understood that building relationships with the Town would be challenging. However, after extensive conversation and engagement with Town staff, elected officials, community leaders, and local residents, Vineyard Wind was able to overcome the initial negative perceptions and build strong working relationships with the Town and members of the community.

Overcoming the Town's skepticism required significant effort. Vineyard Wind hosted numerous community meetings that were widely advertised through traditional and non-traditional means. Direct mail and newspaper advertisements were supplemented with social media, flyers, and outreach to civic organizations and community groups to help spread awareness; Vineyard Wind staff engaged directly with various civic and community organizations in and around the Town of Barnstable, giving presentations about the project and gathering feedback. These outreach efforts began in 2016, before the project's permitting process began, giving residents and local stakeholders significant time to become informed, ask important questions, and provide valuable input to the project. These outreach efforts, alongside Vineyard Wind's response to community concerns and commitment to developing community benefits on a collaborative basis, turned the Town of Barnstable into a supporter of offshore wind, built trust, and made the HCA possible.

As Vineyard Wind 1 nears financial close and Park City Wind advances through the permitting process, Vineyard Wind will continue to actively engage with the Town and local residents. In

2020, the company has largely the Town of Barnstable community on virtual platforms due to the COVID-19 pandemic. Engagement activities with the community so far this year include the following:

- Hosting five in-person events in Barnstable from January to March.
- Publicizing virtual events were publicized via web, social media (including paid ads to boost viewership), and email and circulated weekly via the Town of Barnstable's weekly e-Newsletter.
- Hosted eight webinars geared towards Cape & Islands stakeholders with a total of 84 participants
- Conducting a virtual site with Massachusetts regulators on July 7, 2020, included virtual GIS flyover video
- Presenting to Barnstable community groups and abutters to update them on Vineyard Wind 1 and introduce them to the Park City Wind portion of the project that will be located in their community–Vineyard Wind Connector 2.
- Mailing a letter mailed to abutters of Vineyard Wind Connector 2 as a project introduction and invitation to attend a Vineyard Wind Virtual information session.

## **Vineyard Wind and Barnstable Enter into Host Community Agreement, Advancing USA's First Commercial-Scale Offshore Wind Farm**

FOR IMMEDIATE RELEASE

(New Bedford, MA; October 5, 2018) – Vineyard Wind announced today that it has entered into a Host Community Agreement (HCA) with the Town of Barnstable. The agreement, which has been filed with the Massachusetts Energy Facilities Siting Board (EFSB), represents another milestone for the United States' first large-scale offshore wind farms it advances through the permitting process to the onset of construction in 2019 and operations by 2021.

The HCA requires Vineyard Wind to make annual payments to the Town of at least \$1.534 million each year in combined property taxes and Host Community Payments. The pact guarantees a total Host Community Payment of \$16 million, plus an additional \$60,000 (adjusted for inflation annually), for each year the project is in operation beyond 25 years.

The HCA also provides opportunity for detailed review of Vineyard Wind's specifications for a new substation by the Town, further ensuring protection of groundwater along with reliable delivery of clean energy to serve over 400,000 Massachusetts homes and businesses. Transformers and other electrical equipment at the substation will be underlain by full volume, impervious containment systems. Transmission cables, which will not contain any fluids, will be sited under public roads or sidewalks connecting to an existing substation in an industrial park and requiring no changes to the existing electrical transmission system.

The agreement with Barnstable follows the award and execution of long-term contracts between Vineyard Wind and Massachusetts' electric distribution companies (EDCs) to construct an 800-megawatt (MW) wind farm in federal waters south of Martha's Vineyard and approximately 34 miles south of the Cape Cod mainland. When the Vineyard Wind's project becomes operational, it will reduce Massachusetts' carbon emissions by over 1.6 million tons per year, or the equivalent of removing 325,000 cars from state roads while offering billions in energy-related cost savings over the life of the project. The Massachusetts Department of Energy Resources reported total net benefits of approximately \$1.4 billion for Massachusetts ratepayers.

In addition to federal and state permitting reviews, the project is actively consulting with tribal and local agencies, including the Conservation Commission and Planning Boards of the Towns of Barnstable and Yarmouth. The project will also be reviewed by the Cape Cod Commission. In total the Vineyard Wind project will face substantial public review and consultations by nearly 30 federal, tribal, state, and local approval agencies, including from the Army Corps of Engineers, National Marine Fisheries Service, the Massachusetts Energy Facilities Siting Board, Massachusetts DEP and CZM, the Cape Cod Commission and local conservation commissions. Vineyard Wind also continues to engage in active conversations with the Wampanoag tribes.



## HOST COMMUNITY AGREEMENT

### 1. PARTIES

This agreement (the "Agreement") is entered into by the Town of Barnstable, a Massachusetts Municipal Corporation ("Barnstable" or "Town") and Vineyard Wind LLC, a Delaware limited liability company ("Vineyard Wind" or "VW").

### 2. THE MASSACHUSETTS PROCEEDINGS

Vineyard Wind proposes to construct a nominal 800-megawatt wind generating facility in federal waters south of Martha's Vineyard and to connect that facility via cables into state waters and eventually to an electrical sub-station in the Town in order to connect to the regional electric grid (collectively, the "Project") as more fully described as the preferred or noticed alternative route in the Supplemental Draft Environmental Impact Report dated August 31, 2018 and filed with the MEPA office of the Commonwealth. The cables consist of high voltage (115 kilovolt or greater) electric power transmission lines, along with associated appurtenances including but not limited to substation equipment, telecommunications lines, duct banks, vaults, and vault access (collectively, "Transmission Lines").

Vineyard Wind has filed for various approvals with the Commonwealth's Department of Public Utilities in D.P.U. 18-18 and 18-19, and with the Energy Facilities Siting Board in EFSB 17-05. VW also filed a Notice of Intent with the Executive Office of Energy and Environmental Affairs in case number EEA 15787 and the Secretary of EEA issued a MEPA Certificate on February 9, 2018. VW also intends to seek the approval of the Cape Cod Commission and applicable boards and committees of the Town of Barnstable and, if any portion of Transmission Lines are located in the Town of Yarmouth, the applicable boards and committees of the Town of Yarmouth.

Except as specifically identified herein, this Agreement does not relate to any matters now or hereafter filed with any Federal agencies including, without limitation, the United States Department of the Interior, the Federal Aviation Administration, or the United State Coast Guard.

### 3. STATEMENT OF PURPOSE

The Town wishes to support Vineyard Wind in launching this important project, which will contribute to the region's renewable energy supply and bring significant revenue to the Town of Barnstable.

The Town believes that certain components of the Project could pose environmental risks to Nantucket Sound and to the Town's public drinking water supplies if not properly designed and managed. VW acknowledges its responsibility to take every possible precaution to assure that, should the worst occur despite its best efforts, damage to the environment will be quickly, effectively, and comprehensively mitigated.

### 4. RECITATIONS

- A. WHEREAS, Vineyard Wind is proposing to develop the Project in federal waters south of Martha's Vineyard and to connect the Project to the regional electric grid via Transmission Lines in federal

and state waters of Nantucket Sound and then across upland to an electrical sub-station in the Town described below, and

- B. WHEREAS, the Project is being developed in response to Section 83C of Chapter 169 of the Acts of 2008, as amended by Chapter 188 of the Acts of 2016, An Act to Promote Energy Diversity which mandated the development of 1,600 megawatts of offshore wind energy generation, and
- C. WHEREAS, the Town has previously opposed the proposed former Cape Wind project which was to be located on Horseshoe Shoals in Nantucket Sound, and
- D. WHEREAS, the Town believes that the Cape Wind project, because of its proposed location in Nantucket Sound, would have created numerous environmental risks to the public interest including, without limitation, the environment of Nantucket Sound, its beaches and estuaries, the water quality of the Town's sole source aquifer, air and marine navigation, endangered species, and the Commonwealth's Public Trust Rights and Obligations, and
- E. WHEREAS, the Town believes that the risks posed by the Cape Wind project, because of its proposed location in Nantucket Sound, would have been completely incompatible with considerations of environmental protection, public health, and public safety, and
- F. WHEREAS, Vineyard Wind was not involved in the proposal or permitting of the former proposed Cape Wind project, nor is the Vineyard Wind Project located in the same vicinity as the former proposed Cape Wind project, and
- G. WHEREAS, if any proposed energy generating facility in Nantucket Sound (including, but not limited to wind generating facilities) was allowed to connect to VW's Transmission Lines, both Parties agree that the Town would consider this to be an unacceptable outcome that clearly conflicts with the public interests of the Town of Barnstable, and
- H. WHEREAS, Vineyard Wind has not selected a final route for the Transmission Lines. However, one of VW potential routes for the Transmission Lines extends through conservation and water supply land belonging to both the Town and the Commonwealth running along and under and eventually across a proposed bike path that the Town states is important to the Town's recreational interests, and another of the routes crosses Covell's Beach, an important recreational facility, and
- I. WHEREAS, Vineyard Wind proposes to build a new electrical substation (the "VW Substation") on a portion of a parcel of land located in Independence Park, Hyannis and commonly known and numbered as 40 Communications Way, and to connect the VW Substation to the adjacent Eversource substation where VW's energy output will be connected to the regional electric grid, and
- J. WHEREAS, the proposed VW Substation will house yet-to-be-identified electrical equipment, some of which is expected to be cooled by so-called dielectric fluids, and
- K. WHEREAS, the Town's Hyannis public water supply wells are down-gradient from the proposed VW Substation, and

- L. WHEREAS, the Barnstable Fire District wells and Town of Yarmouth wells (the latter of which the Town of Barnstable has rights to draw upon for emergency purposes) are either/both down-gradient from or their zones of contribution may be affected by a hazardous release at the proposed VW Substation, and
- M. WHEREAS, Vineyard Wind may seek to select a second route for the Transmission Lines to the Eversource substation on Oak Street in West Barnstable to support a subsequent Vineyard Wind project that would not transmit energy generated from facilities located within Nantucket Sound, and
- N. WHEREAS, the Parties desire that, should the proposed Transmission Lines and VW Substation be authorized by the applicable regulatory agencies and thereafter be constructed by Vineyard Wind, the construction and operation of such facilities be undertaken in a manner that minimizes impact on the environment and the public, that appropriate mitigation be put in place to protect such interests, and
- O. WHEREAS, based on the information currently made available to the Town, the Parties agree that this Agreement establishes obligations and commitments that, when implemented, will sufficiently address the Town's concerns (including but not limited to those regarding environmental risks to Nantucket Sound, the Town's public drinking water supplies, and minimization of Project impact on the environment and the public), and that the Town, by and through its Town Manager, therefore agrees to support Vineyard Wind's Project in furtherance of the mutual interests of the Parties with respect to these concerns and consistent with the terms of this Agreement,

NOW, THEREFORE, for good and valuable consideration, the adequacy of which is hereby acknowledged, the Parties agree as follows:

#### 5. NANTUCKET SOUND CABLE

Vineyard Wind acknowledges that there are three material inducements to the Town of Barnstable to enter into this Agreement. The first inducement is an absolute, unconditional assurance from Vineyard Wind that Vineyard Wind will not voluntarily permit any entity that generates energy from a location within Nantucket Sound to connect to the VW Transmission Lines, unless ordered to do so by a governmental authority with legal jurisdiction to order such a connection or utilization, and where either a) no stay of such order is granted pending appeal or b) if such stay is granted, a final order of a court of competent jurisdiction affirms the underlying order after appeal. Therefore, Vineyard Wind expressly represents that it will not voluntarily permit any such connection or utilization to occur. The second inducement is the need to protect the Town's public water supply from any hazardous releases at the proposed VW substation(s). The third inducement is the payments to the Town by Vineyard Wind, as more particularly described in Section 9 herein, which the Town may use for any purpose.

For the purposes of this Agreement, "Nantucket Sound" shall be defined as the area outlined in red on the NOAA Chart attached hereto as Exhibit A.

## 6. TRANSMISSION LINES AND DUCT BANKS

### a. ROUTE SELECTION

Vineyard Wind has not selected a final route for the Transmission Lines, although the Town and Vineyard Wind express a mutual preference for, and interest in prioritizing, the route(s) involving Covell's Beach. The routes under consideration are the Preferred Route (and variants thereto) and the Noticed Alternative (and variant thereto), as described in Vineyard Wind's petition to the Siting Board dated December 18, 2017 and, for the purposes of this Agreement only, are shown in the map entitled "Vineyard Wind Routes Under Consideration – August 2018" and appended hereto as Exhibit B. In addition, Vineyard Wind may seek to select a route to the Eversource substation on Oak Street in West Barnstable for a subsequent Vineyard Wind project that would not transmit energy generated from facilities located within Nantucket Sound. The Town shall work cooperatively with Vineyard Wind on the selection of the final route(s) for the Transmission Lines on both the Project and any subsequent project, including minor modifications to the foregoing identified routes. The Town agrees to support either route selected by Vineyard Wind for the Project and the route for any subsequent Project, including route(s) involving Covell's Beach (subject to the reservations set forth in Section 13), and agrees to otherwise cooperate with Vineyard Wind as reasonably requested to effectuate the purposes of this Agreement in accordance with Section 8(c).

### b. EASEMENTS AND GRANTS OF LOCATION

Contingent upon the approval of the Town Council and consistent with Section 8(d), the Town agrees to grant to Vineyard Wind, and Vineyard Wind agrees to accept as its sole means of upland access in Town public ways and Town property, the following:

- i. As to public ways within the Town, grants of location (or, upon mutual agreement between Vineyard Wind and the Town, easements) in, through, under and across said public ways (or properties in which the Town has the right to use for all purposes for which streets and ways are commonly used within the Town) along the considered route(s) sufficient for purposes of constructing, installing, inspecting, repairing, replacing, operating, maintaining, and from time to time relocating, the Transmission Lines.
- ii. As to Town property that is not a public way, including but not limited to Covell's Beach, easements in, through, under and across said Town property along the considered route(s) sufficient for purposes of constructing, installing, inspecting, repairing, replacing, operating, maintaining, and from time to time relocating, the Transmission Lines.

All easements granted under this Section shall be in form and substance reasonably acceptable to both Vineyard Wind and the Town of Barnstable and shall be promptly recorded in the Barnstable County Registry of Deeds by the Town at Vineyard Wind's expense. No easement or grant of location granted under this Section shall be revoked without written agreement by both the Town and Vineyard Wind, except that any easement shall: (i) expire upon the expiration of BOEM lease OCS-A-501 (or other comparable right to operate offshore wind turbines) to Vineyard Wind, including any existing or future extensions or renewals of the same; (ii) be for the purpose of installing, constructing, operating, maintaining, repairing and replacing, from time to time, the Transmission Lines for the Project or any

subsequent Vineyard Wind project that would not transmit energy generated from facilities located within Nantucket Sound, (iii) not be utilized by Vineyard Wind to serve facilities that generate energy from within Nantucket Sound, and (iv) otherwise be in form and substance reasonably acceptable to both Vineyard Wind and the Town of Barnstable.

Notwithstanding any other language in Agreement, The Town may, in its sole discretion, reserve surface rights in the easements at Covell's Beach and the Bike Path in Cummaquid and both subsurface and surface rights in all other easements consistent with Vineyard Wind's intended use. Additionally, each easement shall contain the following language:

This easement is for the exclusive use of Vineyard Wind, LLC, its heirs, successors, and assigns ("Vineyard Wind"). In accordance with a Host Community Agreement dated \_\_\_\_\_ to be recorded herewith, this easement shall be used solely for the purposes of the installation, construction, operation, maintenance, repair, and replacement, from time to time, of both transmission lines and duct bank capacity intended for the transmission of power generated within the area designated by BOEM lease area number OCS-A-501 and located in federal waters approximately 14 miles south of Martha's Vineyard to either (i) the proposed Vineyard Wind electrical substation at 40 Communications Way, Independence Park, Hyannis, or (ii) the regional electric grid connecting at or in the vicinity of Oak Street, West Barnstable. As a condition precedent to the validity of a transfer of any interest in the easement to a third party, any heir, successor, or assign to this easement shall accept in writing delivered to the Town before transfer the rights of this easement subject to all conditions upon which this easement is granted, including the conditions of the Host Community Agreement recorded herewith. Without limiting or expanding the foregoing and solely for the avoidance of all doubt, this easement does not authorize any use by any entity that generates energy from a location within Nantucket Sound. The grant of this easement is not and shall not be construed as a consent of the Town to an eminent domain taking of the easement lands pursuant to G.L. c. 164, section 72 or any other statute or regulation of similar import now or hereafter enacted.

Notwithstanding any other provision in this Agreement to the contrary, Vineyard Wind expressly acknowledges and agrees that any easement or grant of location are not and shall not be construed or treated as a consent of the Town to an eminent domain taking of the same pursuant to G.L. c. 164, § 72 or any other statute or regulation of similar import.

#### c. DUCT BANKS

To minimize the construction impact on the Town, the scope of all easements and grants of location shall authorize Vineyard Wind to install, construct, operate, maintain, repair, and replace, from time to time, both i) Vineyard Wind transmission lines and duct bank capacity for the Project and ii) upon provision by the Town in writing of approval, which shall not unreasonably be withheld, additional Vineyard Wind transmission lines and/or duct bank capacity sufficient to accommodate said additional Vineyard Wind transmission lines in the event Vineyard Wind develops additional offshore wind turbines. All easements and grants of location shall be granted under the express condition that no energy transmitted through said duct banks or transmission lines shall be generated from facilities within Nantucket Sound, and that no use of said additional duct bank by Vineyard Wind to transmit energy shall be authorized until payment by Vineyard Wind to the Town pursuant to Section 9 of this Agreement.

Notwithstanding any other provision in this Agreement to the contrary, VW expressly acknowledges and agrees that any easement or grant of location are not and shall not be construed or treated as a consent of the Town to an eminent domain taking of the same pursuant to G.L. c. 164, § 72 or any other statute or regulation of similar import.

d. EASEMENT FOR SUBSEQUENT DUCT BANK USE

With respect to the use by Vineyard Wind or its successor or assign of any easement for assets intended to support a subsequent Vineyard Wind project (including the Second Vineyard Wind Project referenced in Section 9(b)(ii) of this Agreement), the portion of an easement granted for such purpose (the "Subsequent Use Portion") shall expire on the tenth anniversary of the grant of such easement if Vineyard Wind has not commenced utilization of the Subsequent Use Portion (beyond installation of duct banks) by said date. Notwithstanding the foregoing, the term of the Subsequent Use Portion shall be deemed extended annually even if Vineyard Wind's utilization of the Subsequent Use Portion (beyond installation of duct banks) has not commenced, so long as Vineyard Wind makes an annual Supplemental HCA Payment installment in the amount of \$640,000 on said date, and shall be deemed extended annually thereafter so long as Vineyard Wind makes Supplemental HCA Payment installments annually thereafter on the anniversary thereof. All said installments shall accrue toward Vineyard Wind's total aggregate Supplemental HCA Payment pursuant to Section 9(b)(ii) of this Agreement. Vineyard Wind may choose, in its sole and absolute discretion, to cease making said Supplemental HCA Payment installments for the preservation of the Subsequent Use Portion rights without further obligation, without constituting abandonment of easement rights other than the Subsequent Use Portion, and without any acceleration or requirement of additional payment that may otherwise be contemplated pursuant to Section 9(b)(ii). In the event that Vineyard Wind fails to make a Supplemental HCA Payment when due and fails to cure within thirty (30) days, then the Town may declare the Subsequent Use Portion abandoned and, upon such declaration, Vineyard Wind shall promptly deliver to the Town a Notice of Termination of the Subsequent Use Portion suitable in form and content to the Town which shall then record the same at the Barnstable County Registry of Deeds.

If Vineyard Wind conveys its rights in the Subsequent Use Portion to any entity other than a Vineyard Wind affiliate (defined as another person or entity that directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control or ownership with Vineyard Wind), the following procedure shall apply. If Vineyard Wind *has not* commenced Supplemental HCA Payment payments, Vineyard Wind shall disburse to the Town within thirty (30) days of the date of conveyance \$640,000 for each full year that has elapsed between the date of the grant of the easement and the date of the conveyance, and the grantee shall commence payment of the balance of the Supplemental HCA Payment on the next-occurring anniversary of the grant of the easement following the conveyance, in installments pursuant to Section 9(b)(ii). If Vineyard Wind *has* commenced Supplemental HCA Payment payments, Vineyard Wind shall disburse to the Town a Supplemental HCA Payment installment in the amount of \$6.4 million within thirty (30) days of conveyance, and the grantee shall commence payment of any balance of the Supplemental HCA Payment on the next-occurring anniversary of the grant of the easement following the conveyance, in installments pursuant to Section 9(b)(ii).

In the event Vineyard Wind at any time commences utilization of the Subsequent Use Portion to support a subsequent Vineyard Wind project, or in the event Vineyard Wind satisfies its obligations under Section 9(b)(ii) by disbursing the total aggregate \$16 million Supplemental HCA Payment, this subsection shall no longer be in effect and Vineyard Wind's obligations shall solely be governed by Section 9(b)(ii).

e. PERMITTING OBLIGATIONS

As to any Vineyard Wind construction activities on, over, or under Town-owned property or municipal roadways, Vineyard Wind agrees to procure all required permits and approvals, and to coordinate construction schedules and construction plans with the requisite Town departments in accordance with existing Town policies, practices, and procedures.

7. ELECTRICAL SUBSTATIONS

a. RISK TO GROUNDWATER AND PUBLIC WATER

Vineyard Wind acknowledges that its electrical substation will house yet-to-be-identified electrical equipment, some of which is expected to be cooled by so-called dielectric fluids. Such dielectric fluids, if not properly managed, could pose a risk to groundwater and public water supplies.

Vineyard Wind acknowledges that the proposed location of its electrical sub-station in Independence Park, Hyannis is located above the sole-source aquifer that services the Town's public water supply wells in the Hyannis area and up-gradient from the Town's Hyannis wells.

The Parties agree that a release of dielectric fluids and other hazardous materials from VW's electric substation must be avoided.

b. SUBSTATION CONTAINMENT; CONSULTATION; EXPEDITED BINDING ARBITRATION AVAILABLE REGARDLESS OF ROUTE

- i. Commitments. Without further limiting the elements of design containment that the Parties will explore, Vineyard Wind commits to providing design containment equal to a minimum of 110% of the dielectric fluid volume contained in the associated equipment plus an additional volume to include the 100-year storm event over a 24-hour period, as well as to providing dielectric fluid containment under each piece of substation equipment containing dielectric fluids (even if such fluid is considered biodegradable).
- ii. Consultation. Vineyard Wind will consult with the Town regarding the substation(s) associated with the Project or any subsequent Vineyard Wind project. Within 5 business days of the execution of this Agreement, Vineyard Wind will supply to the Town for its review and comment all information previously submitted by Vineyard Wind to any regulatory authority (and any other plans or information Vineyard Wind is reasonably able to provide) relating to the containment of dielectric fluids that may be used, or the mitigation of any release or potential release of such dielectric fluids. Additionally, Vineyard Wind commits to promptly provide on request at its own cost and subject to procurement, exemplars of the dielectric fluid(s) and oil absorbing inhibition device(s) to be used in substation equipment, in sufficient quantities as the Town may reasonably designate to enable independent examination and testing.

The Parties will work together in good faith to discuss the Town's concerns with regard to these issues. In particular, Vineyard Wind commits to consider in good faith and to respond promptly in good faith to all written substation design requests made by the Town prior to commencement of construction of any Vineyard Wind substation

pertaining to any of the following issues relating to dielectric fluids: 1) the scope and volume of containment measures, 2) concrete treatment measures, 3) oil inhibition measures, 4) oil-water separation measures (collectively “Written Design Requests”). Vineyard Wind further commits to cooperate fully in assessing risk parameters of its proposed designs, mitigation measures with respect to such risks, and emergency and oil spill response plans designed to prevent discharges of dielectric fluids and other hazardous substances located at the substation from reaching groundwater. Vineyard Wind also agrees to implement any Written Design Request that is both reasonably implementable prior to commencement of construction and mutually agreed upon by the Parties.

- iii. Expedited Binding Arbitration. Any Written Design Request submitted by the Town to Vineyard Wind within seventy-five (75) days of the execution of this Agreement shall be eligible for binding arbitration pursuant to this subparagraph. If at any point beginning 90 days after the execution of this Agreement either Party determines that Vineyard Wind and the Town are not likely to reach agreement on a Written Design Request under the previous subparagraph, or (if at least seventy-five days have passed since execution of this Agreement) five days after either Party declares an impasse in consultation under the previous subparagraph, then without the need to utilize Section 18 that Party may request expedited binding arbitration (or any other dispute resolution mechanism mutually agreeable to the Parties) to resolve the dispute.

Within 30 days of the notice of the request for expedited binding arbitration, the Parties shall agree upon three arbitrators (one of whom shall be a licensed attorney with a minimum of ten years’ experience in arbitration, one of whom shall be a licensed attorney with a minimum of ten years’ experience in environmental matters, and one of whom shall be a licensed professional engineer with a minimum of ten years’ experience in substation design and operations), and shall enter into an arbitration agreement with the arbitrators. If the Parties cannot agree upon arbitrators or an arbitration agreement within that time, they shall be deemed to have selected the Real Estate Bar Association, Boston, MA (“REBA”) arbitration services, which shall appoint three qualified arbitrators using the above stated criteria to hear and resolve the dispute. The Parties agree to engage in and conclude the arbitration within 90 days of notice of the request for arbitration unless they mutually agree to extend that time.

The Parties agree that the standard on which any expedited binding arbitration will proceed is as follows: “Whether the failure to implement the Written Design Request will result in a substation design that could reasonably prevent continued use of existing Town municipal water wells in the event of a release of dielectric fluid from Vineyard Wind substation equipment or components, taking into account the degree of risk posed to public drinking water supplies from such release, the components, design, materials, site conditions, mitigation, emergency response and oil spill response plans, and existing best practices for environmental remediation.”

If Vineyard Wind has not designated specific dielectric fluid(s) or oil absorbing inhibition device(s) as of the time the request for expedited binding arbitration is submitted, then the Written Design Request by the Town may assume that such materials are of any type



used in substation design, unless Vineyard Wind specifically commits to their non-use at the substation.

The Parties agree that any arbitrated resolution must be consistent with Good Engineering Practice (as that term is commonly understood in the engineering profession) and be capable, when implemented, of receiving the stamp of Professional Engineers with expertise in civil engineering and substation design and operations. The Parties agree that the arbitrated resolution need not adopt the position of either Party, but may provide for a compromise position deemed reasonable and prudent by the arbitrators that is consistent with the parameters above. Notwithstanding the above, the parties further agree that in the event of a conflict between the final order of the arbitration panel and a final order of the Energy Facilities Siting Board, the arbitration order shall prevail.

- iv. Construction At Risk Allowed. During the pendency of any proceeding intended to resolve a disagreement over whether a written design request should be implemented, Vineyard Wind shall be entitled to construct and operate any substation consistent with any Final Order of the Siting Board, albeit at its own risk (and the Parties agree that the fact of the construction or operation of any substation shall not be considered as evidence in such proceeding, and that any Final Order of the Siting Board shall not be considered in such proceeding), unless enjoined by a court of competent jurisdiction, and provided further that said construction shall not preclude the ability to retrofit the substation in the event the Town prevails in said proceeding on any Written Design Request.
- v. Expert Reimbursement. Within thirty days of being presented with evidence of payment thereof, Vineyard Wind agrees to reimburse the Town in an amount not to exceed \$50,000 in total for technical expert service(s) of the Town's choosing relating to the containment of dielectric fluids, or the mitigation of any release or potential release of such dielectric fluids. Each Party will bear their own costs with respect to any arbitration proceeding.

## 8. TOWN SUPPORT

### a. ZONING AND OTHER REGULATORY APPROVALS

Vineyard Wind is seeking individual and comprehensive zoning exemptions pursuant to G.L. c. 40A, §3 for the Transmission Line and the VW Substation from the Massachusetts Department of Public Utilities. The Town agrees to publicly support the issuance of such exemptions and agrees to immediately withdraw all prefiled direct testimony submitted to the Siting Board pertaining to zoning. The Parties agree that if requested by the Siting Board in this proceeding, each shall be entitled to reintroduce and add to such testimony. Furthermore, if Vineyard Wind seeks zoning relief from the Town for the VW Substation and/or the Transmission Lines, the Town agrees to support such relief before applicable Town boards and departments having jurisdiction over the same including, without limitation, the Zoning Board of Appeals, the Planning Board and the Building Department.

To the extent that approvals of other Town boards and departments are required, including without limitation the Conservation Commission, the Town will similarly support Vineyard Wind's requests for relief before those boards.

b. ARTICLE 97

Portions of some of the proposed routes as shown in Exhibit B are located on land that is or may be subject to Article 97 of the Amendments to the Massachusetts Constitution, including Covell's Beach and the bike path. Subject to a 2/3 vote by the Town Council, the Town agrees to publicly support the adoption by the Massachusetts General Court of legislation approving the grant of easements and other rights through such land for the Transmission Lines, and will support Vineyard Wind's requests to Town boards and departments having jurisdiction over the same including, without limitation, the Conservation Commission, to approve the grant of such easements and other rights through such land for the Transmission Lines in accordance with Section 6. In the event approval pursuant to Article 97 is determined to be necessary but cannot be obtained, the Town and Vineyard Wind agree to consult in good faith to identify and consider alternative solutions.

c. COOPERATION

The Town agrees to publicly support the Project in its permitting, construction, operation, and maintenance, and will provide at no material cost to the Town such assistance as may be reasonably requested to facilitate the timely development of the Project. Such assistance may include but is not limited to (i) facilitating permitting at state, regional and local levels; (ii) providing information and guidance to facilitate efficient planning and construction process and to minimize disruption to the Town and its residents; (iii) working cooperatively with VW on construction scheduling, including granting licenses where necessary to facilitate construction access, and (iv) considering promptly and in good faith all requests from Vineyard Wind, in addition to those identified in Section 8(d), for a) additional easements with respect to Town property identified by Vineyard Wind as necessary to the Project and lying on one or more of the proposed Project routes as shown in Exhibit B, or other such Town Property as mutually agreed by the Parties, and b) sufficient authorizations acceptable to Vineyard Wind pursuant to Section 8(b) with respect to any easement granted.

The Town states that its Town Manager is authorized by state and local law to grant grants-of-location, and the Town agrees, by and through its Town Manager, to grant grants-of-location in all Town public ways (or properties in which the Town has the right to use for all purposes for which streets and ways are commonly used within the Town), identified by Vineyard Wind as necessary to the Project and lying on one or more of the proposed Project routes as shown in Exhibit B (or other such locations as otherwise mutually agreed by the Parties). As to properties in which the Town has the right to use for all purposes for which streets and ways are commonly used within the Town, Vineyard Wind shall defend, indemnify, and hold harmless the Town with respect to any challenge to the Town's authority to such grant of location, and the Town agrees to cooperate to the extent required for Vineyard Wind to defend.

In exchange for the benefits of the binding arbitration provisions of Section 7(b), and so long as a decision has been issued by the arbitrators pursuant to Section 7(b), the Town agrees not to appeal any Final Order of the Siting Board in EFSB 17-05. The Town agrees to immediately withdraw upon the effective date this Agreement all prefiled direct testimony submitted to the Siting Board, and further agrees to affirmatively object to and oppose any use of said prefiled direct testimony (unless and until verified under oath in person before the Siting Board in future) by any person or entity seeking to utilize said prefiled direct testimony in any setting as a basis for furthering any opposition to the Project. Vineyard Wind agrees to withdraw all prefiled rebuttal testimony, after the filing thereof, upon the Town's withdrawal of its prefiled direct testimony. The Parties also agree to immediately suspend and withdraw discovery requests, including Information Requests. Notwithstanding the mutual withdrawal of said

prefiled testimony, the Parties agree that if requested by the Siting Board in this proceeding, each shall be entitled to reintroduce and add to such testimony.

d. EFFECTIVE DATE; TOWN COUNCIL APPROVALS

The effective date of this Agreement shall be the date on which Town Council grants the request by Vineyard Wind for a) valid easement(s) in accordance with all applicable state and local laws, and otherwise acceptable to Vineyard Wind, in Covell's Beach consistent with Section 6(c), and b) sufficient authorizations acceptable to Vineyard Wind pursuant to Section 8(b) with respect to the same.

If Town Council does not approve this request on or before October 18, 2018, the effective date of this Agreement shall be October 19, 2018, with the provisos that in such circumstance a) consistent with Section 8(c), the Town Manager agrees to promptly and in good faith work with Vineyard Wind to identify easements in Town Property and authorizations required for other routes, and to propose such alternative easements and authorizations to Town Council for its consideration, and b) that notwithstanding Section 9(b)(i)(1), Section 9(b)(i)(2) shall govern any Primary HCA Payment that may be owed.

Notwithstanding the previous paragraph, if a) Town Council does not approve this request on or before October 18, 2018 due to an event of force majeure (in which case Town Council shall schedule a meeting to consider this request on the next date consistent with the state Open Meeting Law), or b) Vineyard Wind elects to extend said deadline for approval of this request to October 25, 2018, then the effective date of this Agreement shall be the date on which Town Council grants the requests after such rescheduling or extension, and Section 9(b)(i)(1) shall apply. If Town Council does not approve this request on said date, however, the effective date of this Agreement shall be the next calendar day, and the same two provisos as stated in the previous paragraph shall apply.

Notwithstanding any other provision in this Agreement to the contrary, VW expressly acknowledges and agrees that any easement or grant of location are not and shall not be construed or treated as a consent of the Town to an eminent domain taking of the same pursuant to G.L. c. 164, § 72 or any other statute or regulation of similar import.

9. FINANCIAL AGREEMENTS

a. TAXES

Vineyard Wind will pay taxes based on the "fair cash valuation" of its real and personal property in the Town in accordance with G.L. c. 59, § 38. This Agreement does not waive any right of either Party pursuant any state or local taxation statute or regulation, including with respect to the valuation, assessment, or abatement of taxes.

b. HOST COMMUNITY AGREEMENT PAYMENTS

In addition to taxes paid annually pursuant to subsection 9(a), if any substation for the Project is located in the Town of Barnstable and so long as the Town remains in compliance with Section 8(c) of this Agreement, Vineyard Wind shall provide the Town annual "HCA Payments." For the purposes of this subsection, the Parties define "Start Date" to mean one year from the commencement by Vineyard Wind of initial physical construction within the Town. For the purposes of this subsection, "Town taxes" shall

not include any fire district taxes owed by Vineyard Wind and collected by the Town Assessor pursuant to G.L. c. 48, § 73.

- i. Primary HCA Payment. Regardless of which of the proposed routes is utilized by Vineyard Wind for the Project, Vineyard Wind shall provide a Primary HCA Payment.
  1. Covell's Beach Route. If Town Council grants easements and authorizations pursuant to Section 8(d) as to Covell's Beach for the Project, the Primary HCA Payment shall be in the aggregate amount of \$16 million, paid by Vineyard Wind in annual installments and calculated pursuant to this subparagraph.

The first annual installment of the Primary HCA Payment shall be due within thirty (30) days of the Start Date of the Project, in the amount of \$640,000. Subsequent annual Primary HCA Payment installments shall be due on the anniversary of the Start Date. Once Vineyard Wind has made \$16 million in total aggregate annual Primary HCA Payment payments, Vineyard Wind's obligation to make further annual Primary HCA Payment payments shall cease.

Each annual Primary HCA Payment installment other than the first such installment shall be calculated by subtracting from the figure \$1,534,000 the amount paid by Vineyard Wind in Town taxes on Project assets in the Town fiscal year immediately preceding the Town fiscal year in which the annual Primary HCA Payment installment due date falls, provided that the once \$16 million has been paid, no further Primary HCA Payment shall be due. If the amount of taxes paid in any given year exceeds \$1,534,000, there will be no Primary HCA Payment installment made or credited that year and the Primary HCA Payment balance will remain as before.

- a. In the event that the calculated annual Primary HCA Payment installment for a given year would, when added to the total aggregate of all annual Primary HCA Payment payments made to that date, exceed \$16 million, Vineyard Wind shall be responsible only for the portion of that given year's annual Primary HCA Payment installment that constitutes the difference between \$16 million and the total aggregate of all annual Primary HCA Payment payments made to that date, resulting in the aggregate of all Primary HCA Payment payments being \$16 million.
- b. In the event that, on the twenty-fifth anniversary of the Start Date of the Project, the total aggregate Primary HCA Payment made by Vineyard Wind is less than \$16 million, Vineyard Wind shall on that date pay the difference between \$16 million and the total aggregate Primary HCA Payment made to that date, resulting in the aggregate of all Primary HCA Payment payments being \$16 million.
- c. Commencing on the twenty-sixth anniversary of the Start Date of the Project, and on each anniversary thereafter, so long as the BOEM lease OCS-A-501 remains valid (including any existing or future extensions or renewals of the same) unless Vineyard Wind otherwise ceases operation

of the Project, Vineyard Wind shall on that date pay a sum of \$60,000, with subsequent annual payments increasing two and one half percent over the prior years' payment.

2. Non-Covell's Beach Route. If Town Council does *not* grant easements and authorizations pursuant to Section 8(d) as to Covell's Beach for the Project, the Primary HCA Payment shall be in the aggregate amount of \$6 million, paid by Vineyard Wind in annual installments and calculated pursuant to this subparagraph.

The first annual installment of the Primary HCA Payment shall be due within thirty (30) days of the Start Date of the Project, in the amount of \$640,000. Subsequent annual Primary HCA Payment installments shall be due on the anniversary of the Start Date. Once Vineyard Wind has made \$6 million in total aggregate annual Primary HCA Payment payments, Vineyard Wind's obligation to make further annual Primary HCA Payment payments shall cease.

Each annual Primary HCA Payment installment other than the first such installment shall be calculated by subtracting from the figure \$1,534,000 the amount paid by Vineyard Wind in Town taxes on Project assets in the Town fiscal year immediately preceding the Town fiscal year in which the annual Primary HCA Payment installment due date falls, provided that the once \$6 million has been paid, no further Primary HCA Payment shall be due. If the amount of taxes paid in any given year exceeds \$1,534,000, there will be no Primary HCA Payment installment made or credited that year and the Primary HCA Payment balance will remain as before.

- a. In the event that the calculated annual Primary HCA Payment installment for a given year would, when added to the total aggregate of all annual Primary HCA Payment payments made to that date, exceed \$6 million, Vineyard Wind shall be responsible only for the portion of that given year's annual Primary HCA Payment installment that constitutes the difference between \$6 million and the total aggregate of all annual Primary HCA Payment payments made to that date, resulting in the aggregate of all Primary HCA Payment payments being \$6 million.
- b. In the event that, on the twenty-fifth anniversary of the Start Date of the Project, the total aggregate Primary HCA Payment made by Vineyard Wind is less than \$6 million, Vineyard Wind shall on that date pay the difference between \$6 million and the total aggregate Primary HCA Payment made to that date, resulting in the aggregate of all Primary HCA Payment payments being \$6 million.
- c. Commencing on the twenty-sixth anniversary of the Start Date of the Project, and on each anniversary thereafter, so long as the BOEM lease OCS-A-501 remains valid (including any existing or future extensions or renewals of the same) unless Vineyard Wind otherwise ceases operation of the Project, Vineyard Wind shall on that date pay a sum of \$60,000,

with subsequent annual payments increasing two and one half percent over the prior years' payment.

- ii. Supplemental HCA Payment. Should Vineyard Wind receive all required federal, state, and local approvals and permits for a route to the Eversource substation on Oak Street in West Barnstable for a subsequent Vineyard Wind project (the "Second Project") and the Town has granted an easement in Covell's Beach or an alternative acceptable to Vineyard Wind, Vineyard Wind shall provide a Supplemental HCA Payment in the aggregate amount of \$16 million, paid by Vineyard Wind in annual installments and calculated pursuant to this subparagraph.

The first annual installment of the Supplemental HCA Payment shall be due within thirty (30) days of the Start Date of the Second Project, in the amount of \$640,000. Subsequent annual Supplemental HCA Payment installments shall be due on the anniversary of the Start Date. Once Vineyard Wind has made \$16 million in total aggregate annual Supplemental HCA Payment payments, Vineyard Wind's obligation to make further annual Supplemental HCA Payment payments shall cease.

Each annual Supplemental HCA Payment installment other than the first such installment shall be calculated by subtracting from the figure \$1,534,000 the amount paid by Vineyard Wind in Town taxes on Second Project assets in the Town fiscal year immediately preceding the Town fiscal year in which the annual Supplemental HCA Payment installment due date falls, provided that once \$16 million has been paid, no further Supplemental HCA Payment shall be due. If the amount of taxes paid in any given year exceeds \$1,534,000, there will be no Supplemental HCA Payment installment made or credited that year and the Supplemental HCA Payment balance will remain as before.

1. In the event that the calculated annual Supplemental HCA Payment installment for a given year would, when added to the total aggregate of all annual Supplemental HCA Payment payments made to that date, exceed \$16 million, Vineyard Wind shall be responsible only for the portion of that given year's annual Supplemental HCA Payment installment that constitutes the difference between \$16 million and the total aggregate of all annual Supplemental HCA Payment payments made to that date, resulting in the aggregate of all Supplemental HCA Payment payments being \$16 million.
2. In the event that, on the twenty-fifth anniversary of the Start Date of the Second Project, the total aggregate Supplemental HCA Payment made by Vineyard Wind is less than \$16 million, Vineyard Wind shall on that date pay the difference between \$16 million and the total aggregate Supplemental HCA Payment made to that date, resulting in the aggregate of all Supplemental HCA Payment payments being \$16 million.
3. Commencing on the twenty-sixth anniversary of the Start Date of the Second Project, and on each anniversary thereafter, so long as the BOEM lease OCS-A-501 remains valid (including any existing or future extensions or renewals of the same) unless Vineyard Wind otherwise ceases operation of the Second Project, Vineyard Wind shall on that date pay a sum of \$60,000, with

subsequent annual payments increasing two and one half percent over the prior years' payment.

c. FEES

Nothing in this Agreement waives the obligation of Vineyard Wind to pay any otherwise-applicable permit fee or license fee payable to the Town pursuant to either state or local law or regulation.

d. SPECIAL MITIGATION

In the event Vineyard Wind selects a Project route landing at Covell's Beach, Vineyard Wind states its intent to commence construction no sooner than September 15, and no later than December 15, of any given year, with the further intent and expectation of completing said construction no later than April 30 of the following year. Starting no later than April 1, and at least every two weeks thereafter, Vineyard Wind will provide status reports to the Town as to the progress of construction and any anticipated requirement for construction beyond April 30, to enable the Town and Vineyard Wind to identify mutually acceptable alternate actions to provide for resident access to Covell's Beach proper after the first Friday in May. If construction in the Covell's Beach parking lot in any given year is not anticipated to be completed before May 15, Vineyard Wind agrees to make temporary repairs at the expense of Vineyard Wind to any physical disturbances to the parking lot caused by Vineyard Wind, so as to return any disturbed portions of said lot to their condition at the time, or to confer promptly with the Town to identify mutually acceptable alternate actions to provide for resident access to Covell's Beach proper after said date. Vineyard Wind agrees that if a resumption of construction is required in the next subsequent construction season, that all construction shall be concluded on or before April 30 of that construction season unless further authorized by the Town. Further, Vineyard Wind agrees to limit any staging on the Covell's Beach parking lot to equipment and materials required for construction within the Covell's Beach easement and the seaward portion thereof, with all other staging required for the Project to occur at another location, unless mutually agreed otherwise with the Town. And further, Vineyard Wind agrees, upon completion of all Vineyard Wind construction at Covell's Beach, to fully repave to the Town's satisfaction the parking lot at Covell's Beach unless otherwise agreed by the Town.

In the event Vineyard Wind selects a Project route landing at Covell's Beach and commences Project construction within the Town on said route, Vineyard Wind will provide the Town \$80,000 for the purpose of reconstructing a bath house at Covell's Beach. Notwithstanding the foregoing, however, if Vineyard Wind is required under either state or local law to compensate the Town for any right, interest, or approval required to authorize Vineyard Wind to utilize said landing at Covell's Beach ("the Compensation Payment"), the Town will credit Vineyard Wind on a dollar-for-dollar basis a maximum of \$80,000 against the Compensation Payment.

10. THE ENVIRONMENTAL JUSTICE COMMUNITY

To the extent this Project triggers the Commonwealth's Environmental Justice Policy of EOEEA, Vineyard Wind agrees to adhere to said policy.

## 11. ROADWAYS AND PUBLIC LANDS

Vineyard Wind has not made a final route selection for the Transmission Lines and therefore site-specific conditions cannot be identified at this time. VW and the Town will review such plans when available and the Town agrees that its approval of these plans shall not be unreasonably withheld.

Notwithstanding the above, the parties agree that all work will conform to MassHighway and Town specifications for new road construction. VW agrees to restore roadways to “like new” condition or a mutually acceptable alternative consistent with then-existing Town policies and procedures.

## 12. BIKE PATH

Certain routes under consideration, as shown in Exhibit B, involve running the Transmission Lines under the proposed Town bike path.

If such routes are selected, as further consideration for this Agreement, VW agrees to coordinate its construction with the municipal bike path, including preparatory work on pathway to facilitate subsequent bike path installation by others.

## 13. OAK STREET SUB-STATION

Vineyard Wind has designated Independence Park in Hyannis as its preferred location for the VW Substation and interconnection to the regional electric grid via the nearby Eversource sub-station. VW has also indicated its interest in a site in the vicinity of the Oak Street sub-station in West Barnstable as an additional location for support of a subsequent Vineyard Wind project that would not transmit energy generated from facilities located within Nantucket Sound. Additional payment shall be made by Vineyard Wind to the Town, should Vineyard Wind utilize such a site and route, pursuant to Section 9 of this Agreement.

The Town currently has insufficient information to determine whether it can support a sub-station in West Barnstable. However, the Town agrees to work cooperatively with VW, at no material cost to the Town, if VW wishes to pursue the Oak Street site (and associated route) for use by a subsequent Vineyard Wind project that would not transmit energy generated from facilities located within Nantucket Sound.

## 14. OTHER TOWN AGENCIES

Vineyard Wind acknowledges and agrees that to the extent that it is required to appear before and obtain permitting from the Barnstable Conservation Commission, Barnstable Site Plan Review, Barnstable Board of Health, or Barnstable Department of Public Works, it agrees to provide full and complete information required by any Barnstable boards pursuant to applicable statute or regulation in support of its application(s). The Town acknowledges that Vineyard Wind must reserve its right to seek a Comprehensive Permit from the Siting Board with respect to the subject matter of each such permit or permission; to the maximum extent feasible, however, Vineyard Wind agrees to solicit full adoption of the Town’s permit conditions into the Siting Board decision.



## 15. CONTINUING REVIEW AND PROMPT DISCLOSURE

The parties agree to meet at least annually during the month of September starting in 2019, and more often if necessary, to review in good faith the parameters of the Project, its equipment, its effect on the environment, and any other matters of material importance to its performance.

Each Party agrees to promptly provide copies of all required public filings and correspondence with public agencies to the other Party promptly upon filing. Each Party further agrees to notify the other of any facts, circumstances, information, or developments that a reasonable observer would deem material to the Town's or Vineyard Wind's interests, including, without limitation, environmental considerations.

## 16. NON-OBJECTION; DEFAULT; INJUNCTIVE RELIEF FOR BREACH OF CONDITIONS

The Town would consider, and Vineyard Wind agrees not to contest, that a connection to the Transmission Lines by any entity that generates energy from a location within Nantucket Sound would both overburden the easements and grants of location contemplated by this Agreement and to be a clear and immediate threat of "damage to the environment" of Nantucket Sound as well as that of Barnstable, Dukes, Nantucket, and Bristol Counties, as that term is used in G.L. c. 214, §7A. Vineyard Wind further agrees that it would not contest an allegation that the occurrence of such an event would irreparably harm the Town's stated interests and that there is no adequate remedy at law that could compensate the Town for such a breach.

Therefore, Vineyard Wind agrees that it would not object to the Town seeking standing to pursue any appropriate relief against any entity that generates energy from a location within Nantucket Sound before any agencies or Courts of competent jurisdiction, including a G.L. c. 214, §7A claim. VW also agrees that it would not object to the Town seeking Temporary, Preliminary, and Permanent Injunctive Relief, as well as Declaratory Relief, ordering the termination of the connection to VW's Transmission Lines by any entity that generates energy from a location within Nantucket Sound. Vineyard Wind further would not object to the Town seeking such further relief as any such agency or Court may determine to be appropriate in the circumstances.

With respect to all other obligations identified in this Agreement, any Party that fails to satisfy any obligation under this Agreement in a timely manner may be declared to be in default by the other Party upon receipt of written notice stating the basis for the same. The defaulting Performing Party shall have 90 days from receipt of the Notice of default to cure the default unless such time is further extended by agreement with the other Party.

Given the importance of this Project to the region's renewable energy supply, in the event of a default by Vineyard Wind under this Agreement, the Town's remedies shall be limited to injunctive and declaratory relief and/or monetary damages; in no event shall the Town have the right to terminate this Agreement due to a default by Vineyard Wind. In the event Vineyard Wind declares bankruptcy, all HCA payments due and not already paid by Vineyard Wind as of the date of said declaration shall, at the Town's election, be accelerated. The amount of each annual outstanding accelerated HCA payment shall be calculated pursuant to the formula established in Section 9, utilizing the taxes paid in the fiscal year ended immediately prior to said date of declaration of bankruptcy.

## 17. INCORPORATION OF CONDITIONS

Vineyard Wind agrees to support any motion or request made by the Town to the Siting Board to incorporate the conditions contained in this Agreement as conditions of any Final Order of the Siting Board in the proceeding. Vineyard Wind further agrees not to object to efforts by the Town to encourage the federal and state agencies with jurisdiction over the Project to endorse or adopt this Agreement as part of any approvals that Vineyard Wind is required to obtain from said agencies.

## 18. DISPUTE RESOLUTION

- a. Generally: The Parties agree to use reasonable efforts to resolve any dispute arising under this Agreement informally.
- b. Mediation: In the event the Parties cannot resolve a dispute arising under this Agreement informally, any Party to the dispute may request mediation upon Notice to the other Party. The Notice shall identify the Parties to the dispute, the nature of the dispute, and a proposed mediator(s).
  - i. Within 30 days of the Notice of the request for mediation, the Parties to the dispute shall agree upon a mediator and enter into a mediation agreement with the mediator. If the Parties to the dispute cannot agree upon a mediator and mediation agreement within that time, they shall be deemed to have selected the Real Estate Bar Association, Boston, MA ("REBA") mediation services which shall appoint a qualified mediator to hear the dispute.
  - ii. The Parties to the mediation agreement shall engage in and conclude the mediation within 90 days of Notice of the request for mediation unless they agree to extend that time.
  - iii. If mediation is unsuccessful, the Parties to the dispute shall be free to exercise any rights or remedies they may have pursuant to this Agreement or otherwise.
- c. Exception: In the event of exigent circumstances, either Party may pursue judicial relief regarding events of default without first resorting to mediation.

## 19. VENUE AND JURISDICTION

Unless the Parties otherwise agree in writing, all actions within the Courts of the Commonwealth shall be filed in the Superior Court for Barnstable County.

Unless the Parties otherwise agree in writing, any Federal actions shall be filed in the United States District Court for the District of Massachusetts.

## 20. INDEPENDENT MASSACHUSETTS CONTRACT

This Agreement shall be governed by and construed as a Massachusetts contract in accordance with its laws, exclusive of the conflicts of law rules of the Commonwealth. It shall have independent legal

significance and, in the event of a conflict with the terms of any administrative order, or otherwise, the terms of this Agreement shall prevail.

If any portion of this Agreement shall be found invalid for any reason, such invalidity shall be construed as narrowly as possible and the balance of this Agreement shall be deemed to remain in full force and effect, except as necessary to accommodate such finding of invalidity in order that both parties shall be provided with the benefits and burden with the obligations set forth herein.

## 21. NOTICE

All notices or correspondence with the Town shall be addressed to:

Town Manager  
Town of Barnstable  
367 Main Street  
Hyannis, MA 02601

With a copy to:

Town Attorney  
Town of Barnstable  
367 Main Street  
Hyannis, MA 02601

All notices or correspondence with Vineyard Wind shall be addressed to:

Vineyard Wind LLC  
700 Pleasant Street, Suite 510  
New Bedford, MA 02740

With a copy to:

Foley Hoag LLP  
155 Seaport Boulevard  
Boston, MA 02210  
Attn: Adam Kahn and Tad Heuer, Esq.

Notice shall be considered delivered if sent via U.S. Postal Service or a commercial delivery service such as FedEx or UPS if, in each instance, a tracking protocol is utilized to record date, time, and place of delivery. Notice shall be effective upon the day following such delivery.

The addresses above shall be utilized unless and until a Party desiring to change such address notifies the other of such change in the manner described above.

## 22. RELATIONSHIP OF THE PARTIES

### a. INDEPENDENT ADVICE

No Party, representative or counsel for any Party, has acted as counsel for any other Party with respect to such Party entering into this Agreement, except as expressly engaged by such Party with respect to this Agreement, and each Party represents that it has sought and obtained any appropriate legal advice it deems necessary prior to entering into this Agreement. No Party shall act or be deemed to act as legal counsel or a representative of the other Party unless expressly retained by such Party for such purpose, and, except for such express retention, no attorney/client relationship is intended to be created between the Parties.

### b. NO PARTNERSHIP

Nothing herein shall be deemed to create a partnership or joint venture and/or principal and agent relationship between the Parties.

## 23. GENERAL TERMS AND CONDITIONS

### a. MODIFICATION

No provision of this Agreement may be modified except by a subsequent writing signed by all of the Parties.

### b. AFFILIATES, SUCCESSORS, AND ASSIGNS

This Agreement is binding upon and shall inure to the benefit of each of the Parties as well as their respective affiliates, successors, and assigns.

### c. INDEMNIFICATION

Vineyard Wind acknowledges that the Town, through no fault of its own, may become a party to litigation or may be threatened with litigation relating to or stemming from VW's Project. VW agrees to defend, indemnify, and hold the Town harmless from any cause of action asserted against the Town, its agents, servants, employees, or contractors resulting from or related to the Project, other than those caused by the Town's negligence (provided, however, that this provision shall not excuse Vineyard Wind for liability to the Town in proportion to any comparative negligence), willful misconduct, or by breach of this Agreement. Such indemnification shall include, without limitation, the costs of investigation, negotiation, or settlement of such claims whether or not such a claim has been placed in litigation. Notwithstanding anything to the contrary contained in this Agreement, in no event shall either Party be liable to the other Party for damages on account of lost profits or opportunities or business interruption.

### d. RESPONSE COSTS

VW asserts that the Project is not expected to require any material increase in use of emergency response resources by the Town. However, Vineyard Wind will within 30 days upon presentation reimburse the Town for all reasonable costs incurred by the Town in responding to any and all emergency response actions originating at or from the Project sites, if deemed by the Town in the public interest to

do so, and whether or not mandated or invited to do so by any local, regional, state or federal agency. These response actions include, but are not limited to, emergency medical response, fire-fighting response, hazardous material release, vessel collisions, and aircraft emergencies. In addition, Vineyard Wind will, upon reasonable prior notice of anticipated expenses of the Town and its fire districts for training for, equipping for, and preparing for emergency response actions originating exclusively at or from the Project sites, and upon preapproval by Vineyard Wind of the same (which shall not be unreasonably withheld), reimburse the Town within 30 days upon presentation for all such reasonable expenses incurred.

e. INSURANCE

Vineyard Wind agrees to provide policies of commercial liability insurance from Insurance Companies domiciled in the United States, acceptable to the Town of Barnstable, naming the Town of Barnstable individually and/or as an additionally-named insured for such coverage and in such amounts as the Town and its insurance advisors shall reasonably determine in relation to the risks to be insured against. All such required policies of insurance shall be delivered to the Town before any permits for construction of the VW Project at sea or ashore shall be commenced. If any such coverage is cancelled or become unavailable, it shall be a material breach of this Agreement and entitle the Town to equitable and legal relief before any agency or court of competent jurisdiction.

f. LEGAL COSTS

Vineyard Wind agrees that it will not seek attorney's fees from the Town in any matter relating to this Agreement or the Project. VW concedes that an assessment of such fees have not been appropriated, and as such are barred by the Constitution of the Commonwealth.

g. ENFORCEMENT AUTHORITY NOT WAIVED

Unless otherwise agreed herein, including but not limited to Section 8, this Agreement does not preclude Town boards or officials from i) taking any action within the scope of their legal discretion on petitions submitted to them by Vineyard Wind, or ii) taking enforcement positions within the scope of their official duties with regard to the Project. Nor does this Agreement preclude legal counsel for the Town, at the direction of the Town Manager, from i) defending decisions of Town boards or officials on petitions submitted to them by Vineyard Wind, or ii) defending enforcement decisions of or commencing enforcement actions on behalf of Town boards or officials within the scope of their official duties with regard to the Project. Further, unless otherwise agreed herein, including but not limited to Section 8, nothing in this Agreement shall prohibit the Town from taking positions or actions with regard to changes to the proposed Project to the extent such changes are inconsistent with this Agreement.

h. FORCE MAJEURE

It is understood and agreed that the Parties hereto shall make a reasonable and good faith effort to perform their obligations under this Agreement. If and to the extent, but only to the extent, that either Party is prevented from performing its obligations hereunder by an event of force majeure, such Party shall be excused from performing hereunder for said period, and shall not be liable in damages or otherwise, and the Parties instead shall negotiate in good faith with respect to appropriate modifications to the terms hereof. For purposes of this Agreement, the term force majeure shall mean any i) storm, flood, earthquake, hurricane, cyclone, typhoon, lightning, landslide, drought, tornado, tidal wave,

wave, blizzard, ice storm, or other natural disaster; ii) explosion, structural collapse, evacuation, fire, sonic boom, pressure waves, bombing, hostage taking, kidnapping, physical criminal acts, accidents involving any aviation, nautical, or automotive vehicle or other means of conveyance, whether manned or unmanned, motorized or unmotorized, iii) plague, epidemics, or nuclear, chemical, or biological incidents or contamination, iv) civil disturbance, invasion, riot, coup, revolution, war (whether declared or not), civil war or any other armed conflict, military or non-military interference by any third party state or states, acts of terrorism or serious threats of terrorist attacks, v) sabotage, piracy, blockade, siege, embargo, strikes, boycotts, labor disputes, vi) interruptions, loss, or malfunctions of utilities, communications, or computer services; and vii) states of emergency declared by a local, state, or federal official or agency, acts of God, or acts of the public enemy.

i. COUNTERPARTS

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. A signed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

Witness this day our hands and seals,

Town of Barnstable,

By,

  
\_\_\_\_\_  
Mark S. Ellis, Town Manager

10.3.2018  
\_\_\_\_\_  
Date

Vineyard Wind LLC

By,

\_\_\_\_\_  
Erich Stephens, Chief Development Officer

\_\_\_\_\_  
Date

END OF DOCUMENT

blizzard, ice storm, or other natural disaster; ii) explosion, structural collapse, evacuation, fire, sonic boom, pressure waves, bombing, hostage taking, kidnapping, physical criminal acts, accidents involving any aviation, nautical, or automotive vehicle or other means of conveyance, whether manned or unmanned, motorized or unmotorized, iii) plague, epidemics, or nuclear, chemical, or biological incidents or contamination, iv) civil disturbance, invasion, riot, coup, revolution, war (whether declared or not), civil war or any other armed conflict, military or non-military interference by any third party state or states, acts of terrorism or serious threats of terrorist attacks, v) sabotage, piracy, blockade, siege, embargo, strikes, boycotts, labor disputes, vi) interruptions, loss, or malfunctions of utilities, communications, or computer services; and vii) states of emergency declared by a local, state, or federal official or agency, acts of God, or acts of the public enemy.

i. COUNTERPARTS

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. A signed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

Witness this day our hands and seals,

Town of Barnstable,  
By,

\_\_\_\_\_  
Mark S. Ells, Town Manager

\_\_\_\_\_  
Date

Vineyard Wind LLC  
By,

  
\_\_\_\_\_  
Erich Stephens, Chief Development Officer

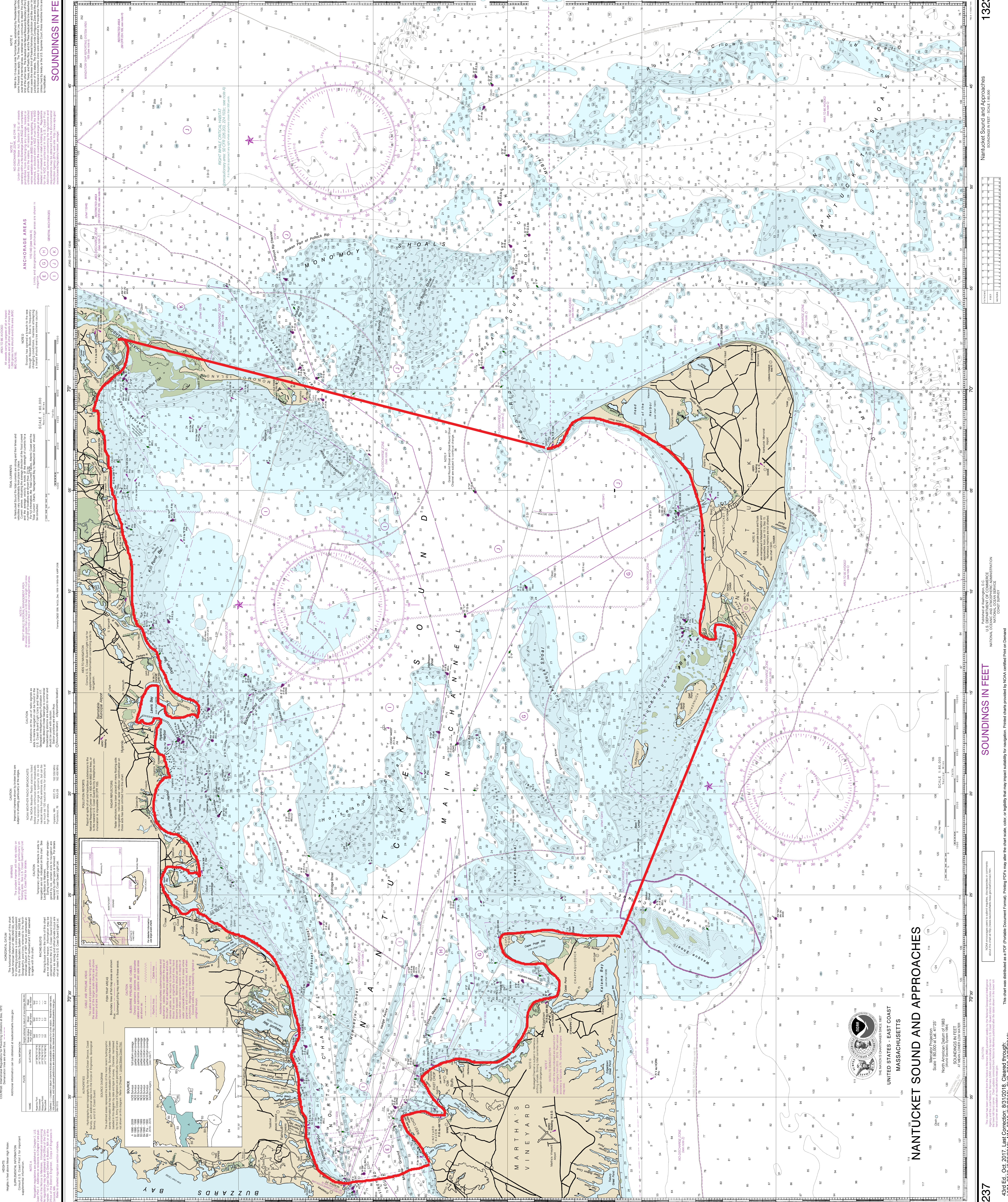
3 Oct 18  
\_\_\_\_\_  
Date

END OF DOCUMENT

# **Exhibit A**

## **Marked NOAA Chart of Nantucket Sound**





**NOTES:**

1. This chart was compiled from the following sources: U.S. Coast and Geodetic Survey charts, U.S. Coast and Geodetic Survey hydrographic data, and other reliable sources.

2. The soundings in this chart are in feet.

3. The datum for the soundings in this chart is Mean High Water (MHW).

4. The chart is based on the North American Datum of 1983 (NAD 83).

5. The chart is subject to change without notice.

6. The chart is not to be used for navigation without the aid of a compass.

7. The chart is not to be used for navigation without the aid of a compass.

8. The chart is not to be used for navigation without the aid of a compass.

**ANCHORAGE AREAS:**

1. The chart shows anchorage areas in red.

2. The chart shows anchorage areas in red.

3. The chart shows anchorage areas in red.

4. The chart shows anchorage areas in red.

5. The chart shows anchorage areas in red.

6. The chart shows anchorage areas in red.

7. The chart shows anchorage areas in red.

8. The chart shows anchorage areas in red.

**GENERAL INFORMATION:**

1. The chart is published by the U.S. Coast and Geodetic Survey.

2. The chart is published by the U.S. Coast and Geodetic Survey.

3. The chart is published by the U.S. Coast and Geodetic Survey.

4. The chart is published by the U.S. Coast and Geodetic Survey.

5. The chart is published by the U.S. Coast and Geodetic Survey.

6. The chart is published by the U.S. Coast and Geodetic Survey.

7. The chart is published by the U.S. Coast and Geodetic Survey.

8. The chart is published by the U.S. Coast and Geodetic Survey.

**CAUTION:**

1. The chart is not to be used for navigation without the aid of a compass.

2. The chart is not to be used for navigation without the aid of a compass.

3. The chart is not to be used for navigation without the aid of a compass.

4. The chart is not to be used for navigation without the aid of a compass.

5. The chart is not to be used for navigation without the aid of a compass.

6. The chart is not to be used for navigation without the aid of a compass.

7. The chart is not to be used for navigation without the aid of a compass.

8. The chart is not to be used for navigation without the aid of a compass.

**REVISIONS:**

1. The chart is revised by the U.S. Coast and Geodetic Survey.

2. The chart is revised by the U.S. Coast and Geodetic Survey.

3. The chart is revised by the U.S. Coast and Geodetic Survey.

4. The chart is revised by the U.S. Coast and Geodetic Survey.

5. The chart is revised by the U.S. Coast and Geodetic Survey.

6. The chart is revised by the U.S. Coast and Geodetic Survey.

7. The chart is revised by the U.S. Coast and Geodetic Survey.

8. The chart is revised by the U.S. Coast and Geodetic Survey.

**ADDITIONAL INFORMATION:**

1. The chart is published by the U.S. Coast and Geodetic Survey.

2. The chart is published by the U.S. Coast and Geodetic Survey.

3. The chart is published by the U.S. Coast and Geodetic Survey.

4. The chart is published by the U.S. Coast and Geodetic Survey.

5. The chart is published by the U.S. Coast and Geodetic Survey.

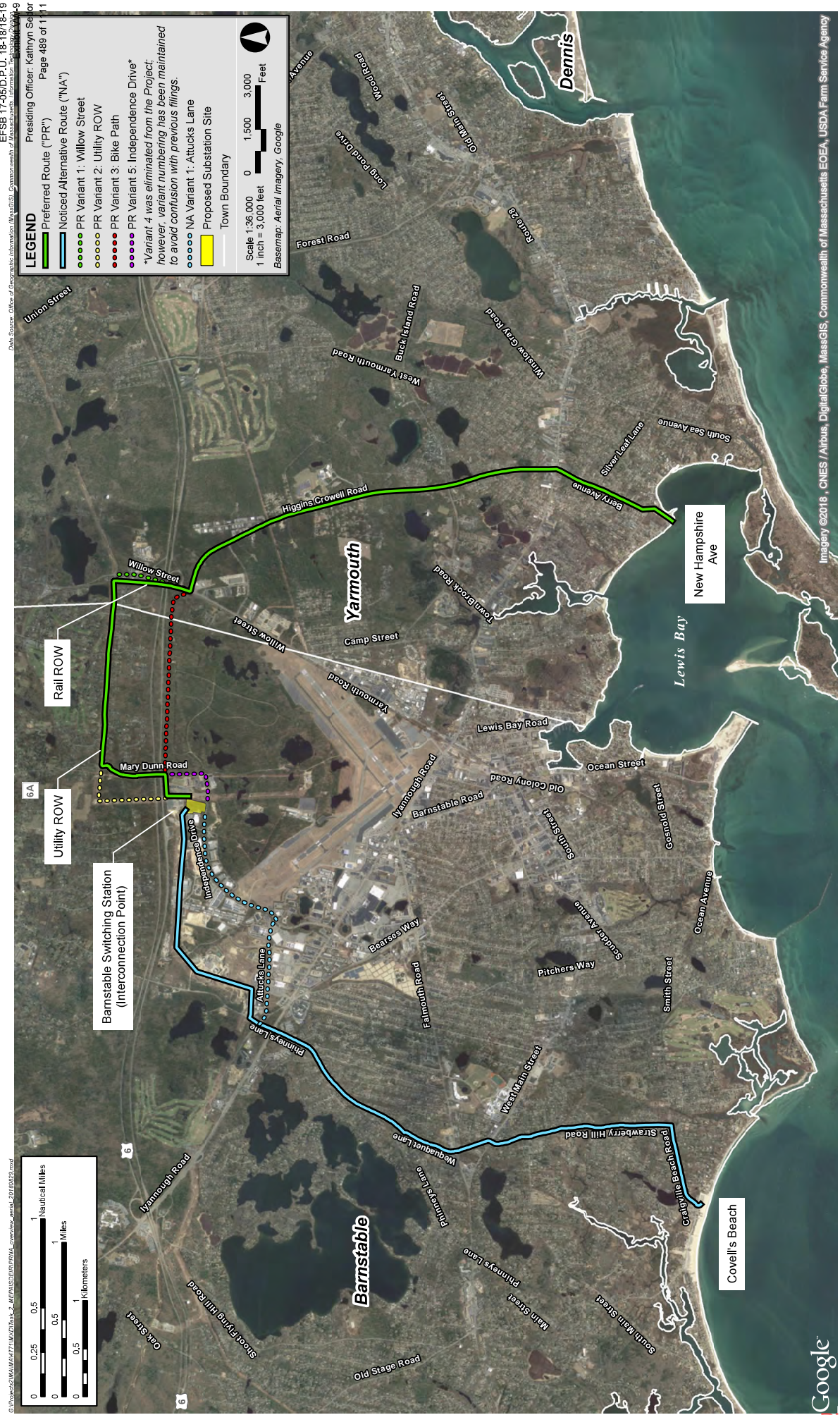
6. The chart is published by the U.S. Coast and Geodetic Survey.

7. The chart is published by the U.S. Coast and Geodetic Survey.

8. The chart is published by the U.S. Coast and Geodetic Survey.

## **Exhibit B**

Vineyard Wind Routes Under Consideration  
August 2018



Imagery ©2018, CNES / Airbus, DigitalGlobe, MassGIS, Commonwealth of Massachusetts EDOEA, USDA Farm Service Agency  
 This product is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

Figure 1-2  
 Onshore Locations: Preferred Route, Noticed Alternative Route, and Variants



# VINEYARD WIND

**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-11**

**REDACTED**



**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-12: COMMUNITY ENGAGEMENT CASE -  
VINEYARD WIND SEIS LETTERS OF SUPPORT**

**Community Engagement Case:  
BOEM Public Meetings on the Supplemental Environmental Impact Statement for Vineyard Wind 1  
July 2020**

Due to the ongoing COVID-19 pandemic, Vineyard Wind has transitioned its community engagement and outreach efforts to a virtual model, relying almost exclusively on Zoom calls, webinars, phone calls, email, and other remote communication methods to remain engaged with stakeholders, share project updates, and support project permitting. The case study provided here concerns Vineyard Wind 1 – the company’s first 800 MW project– and demonstrates Vineyard Wind’s ability to successfully engage in community outreach and generate broad public support for offshore wind in a completely virtual setting.

On June 12, 2020, the Bureau of Ocean Energy Management (BOEM) published a Notice of Availability for the Supplement to its Draft Environmental Impact Statement (SEIS) for Vineyard Wind 1. This opened a 45-day public comment period during which BOEM hosted five public meetings in July. BOEM decided to host these meetings on a virtual basis due to pandemic. In support of project permitting, Vineyard Wind engaged in its own virtual community outreach campaign leading up to and throughout the public comment period to encourage attendance at the virtual public meetings along with the submission of supportive comments.

Among other things, Vineyard Wind issued press releases, promoted the meetings on social media and through email blasts, and worked with the company’s network of NGOs, unions, suppliers, fisheries representatives, and community stakeholders to widely share information about the opportunity to participate during the public comment period and at the virtual public meetings.

Virtual public meetings are not typically part of the federal regulatory process. There was a significant effort made by BOEM to make the meetings transparent and informative while maintaining appropriate public access and adhering to public record requirements. Vineyard Wind sought to publicize the meetings and to accurately relay instructions to stakeholders about how to participate in this new meeting format. Information about the virtual meetings and how to comment was published on the Vineyard Wind website and circulated by email to more than 3,000 contacts including several hundred fisheries contacts. The result was an overwhelming response largely in favor of the project. In total, 135 participants spoke at five virtual meetings, approximately 86% in favor of the project.

Written comments supporting the project were submitted by citizens concerned with climate change, local pile drivers eager for job opportunities, state and local elected officials, national environmental groups, project partners, and more. BOEM received an incredible 13,259 written comments with approximately 86% in support of project approval. In addition, more than 16,000 individuals signed petitions calling for project approval.



# VINEYARD WIND

## Letters of Support for Vineyard Wind 1

- 1. Richard Hendrick**, *Albany Port District Commission*  
July 27, 2020
- 2. John Hyland**, *Professional Staff Congress-CUNY, AFT Local 2334 NYSARA, NYC ARA, LI ARA*  
July 27, 2020
- 3. Ryan Stanton**, *Long Island Federation of Labor*  
July 15, 2020
- 4. Barbara Hafner**, *Long Island Federation of Labor*  
July 27, 2020
- 5. Ross Gould**, *Workforce Development Institute*  
July 27, 2020
- 6. Dan Walcott**, *NYC District Council of Carpenters*  
July 27, 2020
- 7. Mariah Dignan**, *Long Island Organizer, Climate Jobs NY*  
July 7, 2020
- 8. Kelly DeVine**, *Long Island South resident*  
July 13, 2020
- 9. Kayla Wuerch**, *NYC resident*  
July 24, 2020
- 10. Maureen Murphy**, *Long Island Resident*  
July 27, 2020
- 11. Victoria Esserry**, *NY Resident*  
July 27, 2020
- 12. Robert Erikson**, *Long Island Resident*  
July 27, 2020

**13. Paul Engel**, *Teamsters Local 294- Albany NY*  
July 27, 2020

**14. IBEW Local #3**  
July 27, 2020

**15. Jeremy Rodgers**, *Local 40 Ironworkers*  
July 27, 2020

## **Additional Letters of Support**

**16. Timothy Timmermann**, *US EPA, Director of Office of Environmental Review*  
July 23, 2020

**17. Robert Snook**, *CT DEEP*  
July 27, 2020

**18. Alex Elvin**, *Martha's Vineyard Commission*  
July 27, 2020

**19. George Detweiler**, *USGC*  
July 27, 2020

**20. Hakan Ozmen**, *CEO of Prysmian Powerlink*  
July 21, 2020

**21. Brian McAllister**, *President, McAllister Towing*  
July 23, 2020

**22. Robert D. Jordan**, *Head of Mission Critical Systems, North America, Irving Texas*  
July 27, 2020

**23. Alex Babbin Operations Manager**, *WindServ Marine*  
July 27, 2020

**24. Steven Sawhill**, *DNV GL USA, Inc.*  
July 27, 2020

**25. Michael Roberts**, *Crowley Marine services*  
July 27, 2020

**26. Ziven Drake**, *Piledrivers and Divers*  
Summer 2020



- 27. David Hardy**, *Offshore*  
Summer 2020
- 28. Julian Cyr**, *State Senator of Cape and Islands District*  
July 16, 2020
- 29. Nancy Durfee**, *Town Planner, on behalf of Town of Somerset*  
July 21, 2020
- 30. Alfredo Castillo**, *Councilman for 136th district, Bridgeport CT*  
July 21, 2020
- 31. Dennis Bradley**, *Connecticut State Senate 23rd district*  
July 21, 2020
- 32. Holly McNamara, Steven Moniz, Lorne Lawless**, *Somerset, Board of Selectmen*  
July 23, 2020
- 33. Peter F. Neronha**, *RI Attorney General*  
July 27, 2020
- 34. Roger Schaefer**, *Martha's Vineyard rec fisherman*  
June 30, 2020
- 35. Fred Akers**, *private recreational fishing boat owner*  
July 24, 2020
- 36. Wendy Northcross**, *Cape Cod Chamber of Commerce*  
June 29, 2020
- 37. Holly Bellebuono**, *Executive Director of ACE MV*  
July 5, 2020
- 38. Fran McDonald**, *President of MMA*  
July 7, 2020
- 39. Robert Rio**, *Associated Industries of MA*  
July 8, 2020
- 40. Winston Vaughan**, *Boston Director of Climate Solutions at Health Care Without Harm*  
July 8, 2020
- 41. Sue Hruby**, *Chair of the West Tisbury Energy Committee, a member of the Cape Light Compact Board, and a member of the West Tisbury Climate Action Committee.*  
July 8, 2020
- 42. Joel Rinebold**, *Connecticut Center for Advanced Technology*  
July 9, 2020

- 43. Stephen Coan**, *President, Mystic Aquarium*  
June 9, 2020
- 44. Betsy Sowers**, *Reverend from Weymouth, MA, and member of Fore River Residents*  
*Against the Compressor Station*  
July 13, 2020
- 45. Meg Kerr**, *Audubon Society of Rhode Island*  
July 13, 2020
- 46. David Downie**, *Fairfield University, chair of Dep. of Politics*  
July 13, 2020
- 47. Michael Sabitoni**, *Rhode Island Building Trades*  
July 15, 2020
- 48. Lisa Wolf**, *Marblehead Municipal Light Department*  
July 15, 2020
- 49. Ben Hellerstein**, *Environment Massachusetts*  
July 19, 2020
- 50. Eileen Mathieu**, *Sustainable Marblehead, Green Marblehead Committee*  
July 19, 2020
- 51. Zenas Crocker**, *Barnstable Clean Water Coalition*  
July 20, 2020
- 52. John Tzimirangas**, *Energy New England*  
July 20, 2020
- 53. John Rogers**, *Union of Concerned Scientists*  
July 23, 2020
- 54. Wouter Vermeersch**, *Jan De Nul Group*  
July 23, 2020
- 55. Emily Reichert**, *CEO, Greentown Labs*  
July 23, 2020
- 56. Kai Salem**, *Green Energy Consumers Alliance*  
July 23, 2020
- 57. Richard Delaney**, *Cape Cod Climate Change Collective*  
July 23, 2020

- 58. Craig Altemose**, 350 Massachusetts  
July 23, 2020
- 59. Hilary Fagan**, EVP Business Development, The Rhode Island Commerce Corporation  
July 27, 2020
- 60. Katherine Mamed**, Building Pathways- Connecticut  
July 27, 2020
- 61. John Hayes**, Sustainability, Energy, and Resiliency Committee, city of Salem, MA  
July 27, 2020
- 62. Pankaj Lal**, Clean Energy and Sustainability Analytics Center, Montclair State University  
July 27, 2020
- 63. Torben Scheller**, Engineer Consultancy for Offshore Wind  
July 27, 2020
- 64. Francis Pullaro**, RENEW  
July 27, 2020
- 65. Eugene Curry**, Cape Cod Technology Council, Inc.  
July 27, 2020
- 66. Brandon Burke**, Business Network for Offshore Wind  
July 27, 2020
- 67. Abby Watson**, Siemens Gamesa Head of Gov't Affairs  
Summer 2020
- 68. Maria Hanna**, Survival Systems USA  
Summer 2020
- 69. Nicole DiPaolo**, National Wildlife Federation  
July 27, 2020
- 70. Richard Payne**, Retired Ph.D physical oceanographer from WHOI  
June 29, 2020
- 71. William Leavenworth**, Ph.D., retired environmental historian & mariner, Searsmont,  
Maine  
June 29, 2020
- 72. John Brazier**, Cape Cod resident and engineer  
June 29, 2020
- 73. Michael McGarty**, NB resident and BCC grad  
June 29, 2020

- 74. David Charles**, *Long time summer resident of Martha's Vineyard, (Edgartown)*  
June 29, 2020
- 75. Bradley Lima**, *Sandwich MA resident with 50 yr career in power generation*  
June 30, 2020
- 76. William Hamner**, *Martha's Vineyard resident*  
July 1, 2020
- 77. Sherrie Burson**, *Cape Cod resident*  
July 1, 2020
- 78. Olivia Gieger**, *Plaintiff in Kain et al. v. Massachusetts Department of Environmental Protection*  
July 1, 2020
- 79. Don Mallinson**, *Cape Cod resident, retired sea captain*  
July 5, 2020
- 80. John Williams**, *MA resident*  
July 7, 2020
- 81. Matthew Perzanowski**, *Islander and George Washington University student*  
June 8, 2020
- 82. David Cole**, *Member, Mass Audubon's Climate Change Committee*  
July 8, 2020
- 83. Alexander Boyle**, *MV resident*  
July 13, 2020
- 84. Steven Wenner**, *Cohasset MA resident, climate activist*  
July 13, 2020
- 85. Sheila Place**, *Cape Cod resident/environmental activist*  
July 13, 2020
- 86. Kirsten Sauter DVM**, *MV resident*  
July 15, 2020
- 87. Madeleine Bell**, *4th gen MV visitor*  
July 21, 2020
- 88. Ashley Koster**, *MV and CT resident*  
July 22, 2020
- 89. Bert Jackson**, *Community leader in Cape Cod*  
July 22, 2020

- 90. John DarrochMannix**, *New Haven, CT resident*  
July 27, 2020
- 91. Honorable Dennis V. McGinn**, *Vice Admiral, U.S. Navy, Retired Former Assistant Secretary of the Navy*  
July 27, 2020
- 92. Ben Tillman**, *MV resident*  
July 27, 2020
- 93. Natalie MacDonald**, *Female pile driver*  
June 29, 2020
- 94. Kyle Martin**, *Piledriver in Local Union 56 out of Boston, MA*  
June 30, 2020
- 95. Patrick Paul**, *Pile Driver Instructor for L.U.56 and NASCTF*  
July 21, 2020
- 96. David Borrus**, *Piledrivers union*  
June 8, 2020
- 97. Douglas P. Nelson**, *IBEW Local 223*  
July 27, 2020
- 98. Aaron Ott**, *Boston Local 56 Piledrivers and Divers member*  
July 27, 2020
- 99. Brian Harrington**, *MA Wildlife biologist for 35 yrs*  
June 29, 2020
- 100. Daniel Hoble**, *Worked on the El Cabo wind project in New Mexico*  
July 1, 2020



## **ALBANY PORT DISTRICT COMMISSION**

**GEORGETTE STEFFENS**  
CHAIR, BOARD OF COMMISSIONERS

ALBANY-RENSELAER  
106 Smith Blvd.  
ALBANY, N.Y. 12202 – (518) 463-8763  
FAX NO. (518) 463-8767  
EMAIL: [portofalbany@portofalbany.us](mailto:portofalbany@portofalbany.us)

**RICHARD J. HENDRICK**  
Chief Executive Officer

July 27, 2020

Walter Cruickshank, Ph.D., Acting Director  
Bureau of Ocean Energy Management  
1849 C Street, NW  
Washington, D.C. 20240

Dear Acting Director Cruickshank,

We are writing you today to show our support for the offshore wind industry here in the U.S. and thank your agency for its work in releasing the draft Supplemental Environmental Impact Statement for Vineyard Wind. This report is a crucial step for this industry to go from plans on paper to steel in the water.

Representing the Albany Port District Commission, we are excited about the enormous economic potential the offshore wind industry brings to our region and country. It's not often that we get to witness the birth of an entirely new, billion-dollar industry in our country, but that's exactly what we are seeing with offshore wind.

While this may be a new industry for the U.S., offshore wind is a proven industry across the Atlantic. With thousands of offshore turbines installed across Europe, this industry has created thousands of jobs, revitalized port communities, created a supply chain and invested billions of dollars into local economies. The U.S. East coast offers some of the most promising conditions in the world for offshore wind. There is no doubt, that we can replicate the industry's success right here at home.

A study by the Special Initiative for Offshore Wind estimates that the nearly 20 GW of offshore wind procurements expected through 2030 will require close to \$70 billion in capital investment. The jobs and economic opportunities are already starting to trickle in – with port investments, vessel construction and factory announcements – even as this industry remains in its infancy. We are already seeing the growth of a domestic supply chain, as developers and suppliers look to minimize their own costs and

**PUBLIC**

logistical risks. This domestic supply chain means good paying jobs, investment in coastal communities and a brand-new economy for Americans to call their own.

In sum, offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. We appreciate BOEM's effort to move this industry forward and the care your agency has taken to ensure this industry can be a success for all. We look forward to seeing this industry's promises come to fruition and hope we can be a trusted source of information as BOEM ushers in the American offshore wind era.

Sincerely,

A handwritten signature in black ink that reads "Richard J. Hendrick". The signature is written in a cursive, flowing style.

Richard J. Hendrick

Chief Executive Officer


Albany Port District Commission

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from John Hyland,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

### Comment

I am a retired professor, union member and union officer, and as a retiree an active member of several union-related retiree and senior organizations. I write to strongly urge you to stay on schedule and move forward rapidly in the Vineyard Wind Energy project. A day doesn't go by without further, mounting evidence of the urgency of wind and other renewable energy production. It is literally madness to slow down and limit the scale of this and related projects. The convergence of environmental and economic (investment/jobs) needs is strikingly clear. I know from my union and retiree/senior organizational work that there is a strong mandate to move forward quickly. The clock is ticking. We have children and grandchildren on our minds. Full speed ahead. Long Island is very interested in your project.

John Hyland  
Professional Staff Congress-CUNY, AFT Local 2334  
NYSARA, NYC ARA, LI ARA  
Coalition of Municipal Retiree Organizations

**ID:** BOEM-2020-0005-12321

**Tracking Number:** 1k4-9hzx-1qw0

### Document Information

**Date Posted:**

Jul 27, 2020

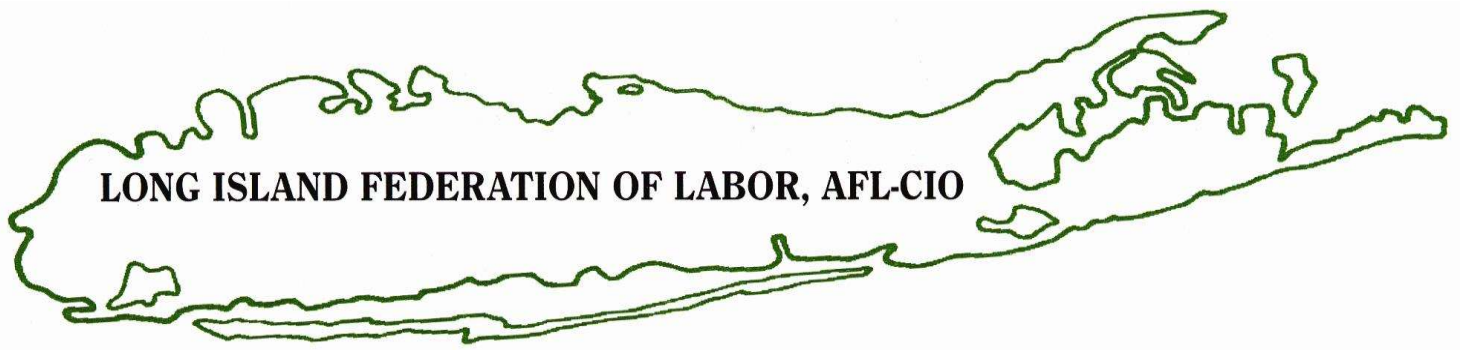
[Show More Details](#) 

### Submitter Information

**Submitter Name:**

John Hyland





**WRITTEN TESTIMONY OF:  
RYAN STANTON, POLITICAL DIRECTOR  
THE LONG ISLAND FEDERATION OF LABOR, AFL-CIO TO  
BOEM ON VINEYARD WIND I-JULY 8, 2020**

My name is Ryan Stanton, I am the Political Director of the Long Island Federation of Labor, AFL-CIO. Our labor movement represents over 250,000 union members and their families on Long Island in New York, across industries and sectors of our economy. I would like to start by thanking the Bureau of Ocean Energy Management for holding a series of public virtual hearings, as well as drafting and releasing the Supplemental Draft Environmental Impact Statement despite the fact that we are in the midst of a National Public Health Crisis. This work is critical to the future of our national security, environment, and economic recovery.

During the public hearings you heard from the New York Offshore Wind Alliance, a unique coalition made up of organized labor, developers, environmental organizations, and a number of other businesses all committed to the responsible development of offshore wind in federal waters off of New York's coast. We are among the coalition's members and count Vineyard Wind among our partners in the coalition.

I submit my comments today in support of this project. By the time you read my testimony you will have repeatedly heard and read that this project is precedent setting. The decisions made now will have ramifications on projects up and down the eastern seaboard. The Vineyard Wind project is vital to moving this industry forward in the fight against climate change, improving public health, addressing longstanding environmental justice issues, and restarting the economy in the wake of the COVID-19 Pandemic.

Vineyard Wind 1 is an 800 MW project that will be located more than 15 miles off the coast of Martha's Vineyard. It will be the nation's first commercial-scale offshore wind project in federal waters. Vineyard Wind 1 will launch the offshore wind industry in the US, and provide clean, renewable, and cost-effective electricity to 400,000 homes and businesses in Massachusetts.

As the first commercial-scale offshore wind project in the US, Vineyard Wind 1 will play a critical role in establishing a domestic offshore wind industry and realizing the tremendous potential economic benefits of this rapidly emerging industry. Locally, Vineyard Wind 1 is expected to create 3,600 jobs – many of them unionized – as the offshore wind industry is built out over the next few years.

In order to capture the full potential of the US offshore wind workforce, developers and suppliers need certainty to invest in and train a local workforce. Moving toward a 100% US workforce that captures the full economic benefits of this industry will require consistent, predictable projects entering construction for workers to gain experience and qualifications necessary to advance within the workforce and replace the Europeans over time.

New York State has a 1,800 MW worth of projects in the pipeline, with a state mandate to achieve 9,000 MW of Offshore Wind Energy Production by 2035. These projects represent a once in a generation opportunity to establish a new industry with family sustaining careers that support good pay and benefits leading to stronger communities.

It's important to note that these projects need to be economically viable, and the industry has gone through an exhaustive process to establish a 1 x 1 Nautical Mile layout based on stakeholder feedback. The 1 x 1 NM layout eliminates at least 30% of the area's potential energy production but addresses the main comments from the commercial fishing industry regarding the need for transit lanes to ensure safe navigation. The 1 x 1 NM uniform layout creates over 200 transit lanes throughout the entire wind project area. The United States

Coast Guard (USCG) has determined that this type of “standard and uniform grid pattern” layout would “maximize safe navigation” in the Wind Energy Areas (WEAs). (MARIPARS, 32)

So, we ask you to reject alternative F, which calls for a 4 x 4 Nautical Mile layout. Alternative F threatens the viability of this industry and provides no benefit. Additional transit lanes will result in substantial technical challenges, delays, cost increases to consumers, and more environmental impacts from offshore wind development, with marginal gains and, as USCG identifies, potentially greater conflict among transiting and fishing vessels that are “funneled into the corridors thereby increasing traffic density and risks for vessel interaction.” (MARIPARS, 7)

We urge BOEM to stick to its published schedule, issue a Final Environmental Impact Statement in November and a record of decision approving the project, as proposed and modified by the applicant in December.


Thank you again for all your hard work.

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Barbara Hafner, Long Island Federation of Labor

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility, Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

**ID:** BOEM-2020-0005-12864

**Tracking Number:** 1k4-9i1p-t2z1

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

Barbara Hafner

**Organization Name:**

Long Island Federation of Labor

### Comment

This work is critical to the future of our national security, environment, and economic recovery. As the first commercial-scale offshore wind project in the US, Vineyard Wind 1 will play a critical role in establishing a domestic offshore wind industry and realizing the tremendous potential economic benefits of this rapidly emerging industry. Locally, Vineyard Wind 1 is expected to create 3,600 jobs - many of them unionized - as the offshore wind industry is built out over the next few years. We urge BOEM to stick to its published schedule, issue a Final Environmental Impact Statement in November and a record of decision approving the project, as proposed and modified by the applicant in December.

In unity

Barbara Hafner

PUBLIC

July 27, 2020

James Bennett  
Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
VAM-OREP  
Sterling, Virginia 20166

**Re: BOEM-2020-0005 – Vineyard Wind 1 COP Supplemental to the Draft EIS**

Dear Mr. Bennett:

I write today on behalf of the Workforce Development Institute (WDI) in support of offshore wind (OSW) and the Vineyard Wind 1 COP Supplemental to the Draft EIS (BOEM 2020-0005) which was published in the Federal Register on June 12, 2020.

For over a decade the Bureau of Ocean Energy Management (BOEM) has been planning, studying, analyzing, and developing a program to lease OSW power plants in the Outer Continental Shelf, including the area that encompasses Vineyard wind 1. WDI thanks you for your work and leadership in moving the development of the OSW industry forward in the U.S. in a careful, insightful manner. The SEIS has been thorough and forward thinking in looking at the impacts of the pipeline of projects BOEM has already leased. Thank you for the opportunity to provide these comments.

WDI is a statewide, 501(c)(3) non-profit organization that works to grow and keep good jobs in New York State through flexible, demand-driven programming. Its work often fills gaps not covered by other institutions or agencies and uses a wide range of tools including workforce expertise, public and private systems analysis, organizational development, funding, ground level information, research, and stakeholder engagement to facilitate projects that solve workforce challenges, raise awareness, build skills, and strengthen employers' ability to hire and promote workers.

WDI brings extensive experience in energy jobs analysis and training and even more in stakeholder engagement, supply chain, and workforce development. Through its Energy and Climate Program, WDI has been involved in multiple aspects of energy jobs. We have long been a supporter of offshore wind. In 2012, we convened labor unions, industry and environmental organizations to discuss the development of an offshore wind industry in New York. Our work has included developing an online supply chain database, publishing research on the industry's workforce, and serving on the New York State Offshore Wind Technical Working Group for Jobs and Supply Chain.

## **I. Introduction**

WDI supports offshore wind. Large scale utility development like offshore wind not only will help reduce our massive carbon footprint but will also mean a tremendous amount of economic opportunity in the form of jobs and community benefits. We have been preparing for this moment for a very long time. We urge approvals be as expeditious as possible to unlock tens of thousands of good paying jobs in a time where we are in dire need of economic stimulus and investment in large infrastructure projects that are environmentally sustainable such as offshore wind.

WDI submits these comments in support of this precedent setting project. The decisions you make here set the tone for and have serious consequences for offshore wind power plants up and down the East Coast. BOEM's actions have a direct impact on investment and other decision-making of the industry, as well as those that support the industry, such as the educators and training providers. Offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. As we begin recovering from the unprecedented social and economic impact of the COVID-19 pandemic, the approval of this project will directly lead to the creation of thousands of jobs that come with good pay and benefits.

This work is critical to the future of our national security, environment, and economic recovery. As the first commercial-scale offshore wind project in the US, Vineyard Wind 1 will play a critical role in establishing a domestic OSW industry and realizing the tremendous potential economic benefits of this rapidly emerging industry. Locally, Vineyard Wind 1 is expected to create 3,600 jobs - many of them will be occupied by local building and construction trades- as the OSW industry is built out over the next few years. We urge BOEM to stick to its published schedule, issue a Final Environmental Impact Statement in November and a record of decision approving the project, as proposed and modified by the applicant in December.

While it may be new for the U.S., offshore wind is a proven industry across the Atlantic. With thousands of offshore turbines installed across Europe, this industry has created thousands of jobs, revitalized port communities, created a supply chain and invested billions of dollars into local economies. The U.S. East Coast offers some of the most promising conditions in the world for offshore wind. There is no doubt that we can replicate the industry's success abroad right here at home.

## **II. The Industry Requires Certainty & Predictability**

To capture the full potential of the U.S. offshore wind workforce, developers and suppliers need certainty and predictability to invest in and train a local workforce. Developing the U.S. workforce to capture the full economic benefits of this industry will require consistent, predictable projects that allow workers to gain experience and qualifications necessary to advance within the workforce. A training provider, university, labor union and not for profits will not invest resources required for OSW curriculum development if they are not certain that there will be future projects or when those projects will occur.

As the SEIS points out there are 22 GWs of projects in the pipeline. Without clear actions and the adherence to predictable timetables it becomes difficult to prepare the U.S. workforce for the industry and obtain the full economic benefits of OSW. Those who work in workforce development know all too well that one of the worst things we can do is train people for jobs that do not exist. In terms of preparing for the offshore wind industry, we know that these jobs exist, however the timing for the jobs is unpredictable because there is a lack of regulatory certainty.

New York State has 1,800 MWs worth of projects in the pipeline, with a state mandate to achieve 9,000 MW of Offshore Wind Energy Production by 2035. These projects represent a once in a generation opportunity to establish a new industry with family sustaining careers that support good pay and benefits while bringing a new industry to the U.S. According to the SEIS, without offshore wind development “additional, more polluting facilities would come on line...” To realize the benefits, the industry needs certainty. This means that the projects in the permitting and development pipeline must be permitted in a timely and reasonable manner.

### III. The Economic Benefits of Offshore Wind Are Significant

The SEIS understates the economic benefits of offshore wind in stating that development will result only in *minor* net economic benefits to the region. With the study’s recognition of significant new investment in ports and harbors, manufacturing and other supply chain activities, and workforce development it is hard to understand how those benefits were deemed *minor*. The SEIS should reflect a more favorable rating of offshore wind as a domestic economic development engine consistent with ongoing and planned investments.

The OSW industry is a large maritime energy infrastructure construction industry. OSW farms spur billions of dollars of investment into payrolls, taxes, supply chain, ports and other businesses. In addition, it requires a significant number of jobs to complete an OSW power plant. There are at least 74 occupations required for the development, manufacturing, assembly, installation, operation and maintenance of an OSW power plant. Globally there are more than 86,000 jobs. Over the last few years, strong roots of an industry have begun to grow in the U.S. with a number of OSW companies establishing offices in the U.S. The American Wind Energy Association (AWEA) forecasts that the OSW industry could create up to 83,000 jobs. These points deserve greater weight in the SEIS and should support a declaration that these economic benefits are *significant*.

UMass Dartmouth’s Public Policy Center conducted a study examining the contribution to employment and economic development to be made by the 800-MW Vineyard Wind project. The study considered impacts to both the economy of the Commonwealth, and the regional economy of southeastern Massachusetts, and found:

- The Vineyard Wind project will support an estimated 3,180 direct full-time equivalent (FTE) job years in Massachusetts across all phases over the project period under the Base scenario and 3,658 direct FTE job years in Massachusetts in the High scenario.
- The 800 MW project will produce nearly \$79 million in direct value added impacts for Massachusetts and just under \$170 million in direct output.

- The study estimates that the amount paid in state and local taxes as a result of the development, construction, and the first year of O&M of the 800 MW Vineyard Wind project is \$14.7 million in the Base scenario and \$17.0 million in the High scenario.

A study by the Special Initiative for Offshore Wind estimates that the nearly 20 GW of offshore wind procurements expected through 2030 will require close to \$70 billion in capital investment. The jobs and economic opportunities are already starting to trickle in – with port investments, vessel construction and factory announcements – even as this industry remains in its infancy. We are already seeing the growth of a domestic supply chain, as developers and suppliers look to minimize their own costs and logistical risks. This domestic supply chain means good paying jobs, investment in coastal communities and a brand-new economy for Americans to call their own.

#### **IV. 22 GWs of Offshore Wind in the U.S. Will Have a Significant Benefit for the Environment**

The SEIS fails to fully recognize the environmental benefits of this and other projects. The SEIS states on page 3-98: “Overall, it is anticipated that there will be no impact on climate change as a result of offshore wind projects alone, though they may beneficially contribute to a broader combination of actions to reduce future impacts from climate change.” The SEIS considers approximately 22 GWs of U.S. Atlantic OSW capacity to be reasonably foreseeable. These OSW GWs will be injected into the onshore electricity systems operated by ISO New England, NYISO, and PJM. Based on the annual CO2 emissions and net generation for these three grid operators, the interconnection of 22 GWs of OSW would result in an estimated 8% reduction in carbon emissions in those regions. On a planetary scale, the total emissions reductions from these projects might be considered small, but the reduction is quite significant in terms of decarbonizing the electricity supply of the Eastern Seaboard. Offshore wind is an important component of East Coast states’ plans to reduce greenhouse gases and to reduce air pollution. Approving the Vineyard Wind project sends the right signal: America is open for business and ready to take a leadership role in this global clean energy industry.

#### **V. Alternative F, which includes a 4NM transit lane, is Unnecessary and has Significant Negative Impacts**

BOEM should reject Alternative F and approve D2.

##### **a. Transit Lanes Reduce Area Available for Wind Turbine Generators (WTGs), Thereby Constraining a Significant Mechanism for Mitigating Climate Change**

The SEIS states on page 2-5: “As explained in Section 3.14.2.4, BOEM assumes that the addition of all six of the 4-nautical mile transit lanes proposed by RODA would reduce the technical capacity of the Rhode Island and Massachusetts (RI and MA) Lease Areas by



approximately 3,300 MW, which is 500 MW less than the current state demand for offshore wind in the area. Furthermore, Alternative F combined with the Alternative D2 layout would not be able to meet existing announced demand as described in Chapter 1.”

Climate change must be a principal consideration in the decision to approve Vineyard Wind. Climate change presents an existential threat to the oceans and marine life, not only in southern New England, but along the entire Eastern Seaboard. The deployment of 22 GWs of U.S. Atlantic OSW capacity that the SEIS assumes to be reasonably foreseeable will provide a significant positive cumulative impact by providing significant climate mitigation benefits.

Given the uniform 1x1 NM Joint Developer Agreement Layout, the US Coast Guard has made a final determination that transit lanes are unnecessary. In fact, the inclusion of transit lanes will directly constrain the U.S. OSW industry’s ability to mitigate climate change.

#### **VI. Transit Lanes Reduce Area Available for WTGs, Thereby Reducing Economic Benefits and Undermining Public Investment**

The SEIS considers approximately 22 GWs of U.S. Atlantic OSW capacity as reasonably foreseeable. A recent study by the American Wind Energy Association (“AWEA”) states U.S. OSW will support up to 83,000 jobs and \$25 billion per year in economic output by 2030, while also delivering investment in critical coastal infrastructure. This pipeline of projects is considered sufficient to trigger large manufacturing investments; however, reducing the area with transit lanes will reduce the overall economic benefit that can be realized.

A reduction in the wind energy area (WEA) jeopardizes the project’s economic potential and undermines public sector investment. BOEM has entered long-term lease contracts with developers and received lease payments in return for material use of the defined areas in the ocean. Reducing the WEA in a substantial manner results in unstable public policy and creates market uncertainty. A substantial material change in the WEA could lead to re-evaluation of the private sector infrastructure investments. This could ultimately affect the United States or any State’s (with an offshore wind policy commitment) ability to secure the supply chain and facilities required to create jobs and develop the offshore wind industry.

#### **Conclusion**

Offshore wind is poised to make an immediate positive impact on America’s economic recovery from the COVID-19 pandemic. The approval of Vineyard Wind is the first step to asserting America’s position in this \$1 trillion global energy industry, which is a once-in-a-generation economic opportunity in a cutting-edge industry. This is directly consistent with the Administration’s focus on infrastructure and the spirit of the June 2020 Executive Order encouraging the development of world-class infrastructure as a means of COVID-19 economic recovery. Globally the industry has offered careers in good paying jobs to over 84,000 workers. Reports indicate that the U.S. could create up to 83,000. These are jobs for those in construction, manufacturing, installation, operation and maintenance. Examples of the workers found on an offshore wind project include electricians, ironworkers, pipefitters, pile drivers, welders, engineers, scientists, vessel operators, lawyers and sales representatives. In all there would be jobs across at least 74 occupations. By approving Alternative D2, BOEM will solidify investor confidence and drive the U.S. offshore wind industry and these jobs forward into reality.

We ask you to reject alternative F, which calls for a 4 x 4 Nautical Mile layout and stick with the 1 X 1 Nautical Mile layout the Coast Guard has approved. We also urge BOEM to stick to its published schedule, issue a Final Environmental Impact Statement in November and a record of decision approving the project, as proposed and modified by the applicant in December.

In sum, offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. We appreciate BOEM's effort to move this industry forward and the care your agency has taken to ensure this industry can be a success for all. We look forward to seeing this industry's promises come to fruition and hope we can be a trusted source of information as BOEM ushers in the American offshore wind era.

Thank you for your attention to our comments.

Respectfully,

A handwritten signature in blue ink that reads "Ross Gould". The signature is written in a cursive style.

Ross Gould  
Director, Energy and Climate Program

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Dan walcott,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-13004

**Tracking Number:** 1k4-9i1v-fq73

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Dan walcott

## Comment

The Future of Offshore Wind

The NYC District Council of Carpenters proudly supports offshore wind and New York's commitment to advancing our use of this innovative energy source that will reduce our carbon footprint, increase economic opportunity and provide ample amounts of community benefits. Many local unions, labor councils and labor federations have submitted comments to the Bureau of Ocean Energy Management to keep their focus on advancing wind projects.

We the NYC District Council of Carpenters represent 20,000 members with distinct crafts, including carpenters, dock builders, timbermen, millwrights, high rise concrete carpenters, floor coverer's and shop and industrial carpenter's. we are ready willing and able to participate in all phases of creating the future of energy and revitalization in our region as soon as possible. in this time of great uncertainty due to COVID-19, our members as well as those across trades industries are eager to get back to work, which is why we urge approvals on the original plans to be approved in an expeditious manner.

We hope that the BOEM will continue with original plans and published schedule of the 1x1 Nautical Mile layout that the Coast Guard has already approved, and reject the 4x4 nautical mile proposal.

Thank you, Dan Walcott  
NYC District Council of Carpenters  
Political Director

PUBLIC

Public Information Meeting Transcript  
Vineyard Wind SEIS Public Meeting  
Virtual Public Meeting Day 4  
July 7, 2020  
1:00PM  
Mariah Dignan

My name is Mariah Dignan, M-a-r-i-a-h 2 D-i-g-n-a-n, and I'm the Long Island organizer for Climate Jobs New York. We are a growing statewide coalition of labor unions representing 2.6 million members advocating for a clean energy economy as scaled climate science demands, and for creating good union jobs and more resilient communities in the process. As a 25-year-old acutely aware of the impacts climate change has and continues to have globally and on the island, I enthusiastically support Vineyard Wind 1, which clearly demonstrates responsible offshore wind development. I'd like to take a moment to thank BOEM for completing the SEIS during the COVID-19 pandemic. As we fight to address this public health crisis, BOEM is doing the necessary work to move offshore wind forward. We are undeniably addressing intersectional crises. Public health, the economy, environmental justice, and climate change are interwoven with offshore wind development. At a moment when we must make large-scale investments to restart our economy, we should take action on clean energy at the level we know we need to take on climate change. We have a once-in-a-generation opportunity to put ourselves in the path to a low carbon future, while creating new quality careers that provide family sustaining wages and benefits for communities across the nation. Vineyard Wind 1 is slated to be the United States first commercial scale offshore wind project in federal waters. Vineyard Wind will propel the United States offshore wind industry and deliver clean, renewable and cost-effective power to Massachusetts. In addition, this project will provide thousands of good union jobs and attract global supply chain manufacturers to the northeast. Vineyard Wind 1 is expected to create 3,600 local jobs that provide good wages and benefits. This project will set the stage for offshore wind developers to work in conjunction with organized labor. Labor unions offer world-class training programs through apprenticeship. By coordinating with industry, we will continue to lead in training offshore wind workforce for the very near future. The developers have listened, engaged and altered construction plans based on community feedback. This is something we need to replicate in other projects. We support the one-by-one nautical mile layout compromise that responds to commercial fisheries' concerns. Not only does the Coast Guard approve of this mitigation effort, but adding additional mileage to the layout would only take away from the efficiency and carbon reduction potential the project is meant to address. The one-by-one nautical mile compromise is important to the overall success and viability of the project. To maximize the economic development and job opportunities in offshore wind, the industry and its potential workforce needs confidence that demand in the US offshore wind market is real. This means we need to move forward promptly in the permitting process, set the stage for this nascent industry. This starts with Vineyard Wind 1. By launching this industry now, the potential for additional jobs multiplies exponentially with the potential for hundreds of thousands of good paying jobs across the United States. I urge BOEM to follow the current permitting schedule for this project and to move forward expeditiously on this and other offshore wind projects. Focusing on my home state of New York, the national leader in offshore wind energy standards, the only way to achieve 9 gigawatts of offshore wind energy by 2035, the state's goal, enshrined last year in legislation, is to advance permitting in a timely manner and develop safe and fair conditions with community stakeholders, as

was done in Vineyard Wind 1. We can provide long term sustainability, economic development, and create a skilled green economy workforce for a consequential new industry. In this time of bold transformation, smart investments in a clean energy future can simultaneously put people back to work, build infrastructure to address climate change, and spurn -- spur economic development in our communities. Thank you for your time and consideration.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Kelly DeVine,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

**ID:** BOEM-2020-0005-0169

**Tracking Number:** 1k4-9hru-ypas

### Document Information

**Date Posted:**

Jul 13, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

Kelly DeVine

### Comment


As a resident along the Long Island Sound, I fully support the Vineyard Wind LLC Proposed Wind Energy Facility. We need to move as aggressively as possible toward renewable energy to deal with the continuing effects of Climate Change including rising water levels threatening coastal communities.

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from wuerch, kayla

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

**ID:** BOEM-2020-0005-12052

**Tracking Number:** kcz-frxz-7ra1

### Document Information

**Date Posted:**

Jul 24, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

kayla wuerch

### Comment

My name is Kayla Wuerch and I'm 17 years old. As a NYC resident the realities of climate change became glaringly obvious after hurricane sandy destroyed my neighborhood in Staten Island. Climate change was no longer a far off, "could be" consequence...it showed up on our doorsteps and could no longer be ignored. Those who are standing in the way of this project should be ashamed of themselves. As a young person who will one day inherit the earth, I applaud BOEM for their due diligence and urge you to approve construction on the first commercial scale wind farm in the US. And to the fisherman, I want to remind you that climate change is real. There are no jobs on a dead planet.

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Murphy , Maureen

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

I support offshore wind. It is critical that we as a Nation move towards renewable energy and away from polluting fossil fuels. Vineyard Wind 1 is poised to be the Nation's first large-scale offshore wind farm. As a New Yorker living on the South Shore of Long Island, this is extremely exciting, since New York is also pursuing offshore wind projects. Vineyard Wind's progress is progress for our region, our state, and our Nation.

I have 2 young children that already recognize the harmful impacts of climate change. We installed solar on our roof and work to reduce everyday climate footprint. These actions are important, however, we also need large-scale offshore wind.

Vineyard Wind 1 has undergone ten years of rigorous environmental review to ensure that it has the least possible impact on fisheries, shipping, and communities, and is now almost at the finish line. The success of this project will kickstart a pipeline of offshore wind projects in New York, Connecticut, and the US: We cannot afford to see it delayed or stopped.

Thank you

**ID:** BOEM-2020-0005-12938

**Tracking Number:** kd4-r7jg-z6rh

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Maureen Murphy




Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Victoria Esserry,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

**ID:** BOEM-2020-0005-12410

**Tracking Number:** 1k4-9i03-lf5e

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

Victoria Esserry

### Comment

To whom it may concern,

As a citizen of New York State, it is imperative that the Vineyard Wind 1 project launches. The project aims to provide clean, renewable, and cost-effective electricity to 400,000 homes and businesses in Massachusetts. They will lead as an example of renewable energy success in the USA. New York cannot meet its greenhouse gas reduction and renewable energy goals without offshore winds. The time to act is now; we should no longer sit in the shadows of Europe and Asia, who are far more environmentally advanced than us. Fossil fuels are a dead industry, stop letting them dictate our future. For the sake of our children and grandchildren, make the switch to renewable energy.

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Robert Erikson,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

This work is critical to the future of our national security, environment, and economic recovery. As the first commercial-scale offshore wind project in the US, Vineyard Wind 1 will play a critical role in establishing a domestic offshore wind industry and realizing the tremendous potential economic benefits of this rapidly emerging industry. Locally, Vineyard Wind 1 is expected to create 3,600 jobs - many of them unionized - as the offshore wind industry is built out over the next few years. We urge BOEM to stick to its published schedule, issue a Final Environmental Impact Statement in November and a record of decision approving the project, as proposed and modified by the applicant in December.

Offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. As we begin recovering from the unprecedented social and economic impact of the Covid-19 pandemic, the approval of this project will directly lead to the creation of thousands of jobs in the trades that come with good pay and benefits.

As a union member I support offshore wind. Large scale utility development like offshore wind not only will help reduce our massive carbon footprint but will also mean a tremendous amount of economic opportunity in the form of jobs and community benefits. We have been preparing for this moment for a very long time. We urge approvals be as expeditious as possible to get the men and women in the building trades to work.

We ask you to reject alternative F, which calls for a 4 x 4 Nautical Mile layout and stick with the 1 X 1 Nautical Mile layout the Coast Guard has approved.

We urge BOEM to stick to its published schedule, issue a Final Environmental Impact Statement in November and a record of decision approving the project, as proposed and modified by the applicant in December.

You can review the comments submitted by the LI Fed by clicking here.

**ID:** BOEM-2020-0005-12734

**Tracking Number:** 1k4-9i15-8876

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Robert Erikson

PUBLIC

Thank you in advance. Together, we can make this once in a generation opportunity and make it a reality on Long Island and in New York State!

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Paul Engel,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-12757

**Tracking Number:** 1k4-9i17-4wy9

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Paul Engel

### Comment

This work is critical to the future of our national security, environment, and economic recovery. As the first commercial-scale offshore wind project in the US, Vineyard Wind 1 will play a critical role in establishing a domestic offshore wind industry and realizing the tremendous potential economic benefits of this rapidly emerging industry. Locally, Vineyard Wind 1 is expected to create 3,600 jobs - many of them unionized - as the offshore wind industry is built out over the next few years. We urge BOEM to stick to its published schedule, issue a Final Environmental Impact Statement in November and a record of decision approving the project, as proposed and modified by the applicant in December.

Offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. As we begin recovering from the unprecedented social and economic impact of the Covid-19 pandemic, the approval of this project will directly lead to the creation of thousands of jobs in the trades that come with good pay and benefits.

As a union member I support offshore wind. Large scale utility development like offshore wind not only will help reduce our massive carbon footprint but will also mean a tremendous amount of economic opportunity in the form of jobs and community benefits. We have been preparing for this moment for a very long time. We urge approvals be as expeditious as possible to get the men and women in the building trades to work.

We ask you to reject alternative F, which calls for a 4 x 4 Nautical Mile layout and stick with the 1 X 1 Nautical Mile layout the Coast Guard has approved.

We urge BOEM to stick to its published schedule, issue a Final Environmental Impact Statement in November and a record of decision

PUBLIC

approving the project, as proposed and modified by the applicant in December.


Paul M. Engel Jr.  
Teamsters Local 294  
Albany, NY

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from IBEW Local #3

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

### Comment

"I strongly support this project that will provide good union jobs and positive economic impact on the eastern seaboard of the US, while addressing the determinants of climate change and providing clean renewable energy for our future."

**ID:** BOEM-2020-0005-12831

**Tracking Number:** kd3-zsx8-o3xd

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#) 

### Submitter Information

**Government Agency Type:**

Local

**Government Agency:**


IBEW Local #3

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Jeremy Rodgers , Local 40 Ironworkers

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

### Comment

We ask you to reject alternative F, which calls for a 4x4 Nautical mile layout and stick with the 1x1 Nautical mile layout the Coast Guard has approved.

**ID:** BOEM-2020-0005-12539

**Tracking Number:** 1k4-9i0i-o1ny

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

Jeremy Rodgers

**Organization Name:**

Local 40 Ironworkers



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1  
5 POST OFFICE SQUARE, SUITE 100  
BOSTON, MA 02109-3912

OFFICE OF THE  
REGIONAL ADMINISTRATOR

July 23, 2020

Jennifer Bucatari  
Environmental Protection Specialist  
Office of Renewable Energy Programs, Environment Branch  
Bureau of Ocean Energy Management  
45600 Woodland Road, Sterling, Virginia 20166

RE: Vineyard Wind 1 Offshore Wind Energy Project Supplement to the Draft Environmental Impact Statement (CEQ #20200123)

Dear Ms. Bucatari:

The U.S. Environmental Protection Agency (EPA) New England Office has reviewed the Bureau of Ocean Energy Management (BOEM) Supplemental Environmental Impact Statement (SEIS) for the Vineyard Wind 1 Offshore Wind Energy Project pursuant to our responsibilities under the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The SEIS was prepared by BOEM to assess cumulative impacts of the proposed Vineyard Wind project when combined with other past, present and reasonably foreseeable activities. Vineyard Wind proposes to construct, operate, and eventually decommission an 800 megawatt (MW) commercial-scale wind energy project to provide energy to help meet New England's demand for renewable energy. The SEIS evaluates the cumulative impacts of the Vineyard Wind 1 project and alternatives against a backdrop of another 22 gigawatts of offshore wind development that is reasonably foreseeable across seventeen active wind energy lease areas. According to the SEIS approximately 2,000 wind turbines would be constructed to provide 22 gigawatts of energy.

EPA serves as a cooperating agency for the Vineyard Wind 1 project and in that capacity has provided input to BOEM on a number of issues including the cumulative impact analysis during project scoping, in response to the DEIS, and during development of the SEIS. We also participated in several BOEM led interagency discussions regarding the analysis of cumulative impacts. Our input over time has consistently underscored the importance of the comprehensive consideration of cumulative impacts and has encouraged BOEM to fully consider impacts from the Vineyard Wind 1 project along with impacts that will be generated by multiple wind development projects currently planned off the New England Coast. Our comments on the DEIS recommended expansion of the geographic scope of the cumulative impacts analysis and encouraged BOEM to expand the scope of analysis to more fully consider future offshore wind



buildout conditions, navigation corridors, wind turbine generator (WTG) orientation, implications for the commercial fishing industry and potential impacts to the marine environment. On balance we found the expanded discussion of cumulative impacts in the SEIS a sound addition to the original analysis presented in the DEIS especially in areas where the scope of analysis (geographic and otherwise) was increased. We acknowledge and support the description of potential benefits of future wind power generation buildout scenarios and encourage BOEM to continue to use the cumulative impact analysis as an appropriate vehicle for this discussion.

Our recommendations below highlight several areas where the cumulative impact discussion could be expanded to clarify the potential for impacts and how cumulative impacts will be addressed. We also offer some observations to help increase the utility of future analyses.

- Construction activities account for the majority of air emissions associated with offshore wind energy development. The cumulative impacts from construction will vary over time depending on whether project construction periods for multiple projects are sequential or concurrent. We recommend that the discussion of cumulative air quality impacts be expanded to discuss whether the construction periods for the Vineyard Wind 1 project and other projects in adjacent lease areas will potentially overlap. We encourage BOEM to take a broad/inclusive view of which projects to include in this part of the air quality analysis by incorporating projects planned for BOEM Lease Areas OCS-A 0517, 0486, and the western portion of 0487. Air emissions associated with the construction and operation of projects planned for these areas and from work to improve ports to support the wind industry, may contribute to air quality impacts associated with the Vineyard Wind project on the OCS, in state waters, or onshore. Current construction schedule projections in the Massachusetts and Rhode Island/Massachusetts lease areas do not appear to coincide, potentially reducing the intensity of construction period impacts but extending the duration of impact over a longer period. Nonetheless, EPA recommends presenting a discussion of the cumulative air quality impacts of the lease areas identified above in the cumulative impact assessment.
- EPA notes that recent interconnection queues for ISO NE, NYISO, and PJM indicate that new generating entrants will be made up of a mix of natural gas, dual fuel natural gas/oil, solar, wind and energy storage. We recommend that BOEM consider the interconnection queues for ISO NE, NYISO, and PJM when assessing impacts of electric generating units that would likely come online in the No Action Alternative and update the alternative accordingly.
- While the current SEIS is based on actions and activities that are “reasonably foreseeable” it is by default an analysis conducted based on our current understanding of the environment in the project areas; how those areas are used by fishery resources, marine mammals, birds and numerous stakeholders; existing technology; construction techniques and other external forces driving wind power development such as the economy and public policy. As projects are constructed BOEM will have the ability to evaluate whether expected impacts occur at the same intensity as anticipated in the cumulative impact analysis. We encourage BOEM to use that knowledge to update and refine the cumulative impact analysis and to focus on how cumulative impacts associated with wind power development will be addressed over time.

- In addition to tracking changes to technology and the marine environment over time, we encourage future cumulative impact analyses by BOEM to incorporate impacts from increases in onshore support facilities at repurposed and new port areas developed along the Atlantic seaboard. These support facilities will be necessary to support a rapidly growing wind industry and they have the potential to bring a range of benefits and impacts to host communities.
- We continue to encourage BOEM to expand the executive summary of the cumulative impacts analysis with a focus on providing key takeaways regarding potential impacts and how they will be considered by BOEM across all lease areas. The summary would benefit from a narrative description of all moderate to major cumulative impacts anticipated that explains the causal factors for those impacts and strategies that can be implemented to address each impact. A focus on representing the impacts in a visual manner and providing appropriate supporting narrative summaries would also be helpful. For example, figure A.7-17 from Appendix A could be brought forward to the executive summary as a key figure showing the eventual development that provides context for the long term cumulative impacts analysis with respect to a range of impacts including but not limited to marine mammals, navigation, fishermen and fisheries. Enhanced with color shading this figure could also show when each project lease area is expected to be developed (to the degree that information is available) over time, providing further context to understand the cumulative impacts of offshore wind energy development in and adjacent to the project area.

EPA appreciates the opportunity to review this SEIS and BOEM's ongoing efforts to coordinate with the cooperating agencies throughout the NEPA process. If you have any questions regarding our comments, please contact me at 617/918-1025 or [timmermann.timothy@epa.gov](mailto:timmermann.timothy@epa.gov).

Sincerely,



Timothy Timmermann, Director  
Office of Environmental Review

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
VAM-OREP  
Sterling, Virginia 20166

July 27, 2020

RE: Comments from the Connecticut Department of Energy and Environmental Protection on the Vineyard Wind 1 COP Supplement to the Draft EIS.

The Connecticut Department of Energy and Environmental Protection (CTDEEP) welcomes the opportunity to provide these comments on the Bureau of Ocean Energy Management's (BOEM) Supplemental Environmental Impact Statement (SEIS) for the Draft Environmental Impact Statement to Vineyard Wind LLC's (Vineyard Wind's) proposed Vineyard Wind 1 Offshore Wind Energy Project (proposed Project) released in December, 2018 pursuant to the National Environmental Policy Act (NEPA) (42 United States Code (USC) §§ 4321–4370f) and the Council on Environmental Quality (CEQ) regulations for implementing NEPA for an SEIS (40 Code of Federal Regulations (CFR) 1502.9(c)). The SEIS is not limited to just the Vineyard Wind 1 project but includes a cumulative impacts analysis for 22,000 megawatts (MW) of potential offshore wind from North Carolina to New England.

CTDEEP appreciates the significant effort that BOEM has put into this SEIS. CTDEEP is concerned about the potential material adverse impacts of the new Alternative F reviewed by BOEM on important state policy goals. Additionally, CTDEEP supports analysis of cumulative impacts, with the recommendation that permit approval is granted with recommendations for coordinated regional monitoring to better guide understanding of the impacts of offshore wind development where information is incomplete. CTDEEP offers these comments to assist the agency in its review.

## **Introduction**

CTDEEP is the state agency tasked with planning and implementing energy and environmental policy for the state of Connecticut. Through its Comprehensive Energy Strategy and its Integrated Resources Plan, CTDEEP directs the state's efforts to meet both its Global Warming Solutions Act<sup>1</sup> obligations and the requirement of Executive Order 3 to study pathways to achieve a zero-carbon grid by 2040. Integral to this effort are CTDEEP's procurement of large-

---

<sup>1</sup> Conn. Gen. Stat. § 22a-200c.

scale offshore wind resources. As directed by the Connecticut General Assembly, Public Act 19-71, gives CTDEEP authority to procure up to 2,000 MW of offshore wind resources in addition to the over 300 MW previously contracted. With this authority, CTDEEP issued a request for proposals in August, 2019 and selected an 804 Vineyard Wind II project in December, 2019. The Vineyard Wind project, combined with the previously contracted offshore wind projects, will account for about 19% of Connecticut's total electric load.

As part of CTDEEP's planning obligations, the agency continually evaluates the state's and the region's electric generation resource mix and the rate and nature of planned retirements. In order to ensure that sufficient new zero-carbon generation is available to replace retiring fossil generation, CTDEEP is studying in its Integrated Resources Plan (IRP) how to schedule procurements of new renewable energy resources and particularly procurements of offshore wind. Connecticut, therefore, is directly and substantially affected by any action or actions that could delay the installation of contracted resources or adversely affect total potential offshore wind capacity in regional lease areas.

## **Background**

Vineyard Wind, LLC (Epsilon 2018a, 2019a, 2020a) plans to construct, operate, and decommission an approximately 800-megawatt, commercial-scale wind energy facility within Lease Area OCS-A 0501 to meet New England's demand for renewable energy. More specifically, the proposed Project would deliver power to the New England energy grid to contribute to states' renewable energy requirements. BOEM's decision on Vineyard Wind's Construction and Operation Plan (COP) is needed to execute its duty to approve, approve with modifications, or disapprove the proposed Project in furtherance of the United States' policy to make Outer Continental Shelf (OCS) energy resources available for expeditious and orderly development subject to environmental safeguards (43 USC § 1332(3)), including consideration of natural resources and existing ocean uses.

## **Comments of the Connecticut Department of Energy and Environmental Protection**

Two key elements of any NEPA analysis are the consideration of alternatives and the study of cumulative impacts. The SEIS for the Vineyard Wind Project has evaluated seven alternatives, one of which has two sub-alternatives:

- Alternative A—Proposed Action
- Alternative B—Covell's Beach Cable Landfall Alternative
- Alternative C—No Surface Occupancy in the Northern-Most Portion of the Project Area Alternative
- Alternative D—Wind Turbine Layout Modification Alternative
  - Alternative D1—One-Nautical Mile Wind Turbine Spacing Alternative
  - Alternative D2—East-West and One-Nautical Mile Wind Turbine Layout Alternative<sup>3</sup>
- Alternative E—Reduced Project Size Alternative
- Alternative F—Vessel Transit Lane Alternative
- Alternative G—No Action Alternative

Alternatives B, C, D, E, and G were discussed in the December, 2018 Draft EIS. After that document was published, BOEM added a new alternative, specifically, Alternative F. Alternative F, or the Vessel Transit Lane Alternative, includes a new vessel transit lane in response to the January 3, 2020, Responsible Offshore Development Association (RODA) layout proposal (Figure 2.2-1) (RODA 2020). The RODA proposal includes designated transit lanes, each at least 4-nautical miles wide (Figure 2.2-2). Although the proposal includes six total transit lanes, only one intersects the Vineyard Wind 1 Project Wind Development Area (WDA), the action for which this EIS is being prepared. The purpose of the proposed northwest/southeast transit corridor would be mainly to facilitate vessel transit from southern New England ports—primarily New Bedford—to fishing areas on Georges Bank. The wind turbine generators (WTGs) that would have been located within the transit lane proposed to intersect the Wind Development Area would not be eliminated from the Proposed Action; but instead, the displaced WTGs would be shifted south within the Vineyard Wind lease area. Connecticut recognizes that this Project, like other OSW projects will have impacts to the commercial fishing industry. Any evaluation of impacts from this and similar projects is a balancing act and it is always important to find the correct balance for the benefit of all parties.

The alternatives are more completely described in the following chart:

Alternative	Description
Alternative A— Proposed Action	Under Alternative A, the Proposed Action, the construction, operation, maintenance, and eventual decommissioning of an up to 800 MW wind energy facility on the OCS offshore Massachusetts within the proposed Project area and associated export cables would occur within the range of design parameters outlined in the Vineyard Wind COP (Epsilon 2018a, 2019a, 2020a), subject to applicable mitigation measures.
Alternative B— Covell’s Beach Cable Landfall Alternative	Under Alternative B, the Covell’s Beach Cable Landfall Alternative, the construction, operation, maintenance, and eventual decommissioning of an up to 800 MW wind energy facility on the OCS offshore Massachusetts within the proposed Project area and associated export cables would occur within the range of the design parameters outlined in the Vineyard Wind COP, subject to applicable mitigation measures. However, the New Hampshire Avenue landfall location option presented in the COP would not be used, and the cable landfall would be limited to Covell’s Beach to potentially reduce impacts on environmental and socioeconomic resources.
Alternative C—No Surface Occupancy in the Northern-Most Portion of the Project Area Alternative	Under Alternative C, the No Surface Occupancy in the Northern-Most Portion of the Project Area Alternative, the construction, operation, maintenance, and eventual decommissioning of an up to 800 MW wind energy facility on the OCS offshore Massachusetts within the proposed Project area and associated export cables would occur within the range of the design parameters outlined in the Vineyard Wind COP, subject to applicable mitigation measures. However, no surface occupancy would occur in the northern-most portion of the proposed Project area to potentially reduce the visual impacts of the proposed Project and potential conflicts with existing ocean uses, such as, marine navigation and commercial fishing. This alternative would result in the exclusion of approximately six of the northern-most WTG locations.
Alternative D— Wind Turbine Layout	Under Alternative D, the Wind Turbine Layout Modification Alternative, the construction, operation, maintenance, and eventual decommissioning of an up to 800 MW wind energy facility on the OCS offshore Massachusetts within the Vineyard Wind lease area and associated export cables would occur within the range of the design parameters outlined in the Vineyard Wind COP, subject to applicable mitigation

Modification Alternative	measures. However, modifications would be made to the wind turbine array layout to potentially reduce impacts on existing ocean uses, such as commercial fishing and marine navigation. Each of the below sub-alternatives may be individually selected or combined with any or all other alternatives or sub-alternatives.
Alternative D1— One- Nautical Mile Wind Turbine Spacing Alternative	Under Alternative D1, WTGs would have a minimum spacing of 1 nautical mile between them and the lanes between turbines would also be a minimum of 1 nautical mile to potentially reduce conflicts with existing ocean uses, such as commercial fishing and marine navigation.
Alternative D2— East- West and One-Nautical Mile Wind Turbine Layout Alternative	Under Alternative D2, <sup>1</sup> the wind turbine layout would be arranged in an east-west orientation and all WTGs in the east-west direction would have a minimum spacing of 1 nautical mile between them to allow for vessels to travel in an unobstructed path between rows of turbines in an east-west direction. This alternative would potentially reduce conflicts with existing ocean uses, such as commercial fishing, by facilitating the established practice of mobile and fixed gear fishing practices and vessels fishing in an east-west direction.
Alternative E— Reduced Project Size Alternative	Under Alternative E, the Reduced Project Size Alternative, the construction, operation, maintenance, and eventual decommissioning of a large-scale commercial wind energy facility on the OCS offshore Massachusetts within the proposed Project area and associated export cables would occur within the range of the design parameters outlined in the Vineyard Wind COP, subject to applicable mitigation measures, with the following exception: the proposed Project would consist of no more than 84 WTGs in order to potentially reduce impacts on existing ocean uses and environmental resources.
Alternative F— Vessel Transit Lane Alternative	Under Alternative F, a vessel transit lane through the WDA would be established in which no surface occupancy would occur. The lane included in this alternative, and not included in other alternatives, could potentially facilitate transit of vessels through the project area from southern New England ports—primarily New Bedford—to fishing areas on Georges Bank. WTG locations displaced by the transit lane would not be eliminated from consideration, but are assumed to move the proposed Project south of the WDA. This alternative will disclose the effect a transit lane could have on the expected effects from the other action alternatives analyzed in this EIS.
Alternative G—No Action Alternative	Under Alternative G, the No Action Alternative, the proposed Project and associated activities as described in the Vineyard Wind COP would not be approved and the proposed construction, operation, maintenance, and decommissioning activities would not occur. Any potential environmental and socioeconomic costs and benefits associated with the proposed Project as described under Alternative A, the Proposed Action, would not occur.

### Reasonably Forseeable Assumptions

Assumptions are a key element of any NEPA analysis. NEPA only requires a reviewing agency to make assumptions that are reasonable. When conducting a supplemental environmental impact analysis, a reviewing agency cannot ignore known or reasonably foreseeable changes in key assumptions. As Connecticut DEEP has

noted, Vineyard Wind has opted to change from 12 to 14 MW turbines.<sup>2</sup> These larger turbines permit the use of fewer monopoles potentially reducing impacts. BOEM has included the larger turbines in its SEIS evaluation.

Overall, based on the changed turbine and other conditions, BOEM concluded that the updated Vineyard Wind project, with the new changes would result in “slight changes in the possible outcomes” as compared to the Draft EIS. Specifically, BOEM reviewed its conclusions from the Draft EIS in light of the now known changed conditions and found that for all Alternatives, use of the larger turbines could reduce the total number of installations from 100 to 57.

However, as noted above, not only have there been changes, such as turbine size, to the Project, a new Alternative has been advanced. In the SEIS, BOEM has considered the Vineyard Wind project in the context of the new Alternative F and concluded:

The WTGs that would have been located within the transit lane . . . would not be eliminated from the Proposed Action; but instead, the displaced WTGs would be shifted south within the Vineyard Wind lease area. Therefore, the number of placement locations would remain the same as assumed under the Proposed Action. Under Alternative F, a 2- and a 4-nautical mile transit lane are analyzed by BOEM to provide the U.S. Secretary of the Interior with an assessment that is representative of transit lanes from 1 to 4 nautical miles wide. In this analysis, BOEM considers the effect of the single transit lane through the WDA on all alternatives considered, but focuses on the direct and indirect impacts from the combination of the new Alternative F with Alternative A and Alternative D2 because these analyses are expected to be similar to combinations with the other alternatives. The placement location of the transit lane assessed in this analysis . . . is based on the submission from RODA.

Even though Vineyard Wind I is a Massachusetts project, there are several potentially important impacts associated with Alternative F that are of direct concern to Connecticut, primarily because the new transit route will displace turbines from the corridor and relocate them much further to the south increasing cable distances and the associated seafloor disturbances. Simultaneously, the new transit corridor will potentially reduce the total leasehold area available for all projects, including projects under contract with Connecticut.

For example, BOEM found that if Alternative F is used, Offshore Export Cable Corridor (OECC) routes would be longer due to shifting project elements further into the southern portion of the lease area. Due to the WTGs being relocated further away, the amount and length of inter-array cabling would need to be increased in excess of the maximum design parameter in the Vineyard Wind COP PDE of 171 miles (275 kilometers). Under Alternative F, total length of inter-array cabling is now estimated to be between 221 and 234 miles (355 and 376 kilometers) depending on the width of the transit lane, number of WTGs utilized,

---

<sup>2</sup> See, Press Release: <https://www.msn.com/en-us/finance/companies/utility-company-wants-turbines-bigger-than-jumbo-jets-for-us-wind-farm/ar-BBXXD3K>. See also, Vineyard Wind 1 SEIS, OCS EIS/EA BOEM 2020-025, June 2020, table ES-1; p. 1-4, fn 14.

and WTG arrangement within the WDA. This would result in up to a 37 percent increase of additional inter-array cabling. Finally, BOEM also found that total disturbed acreage from all causes could increase as high as 61 percent.

There are other consequences of using Alternative F which are of considerable concern to CTDEEP and with which BOEM found the following additional technical and practical challenges:

- Implementation of Alternative F would delay proposed Project construction if significant additional survey work is required. Additional site characterization surveys for Alternative F, if required, would be similar to those described in Section 3.1.3 of BOEM 2012a, with the attendant environmental impacts described in Section 4.2 of BOEM 2012a.
- Vineyard Wind's proposed 66-kilovolt inter-array cables would experience additional transmission loss if cables are lengthened to accommodate the transit lanes assumed under Alternative F. Such transmission losses are not considered as part of the Project design and could translate to technical difficulties and additional unanticipated costs.
- Cable lengthening would require factory joints, which are not currently technically possible by cable manufacturers. Joints could increase the risk of potential cable failure and repairing such failures could lead to increased environmental effects due to a variety of factors including bottom disturbance and vessel traffic.
- The space required for implementation of the transit lane could reduce the area available for Vineyard Wind to construct future projects within the lease area.

Each of the above referenced impacts will have adverse impacts to important Connecticut energy policies. Delay itself would potentially delay future offshore wind procurements needed to meet the state's zero-carbon goals. And this problem would not be limited to Connecticut. Massachusetts, New York, and Rhode Island area also looking to this lease area to meet important regional public policy goals. It is in this context that BOEM's conclusion that "potential construction delays . . . could create more overlap with other future offshore wind projects' construction schedules, potentially leading to increased cumulative impacts on resources that are sensitive to overlapping construction activities" is most alarming.

Beyond delay issues, additional line losses associated with longer alternating current (AC) cables will reduce the amount of zero-carbon energy needed to replace fossil energy and will simultaneously result in Connecticut ratepayers receiving less power for the same price from contracted resources. Increase cable array vulnerability threatens the entire project and loss of leasehold space will result in less available total capacity cutting down the amount of total potential zero-carbon offshore wind energy that is needed to meet state goals.

This last point is critical and BOEM's analysis backs this up. BOEM found the following technical and practical challenges of Alternative F as they relate to the assessment of cumulative impacts:

- If all six transit lanes proposed by RODA were implemented, the technical capacity of offshore wind power generation assumed in Chapter 1 would not be met. The magnitude of the diminished technical capacity would depend on the width of transit lanes implemented, but ultimately, less clean energy in the region



would be produced. BOEM assumes this to be true of any combination of alternatives that includes Alternative F. As explained in Section 3.14.2.4, BOEM assumes that the addition of all six of the 4-nautical mile transit lanes proposed by RODA would reduce the technical capacity of the Rhode Island and Massachusetts (RI and MA) Lease Areas<sup>3</sup> by approximately 3,300 MW, which is 500 MW less than the current state demand for offshore wind in the area.

The loss of 3.3 GW of zero-carbon energy poses a direct threat to important state public policy goals for Connecticut and the entire region. In this regard, it is not immediately apparent from the SEIS why Alternative F continues to be under consideration. In fact, according to the SEIS itself, Alternative F, which is much more impactful to state policy goals, has essentially the same impacts as Alternatives A-E. A review of table ES-2, a cross comparison of the various project alternatives, shows that the Proposed Action and Alternatives A through E and the new Alternative F, appear to have very similar impacts with the exception that Alternative F could materially impede state zero-carbon planning. Furthermore, the United States Coast Guard has fully endorsed the 1 x 1 nm layout without Alternative F.

### **Support for Cumulative Analysis, with a Recommendation for Adaptive Monitoring**

CTDEEP supports the efforts to incorporate reasonably foreseeable effects from an expanded cumulative activities scenario for offshore wind development. CTDEEP wants to acknowledge that there will always be some level of incomplete information in this type of cumulative analysis, however, the state wants to stress that BOEM should avoid slowing the process towards offshore wind approval. Instead, areas with incomplete information regarding impacts should be noted. As developments advance, data to better inform decisions should be collected through adaptive monitoring and management at the project level and through cooperation with regional level studies.

Specific seasonal risks to migratory birds and bats have the potential to impact large congregations of animals. There is evidence that these risks are predictable. Connecticut feels more information and monitoring will help guide future decisions. Examples are included below.

#### **Migratory Bats:**

CTDEEP has concern that there is the potential for significant negative impact to migratory bat populations from collision with operating wind turbines. The analysis specifies that that the 1nm (1.85km) spacing will allow bats to “avoid” collisions by flying around structures but does not present any observational data to support that avoidance behavior.

Although it is noted that “Use of the OCS by tree bats is expected to be very low and limited to spring and fall migration periods,” it is this pattern and predictability that may be beneficial for developing avoidance measures

for collision. Migratory tree bats are regularly observed offshore with a consistent and predictable pattern.<sup>3</sup> Migratory tree bats are among the most highly impacted by onshore wind turbines.<sup>4</sup> The three most impacted by onshore wind installations are also currently state listed in Connecticut (RCSA Sec. 26-306), the hoary bat (*Lasiurus cinereus*), eastern red bat (*Lasiurus borealis*), and the silver-haired bat (*Lasionycteris noctivagans*).

Although the period of exposure is short, it has the potential to impact many adult animals during a sensitive portion of their life cycle, when populations are concentrated for migration. Connecticut disagrees that BOEM has enough information to assume that “very few individuals would be expected to encounter operating WTGs or other structures.” Insufficient knowledge is acknowledged in Section A. 8.4.

“There will always be some level of incomplete information on the distribution and habitat use of migratory tree bats in the offshore portions of the Project area, as habitat use and distribution varies between season and species.”

“Additionally, there is some level of uncertainty regarding the potential collision risk to individual bats that may be present within the offshore portions of the Project area, as the Vineyard Wind 1 Project represents the first utility-scale offshore wind project in the U.S.”

Connecticut also notes that there are no plans in the Vineyard Wind 1 COP (COP Section 6.3) to continue to monitor collisions for bats based on the conclusion that risk would be “negligible.”

Insufficient knowledge is not a basis for dismissing any need for mitigation, but it is a justification for additional research and monitoring. The risk to bats onshore and the evidence that bats occur offshore support the conclusion that monitoring of the risk should continue as the project develops.

---

<sup>3</sup> Peterson, Trevor. *Bats and Offshore Wind*. Bird and Bat Scientific Research Framework Workshop. March 4, 2020, [https://a6481a0e-2fbd-460f-b1df-f8ca1504074a.filesusr.com/ugd/4b9f26\\_afe6208327e648e0bdc9b089cc7bca91.pdf](https://a6481a0e-2fbd-460f-b1df-f8ca1504074a.filesusr.com/ugd/4b9f26_afe6208327e648e0bdc9b089cc7bca91.pdf). PowerPoint Presentation; Dowling, Z., P. R. Sievert, E. Baldwin, L. Johnson, S. von Oettingen, and J. Reichard. 2017. Flight Activity and Offshore Movements of Nano-Tagged Bats on Martha’s Vineyard, MA. US Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs, Sterling, Virginia. OCS Study BOEM 2017-054. 39 pp.; Peterson, Trevor, Pelletier, Steve, and Giovanni, Matt. *Long-term Bat Monitoring on Islands, Offshore Structures, and Coastal Sites in the Gulf of Maine, mid-Atlantic, and Great Lakes—Final Report*. United States: N. p., 2016. Web. doi:10.2172/1238337; Hatch SK, Connelly EE, Divoll TJ, Stenhouse IJ, Williams KA. 2013. Offshore Observations of Eastern Red Bats (*Lasiurus borealis*) in the Mid-Atlantic United States Using Multiple Survey Methods. PLoS ONE 8(12): e83803. <https://doi.org/10.1371/journal.pone.0083803>.

<sup>4</sup> American Wind Wildlife Institute (AWWI). 2018. *Bats and Wind Energy: Impacts, Mitigation, and Tradeoffs*. Washington, DC.

## Migratory Birds:

CTDEEP has similar concerns for migratory birds with respect to collision with structures. The assessment recognizes the risk for turbine collision.

“Some turbine strikes could occur as a result of the Proposed Action, though the extent to which this mortality would affect resident and migrant populations of birds is unclear at this time. Given the low expected use of the WDA, these impacts would be **negligible to minor.**”

“Cumulatively, most of the assumed WTG strikes associated with the Proposed Action and past, present, and reasonably foreseeable activities would be attributed to future offshore wind development (excluding the Proposed Action) and those impacts are expected to range from **minor to moderate**” (Table A-11).

Connecticut disagrees that the Wind Development Area for Vineyard Wind has enough data at this time to conclude that there would be low use and negligible risk, especially with reference to migratory landbirds. For example, the Blackpoll warbler (*Setophaga striata*) has been observed to migrate offshore.<sup>5</sup> This risk during the migratory period was determined to be “insignificant” in the COP (Section 6.2). In contrast, the IUCN has listed this species as Near Threatened, and understanding the potential threat from offshore wind development is highlighted as a conservation action to protect this species.<sup>6</sup>

CTDEEP recommends BOEM does not dismiss the risk of collision for migratory tree bats and migratory birds in the operations phase for Vineyard Wind 1. Connecticut recommends:

- Vineyard Wind continue to monitor and measure bird and bat fatality risk specific to migration during operations and share data to better quantify the impact from this project, as well as the cumulative impact from other sites.
- Vineyard Wind engage with and contribute towards entities that are developing collision avoidance tools to minimize this risk.
- Vineyard Wind consider options for compensatory mitigation if substantial risk is quantified and cannot be avoided.

---

<sup>5</sup> DeLuca WV, Woodworth BK, Rimmer CC, et al. 2015. Transoceanic migration by a 12 g songbird. *Biol Lett.* 11(4):20141045. doi:10.1098/rsbl.2014.1045

<sup>6</sup> BirdLife International. 2018. *Setophaga striata*. *The IUCN Red List of Threatened Species 2018*: e.T22721737A131459482. <https://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22721737A131459482.en>. Downloaded on 01 July 2020.

The collision risk for migratory birds and bats is limited to specific periodicity and weather conditions, and the mitigation efforts to avoid impact have the potential to be simple and have precision in application. This risk should not be dismissed without further evaluation.

## **Conclusion**

CTDEEP fully supports BOEM's NEPA process and greatly appreciates the immense effort undertaken by the agency. CTDEEP does not believe that any impacts detailed in this analysis should halt the approval process. Connecticut, however, is concerned that Alternative F may have excessive impacts that will prevent Connecticut, and the region, from attaining important climate change policies and urges BOEM to consider that as it proceeds with its review.



# Martha's Vineyard Commission

OLD STONE BUILDING • 33 NEW YORK AVENUE  
PO BOX 1447 • OAK BLUFFS, MA 02557  
PHONE: (508) 693-3453 • FAX: 508-693-7894  
INFO@MVCOMMISSION.ORG • WWW.MVCOMMISSION.ORG

27 July 2020

Jim Bennett  
Program Manager, Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road, VAM-OREP  
Sterling, Virginia 20166

## **Re: Vineyard Wind SEIS letter of support**

Dear Mr. Bennett,

The Martha's Vineyard Commission (MVC) would like to thank the Bureau of Ocean Energy Management (BOEM) for the opportunity to comment on the Supplemental Environmental Impact statement (SEIS) to assess the impacts of offshore wind developments along the East Coast. The MVC urges BOEM to approve the SEIS as drafted, as it further ensures the co-existence of the emerging offshore wind industry, maritime stakeholders, and the natural environment on which we depend.

The MVC is the Regional Planning Agency for Dukes County, MA, which includes the six towns on Martha's Vineyard, and the town of Gosnold which comprises the Elizabeth Islands. Chapter 831 of the Acts of 1977 empowers the Commission to conduct regulatory activities aimed at preserving the natural, historical, ecological, scientific, and cultural values of the Island, by protecting those values from harmful development and promoting the enhancement of sound local economies. The Commission also works with the towns on both short- and long-term planning in regard to economic development, the environment, land use and other areas of focus.

In response to the growing impacts of climate change, the MVC in 2019 adopted a Climate Crisis Resolution that formalizes our support for eliminating fossil fuel use on the Vineyard by 2040, along with developing policies that further incorporate the effects of climate change into our planning and regulatory activities, and drafting master plans for mitigating and adapting to the effects climate change in the coming years. Without the rapid development of offshore wind in Massachusetts, the Commission's energy-reduction goals will remain well out of reach, and climate change will continue to disrupt our economy, culture, and environment at an increasing rate.

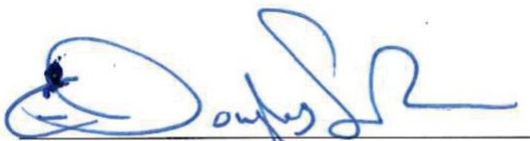
The Commission is aware of the 2015 Community Benefit Agreement between Vineyard Wind and the Island's non-profit Vineyard Power Cooperative pursuant to which the parties regularly consult, with input from members of the Island community, to identify opportunities to benefit Island residents. We understand such benefits to include Aircraft Detection Lighting Systems (reducing the amount of light

visible on our shores); sighting an operations and maintenance facility, which includes investment in the Tisbury Working Waterfront and the creation of up to 40 year round well paid jobs; providing funding for job training; and direct funding from the Vineyard Wind Affordability and Resiliency Program, which will enable the development of local renewable energy projects to improve energy security, resiliency, climate change mitigation and adaptation, and affordability for Island residents. The Commission broadly supports these initiatives.

To summarize, the MVC strongly supports the SEIS as a further example of the careful review Vineyard Wind and other projects have undergone in recent years. We urge BOEM to approve the SEIS this year so that the many benefits of Vineyard Wind and other offshore wind projects may be realized.

*The Martha's Vineyard Commission voted on July 16, 2020, to approve this letter.*

Sincerely,



Douglas Sederholm, Chairman  
Martha's Vineyard Commission

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commandant  
United States Coast Guard

2703 Martin Luther King Jr. Ave SE  
Mail Stop 7509  
Washington, DC 20593-7509  
Staff Symbol: CG-5PW  
Phone: (202) 372-1566

16000  
27 July 2020

Ms. Jennifer Bucatari  
Bureau of Ocean Energy Management  
Office of Renewable Energy Programs  
45600 Woodland Road  
Sterling, VA 20166

Dear Ms. Bucatari,

The Coast Guard has reviewed the Bureau of Ocean Energy Management (BOEM) Vineyard Wind Offshore Wind Energy Project Supplemental Environmental Impact Statement (SEIS), dated June 21, 2020. This SEIS assessment builds upon our input submitted to the Federal Register on the Draft Environmental Impact Statement, dated March 1, 2019, and includes the enclosed recommended mitigations to further reduce the impact on navigation safety and Coast Guard missions.

In the Massachusetts/Rhode Island Port Access Route Study (MARIPARS) report (referenced in the SEIS as USCG 2020), we concluded the best outcome to mitigate effects on safe navigation, and Coast Guard missions is the adoption of a uniform grid pattern across the entire wind energy area. This outcome is in alignment with SEIS Alternative D2. We concur with the SEIS that for alternatives that do not incorporate the principles of Alternative D2, there will be a cumulative major impact on navigation and search and rescue (SAR). The standard and uniform grid pattern with 1 nautical mile (NM) spacing identified in Alternative D2 may also mitigate cumulative impact to commercial and recreational fishing.

The Coast Guard recommends the adoption of a wind farm layout in the Vineyard Wind lease area and the Massachusetts/ Rhode Island Wind Energy Area, in a uniform grid pattern with at least three lines of orientation and standard spacing. Based on the historic data studied in the MARIPARS, lanes for vessel transit should be oriented in a northwest to southeast direction, 0.6 NM to 0.8 NM wide, to allow vessels to maneuver in accordance with Convention on the International Regulations for Preventing Collisions at Sea (COLREGS) while transiting through wind energy areas along historical patterns. Lanes for commercial fishing vessels actively engaged in fishing should be oriented in an east to west direction, 1 NM wide. To ensure two lines of orientation for USCG helicopters to conduct SAR operations, lanes should be oriented in a north to south and east to west direction, 1 NM wide.

We understand small variances may take place in the siting of individual wind turbine generators. Small variances throughout the wind farm should not significantly affect safety of navigation. The MARIPARS provided quantitatively-derived recommendations for turbine

spacing and transit lane widths, including that diagonal lanes be 0.6 to 0.8 NM wide. Any variances in turbine location should not reduce these diagonal lanes to less than the 0.6 NM recommended.

The use of a uniform layout along three lines of orientation, in concert with the recommendations and considerations detailed in the enclosure, will provide substantial mitigation of impacts for navigation and Coast Guard missions, including SAR.

My project officer for the Vineyard Wind proposal is Mr. George Detweiler, who may be reached at [George.H.Detweiler@uscg.mil](mailto:George.H.Detweiler@uscg.mil), or (202) 372-1566.

Sincerely,



MICHAEL D. EMERSON  
Director of Marine Transportation Systems  
U.S. Coast Guard

Enclosure: U.S. Coast Guard Recommended Mitigations for the Vineyard Wind Supplemental Environmental Impact Statement (SEIS)

Copy: CGDONE (d)  
CG LANTAREA (LANT-00)  
CGSECTOR SENE (s)



ENCLOSURE:

U.S. COAST GUARD RECOMMENDED MITIGATIONS FOR THE VINEYARD WIND  
SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (SEIS)

1. **Design Conditions:**

- a. **Marking:** Each wind turbine generator (WTG) and electrical services platform (ESP) shall be marked with private aids to navigation, subject to the approval of the Commander (dpw-1), First Coast Guard District. Approval is required prior to commencing any installation activities. Vineyard Wind shall:
- (1) Provide a lighting, marking, and signaling plan for review by the Bureau of Ocean Energy Management (BOEM) and the Coast Guard. The plan should conform to applicable Federal law and regulation, and guidelines established by the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Recommendation O-139, *The Marking of Man-Made Offshore Structures*. Should any part of Recommendation O-139 conflict with Federal law or regulation, or if Vineyard Wind seeks an alternative to Recommendation O-139, then Vineyard Wind shall consult with the Coast Guard;
  - (2) Ensure each individual WTG and ESP is marked with clearly visible, unique, alpha-numeric identification characters;
  - (3) Ensure each WTG and ESP is lighted in a manner that is visible by mariners in a 360° arc around the WTG;
  - (4) Ensure each WTG is lighted with red obstruction lighting consistent with the Federal Aviation Administration (Advisory Circular (AC) 70/7460-1L Change 2).
  - (5) Provide signage, which is visible by mariners in a 360° arc around the structures, warning vessels of the air draft below the turbine blades as determined at highest astronomical tide;
  - (6) Cooperate with the Coast Guard and National Oceanic and Atmospheric Administration to ensure that cable routes and wind turbines are depicted on appropriate government produced and commercially available nautical charts; and
  - (7) Provide mariner information sheets on Vineyard Wind's website with details on the location of the turbines and specifics such as blade clearance above sea level.
- b. **Blade/Nacelle Control:** All WTG rotors (blade assemblies) should be equipped with control mechanisms operable from the Vineyard Wind control center.
- (1) Control mechanisms will enable operators to shut down and lock requested WTGs within an agreed upon time of notification between the Coast Guard and Vineyard Wind. A formal shutdown procedure will be part of the Standard Operating Procedures and periodically tested.
  - (2) Rotor shutdown and locking may be requested by the Coast Guard. Normally, Coast Guard-requested shut downs will be limited to those WTGs in the immediate vicinity of an emergency and for as short a period of time as is safely practicable under the circumstances, as determined by the Coast Guard.

- (3) Vineyard Wind will participate in Coast Guard coordinated training and exercises to test and refine notification and shutdown procedures, and to provide search and rescue training opportunities for Coast Guard vessels and aircraft.
- c. Cable Burial: A copy of the submarine cable system burial plan should be submitted that depicts precise location and burial depths of the entire cable system.

2. **Operating Conditions**:

- a. Installation: No WTG/ESP installation work should commence at the project site (*i.e.*, on or under the water), without prior review by BOEM and the Coast Guard of a plan to be submitted by Vineyard Wind that describes the schedule and process for erecting each WTG and ESP, including all planned mitigations to be implemented to minimize any adverse impacts to navigation while installation is ongoing. Appropriate Notice to Mariners submissions should accompany the plan.
- b. Operation and maintenance: The Coast Guard recommends that prior to operation, Vineyard Wind submit a written plan for operation and maintenance, which includes a control center, for review by BOEM and the Coast Guard. The plan should demonstrate that the control center will be adequately staffed at all times to perform the standard operating procedures, communications capabilities, and monitoring capabilities. The plan should include, but not be limited to, the following topics:
  - (1) Standard Operating Procedures: Methods for establishing and testing WTG rotor shutdown and locking; methods of lighting control; method(s) for notifying the Coast Guard of mariners in distress or potential/actual search and rescue (SAR) incidents; method(s) for notifying the Coast Guard of any events or incidents that may impact maritime safety or security; methods for providing the Coast Guard with environmental data, imagery, communications and other information pertinent to search and rescue or marine pollution response.
  - (2) Staffing: Number of personnel intended to staff the control center to ensure continuous monitoring of WTG operations, communications and surveillance systems.
  - (3) Communications: Capabilities to be maintained by the control center to communicate with the Coast Guard and mariners within and in the vicinity of the Vineyard Wind project area. Control center communications capability should include, at a minimum, VHF marine radio and landline and wireless telephone for voice and data.
  - (4) Monitoring: The control center should maintain the capability to monitor the Vineyard Wind installation and operations in real time, including at night and in periods of poor visibility, for the following at a minimum:
    - (a) Determining status of all private aids to navigation.
    - (b) Searching for and locating mariners in distress upon notification of a maritime distress incident.

- (c) Detection of a survivor who has climbed to the survivor's platform, if installed, on any WTG or ESP.

3. **Reporting Conditions:**

- a. **Complaints:** On a monthly basis during installation, Vineyard Wind should provide a description of any complaints received (written or oral) by boaters, fishermen, commercial vessel operators, or other mariners regarding impacts to navigation safety allegedly caused by construction vessels, crew transfer vessels, barges, or other equipment. Describe any remedial action taken in response to complaints received.
- b. **Correspondence:** Vineyard Wind shall provide the Coast Guard with copies of any correspondence received from other federal, state, or local agencies that mention or address navigation safety issues.
- c. **Maintenance Schedule:** Vineyard Wind will agree to provide the Coast Guard with its planned WTG maintenance schedule, forecasted out at least one quarter. Appropriate Notice to Mariners submissions will accompany each maintenance schedule.

4. **Miscellaneous Conditions – Meeting Attendance :**

To ensure sufficient opportunity for the public to receive information directly from the owners/operators of the wind farm, Vineyard Wind should attend meetings (e.g. Harbor Safety Committee, Area Committee) as requested by the Coast Guard, to provide briefs on the status of construction and operations, and on any problems or issues encountered with respect to navigation safety.

5. **Caveats:**

- a. **Periodic Review:** The Coast Guard will continue to monitor the construction and operation of the wind farm for purposes of navigation safety and the execution of Coast Guard missions. Vineyard Wind will cooperate with Coast Guard in this regard including participation in Coast Guard exercises and evaluations.
- b. **Amending Conditions:** The Coast Guard reserves the ability to amend these conditions should material facts or circumstances come to light that were either unforeseen or were not reasonably available at the time these conditions were issued.

Office of Renewable Energy  
Bureau of Ocean Energy Management

Attn.: The Program Manager

Subject: Vineyard Wind 1 COP Supplement to the Draft EIS

We in Prysmian Group, worldwide leader in the cable industry, strongly believe that the Offshore Wind industry is a fundamental mean to brace an effective energy transition process from fossil fuels in a sustainable way.

The move from fossil fuels to renewable energy sources is one of the greatest and most urgent issues faced by humanity. But to access that cleaner, greener energy, further-reaching power grids are required. Our cable solutions are the backbone of these next-generation grids, making connections where it was previously impossible. Our offshore wind solutions bring power from sea to shore, with larger, higher density cables and longer connections meaning we can harness renewable energy sources where they're at their strongest and most abundant.

Prysmian has been working on several Offshore Wind projects in Europe, always supporting the development of such industry sector also in other Regions of the Planet.

The Prysmian Group seeks to be the go-to technology player in this scenario, facilitating the production and transmission of cleaner, more intelligent and more efficient and competitive energy, so that power can be transferred from the location of renewable production (offshore wind farms) to the place of consumption (communities and urban centers).

With a consistent presence in North America, where we run 23 plants, employing more than 5.800 people, we truly believe in the benefit the Region would have from the developing of the Offshore Wind.

The investments related to the Offshore Wind Industry are estimated to be roughly \$57 billion in the US by 2030 if States continue to meet their procurement goals and we in Prysmian, as well as other international companies, are exploring the possibility of increasing our US-based operations in anticipation of offshore wind energy construction.

Prysmian is already playing a key role in the Vineyard Wind 1, Nation's first commercial-scale offshore wind project in Federal waters, that will generate 800 MW clean energy and that is expected will launch the offshore wind industry in the US, triggering the need for the development of a stronger related supply chain in the Country.

However, despite the commitment of main players in the Offshore Wind Industry, without certainty that projects in the development timeline will be permitted in the US in a timely and reasonable manner, it is unlikely that the industry will be able to grow, in a market that has already been delayed 20 years behind its European counterparts.

Kind Regards,



Hakan ÖZMEN  
Executive Vice President Project Business  
President, CEO Prysmian Powerlink



**McALLISTER TOWING AND  
TRANSPORTATION COMPANY, INC.**

17 BATTERY PLACE, NEW YORK, NY 10004-1260  
TEL (212) 269-3200 FAX (212) 509-1147

**RECEIVED**

**JUL 21 2020**

**Office of Renewable  
Energy Programs**

July 14, 2020

James Bennett  
Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
VAM-OREP  
Sterling, Virginia 20166

Re: Vineyard Wind Park City Wind Project

Dear Mr. Bennett:

As the President and owner of McAllister Towing, the Bridgeport Port Jefferson Steamboat Company and the Barnum Landing site that will be home to Vineyard Wind's 'Park City Wind' project, I am writing you today to express my full support for the Vineyard Wind 1 project and offshore wind development more broadly.

McAllister Towing was founded in 1864 by my Great Great Grandfather, and the Bridgeport and Port Jefferson Ferry was founded in 1883 by P.T. Barnum. With our long perspective on port infrastructure, we have seen port cities like Bridgeport left to die on the vine for far too long. For the first time in generations it feels like we are on the precipice of turning the proverbial tide. The offshore wind industry is in desperate need of port development, a fact that will lead to the creation of thousands of local jobs here in Bridgeport both during construction and operations and maintenance of the wind farms.

At McAllister Towing, we have over 150 years of experience in working on the water. The Bridgeport Port Jefferson Steamboat Company provides year-round ferry service across Long Island Sound for vehicles, passengers and freight. We operate 20-30 trips per day (140-210 trips per week) in each direction using three vessels, and carry approximately 400,000 cars, trucks and buses and more than 800,000 passengers annually.

James Bennett  
Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
July 14, 2020  
Page 2

We know that the health of our ports is vitally important to our regional economy, and we stand ready to help launch an industry that will dramatically enhance our effort to reduce the effects of climate change.

Sincerely,

A handwritten signature in blue ink that reads "Brian B.A. McAllister". The signature is fluid and cursive, with the first name "Brian" being the most prominent.

Brian B.A. McAllister  
President  
McAllister Towing

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Robert Jordan,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

Walter Cruickshank, Ph.D., Acting Director  
Bureau of Ocean Energy Management  
1849 C Street, NW  
Washington, D.C. 20240

Dear Acting Director Cruickshank,

I am writing you today to show osumy port for the offshore wind industry here in the U.S. and thank your agency for its work in releasing the draft Supplemental Environmental Impact Statement for Vineyard Wind. This report is a crucial step for this industry to go from plans on paper to steel in the water.

As a professional manager working for Atos, I am extremely excited about the enormous economic potential the offshore wind industry brings to our region and country. It's not often that we get to witness the birth of an entirely new, billion-dollar industry in our country, but that's exactly what we are seeing with offshore wind.

While this may be a new industry for the U.S., but offshore wind is a proven industry across the Atlantic. Atos' wind business and our supply chain is testimony to that fact. With thousands of offshore turbines installed across Europe, this industry has created thousands of jobs, revitalized port communities, created a supply chain and invested billions of dollars into local economies. The U.S. East coast offers some of the most promising conditions in the world for offshore wind. There is no doubt, that we can replicate the industry's success right here at home.

A study by the Special Initiative for Offshore Wind estimates that the nearly 20 GW of offshore wind procurements expected through 2030 will require close to \$70 billion in capital investment. The jobs and economic opportunities are already starting to trickle in - with port

**ID:** BOEM-2020-0005-12301

**Tracking Number:** 1k4-9hzw-a6uh

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Robert Jordan

PUBLIC



investments, vessel construction and factory announcements - even as this industry remains in its infancy. We are already seeing the growth of a domestic supply chain, as developers and suppliers look to minimize their own costs and logistical risks. This domestic supply chain means good paying jobs, investment in coastal communities and a brand-new economy for Americans to call their own.

In sum, offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. We appreciate BOEM's effort to move this industry forward and the care your agency has taken to ensure this industry can be a success for all. We look forward to seeing this industry's promises come to fruition and hope we can be a trusted source of information as BOEM ushers in the American offshore wind era.

Sincerely,  
Robert D. Jordan  
Head of Mission Critical Systems, North America  
Mobile +1 (310) 491-4119  
Atos Mission Critical Systems, North America  
Irving, Texas

25 JULY 2020



Walter Cruickshank, Ph.D., Acting Director  
Bureau of Ocean Energy Management  
1849 C Street, NW  
Washington, D.C. 20240

Dear Acting Director Cruickshank,

We are writing you today to show our support for the offshore wind industry here in the U.S. and thank your agency for its work in releasing the draft Supplemental Environmental Impact Statement for Vineyard Wind. This report is a crucial step for this industry to go from plans on paper to steel in the water.

WindServe Marine is a premier offshore wind support services provider on the U.S. Atlantic Coast. Building upon more than 96 years in the maritime industry, WindServe is committed to providing excellence in all stages of the offshore wind farm lifecycle. With offices and waterfront facility locations in Massachusetts, New York and Rhode Island, WindServe Marine are local experts and trusted solution providers.

Our first vessel, WINDSERVE ODYSSEY, was built in North Kingstown, RI at Senesco Marine. This vessel alone, created approximately 35 shipyard jobs, four vessel crew positions, and various shoreside support jobs. Economic growth in the offshore wind farm industry through local job creation and development of local expertise is critically important to WindServe and the Reinauer Group, and to those who support the creation of US offshore wind infrastructure, as well as those who benefit from its renewable energy output.

WindServe Marine supports Alternative D2, which is the proposal for 1x1 nautical mile spacing in a uniform east-west grid layout. This reflects the joint proposal of all wind farm developers holding a lease in the area south of Martha's Vineyard, and it is the proposal that the Coast Guard determined would facilitate navigation safety and search-and-rescue in its MARIPARS report.

Conversely, Alternative F, which would impose 4-mile wide vessel transit lanes within wind farms, is not supported by the industry nor the U.S. Coast Guard, which determined such lanes could actually reduce navigation safety and increase danger and risk to mariners.

A study by the Special Initiative for Offshore Wind estimates that the nearly 20 GW of offshore wind procurements expected through 2030 will require close to \$70 billion in capital investment. The jobs and economic opportunities are already starting to trickle in – with port investments, vessel construction and factory announcements – even as this industry remains in its infancy. We are already seeing the growth of a domestic supply chain, as developers and suppliers look to minimize their own costs and logistical risks. This domestic supply chain means good paying jobs, investment in coastal communities and a brand-new economy for Americans to call their own.

In sum, offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. We appreciate BOEM's effort to move this industry forward and the care your agency has taken to ensure this industry can be a success for all. We look forward to seeing this industry's promises come to fruition and hope we can be a trusted source of information as BOEM ushers in the American offshore wind era.

WindServe Marine is part of the Reinauer Group and handles all offshore wind business for the organization. The Reinauer Group owns and operates seven (7) affiliate companies in the group to include; WindServe Marine LLC, Reinauer Transportation Companies LLC, Senesco Marine LLC, Boston Towing & Transportation, Reicon Group LLC, BTT Marine Construction LLC and Erie Basin Bargeport. Reinauer has been in the Maritime Industry for over



PUBLIC

96 years specializing in petroleum and chemical transportation, ship assist/escort work, vessel construction & repair and marine construction services.

#### Information About Our Facilities and Offices

WindServe Marine, LLC has fully operational facilities and offices in the following U.S. East Coast locations:

- North Kingstown, Rhode Island, U.S.A. (Full-Service shipyard)
- Boston, Massachusetts, U.S.A.
- Staten Island, New York, U.S.A.
- Brooklyn, New York, U.S.A.

#### Training Programs for Offshore Wind

WindServe Marine recently worked with CWind LTD. of the United Kingdom to develop and administer an offshore wind vessel training program for WindServe employees that was completed in Grimsby, United Kingdom. The training program consisted of classroom lecture, shoreside port operations and offshore wind vessel operations in the European wind farm, Westermost Rough located in the North Sea. This hands-on training program has allowed WindServe's local U.S. employees to become certified for offshore wind vessel operations on the upcoming Coastal Virginia Offshore Wind Project (CVOW). With our initial crew completely certified for offshore operations, we have now developed an in-house train-the-trainer program for internal and external vessel operations training onboard our crew transfer vessel. In addition to vessel operations training, we have also been able to increase our workforce recruitment and training at our affiliate shipyard Senesco Marine, LLC in Rhode Island for the construction of new offshore wind vessels.

We remain at your disposal for any information that you may request.

Yours sincerely,



Alex Babbin  
Manager, Operations  
WindServe Marine, LLC

#### Company Address:

New York - 1983 Richmond Terrace, Staten Island New York  
Massachusetts – 338 Border Street, Boston, Massachusetts 02128  
Rhode Island – 10 Macnought Street, North Kingstown, Rhode Island 02852





PUBLIC

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road, VAM-OREP  
Sterling, VA 20166  
USA

DNV GL Group  
Government & Public Affairs  
1560 Wilson Blvd Suite 800  
Arlington, VA 22209-2453  
USA

<b>Date:</b>	<b>Our reference:</b>	<b>Your reference:</b>
2020-07-24	GPA-US-2020-006	Docket BOEM-2020-0005

Dear BOEM,

I am writing on behalf of DNV GL, the independent expert in risk management and quality assurance, to express our support for the scaling of offshore wind power in the United States.

Offshore wind, supported by developments such as the Vineyard Wind 1 project, has potential to become a means for providing a secure supply of affordable, decarbonized energy to the US economy as the world increasingly relies on a broader portfolio of energy sources over the coming decades.

Vineyard Wind 1 will be the nation's first utility-scale offshore wind energy project. It will generate clean, renewable, cost-competitive energy for over 400,000 homes and businesses across the Commonwealth of Massachusetts, while reducing carbon emissions by over 1.6 million tons per year.

In the 2019 edition of DNV GL's Energy Transition Outlook (<https://eto.dnvgl.com/2019/power-supply-use/>), an independent forecast of energy demand and supply to mid-century, we forecast that 30 per cent of all global electricity production will come from wind energy by 2050, with 12% from offshore wind and 18% from onshore wind. Today, offshore wind supplies 0.2% of global electricity production, and onshore wind supplies 4.1%. We forecast offshore wind to reach about 40% of total wind production by mid-century. This points to wind becoming a 'new conventional' rather than a challenger technology.

According to the American Wind Energy Association (AWEA), the offshore wind industry has the potential investment of \$57 billion in the US by 2030 if states continue to meet their renewable energy procurement goals. However, history has shown that capital project investments will go where they are welcomed. Providing greater certainty that offshore wind can and will be permitted in the US will enhance the attractiveness of the US market, encouraging the industry to continue their investments in the US economy and a sustainable energy future.

---

---

---

**Page 2 of 2**

Sincerely  
for DNV GL,



Steven Sawhill  
Director, US Government & Public Affairs

Tel.: +1 703 678 2832  
Steven.Sawhill@dnvgl.com

### **About DNV GL**

DNV GL is the independent expert in risk management and quality assurance. Since 1864, driven by our purpose, to safeguard life, property and the environment, we empower our customers and their stakeholders with facts and reliable insights so that critical decisions can be made with confidence. As a trusted voice for many of the world's most successful organizations, we use our knowledge to advance safety and performance, set industry benchmarks, and inspire and invent solutions to tackle global transformations.

### **In the power and renewables industry**

DNV GL delivers advisory, certification and testing services to stakeholders in the energy value chain. Our expertise spans energy markets and regulations, onshore and offshore wind and solar power generation, power transmission and distribution grids, energy storage and sustainable energy use. Our experts support customers around the globe in delivering a safe, reliable, efficient, and sustainable energy supply.

### **In the oil & gas industry**

DNV GL is the technical advisor to the oil and gas industry. We bring a broader view to complex business and technology risks in global and local markets. Providing a neutral ground for industry cooperation, we create and share knowledge with our customers, setting standards for technology development and implementation. From project initiation to decommissioning, our independent experts enable companies to make the right choices for a safer, smarter and greener future.



People Who Know®

July 27, 2020

Walter Cruickshank, Ph.D., Acting Director  
Bureau of Ocean Energy Management  
1849 C Street, NW  
Washington, D.C. 20240

Dear Acting Director Cruickshank,

We are writing you today to show our support for the offshore wind industry here in the U.S. and thank your agency for its work in releasing the draft Supplemental Environmental Impact Statement for Vineyard Wind. This report is a crucial step for this industry to go from plans on paper to steel in the water.

As a group representing marine transportation and logistics we are excited about the enormous economic potential the offshore wind industry brings to our region and country. It's not often that we get to witness the birth of an entirely new, billion-dollar industry in our country, but that's exactly what we are seeing with offshore wind.

While this may be a new industry for the U.S., offshore wind is a proven industry across the Atlantic. With thousands of offshore turbines installed across Europe, this industry has created thousands of jobs, revitalized port communities, created a supply chain and invested billions of dollars into local economies. The U.S. East coast offers some of the most promising conditions in the world for offshore wind. There is no doubt, that we can replicate the industry's success right here at home.

A study by the Special Initiative for Offshore Wind estimates that the nearly 20 GW of offshore wind procurements expected through 2030 will require close to \$70 billion in capital investment. The jobs and economic opportunities are already starting to trickle in – with port investments, vessel construction and factory announcements – even as this industry remains in its infancy. We are already seeing the growth of a domestic supply chain, as developers and suppliers look to minimize their own costs and logistical risks. This domestic supply chain means good paying jobs, investment in coastal communities and a brand-new economy for Americans to call their own.

In sum, offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. We appreciate BOEM's effort to move this industry forward and the care your agency has taken to ensure this industry can be a success for all. We look forward to seeing this industry's promises come to fruition and hope we can be a trusted source of information as BOEM ushers in the American offshore wind era.

Sincerely,

*Michael Roberts*

Michael Roberts  
Sr. Vice President Government Relations  
Crowley Marine Services



[crowley.com/social](https://crowley.com/social)

1102 SW Massachusetts St.  
Seattle, WA 98134  
P: 206.332.8000

**PUBLIC** [crowley.com](https://crowley.com)

Public Information Meeting  
BOEM Transcript  
Vineyard Wind SEIS Public Meeting  
Virtual Public Meeting, Day 2  
June 30, 2020  
1:00 PM  
Ziven Drake

“Good afternoon. My name is Ziven Drake. That is indeed spelled correctly on your screen. I am a member of local Union 56, Commercial Divers and Pile Drivers. And I work for the North Atlantic State Carpenters Training Fund. So I do a lot of our recruiting and retention of newer members looking to join the trades here in Boston and elsewhere throughout New England, and when I speak to young divers, none of them want to go dive in the Gulf of Mexico on oil rigs anymore, they are all incredibly excited at the potential for offshore wind. I had the honor of taking the offshore survival training class offered through Mass Maritime and the Global Wind Organization. And I have a statement from a young diver. She also took the class with me, she is one of our youngest members at Local 56. And she put together a very, very poignant statement that I absolutely second, so I would like to read that on her behalf. This is a statement from Natalie MacDonald, member in good standing of Local Union 56 Commercial Divers and Pile Drivers. ‘I’m a 20 year old female pile driver who has taken the training required to be able to work on building offshore wind farms. To imply that I do not care about the future of our planet, the animals that live there, or the people who also work in these waters for a living is totally incorrect. I see what we’ve done to our planet through years of reliance on fossil fuels, and, yes, no solution is perfect. But here we have the opportunity to lead the way to build turbines in a way that takes into account wildlife, fishermen and local residents. There’s no perfect solution to supply the energy demands of the growing world, but these turbines along with other clean energy solutions are the future. You can resist the change and demand that, as an industry, fishing should be given precedence over turbines for ocean space. But you cannot deny that your industry has also had dire negative impacts on the waters you claim to be here to protect. Overfishing, habitat destruction and an industry that has become one dominated by large conglomerates cannot possibly sit here and say that they are doing right by our planet. Yes, the project could affect people’s livelihoods. But it could also put us one step closer to having cleaner energy while also showing the rest of the United States that we are serious about the future we want to secure for future generations. Change is hard. Not all the world embraced the Industrial Revolution. But nonetheless it prevailed. We are now at the point where we can make a very positive change in our planet when it comes to creating clean energy, creating jobs in a growing field, and we need to take a stand against increasingly large fishing entities that claim to be working for the best interests of their employees and not just to take all they can from our oceans. We can all share the oceans, but we have to be willing to work together, to concede a little on both sides, and to do what we can to make the world a cleaner and more sustainable planet. I deserve to be able to work just as much as local fishermen and we should be able to work together. This world is too often about pitting everyone against each other. Speaking as perhaps one of the youngest voices invested in this project, we should show the world what collaboration and cooperation can look like.’ Thank you.”



Public Information Meeting  
BOEM Transcript  
Vineyard Wind SEIS Public Meeting  
Virtual Public Meeting, Day 3  
July 2, 2020  
5:00 PM  
David Hardy

“Thank you. Acting Director Cruickshank and other members of the Bureau of Ocean Energy Management, thank you for allowing me to offer this brief statement this evening on the Vineyard Wind supplemental Environmental Impact Statement, the SEIS. My name is David Hardy, H-a-r-d-y, and I'm the President and Chief Operating Officer for Orsted North America Offshore. Orsted is the world's leading developer of offshore wind with operating wind farms globally, comprising -- comprising 6.8 gigawatts of clean and renewable generation. Here in the U.S., we have been awarded over 2900 megawatts of offtake rights. The states of Rhode Island, Connecticut, New York, New Jersey, Maryland, and Virginia have all entrusted Orsted to build their first offshore wind projects in the U.S. And as the leaseholder of multiple wind energy areas in the Mid Atlantic and New England regions, we are poised to deliver from 8 to 10 gigawatts of additional capacity and bring the economic, environmental and energy benefits of offshore into these markets. I'd like to start by commending BOEM for its work on the supplemental EIS. It is no small feat to forecast the myriad impacts that the development of a new ocean-based renewable resource will have on the human and natural environment, both positive and negative. But BOEM has largely presented a comprehensive, thoughtful and data driven analysis of the reasonably foreseeable impacts of project development along the Eastern Seaboard. Just as importantly, BOEM has honored its commitment to deliver the SEIS in a timely fashion. It's hard to overemphasize this point. As a nascent industry, market participants are looking to BOEM and other state and federal agencies to create stable, predictable and transparent permitting processes and timelines that are paramount to unlocking the billions of dollars in private sector investment that will be required to stand up this new industry here in the U.S. and meet state energy targets. The release of the SEIS is, therefore, a critical milestone. With the completion of the cumulative impact analysis, and establishment of a methodology that can be broadly replicated across all planned offshore wind projects, we urge Secretary Bernhardt to now lift the Department's hold on the formal environmental review projects in the queue. But the remainder of my time, I'd like to briefly touch on a few substantive points regarding the SEIS. These points will be amplified in public hearing statements by Orsted subject matter experts and in our written comments. First, we strongly support the adoption of Alternative D-2 as the preferred alternative for project layout in the Rhode Island/Massachusetts contiguous lease area. As one of the participating developers to the consensus proposal for a uniform one-nautical-mile-by-one-nautical-mile east-west grid configuration for these specific lease areas, we were heartened to see the solid evidence presented in the SEIS demonstrating the superiority of this approach from a navigational safety perspective while still respecting the ability of commercial fishermen and other navigators to transit in and through our lease area. We encourage BOEM to defer to judgment of the U.S. Coast Guard, which in the context of the recently released final Massachusetts Rhode Island Port Access Route Study, the MARIPARS, determined that the grid layout pattern, and I quote, will result in the functional equivalent of numerous navigational corridors that can safely accommodate both transits through and fishing within the wind -- the WEAs, and declined to recommend further formal or informal vessel routing measures. Diversely, we take issue with the SEIS finding that Alternative F contemplating a dedicated four-mile-wide transit corridor could, quote, technically and economically meet the purpose and need. As an example, the Responsible Offshore Development Alliance wrote a proposal for a four-nautical-

mile-wide transit lane, the basis for Alternative F, if -- if adopted and extended to other projects would result in the loss of over 50 -- 50 wind turbine locations from our current three projects, South Fork, Revolution and Sunrise Wind, that have current existing PPA obligations. This equates to nearly 25% loss in the total wind turbine locations needed to support our state power purchase agreements. In light of this significant constraint on our development -- developable footprint and attendance production loss, we believe the SEIS conclusion of technical and economic feasibility with respect to Alternative is misplaced. Second, it's hard to reconcile the SEIS qualitative assessment that future offshore wind development will result in only minor net economic benefits to the region with the study's recognition of significant new investment in ports and harbors, manufacturing and other supply chain activities and workforce development. Our company alone is on its way to investing 15 billion over the next decade in the U.S. The SEIS should reflect a more favorable rating of offshore wind as a domestic economic development engine consistent with ongoing and planned investments. Third, for many of the cumulative impact parameters considered in the SEIS, BOEM chose not to incorporate widely accepted or legally mandated mitigation strategies. Thus, the bottom-line impact of the 22 gigawatt build-out must be considered a worst case scenario and not a representative -- representative as -- representative of as-constructed project impacts. The SEIS should place the impact assessment in proper context. Fourth, since the SEIS acknowledges that ongoing climate change, which contributes to cumulative impact, it's important to reemphasize the positive climate impact that renewable energy projects will provide to terrestrial and marine fauna and local communities. For example, Orsted's ocean wind project is expected to avoid emissions of over 100 million tons of carbon dioxide, almost 200,000 tons of sulfur dioxide, and over 80,000 tons of NOx over the life of the project. Offshore wind thereby results in a net reduction of regional air pollution. In conclusion, we applaud BOEM for an instrumental role in encouraging America's offshore wind energy to continue to advance. This SEIS an important step in this journey. We remain confident that our offshore wind farms can coexist with all other ocean users including the Northeast commercial fishing industry. As noted, we've already taken steps to support that coexistence. At the same time, we stand ready to help the Northeast recover long term from this unprecedented -- unprecedented economic crisis by creating thousands of good local jobs and investing hundreds of millions of dollars in local ports to develop homegrown clean energy that will combat climate change and power our communities for decades to come. Thank you."



The General Court of the Commonwealth of Massachusetts  
State House, Boston, MA 02133-1053

July 10, 2020

Program Manager, Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road (VAM-OREP), Sterling, Virginia 20166

RE: Vineyard Wind 1 COP EIS

Dear Program Manager,

In response to your request for public comment following the release of the Supplemental Draft Environmental Impact Statement (SDEIS) on June 12, 2020, we are writing you today to express our strong support for both Vineyard Wind and the emerging offshore wind industry in our region.

It has been a long road to get to this point. Over the course of more than six years, 35 public hearings and 5 comment periods, BOEM finalized the siting of wind development areas, reducing originally identified areas by more than half, to avoid areas with habitat, navigation and commercial fisheries value. That process actively engaged stakeholders and received more than 300 public comments.

After long and careful consideration, we urge the agency to approve the first utility scale offshore wind farm in the United States so we can finally realize the many benefits of this industry.

The Commonwealth has led the nation in the pursuit of offshore wind – the 2016 Energy Diversity Act saw broad, bipartisan support, and an alliance of environmental, labor and business interests who saw not only the clean energy benefits, but also the opportunity to build a new business sector in the United States, one that will contribute to the needed transition of our energy grid to new, renewable sources of clean energy. That law ushered in the offshore wind era by directing utilities to procure 1600MW of offshore wind into the MA electricity grid, with another 1600 authorized – when filled, offshore wind would supply nearly a quarter of the electricity used by homes and businesses in Massachusetts.

Indeed, the economic potential of offshore wind power is growing by the day. Vineyard Wind alone will generate at least 3,600 jobs and reduce costs for ratepayers by an estimated \$1.4 billion, according to the Massachusetts Department of Energy Resources. A recent report from the American Wind Energy Association found that by 2030, the offshore wind sector will

PUBLIC

employ more than 80,000 people from North Carolina to Maine and lead to \$25 billion in annual economic output.

That kind of economic potential, if realized, would be a game changer for people in our region and across the country, the kind of investment that can rebuild communities and create new opportunities for families.

But just as important as the economics is the effect the development of this industry will have on our environment and our efforts to reduce the catastrophic effects of climate change. Coastal communities are at a far greater risk from climate change, not only due to the impacts of coastal erosion and severe storms, but also because our economic health is closely tied to a healthy, stable environment.

Vineyard Wind 1 will generate clean, renewable, cost-effective power for over 400,000 homes and businesses across the state while reducing carbon emissions by almost 1.7 million tons per year, the equivalent of taking 325,000 cars off the road.

In contrast, if the project fails to move forward, the SDEIS outlines the cataclysmic impact that climate change will have on our oceans, including ocean acidification, ocean warming, and sea level rise, and other effects that are likely to contribute or lead to “permanent changes of unknown intensity” (3-2) to terrestrial and coastal fauna, “the decline of benthic resources with calcareous shells” (3-14), “noticeable temporary and permanent adverse impacts” on finfish and invertebrate communities (3-30), “long-term, possibly high consequence risks to marine mammals (3-38), and “long-term, high-intensity risk to sea turtles” (3-49).

We would also see a burgeoning industry once again stalled, that could shake the confidence of those seeking the regulatory predictability that leads to a stable, prosperous industry. The offshore wind industry cannot get off the ground without a clear pathway forward.

Late last year, after hearing from many stakeholders, the developers of the New England Wind Energy Areas (NE WEA) came together and proposed uniform, 1 x 1 nautical miles spacing between turbines, a layout that was recently endorsed by the United States Coast Guard (USCG). In the recently released MARIPARS report, the USCG found that the standard and uniform grid pattern “would allow for safe navigation and continuity of USCG missions through seven adjacent wind farm lease areas over more than 1400 square miles of ocean.” (MARIPARS, 33)

Alternative “F” slashes the generation capacity the Commonwealth and other New England states have demanded and puts the entire region at risk of not meeting energy demand even as many of New England’s fossil fuel and nuclear power plants are retiring. Section 2.2.2 of the SEIS states “the addition of all six of the 4-nautical mile transit lanes proposed by RODA would reduce the technical capacity of the Rhode Island and Massachusetts (RI and MA) Lease Areas

by approximately 3,300 MW, which is 500 MW less than the current state demand for offshore wind in the area” and further “BOEM recognizes that implementation of Alternative F could further erode project economics and viability.” This figure does not account for the more than 13,000-megawatt reduction already realized by adopting the 1 by 1 nautical mile uniform layout demanded by maritime users and adopted by developers. For these reasons, we oppose the additional transit lanes outlined in Alternate F. Implementation of those additional transit lanes will only further constrain the economic and environmental benefits of the industry.

Additionally, states in our region have set ambitious goals for carbon reduction, and offshore wind is a major component of reaching those goals; in fact, they cannot be reached without this industry.

We want to thank BOEM for giving us the chance to take part in this process and urge the agency to approve Vineyard Wind, so we can finally take steps forward for the good of our economy and our planet.

Respectfully,

**Julian Cyr**  
*State Senator*  
*Cape and Islands District*

**Dylan A. Fernandes**  
*State Representative*  
*Barnstable, Dukes and Nantucket District*

**Patricia A. Haddad**  
*State Representative*  
*5th Bristol District*

**Sarah K. Peake**  
*State Representative*  
*4th Barnstable District*

**Susan L. Moran**  
*State Senator*  
*Plymouth and Barnstable District*

**William L. Crocker, Jr.**  
*State Representative*  
*2nd Barnstable District*

**Timothy R. Whelan**  
*State Representative*  
*1st Barnstable District*

**Randy Hunt**  
*State Representative*  
*5th Barnstable District*

**David T. Vieira**  
*State Representative*  
*3rd Barnstable District*

**Marc R. Pacheco**  
*State Senator*  
*First Plymouth and Bristol District*

**Mathew J. Muratore**  
*State Representative*  
*1st Plymouth District*

**Elizabeth A. Malia**  
*State Representative*  
*11th Suffolk District*

**Joan Meschino**  
*State Representative*  
*3rd Plymouth District*

**David Henry Argosky LeBoeuf**  
*State Representative*  
*17th Worcester District*

**Joanne M. Comerford**  
*State Senator*  
*Hampshire, Franklin and Worcester District*

**Jay D. Livingstone**  
*State Representative*  
*8th Suffolk District*

**Steven Ultrino**  
*State Representative*  
*33rd Middlesex District*

**Hannah Kane**  
*State Representative*  
*11th Worcester District*

**Kathleen R. LaNatra**  
*State Representative*  
*12th Plymouth District*

**Jack Patrick Lewis**  
*State Representative*  
*7th Middlesex District*

**Michael O. Moore**  
*State Senator*  
*Second Worcester District*

**Maria Duaine Robinson**  
*State Representative*  
*6th Middlesex District*

**Daniel R. Carey**  
*State Representative*  
*2nd Hampshire District*

**Lindsay N. Sabadosa**  
*State Representative*  
*1st Hampshire District*

**Nika C. Elugardo**  
*State Representative*  
*15th Suffolk District*

**Carolyn C. Dykema**  
*State Representative*  
*8th Middlesex District*

**Mindy Domb**  
*State Representative*  
*3rd Hampshire District*

**Jason M. Lewis**  
*State Senator*  
*Fifth Middlesex District*

**Brian W. Murray**  
*State Representative*  
*10th Worcester District*

**Tommy Vitolo**  
*State Representative*  
*15th Norfolk District*

**Andres X. Vargas**  
*State Representative*  
*3rd Essex District*

**Kay Khan**  
*State Representative*  
*11th Middlesex District*

**Natalie M. Higgins**  
*State Representative*  
*4th Worcester District*

**Michael S. Day**  
*State Representative*  
*31st Middlesex District*

**Tram T. Nguyen**  
*State Representative*  
*18th Essex District*

**Michelle M. DuBois**  
*State Representative*  
*10th Plymouth District*

**Kevin G. Honan**  
*State Representative*  
*17th Suffolk District*

**Norman J. Orrall**  
*State Representative*  
*12th Bristol District*

**Barry R. Finegold**  
*State Senator*  
*Second Essex and Middlesex District*

**Natalie M. Blais**  
*State Representative*  
*1st Franklin District*

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Nancy Durfee, Town of Somerset

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-2734

**Tracking Number:** 1k4-9hxo-cf73

### Document Information

**Date Posted:**

Jul 21, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Nancy Durfee

**Organization Name:**

Town of Somerset

**Government Agency Type:**

Local

**Government Agency:**

Town Planner

### Comment

On behalf of the Town of Somerset, I am writing to strongly support Vineyard Wind's proposed 800-megawatt wind farm to be constructed in federal waters off the coast of Martha's Vineyard. We also wish to extend support to the emerging offshore wind industry in our region.

The Town's dominant industry for the last 100-year was coal burning power generation. The paradigm is once again changing in Somerset and along the whole eastern coastline. The phasing out of fossil fuel power generating stations affords an opportunity that is once-in-a-century. Both the Brayton Point site and the former Montaup Electric site have been considered by the offshore wind industry for reuse as offshore wind farm component marshaling, fabrication, and/or manufacturing facilities. The Brayton Point site in particular has seen extensive interest in the facility from the offshore wind industry. The development and redevelopment potential facilitated by these sites creates the immense opportunity that exists within the rapidly developing Blue Economy that will positively impact communities in the South Coast and beyond. Conversion of these properties to other use scenarios for the sites that are key to rebuilding our community's economy and create new opportunities for families.

Vineyard Wind 1 takes a major step to tackle climate change by reducing the impacts caused by the emission of nearly 1.7 million tons of carbon dioxide per year, this is the equivalent of removing 325,000 automobiles from the road. By selecting the proposed Alternative F, would in effect reduce approximately 3,300 MW, drastically reducing the benefits including emissions reductions, improved health, economic investment, and jobs that will come from this industries growth.

Thank you for allowing us to comment on this process. I urge BOEM to approve Vineyard Wind 1 for all the many benefits it will produce.

Sincerely,

**PUBLIC**



Nancy L. Durfee  
Town Planner  
Town of Somerset



*Bridgeport  
City Council*

Alfredo Castillo  
136th District

July 16, 2020

Attention: Mr. James Bennett

(Docket # BO EM-2020-0005)

Chief, Office of Renewable Energy Programs  
Bureau of Ocean Energy Management  
United States Department of the Interior  
45600 Woodland Road VAM-OR EP  
Sterling, Virginia 20166

Re: US BOEM Invitation of Public Submission

Dear Mr. James Bennett,

Per our discussion, I am responding to US BOEM Invitation of Public Submission (Docket # BOEM-2020-0005).

- 1) The City of Bridgeport is committed to developing clean energy for energy savings and workforce development.
- 2) This past 2019 legislative session, M E S A (Municipal Energy Savings Area) was made into law at the Connecticut General Assembly recognizing City of Bridgeport's success in its delivery of clean energy development and savings in low income neighborhoods.

- 3) Successful completion of the 'pilot' known as Seaview Village is a carbon-free, subsidy-free, low-income, private-housing project located in the Bridgeport's lowest income area.
- 4) In 2018, the City of Bridgeport passed unanimous legislation with the Mayor's written support to adopt clean energy and technology as a workforce development initiative through a minority set-aside company (Pequot) registered with the City of Bridgeport.
- 5) To date, various clean energy technologies (fuel cell, heat pumps, solar thermal, offshore wind and other relevant clean energy systems) are recognized by the City of Bridgeport.
- 6) The City of Bridgeport, through lawful resolution, is determined to identify, attract and secure qualified clean energy technologies, companies, investors and industry partners.
- 7) By this resolution, the City of Bridgeport is committed to realizing measurable and verifiable clean energy savings while advancing workforce employment and tax revenue.
- 8) The City of Bridgeport is recognized as a global leader in manufacturing with credentials in national security extending to the US Department of Defense.
- 9) The City of Bridgeport is the legal custodian and responsible jurisdiction of its own deep-water harbor with its oversight authority recognized by the US Federal Government.

10) To date, *no* written agreements are in place, outstanding or promised for the use and access for our harbor by either government or private interests not of public record.

Mr. Bennett, the purpose letter is to submit to US BOEM my cooperation in developing a working relationship that preserves and advances our stated clean energy goals with the City of Bridgeport.

Specifically, Bridgeport can be of assistance in identifying a reliable industry partner for our Offshore Wind development and use of our natural harbor.

Of course, any other approaches to our successfully adopting clean energy technologies that create energy savings, workforce and revenue is priority by our City Council.

Finally, please understand that Bridgeport is committed to conserving, improving and protecting the natural resources and the environment of the State of Connecticut as well as making cheaper, cleaner and more reliable energy available for the local people and businesses with American goals.

Bridgeport is also committed to playing a positive role in rebuilding economy and creating local workforce (Rangers) within the clean energy industry while fostering a sustainable and prosperous economic future for New England.

Renewable Energy is a clean source of energy that can replenish itself for thousands of years to come. Fossil fuels on the other hand are finite, create

harmful greenhouse gases and other emissions, and require dependency on countries outside of the United States. Renewable Energy is important to lower carbon footprint, lessen dependency, and to create jobs within the U.S.

Mr. Bennett, in summary, the City of Bridgeport and US BOEM share the many of the same goals. Allow this correspondence as my request to US BOEM on *how to cooperate* - so we may realize these shared goals.

I sincerely look forward to both US BOEM and your professional assistance.

My Warmest Regards,



Councilman Alfredo Castillo  
136<sup>th</sup> District, City of Bridgeport  
Connecticut, USA

Cc: City of Bridgeport, City Council

City of Bridgeport, Mayor Joseph P. Ganim

City of Bridgeport, Major Contractor and Minority Supplier (Pequot Group, LLC)

US Department of the Interior, Office of Renewable Energy Programs

**SENATOR DENNIS BRADLEY**  
**DEPUTY MAJORITY LEADER**

Legislative Office Building  
Room 3500  
Hartford, CT 06106-1591  
Tel. 860-240-0591

[www.senatedems.ct.gov/Bradley](http://www.senatedems.ct.gov/Bradley)  
[www.facebook.com/senatorbradley](https://www.facebook.com/senatorbradley)  
[www.instagram.com/dennisabradley](https://www.instagram.com/dennisabradley)



**State of Connecticut**  
**SENATE**  
*Bridgeport/Stratford*

*Chair*  
Housing Committee  
Public Safety & Security Committee  
*Vice Chair*  
Planning & Development Committee  
*Member*  
Appropriations Committee  
General Law Committee  
Judiciary Committee

July 17, 2020

James F. Bennett  
Chief, Office of Renewable Energy Programs  
Bureau of Ocean Energy Management  
United States Department of the Interior  
45600 Woodland Road VAM-OREP  
Sterling, Virginia 20166

**Re: US BOEM Invitation of Public Submission (Docket # BOEM-2020-0005)**

Mr. James Bennett,

Per US BOEM invitation for public submission, please see the question(s) below:

Vineyard Wind is a company that is both foreign (not USA) in its ownership and control by Danish sovereign funds. Whereas;

Vineyard Wind requests to US BOEM through its application (Docket # BOEM-2020-0005) for approved offshore wind permitting to operate within the US Department of Interior's protected United States territorial sea. Whereas:

Vineyard Wind, through its application to US BOEM, represents its capacity to function and operate an offshore wind enterprise within local Bridgeport harbor and ports. Whereas:

Vineyard Wind application represents that its investment in State of Connecticut's offshore wind strategy has secured all relevant CT State authorities support. Whereas;

Request for US BOEM Information:

Can you please provide written evidence of relevant CT State authority in support, to include; PURA, DEEP, CPA, DECD and any other US BOEM public record demonstrating CT State support for Vineyard Wind offshore wind application for US BOEM offshore wind permit?

PUBLIC

Can you please provide written evidence of relevant City of Bridgeport support, to include; City of Bridgeport EPD (Economic Planning and Development), City of Bridgeport BPA (Bridgeport Port Authority), Bridgeport East End NRZ (Neighborhood Revitalization Zone), Bridgeport Economic Development Corporation (BEDCO), and Bridgeport Regional Business Corporation (BRBC) and any other US BOEM public record demonstrating Bridgeport support for Vineyard Wind offshore wind application for US BOEM offshore wind permit?

Mr. Bennett, generations of US Congressional laws, preserve the bipartisan supported, 100% American “energy independence” agenda - as US national security – a DoD critical priority. Has US BOEM made public any recorded comments of the significance of Vineyard Wind and its applicant partner, Avangrid (both exclusively 100% foreign owned) *for not* having local or US representation within their ownership and control structure with respect to offshore wind?

Has US BOEM made public any recorded comments of the significance of Vineyard Wind and Avangrid’s intentions in securing control of CT ports for long term industrial foreign investment through various US based foreign proxies for CT domestic port control?

Has US BOEM made public any recorded comments of the significance of Gateway Terminal (a Danish contracted company) for not being represented by CT local union contracts?

Is US BOEM reviewing the Vineyard Wind offshore wind application for its capacity in advancing the local (Bridgeport) workforce within the City of Bridgeport for offshore wind and manufacturing? (Longshoreman and Rangers - 100% USA based and controlled *without* contracts)

Final Comment(s):

While I applaud and support the clean energy agenda and investment in Connecticut and America, our citizens must expect to continue in our local control of the port and city.

This includes, local representation within all the industrial aspects of port and offshore wind, workforce, harbor, site access, energy pricing and transparency within shared public record.

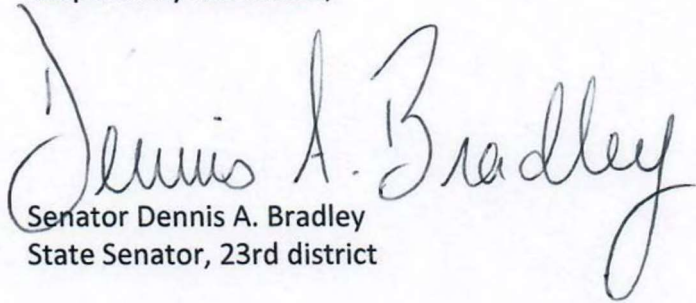
Absent of the State in securing these assurances, the people of Bridgeport, namely those whose livelihoods are tied to the merging of our local ports with foreign clean energy industry (offshore wind), must be stakeholders of lawful status with respect to the unintended absence of US and State public policy mandating local Bridgeport workforce security and representation.

Finally, this public comment is extended to US BOEM and US Homeland Security regarding its lawful submission for public record.

Be advised, that foreign owned and controlled (offshore wind) applicants who seek to operate within Bridgeport without local ownership, control and representation are deemed emerging domestic security risks with respect to our local energy independence from foreign pricing.

To be clear, local workforce jobs based in Bridgeport, Connecticut are a necessity and are a protected class of industry by city legislation.

Respectfully submitted,

A handwritten signature in black ink that reads "Dennis A. Bradley". The signature is written in a cursive style with a large, looping initial "D".

Senator Dennis A. Bradley  
State Senator, 23rd district





## Board of Selectmen

Town Office Building  
140 Wood Street  
Somerset, MA 02726  
(508) 646-2824

July 20, 2020

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
Sterling, Virginia 20166

Re: *"Vineyard Wind COP Supplement to the Draft EIS"*

Dear Program Manager,

On behalf of the town of Somerset, as the Board of Selectmen we collectively write to you regarding our strong support of Vineyard Wind's proposed 800-megawatt (MW) wind farm to be constructed in federal waters 14 miles off the coast of Martha's Vineyard and approximately 29 nautical miles south of Brayton Point, a key transfer site for electrical generation. We also extend our full support to the emerging offshore wind industry in our region.

For much of the last 100-years the Town's dominant industry was power generation from the two major generating stations. However, more recently, the cost of operating coal – and oil-fired power plants was out of step with more modern power generation cost profiles. Wind generation is the modern power generation. Currently, the former Brayton Point coal-fired power station is being redeveloped into a world class logistical port and support center for offshore wind. This redevelopment, along with port upgrades, will revitalize these areas, create new business opportunities, and result in hundreds of new jobs.

The economic potential of offshore wind power is growing by the day. Advancement of Vineyard Wind will generate at least 3,600 jobs for local residents, and reduce costs for ratepayers by \$1.4 billion according to the Massachusetts Department of Energy Resources. In a recent report from the American Wind Energy (AWEA), the offshore wind industry will employ more than 80,000 people from North Carolina to Maine, and lead to \$25 billion in economic output by 2030. The kind of investment that can rebuild communities in our region and create new opportunities for our families.

Just as important as the economics is the positive impact renewable energy will have on our environment and our efforts to reduce the devastating impacts of climate change. Vineyard Wind 1 will make a significant effort to tackle climate change by avoiding the emission of almost 1.7

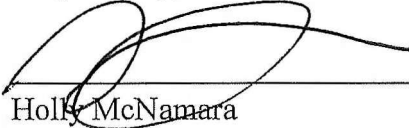
PUBLIC

million tons of carbon dioxide per year, the equivalent of removing 325,000 cars off the road. These benefits can be multiplied by each new project that is constructed in the near future.

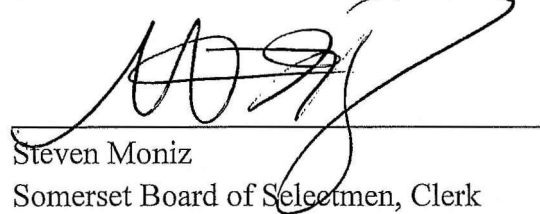
The fishing industry has proposed additional transit lanes of at least 4 Nautical Miles (NM) reflective in Alternative F in the SDEIS, a move that would constrain clean energy production, but not improve navigation. The selection of Alternative F would set a precedent for including all four nautical mile transit lanes that would result in, the reduction of approximately 3,000 MW. This would threaten the viability of offshore wind in the region and their ability to address climate change with real meaning. A commitment we should all take seriously and act responsibly upon.

We want to thank the Bureau of Ocean Energy Management (BOEM) for allowing us to take part in this process and urge the agency to approve Vineyard Wind 1 in order to take the necessary steps for the good of our community, and the economy, while protecting the sustainability of our environment for future generations.

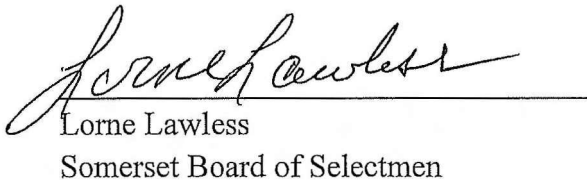
Respectfully,



Holly McNamara  
Somerset Board of Selectmen, Chairman



Steven Moniz  
Somerset Board of Selectmen, Clerk



Lorne Lawless  
Somerset Board of Selectmen



STATE OF RHODE ISLAND  
OFFICE OF THE ATTORNEY GENERAL

150 South Main Street • Providence, RI 02903  
(401) 274-4400 • www.riag.ri.gov

*Peter F. Neronha*  
*Attorney General*

July 27, 2020

Secretary David Bernhardt  
Department of the Interior  
1849 C Street, N.W.  
Washington DC 20240

Walter Cruickshank  
Acting Director  
Bureau of Ocean Energy Management  
1849 C Street, N.W.  
Washington DC 20240

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road,  
Sterling, Virginia 20166

**Re: BOEM-2020-0005**

**Comments to the Supplement Draft Environmental Impact Statement  
(DEIS) for Vineyard Wind, LLC's Proposed Construction and Operations  
Plan (COP) Docket No. BOEM-2020-0005**

Dear Secretary Bernhardt and Acting Director Cruickshank:

This letter is submitted to the Bureau of Ocean Energy Management (BOEM) in response to the Notice of Availability of a Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Construction and Operations Plan, which was posted for public comment in the Federal Register on June 12, 2020.

The Rhode Island Attorney General is tasked with the responsibility of protecting the public resources of Rhode Island, including its valuable ocean resources. While I support offshore wind energy development as a means of reducing greenhouse gas emissions and their effects on global climate change, I remain concerned about the interests of the commercial and recreational fisheries, safe navigation, and the environment, as outlined in my original January 22, 2019 comment letter.

I am aware that the Rhode Island Coastal Resources Management Council has recently submitted comments on this matter in favor of Alternative D2 in the EIS as the preferred alternative for the Vineyard Wind project. I am also aware that many in the Rhode Island commercial fishing industry still have significant concerns about the project and are most

PUBLIC

supportive of Alternative F, which was recently added to the EIS and is essentially Alternative D2 with the addition of several wider transit lanes.

I submit these comments to advocate for BOEM to, at a minimum, adopt Alternative D2 in the EIS as the preferred alternative for the Vineyard Wind project and require the developer to construct the wind farm in a uniform grid pattern with 1 x 1 nautical mile spacing between all turbine foundations (including the OSS platforms) in an East-West, North-South orientation, as recommended by the U.S Coast Guard (USCG) in their June 14, 2020 final Massachusetts Rhode land Port Access Route Study (MARIPARS). I also ask that BOEM review and consider Alternative F, which includes 4 nautical mile wide transit zones through the project area.

I further request that BOEM adopt the USCG MARIPARS recommendation on the wind farm configuration as a condition of COP approval not only for the Vineyard Wind project, but for all southern New England offshore wind projects.

Uniformity by BOEM in adopting the USCG MARIPARS recommendation for all southern New England offshore wind farm configurations will provide regulatory certainty for the offshore wind industry and provide stakeholders with the assurance that there will be a predictable and uniform wind farm pattern that accommodates and facilitates safe navigation, commercial and recreational fishing activities, and USCG search and rescue operations. In addition, this configuration will limit the impacts to navigation and fishing as required by the federal Outer Continental Shelf Lands Act ("the right to navigation and fishing therein shall not be affected."). *See* 43 U.S. Code§ 1332.

Of additional significance here is that all (or virtually all) stakeholders in this process have either expressly supported Alternative D2 or expressed support for one or all of the design elements in this Alternative. The Alternative D2 configuration is entirely consistent with the USCG's MARIPARS recommendation. It is also consistent with the offshore wind industry's November 1, 2019 collaborative proposal to the USCG<sup>1</sup> for wind farm layout in the southern New England offshore renewable energy lease areas. It is also supported by the Rhode Island Coastal Resources Management Council (RI CRMC) and the Massachusetts Office of Coastal Zone Management (MA CZM). Additionally, the Rhode Island Fisheries Advisories Board, the Massachusetts Fisheries Working Group, fisheries groups that serve as representatives to the Leaseholders, fishing fleet operators, and fish processing companies, as well as the National Marine Fisheries Service, have all expressed support for one or all of the Alternative D2 design elements.

Rhode Island does want this project to move forward, as it represents a key step in lessening our country's reliance on fossil fuels. In fact, Rhode Island is a proud leader in renewable energy initiatives and wind energy development, as it has successfully implemented the nation's first offshore wind farm off the coast of Block Island. That project was meticulously planned by the RI CRMC, Deepwater Wind, LLC., and other stakeholders to balance the interests of the fishing industry, the environment, and wind energy development.

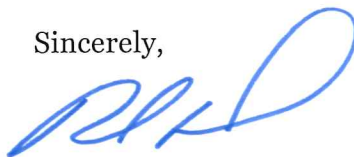
---

<sup>1</sup> The proposal was submitted to the USCG jointly by the five New England offshore wind leaseholders, Orsted North America, Eversource Energy, Vineyard Wind, LLC, Equinor Wind U.S., and Mayflower Wind.

July 27, 2020  
Page Three

In sum, while I am supportive of offshore wind development, I remain concerned about the interests of the commercial and recreational fisheries, safe navigation, and the environment. It is of the utmost importance for BOEM to balance the interests of the fishing industry, the environment, and wind energy development when reviewing this unprecedented project. The decisions made here will directly affect construction and operation plans for the 14 other upcoming offshore wind projects, covering nearly two million acres in federal waters. Without sound planning here, BOEM's decisions will permanently impact our nation's most important ocean resources and commercial fishing industry.

Sincerely,



Peter F. Neronha  
Attorney General

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Roger Schaefer,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

### Comment

Hi, My name is Roger Schaefer. I am a year-round resident of Martha's Vineyard. I fish 6 months of the year, much of which is spent recreation fishing the waters South of Martha's Vineyard, in the area these windmills will be going. I fully support the project. I am not worried about the windmills being a hazard to navigation. I already have the ability to avoid tiny lobster traps in the fog at night using my radar. I feel the windmills are spaced out adequately. This is definitely a windy region, so I feel harnessing that wind power would be good. I also think these windmills will create entire ecosystems and increase the marine life in the area, similar to how any artificial reef created in other areas of the East Coast have been great for fishing. Each of these windmill bases will become their own 'artificial reef', supporting dozens of varieties of sea life and also drawing in the bigger predators. I look forward to fishing in the region after they are installed because I think they will vastly improve our fishing opportunities. I urge you to approve this project.

**ID:** BOEM-2020-0005-0086

**Tracking Number:** 1k4-9hja-2bub

### Document Information

**Date Posted:**

Jun 30, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**


Roger Schaefer

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Akers, Fred

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

### Comment

As a private recreational fishing boat owner who currently fishes in the proposed WEAs, I support the proposed development of ocean wind energy, and the findings of BOEM's Vineyard Wind Supplement to the Draft Environmental Impact Statement (SEIS).

The SEIS and the NEPA cumulative impacts analysis are very comprehensive and inclusive.

Given that Commercial transit lanes have already been carved out of the established WEAs, and the wind industry has proposed a uniform 1 x 1 nm turbine layout, I am against the additional 2 to 4-mile wide transit lanes within wind farms as they are unnecessary and reduce renewable energy potential.

To best understand the changes in marine species extent and abundance from the cumulative impacts of the turbines, project specific monitoring should be required before, during and after construction.

BOEM should require recreational fishing access outside of construction and maintenance as a permit condition to guarantee that recreational anglers can benefit from the reef effect of turbine structures.

**ID:** BOEM-2020-0005-12059

**Tracking Number:** kcz-hhaw-rjrw

### Document Information

**Date Posted:**

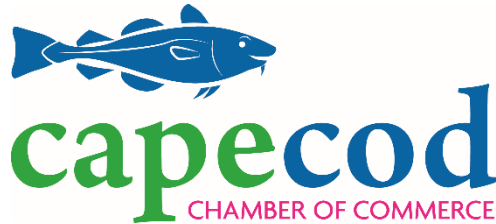
Jul 24, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

Fred Akers



**COMMENTS TO THE SUPPLEMENT TO THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (SEIS) FOR  
VINEYARD WIND'S OFFSHORE WIND PROJECT, VINEYARD WIND 1**

**U.S. BUREAU OF OCEAN ENERGY MANAGEMENT**

**JUNE 29, 2020**

On behalf of our 1,236 member businesses and organizations, thank you for the opportunity to comment on the SEIS for Vineyard Wind 1. We acknowledge that the creation of a major new industry is a significant undertaking and needs to be approached with careful consideration. We feel the Federal government has done its due diligence and urge execution of the final permit for Vineyard Wind I.

We agree that it is important that the first commercial offshore wind projects are done right and that it's imperative to evaluate the cumulative impacts to existing maritime uses as well as the environment and establish best practices that minimize those. We are especially sensitive to the concerns of the commercial fishing industry as an important piece of our past, present, and future economy and one that is impacted the greatest by this industry.

Vineyard Wind has gone through many iterations in an effort to craft a facility that is economically feasible while at the same time taking its impacts into account. Vineyard Wind has been a collaborative, communicative and an engaged partner with many stakeholder groups, and has shown a genuine interest in the region's environmental and economic health. While it is clear that there will be impacts to existing uses and that the emergence of this new industry will require changes in both practice and habit, we feel that the adjustments made through this permitting process, and the mitigations put in place will minimize those impacts.

Developers have made a commitment to coordinate a predictable layout that answers marine concerns and comes at the cost of substantial reductions in clean energy potential among the lease areas. We support the proposal, and further dilution beyond this proposal could jeopardize project viability, increase the cost to ratepayers as well as increase environmental impact, and render existing lease areas insufficient to meet the region's clean energy mandates. All this would occur if additional transit lanes are added to the plan, which the US Coast Guard has asserted will not provide meaningful increases in ease of transit and could create increased conflict.

In terms of economic development, Vineyard Wind represents a major opportunity bringing \$1.87 billion in direct economic benefits to Massachusetts including 3,600 new jobs. The project has created a \$15 million fund to help build a sustainable offshore wind industry in Massachusetts that would bolster development of the supply chain, businesses, and infrastructure. This type of economic development will play out up and down the east coast of the United States as the nation ushers in this new renewable energy industry.

Cape Cod Chamber of Commerce, 5 Patti Page Way, Centerville, Cape Cod, Massachusetts 02632  
1-888-33CapeCod (888-332-2732) or 508-362-3225

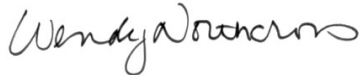
**PUBLIC**



We urge BOEM to arrive at a final decision on the federal permit this year. This is critical not only for the viability of Vineyard Wind, but for the entire future U.S. offshore wind industry including shipbuilders, suppliers, and other maritime interests. Considering the nation's abrupt economic downturn this year due to COVID-19 impacts, this will help spur immediate economic growth in the nation's economy.

Thank you again for the opportunity to comment on this project.

Sincerely,

A handwritten signature in black ink that reads "Wendy K. Northcross". The signature is written in a cursive, flowing style.

Wendy K. Northcross, CCE  
Chief Executive Officer

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Holly Bellebuono,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

I'm am writing to express my full support for the Offshore Wind projects south of Martha's Vineyard and along the Eastern seaboard.

1) As executive director of ACE MV, Adult and Continuing Education of Martha's Vineyard, I am excited to have welcomed our first cohort of students this January, entering into our new certificate program to earn a credential through Bristol Community College as Offshore Wind Technician--specifically to support the new offshore wind initiatives. We enrolled 18 Martha's Vineyard residents to study in a 2-3 year program that will directly prepare them as technicians working on offshore wind turbines. We expect to welcome our second cohort of students in January 2021, and will continue this educational program into the future to meet the needs of renewable energy in southeast Massachusetts.

The response to this program has been very positive and will provide our local, year-round residents with stable jobs, rewarding education, and promising career opportunities.

2) As a former program director for an environmental advocacy nonprofit in North Carolina, I worked with task forces in West Virginia and Kentucky to end the destructive practice of mountaintop removal. I witnessed first-hand the horrific devastation of hundreds of thousands of acres of mature forest in a shameless grab for coal that completely destroyed ecosystems and habitats for thousands of miles of Appalachian woodlands.

ID: BOEM-2020-0005-0117

Tracking Number: 1k4-9hl3-v34b

### Document Information

**Date Posted:**

Jul 5, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Holly Bellebuono

My introduction to offshore wind has been the opposite: as an educator and director, I have been working with groups in the industry who are committed to extremely low environmental impact. There is no comparison between offshore wind and mountaintop removal; the erection of turbines in the ocean and the maintenance of them will have a significantly lower environmental impact and is a much more welcome process than pursuing coal or other fuels.

Thank you for supporting this important initiative.

The Commonwealth's



Leadership University™

06 JULY 2020

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
Sterling, VA 20166

Ref: Letter of support for Vineyard Wind and additional offshore wind projects

To whom it may concern,

I write this letter of support Vineyard Wind and all offshore wind projects being considered along the continental United States.

Massachusetts Maritime Academy has a long-standing tradition of educating personnel for the maritime industry, the power generation industry, and their supporting industries. Years ago the academy initiated action in support of wind power generation by installing a 660 KW Vestas turbine on its Buzzards Bay campus. More recently the academy established a Basic Safety Training (BST) program for training the offshore work force. The training facilities at the Buzzards Bay campus include a floating transfer tower, boat to conduct transfers, a working from heights tower and extensive training required for those who are the designated instructors. The creation of the BST center was a three-year effort and supported financially by grants for the Massachusetts Clean energy Center. Classes for this program commenced this past spring.

The academy saw a growing need to support alternative power generation concepts to alleviate the demand of fossil fuels while reducing Carbon Dioxide emissions. The newest Bachelor of Science degree program established by the academy is *Energy Systems Engineering*. This program was designed with the understanding that energy efficiencies and conservation measures must be adopted today rather than wait for future generations to solve today's energy concerns. We believe that all of the academy's graduate and undergraduate majors have the potential to contribute to this industry as it develops in the US.

Additionally, the academy agrees with the New England Wind Energy Area (NE WEA) leaseholder's plans to provide 1+ mile spacing between turbines, the largest space between turbines of any wind development currently operating on the globe, to allow for safe navigation and fishing within the wind farm.

Wind Power generation being considered along the Atlantic Coast will have a direct and positive impact on reduction of greenhouse gasses while providing an economic stimulus measured in billions of dollars. Wind Power generation has been accepted and proven effective for 20 years in Europe. The concept of offshore wind power generation off the Atlantic Coast must now go forward with necessary permitting, enthusiasm and support from all involved parties.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "F. McDonald".

Francis X. McDonald, LPD  
RADM, USMS  
President, Massachusetts Maritime Academy



1 Beacon Street, 16th Floor  
Boston, MA 02108

www.aimnet.org | 617.262.1180 | fax 617.536.6785

**Submitted via: Federal Portal**

July 7, 2020

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
VAM-OREP  
Sterling, Virginia 20166

Re: BOEM–2020–0005 - Vineyard Wind 1 COP Supplement to the Draft EIS

To Whom it May Concern:

I write to you on behalf of the Associated Industries of Massachusetts (AIM) to comment on Vineyard Wind 1 COP Supplement to the Draft EIS (BOEM 2020–0005) which was published in the Federal Register on June 12, 2020.

AIM strongly supports Vineyard Wind’s proposal and its commitment to building the turbines in a grid with 1 nautical mile (NM) between turbines in the east-to-west direction and 1 NM between turbines in the north-to-south direction. The United States Coast Guard (USCG) has since determined that this type of standard and uniform grid pattern layout would maximize safe navigation.

AIM is the largest general trade association in Massachusetts. AIM’s mission is to promote the prosperity of the Commonwealth of Massachusetts by improving the economic climate, proactively advocating fair and equitable public policy, and providing relevant, reliable information and excellent services.

AIM strongly supports the development of offshore wind energy as a major new source of electric power for Massachusetts consumers. Directed by state legislation, the state has undertaken several competitive procurements of offshore wind energy in recent years. The long-term power contracts that have emerged from these procurements will deliver large amounts of carbon-free electricity for many years to come to Massachusetts consumers, including many of our member companies.

The construction and operation of Vineyard Wind I will yield economic benefits to Massachusetts. Nearly 4000 jobs will be created in the area, directly in construction and

PUBLIC

operation and indirectly through existing and new supply chains. These jobs and industries will not exist if Vineyard Wind is not approved and construction does not begin soon.

Further, the benefits will be more than local. Certain materials cannot be sourced locally and will need to be purchased throughout the Northeast region and maybe throughout the United States, creating additional demand and jobs. Also, the carbon reduction benefits - estimated to be the equivalent of removing 325,000 cars from the road - will benefit the entire United States and contribute to a necessary worldwide reduction in greenhouse gas emissions that will help mitigate climate change. The benefits in jobs and to the environment will accrue even more once additional offshore wind projects follow Vineyard Wind's example and begins construction soon after.

We can no longer delay offshore wind development – too much economic and environmental benefits depend on it and the Vineyard Wind project has been studied extensively. Without it there is no chance we will stop the negative impacts of climate change. We urge the Bureau of Ocean Energy Management to do everything within its power to make Massachusetts and the United States the new leader in clean energy development.

Thank you for the opportunity to comment. We very much look forward to significant development of the energy potential in the New England Wind Energy Area.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Robert A. Rio". The signature is fluid and cursive.

Robert A. Rio, Esq.  
Senior Vice President and Counsel  
Government Affairs

Thank you for the invitation to participate in today's discussion.

My name is Winston Vaughan. I am the Boston Director of Climate Solutions at Health Care Without Harm. We are a global non-profit that works to transform health care worldwide by proactively reducing the sector's carbon footprint, becoming a community anchor for sustainability, and becoming a leader in the global movement for environmental health and justice. We work with over 36,000 hospitals and health centers in 60 countries worldwide, including the leading health care institutions in New England.

I'm here today to speak in support of the Vineyard Wind project because we believe that clean, renewable energy is essential to preserving public health, and protecting both our facilities and the communities we serve from the impacts of climate change. Offshore wind also has the potential to reduce New England's notoriously high energy costs and help energy-intensive businesses like health care recover from the financial impacts of the COVID crisis.

The health care sector is our Commonwealth's largest employer - employing nearly 500,000 people. As the only sector of our economy that has healing as our mission, our health care industry is working hard to reduce our own impact as well as addressing vulnerability and resiliency to the impacts of climate change. By the end of this year, Boston Medical Center will be running on 100% Renewable Energy on the electricity side and they are working on cleaning up the thermal load. The Mass General-Brigham system will be carbon positive by 2025, but we still have much to do, and offshore wind is essential to that work.

Burning fossil fuels to generate electricity is a major driver of air pollution in our communities and is a major source of our region's climate change contribution. Over the last few months, we have seen all too clearly the disproportionate impact that COVID has had on the lives and health of low-income communities and communities of color who are disproportionately burdened by air pollution from the burning of fossil fuels, making them more vulnerable to the impacts of this deadly respiratory disease.

In order to effectively combat climate change, and protect the health of the communities our hospitals serve, we must not only transition to renewable energy but do so in a way that brings new renewable energy sources here to our region to replace the power plants that are burning fossil fuels and harming our health. Vineyard Wind 1 will provide enough clean energy to power over 400,000 homes and businesses, reduce carbon emissions by 1.7 million tons per year, NOx pollution by 1,000 tons per year, and SO2 pollution by 860 tons per year.

It is also important to note that COVID has not just ravaged the health of our communities, it has also taken a massive financial toll on our economy, and our health care system in particular. According to the Boston Globe, Mass General Brigham, the largest health care provider in the commonwealth, expects to lose \$400 million per month as a result of disruptions caused by the pandemic. Power from offshore wind is not just cleaner, it could also reduce the cost of energy, which would help energy-intensive businesses like health care recover more quickly from the financial impacts of COVID. Vineyard 1 alone is expected to save ratepayers more than \$1.4



billion in energy-related costs over the life of the project, money that is essential for our region's economic recovery, and our future economic prosperity. These benefits are, of course, in addition to the 3,600 jobs, many unionized, that this project will create which will also contribute to our region's economic recovery.

I also want to briefly touch on the topic of the proposed transit lanes envisioned in alternative F. The size of these lease areas has already been substantially reduced, and the spacing between turbines has been substantially increased, to safely accommodate fishing and other ocean uses. The addition of the proposed transit lanes on top of those accommodations would mean 4,000 fewer megawatts of wind power coming online which, according to Health Care Without Harm's "Energy Climate Calculator" would translate to an estimated additional 52.5 premature deaths from air pollution and an additional 25.3 ER visits for asthma attacks every year. or 1325 premature deaths from air pollution and 625 ER visits over the 25-year life of the project. As we know, the health impact of our existing fossil fuel powered electric generation falls disproportionately on low-income communities and communities of color. By failing to consider these impacts - impacts that could be mitigated by generating more clean renewable offshore wind power, I'm concerned that this analysis fails to account for the negative impacts on Environmental Justice communities that alternative F would have. This is, of course, on top of lost jobs and business for our region due to the smaller project that would result.

New England is blessed with some of the best offshore wind resources on the planet, which projects such as this can turn into an abundant source of clean inexpensive energy that can power a healthy, resilient, and economically thriving future for our region. We urge you to allow this critical project to move forward without further diminishment or delay.

My Name is Sue Hruby. I am here as the Chair of the West Tisbury Energy Committee, a member of the Cape Light Compact Board, and a member of the West Tisbury Climate Action Committee.

The project is the culmination of more than 10 years of exhaustive study and analysis to identify the best possible locations for the wind industry off the east coast. We also have the experiences in Europe to guide us in determining impacts.

I am not in a position to comment on lane widths and some of the more technical accommodations Vineyard Wind and some of the other leaseholders have made, but it shows they are working with the community as they have for a long time.

The fishing issue is bigger than that represented by this area of the Atlantic, and needs to be viewed in the context of the impacts of Ocean Acidification, declining marine environments and fish stocks. We can do everything possible to accommodate the fisherman and still we will lose in the end because bigger forces are at work impacting our fish. And yet, the fishermen need help, but it goes beyond limitations that possibly will impact them on these projects. I call on all the New England states to work with the fisherman and help them maintain their livelihoods. New England has a long tradition of working as a community to help fellow citizens. We should not back away from that now. In other words, I do not believe this project can be viewed solely in the context of the microenvironments in which these wind farms will be located.

As for the impacts on Military and Science – they have areas where they worked that could be impacted. It's a big ocean. If the priority is high enough why can't they move their boundaries to accommodate their training exercises, and their monitoring activities? This may be naive, however, all of these issues were created by people and can be changed by people. This project should not be delayed because of human created obstacles.

We know by now that when a new technology—like Wind, or—looking in another arena like Facebook comes into a space there will be unforeseen consequences that we can't even imagine—even though BOEM has done as thorough of a job as possible with what we know today. Vineyard Wind is a company that has deep experience with a demonstrated track record who is able to anticipate some of the issues we may not even see.

The East Coast has a need for short and long term energy supplies, and given the strategic priorities of our states – clean energy. Vineyard Wind is here to provide it. I urge you to take the greater context into account in moving this project forward. Let's get on with it.

July 7, 2020

**To: BOEM Director, Dr. Walter Cruickshank**

**Re: The Bureau of Ocean Energy Management (BOEM) Supplement to the Draft EIS for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Hearings.**

**Comments of the Connecticut Center for Advanced Technology, July 8, 2020.**

The Connecticut Center for Advanced Technology (CCAT) stands in support of this project and the leasing of the offshore area for the project. We thank BOEM for this opportunity to provide supportive comments.

CCAT is a nonprofit corporation that provides services and resources to entrepreneurs, businesses, industry, academia, and government. The energy program at CCAT has been established to improve the economic competitiveness of the region through solutions that lower energy costs, improve environmental performance, and increase long-term energy reliability. CCAT also provides assistance to businesses and manufacturers regarding energy use and energy efficiency; promotes the use of sustainable and renewable energy technologies; and undertakes energy planning, including use of energy storage and distribution technologies.


CCAT is a strong supporter of renewable energy that is reliable, safe, environmentally sound, and has economic value to ratepayers. We have extensive experience in the siting of energy projects including commercial wind facilities, energy infrastructure, and water dependent energy projects.

BOEM has conducted a fair and balanced proceeding that recognizes the protection of critical environmental resources, navigation, commercial fisheries, development of clean sustainable energy technologies, and the cultivation of economic activities to create high tech, clean energy jobs in the US. The approach includes a thoughtful siting process using collaborative communication with all stakeholders. CCAT appreciates the solutions-oriented planning process to avoid, minimize, and mitigate impacts on navigation, wildlife, and commercial fisheries.

There is public need for the project to develop renewable energy resources that have zero emissions, are sustainable, and indigenous to the US. There is also public value for the project that will provide significant economic value to transform port cities including Bridgeport, New London, and New Bedford into offshore wind hubs with direct and indirect supply chain jobs. This need and value are substantial and must not be underestimated.

CCAT recognizes the potential for long term environmental effects and irreversible or irretrievable commitments of resources associated with the project and believes that they have been avoided, minimized, mitigated, and outweighed by the public need and benefits for the proposed project.

BOEM



CCAT recognizes the opportunities to find alternatives to the proposed project and project development components and believes that all alternatives have been adequately addressed and the proposed project presents the best alternative to achieve the desired public benefits for renewable, sustainable, indigenous energy.

In terms of alternatives associated with the grid layout, we are in general agreement that a standard and uniform grid pattern should be designed and adopted for offshore wind development without delay. It appears that the proposed 1.0 nautical mile by 1.0 nautical mile grid layout (1 X 1 NM) is reasonable for the development of the proposed wind project and will provide an adequate margin of safety for commercial fishing and navigation, and that no additional navigational lanes will be necessary. The 1 X 1 NM grid layout has advantages to provide to navigation, turning, and predictable passage for both large commercial ships and fishing vessels. In addition to this uniform grid layout, the wind facilities will have marking, lighting, electronic communications, navigational charting (paper and electronic), and bulletins with notice to mariners. We are also pleased to see a decommissioning plan for all facilities. The downside to the proposed layout spacing is that it reduces the area available for facilities which reduces the opportunity to develop zero emission electric energy power. Nonetheless, the 1 X 1 NM grid layout is a reasonable trade off and balances the need for these facilities with protection of environmental resources, fisheries and commercial fishing, navigation, and recreational use of the site area. CCAT does not support the widening of this 1 X1 NM spacing or the creation of a four-mile transit corridor, which will further reduce the availability of the project area to produce renewable power. Unless BOEM finds hard credible evidence that requires a corridor wider than the 1 X1 NM grid, we believe that the proposed grid is more than adequate for navigation and commercial fisheries and that this proposal for leasing and development should be approved without delay.

In summary, we find that the project is needed; that potential impacts have been avoided, minimized, mitigated, and outweighed by the public need and benefits for the proposed project; and that alternatives have been fully addressed. We thank BOEM for this opportunity to comment and urge BOEM to approve the project, grid layout, and lease without delay.

Thank you for the opportunity to provide comment. Please feel very free to contact me if you seek additional detail on this comment.

Very truly yours,



Ronald F. Angelo, Jr.  
President and CEO

cc: CT DEEP Commissioner Katie Dykes

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Stephen Coan,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0149

**Tracking Number:** 1k4-9hpy-rld0

### Document Information

**Date Posted:**

Jul 9, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Stephen Coan

### Comment

As President of Mystic Aquarium, I am pleased to submit testimony in support of the Vineyard Wind 1 project.

Vineyard Wind is a responsible and highly community minded company. Since the inception of Vineyard Wind 1 the company has done an exemplary job at engaging the public, working with experts and scientists, and refining their proposal. The proposal for Vineyard Wind 1 is the result of more than 10 years of study and dialog.

Massachusetts and New England needs ocean wind energy and the Vineyard Wind 1 project. It will generate clean, sustainable energy for more than 400,000 homes and businesses and effectively reduce carbon emissions by nearly two tons annually.

The issue of adding transit lanes need not be revisited. The United States Coast Guard has already endorsed the 1x1 NM layout finding that the standardized spacing layout would be best for navigational safety. In fact, the Coast Guard specifically notes that additional transit lanes are potentially less safe than the 1x1 NM layout.

BOEM's scientists have studied the impact of offshore wind in the Massachusetts Wind Energy Area and up and down the Eastern seaboard. BOEM's own scientists have concluded that the Vineyard Wind 1 project, as proposed, would not have an adverse impact on birds or fisheries. The economic impact of fishers not being able to fish in the Wind Energy Area where Vineyard Wind 1 is sited is less than .05 percent according to various studies. That negligible impact assessment assumes that fishers cease to fish in the entirety of the lease areas and or fail to shift fishing to other areas nearby, a highly unlikely scenario.

In short, adverse impact on the environment, on fish stocks, and on the economics of the fishing industry have not been shown. Enough is known, however, about the adverse impact on the environment and the economy, including the livelihood of fishers, if nothing is done to develop renewable energy such as the Vineyard Wind 1 project.

**PUBLIC**

Warming waters due, in part, to carbon emissions, are but one example of a far greater threat to fishers and others than Vineyard Wind 1.

Vineyard Wind has shown that the economics of moving ahead with such a beneficial project are greatly diminished with additional delays and or unnecessary changes to the siting plan. Time is of the essence to begin construction of the Vineyard Wind 1 project so that Massachusetts and New England can begin to see the benefit of clean, renewable energy, and less carbon impact on our environment.

Thank you.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Rev. Betsy Sowers,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0152

**Tracking Number:** 1k4-9hpy-4q7i

### Document Information

**Date Posted:**

Jul 13, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Rev. Betsy Sowers

### Comment

BOEM testimony re: Vineyard Wind  
July 9, 2020

I am Rev. Betsy Sowers, from Weymouth, Mass., and a member of Fore River Residents Against the Compressor Station. Thank you for this opportunity to support this project that is essential to a clean and just energy future, and critical to slowing the unfolding climate catastrophe. I am a faith leader whose ministry is focused on environmental justice. The Vineyard Wind Project is not just about energy. Choosing to build it with the one-mile spacing of turbines under option D2, or to further delay, and possibly kill it through proposals such as option F or G, is also a moral decision with possible life and death consequences.

You see, I've learned a lot about the impacts of energy choices a resident of Weymouth, Massachusetts. With no EIS, and a vacated Air Quality Permit, Enbridge is venting massive amounts of methane at this very moment, testing pipes for a fracked-gas compressor station being built adjacent to already overburdened Environmental Justice Communities. As a member of the citizens' group fighting this project for five and a half years, I have seen first-hand how dirty and dangerous energy projects impact communities of color and low-income communities; how their lives and livelihoods bear the brunt of pollution. I've seen kids with rare cancers, high rates of coronary and respiratory diseases, greater illness and death from COVID-19 due to compromised respiratory systems. I've seen how the project's jobs, promised to those local people, in fact are being done by men from out of state.

I also know that projects like Enbridge's will make it impossible for Massachusetts to meet its mandated carbon reductions under the Global Warming Solutions Act, speeding up the unfolding climate catastrophe, of which COVID-19 is only a foretaste. This is the alternative to Vineyard Wind. Further permitting delays to Vineyard Wind will increase the likelihood of killing it, and leaving New England to the mercies of fossil fuel companies. Their environmental justice

impacts would far exceed the Environmental Justice impacts on low-income fishing workers from the one-mile layout of wind turbines. And the continuing of ocean warming and acidification from burning fossil fuels would accelerate the crashing of fish stocks, causing far worse impacts on the fishing industry. The impacts of wind energy have to be weighed in that context.

I have also visited the only 5 wind turbines in the U.S. off Block Island, where fishing boats abound, since the turbines have served as artificial reefs, creating fish habitat. I've seen the massive offshore windfarms of Europe. It is simply stunning that our great country has only five of these turbines in 2020. It is past time for the U.S. to join other developed nations with projects like Vineyard Wind, that can provide clean energy, local jobs, and that have far less impact on human and environmental health than fossil fuels. Vineyard Wind has been studied for many years. There has been extensive engagement with stakeholders of all kinds. The Coast Guard states that the one-mile spacing plan (D2) is safe for shipping and fishing, and deems additional transit lanes unnecessary. The additional transit lane would likely make Vineyard Wind financially unfeasible. Please give this project the green light with the D2 spacing plan.

It is also essential that environmental groups like The National Wildlife Federation, Mass Audubon, and others, continue to be part of the process, and to hold the project to responsible environmental practices to protect wildlife during construction and operation. And I ask that special attention be paid to training and hiring people from local communities of color and low-income communities to build and maintain Vineyard Wind as partial recompense for the disproportionate damage they have already suffered from polluting energy projects. Please place climate justice, environmental justice, and racial and economic justice at the center of your decision making and permit this project.

The Rev. Betsy J. Sowers  
48 Sandtrap Circle  
So. Weymouth, MA 02190  
earthjustice@oldcambridgebaptist.org





Over 100 Years of Education, Conservation & Advocacy

# Audubon Society of Rhode Island

July 9, 2020

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
Sterling, Virginia 20166

Re: Vineyard Wind COP Supplement to the Draft EIS

Dear Program Manager:

The Audubon Society of Rhode Island is a Rhode Island non-profit representing over 17,000 members and followers. We are not part of the National Audubon. Our mission is to protect birds, other wildlife and their habitat through conservation, education and advocacy for the benefit of people and all living things. Mitigating and preparing for climate change is the existential and urgent issue that drives all of our advocacy and programming.

We are writing in support of the Vineyard Wind 800 MW project and urge you to approve this project to provide clean, renewable and cost-effective electricity to 400,000 homes and businesses in aextensive public consultation and when approved, will drive the further development of critical renewable offshore wind projects.

Offshore wind is critical to reaching ambitious and necessary greenhouse gas reduction goals for Rhode Island and neighboring states. Stakeholders have worked hard to ensure that the project is well-sited with minimal impact on offshore wildlife and resources. The fishing industry is concerned about the overall development of offshore wind, but it is important for us all to recognize that the much bigger risk to the fishing industry is climate change itself. Warming ocean waters have already impacted the lobster fishery in Rhode Island and southern New England. The EIS acknowledges these impacts, stating that unabated climate change will have a large negative impact on many species including commercially viable fish, marine mammals and birds.

Vineyard Wind has addressed the environmental concerns raised by advocates during the development of this project. They negotiated with the National Wildlife Federation, Natural Resources Defense Council and the Conservation Law Foundation over protection of the highly endangered North Atlantic Right Whale and signed an agreement to protect these animals during construction and operation of the wind farm. This agreement can be a model for future wind farm developers to follow.

Climate change is the existential crisis of our time. Responsible development of offshore wind is critical to our rapid transition to renewable energy.

We don't have time to waste. We urge you to allow the Vineyard Wind project to move forward as soon as possible.

Sincerely,

A handwritten signature in cursive script that reads "Meg Kerr".

Meg Kerr  
Senior Director of Policy



College of Arts and Sciences  
Department of Politics

David Downie  
Chair, Department of Politics  
Former Director, Environmental Studies Program  
Fairfield University,

July 9, 2020

Program Manager  
Office of Renewable Energy, Bureau of Ocean Energy Management  
45600 Woodland Road, VAM-OREP  
Sterling, Virginia 20166

Dear Program Manager,

I write to support the Vineyard Wind 1 offshore wind development and urge you to grant its final permits to begin construction. It will create clean energy, much needed clean energy jobs, and an infrastructure to create more in the future.

I write in my personal capacity, as a citizen of CT. I do not represent, nor do my comments represent, Fairfield University or its Politics department. The use of our letterhead and inclusion of my professional affiliation are intended for reference only. However, to frame my remarks, I should note that I have conducted research on, written about, and taught environmental policy for 30 years. I am currently Chair of the Politics Department at Fairfield University, where I have previously served as Director of Environmental Studies. Prior to coming to Fairfield, I taught graduate courses in environmental politics and policy at Columbia University from 1994-2008, where I also held a number of positions at the Earth Institute and School of International and Public Affairs (SIPA), including Director of the Global Roundtable on Climate Change, Associate Director of the Graduate Program in Climate and Society, and Director of SIPA's Environmental Policy Studies program. I currently serve on the editorial boards of the *Journal for Environmental Studies and Sciences* and *Studies and Case Studies in the Environment*. My publications include two co-authored books, *Global Environmental Politics*, now in its 7th Edition, and *Climate Change: A Reference Handbook*; two co-edited volumes, *The Global Environment: Institutions, Law & Policy* (2<sup>nd</sup> edition) and *Northern Lights against POPs: Combating Toxic Threats in the Arctic*; and a variety of journal articles, book chapters, and reference articles.

Numerous scholarly, government, intergovernmental, and private industry studies have shown that off-shore wind energy is a proven, very cost-efficient technology that provides clean-energy, local and regional jobs, enhanced energy independence, excellent public relations,

preparation for future fossil-fuel and climate-change related regulations and public demands, and even enhanced insulation from potential climate change related lawsuits. Reducing fossil fuel use has also been shown to reduce public health costs associated with the impact of air pollution on asthma rates, lung-related ailments, and other issues. In addition, studies show that most of the arguments against off-shore wind have little or no basis in fact and that all potential, actual downsides of off-shore wind are both far less significant than their upsides and can be addressed relatively easily. There is literally no debate regarding these points among serious, peer reviewed, impartial scholars.

Off-shore wind is also a key energy technology of the present and the future - and one in which the USA is falling behind. The opportunity to utilize our excellent natural, clean-energy resources in the northeast USA should be a regional and national priority. Moreover, this project would represent a significant private sector investment in clean energy jobs in a region hard hit by the economic impact of the historic COVID-19 pandemic.

After more than ten years of exhaustive study and analysis, including the Supplemental Environmental Impact Statement, and extensive public consultation to determine where offshore wind could be built with the least possible impact on existing industries and the environment, I can see no reasonable public policy or environmental reason that the project should not be approved and implemented without further delay.

To quote project supporters: “Offshore wind has a unique opportunity at this moment in time to benefit the US economy and environment. The pipeline of offshore wind projects is estimated to deliver approximately \$100 billion in economic investment, more than 80,000 jobs, and provide enough electricity to power millions of homes. New England stands at the forefront of this new American energy industry with multiple large projects in development that will deliver thousands of megawatts of clean energy to the grid. These projects will deliver competitively priced energy to the Massachusetts and Connecticut ratepayers and also bring thousands of high-paying jobs, considerable economic investment, and demand for a deep, regional supply chain.”

Vineyard Wind 1 represents the first major offshore wind development in the United States – and again, the USA lags seriously behind our global competitors in deploying this critical clean-energy, job producing technology. A final permit approval will provide the needed certainty for future developments and capital investment along the East Coast.

Again, I agree with and quote the project developers: “Along with the 3,600 jobs anticipated for the project, Vineyard Wind will also provide New England the opportunity to develop the deep supply chain needed to service the full offshore wind industry along the Eastern seaboard. It also likely serves as our region’s strongest opportunity for large scale new energy to meet our growing population and demand for energy. However, in order to capture the maximum benefits of the supply chain opportunity, it is imperative that BOEM send the right signals to the market that the US is serious about moving forward with offshore wind and project permitting will be conducted fairly and within a reasonable timeframe. Without this certainty and predictability, it will be difficult to encourage the business community to invest in offshore wind to its full potential. Further delay or additional restrictions will not only harm this project

but also impede the forecasted growth of the other proposed project to come and increase energy costs for ratepayers.”

I support the Vineyard Wind 1 project. I respectfully ask that you approve Vineyard Wind 1 so that our region and country can realize the economic benefits of long-term, clean, job-producing, climate-realistic, competitively priced energy.

I know you are very busy and I thank you for reading this submission.

Very Vest regards,

A handwritten signature in cursive script, appearing to read "David Downie".

David Downie  
655 Warner Hill Rd  
Southport, CT 06890

Michael F. Sabitoni  
President

RHODE ISLAND

Scott Duhamel  
Secretary/Treasurer



BUILDING TRADES

July 15, 2020

Walter Cruickshank, Ph.D., Acting Director  
Bureau of Ocean Energy Management  
1849 C Street, NW  
Washington, D.C. 20240

Dear Acting Director Cruickshank:

We are writing you today to thank your agency for its work in releasing the draft Supplemental Environmental Impact Statement for Vineyard Wind. This report is a crucial step for this industry to go from plans on paper to steel in the water.

As a group representing over 10,000 skilled tradesmen and women, we are excited about the enormous economic potential that the offshore wind industry brings to our region and our members. It is not often that we get to witness the birth of an entirely new, billion-dollar industry in our country, but that is exactly what we are seeing with offshore wind. Indeed, 300 union members from the Rhode Island Building and Construction Trades Council constructed the country's first windfarm off the coast of Block Island.

While this may be a new industry for the U.S., offshore wind is a proven industry across the Atlantic. With thousands of offshore turbines installed across Europe, this industry has created thousands of jobs, revitalized port communities, created a supply chain and invested billions of dollars into local economies. The U.S. east coast offers some of the most promising conditions in the world for offshore wind. There is no doubt that we can replicate the industry's success right here at home.

A study by the Special Initiative for Offshore Wind estimates that the nearly 20 GW of offshore wind procurements expected through 2030 will require close to \$70 billion in capital investment. The jobs and economic opportunities are already starting to trickle in – with port investments, vessel construction and factory announcements – even as this industry remains in its infancy. As we begin recovering from the unprecedented social and economic impacts of the Covid-19 pandemic, the offshore wind industry will not only create family-sustaining jobs in America, but it will also substantially mitigate the effects of climate change.

We appreciate BOEM's effort to move forward and the care your agency has taken to ensure this industry can be a success for all. We look forward to seeing this industry's promises come to fruition and hope we can be a trusted source of information as BOEM ushers in the American offshore wind era.

Sincerely,

MICHAEL F. SABITONI  
President

**Rhode Island Building and Construction Trades Council**

410 South Main Street, Providence, RI 02903  
(401) 331-9682 Fax: (401) 861-1480

PUBLIC



Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Lisa Wolf,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0188

**Tracking Number:** 1k4-9htt-pteq

### Document Information

**Date Posted:**

Jul 15, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Lisa Wolf

### Comment

Letter in Support of Vineyard Wind

As a commissioner of the Marblehead Municipal Light Department, I submit this letter in support of the proposed Vineyard Wind project and urge BOEM to approve the Vineyard Wind project without delay.

Marblehead Municipal Light Department (MMLD) is responsible for supplying electricity to our town. Currently 37% of our power supply is non-emitting, including 12% renewable energy and 25% nuclear energy. In order to meet the requirements of the Global Warming Solutions Act (GWSA), the power sector in Massachusetts must move continuously towards an overall decarbonization. Specifically, it is anticipated that climate legislation will be passed this legislative session requiring municipal light plants such as ours to increase carbon-free energy to 50% by 2030 and 100% by 2050. Marblehead, along with many other towns in the Boston area, is actively pursuing zero carbon emissions goals by 2040, and climate bills with strong support at both State and federal levels may soon be passed requiring electric power become carbon-free by 2035.

Our options for sources of non-emitting energy are constrained. Like most communities in eastern Massachusetts, Marblehead is too constrained by our population density to have the land area for either land-based wind or solar at utility scale. With limited local distributed energy sources, MMLD purchases a majority of our power through MMWEC, Mass Municipal Wholesale Electric Corp. MMWEC, in turn, currently offers very limited wind options to its members. Thus the offshore wind project of Vineyard Wind holds a very important potential for MMLD and Massachusetts, and the best solution to meeting the demand for renewable energy.

The proposed Project has been thoroughly vetted. It has been contracted to deliver power to the New England energy grid to contribute to Massachusetts' renewable energy requirements particularly, the Commonwealth's mandate that distribution companies jointly and competitively solicit proposals for offshore wind

**PUBLIC**

energy generation. In addition to providing much needed, clean energy to our power portfolio, the development of offshore wind will stabilize electric prices over the long term. The Project is also poised to kickstart a new offshore wind industry that promises industrial growth along with new manufacturing and blue-collar employment across the United States.

For these reasons, on behalf of MMLD, I urge BOEM to approve this project without delay.

Sincerely,  
Lisa Wolf, MMLD Commissioner  
66 Pitman Rd,  
Marblehead, MA





Testimony on the supplement to the draft environmental impact statement for Vineyard Wind  
BOEM-2020-0005-0001

July 17, 2020

Thank you to BOEM for the opportunity to offer our testimony on behalf of Environment Massachusetts and Environment America. Environment Massachusetts works to protect clean air, clean water, and open space in the Bay State, together with our tens of thousands of citizen members and supporters. Environment Massachusetts is part of Environment America, a network of organizations that advocate for offshore wind energy and other policies to protect our environment across the country.

We support the use of our offshore wind resources to provide limitless, pollution-free energy for Massachusetts and other East Coast states.

In Massachusetts, offshore wind is the largest renewable energy resource we have. In 2018, Environment Massachusetts Research & Policy Center released a report, *Wind Power to Spare: The Enormous Energy Potential of Atlantic Offshore Wind*, documenting the potential for offshore wind energy along the Atlantic coast. Our report found that Massachusetts has the highest offshore wind potential of any state in the nation. Massachusetts' technical potential for offshore wind is equivalent to more than 19 times the state's annual electricity consumption. Even if our heating and transportation are converted to electric power – a trend that is already underway, and a necessary step toward decarbonizing our economy and preventing the worst impacts of global warming – offshore wind will still be sufficient to power Massachusetts eight times over.

Massachusetts' offshore wind resources, along with our potential for other forms of renewable energy like solar, give us confidence that a future powered by 100 percent clean, renewable energy is feasible. When we achieve 100 percent renewable energy, our air will be cleaner, our communities will be healthier, and we'll be doing our part to avoid devastating climate change.

In Massachusetts, public support for clean energy is strong, and state and local officials are responding to this support with ambitious commitments. In 2016, state officials passed a law committing to 1,600 megawatts of offshore wind energy within 10 years. Two years later, legislators opened the door to doubling that commitment to 3,200 megawatts, and Governor Baker promised he would do so.

As the SEIS says, Vineyard Wind and other proposed offshore wind projects will help Massachusetts and other East Coast states to reduce their reliance on polluting fossil fuels.

Once completed, the Vineyard Wind project will produce approximately 6 percent of the electricity consumed in Massachusetts while avoiding 1.6 million tons of carbon dioxide annually, the equivalent of taking 325,000 cars off the road. The project will also result in a significant reduction in other pollutants, like nitrogen oxides and sulfur dioxide, that harm public health.

There has been an extensive process to gather input on the Vineyard Wind project from key stakeholders, beginning with the selection of lease area sites and continuing through multiple stages of the project's design. Vineyard Wind has responded to this input by making significant adjustments in the project plans.

Vineyard Wind has shown a commitment to building a cooperative relationship with the project's host communities. Vineyard Wind is partnering with Vineyard Power, an energy cooperative, to ensure that residents of Martha's Vineyard experience the economic benefits of offshore wind. The company has also committed to significant investments in renewable energy and resiliency in communities throughout Southeastern Massachusetts.

The SEIS reinforces our view that Vineyard Wind can be built in a way that protects wildlife and our natural resources. Vineyard Wind represents the launching point for the American offshore wind industry. Please advance this project as quickly as possible, so that all of us can breathe cleaner air and live in a safer climate.

Thank you for your consideration. Please feel free to contact us with any questions.



Ben Hellerstein  
State Director  
Environment Massachusetts



Bronte Payne  
Campaign Director  
Environment America

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Eileen Mathieu,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0210

**Tracking Number:** 1k4-9hvv-2zri

### Document Information

**Date Posted:**

Jul 19, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Eileen Mathieu

### Comment

Re: DOCKET # BOEM-2020-0005

July 3, 2020

My name is Eileen Haley Mathieu, 44 Longview Drive, Marblehead MA.

I am Chair of Clean Energy and Public Policy Group of Sustainable Marblehead, and a member of the Selectmen appointed Green Marblehead Committee, also a member of Massachusetts Climate Action Network, Mass Audubon, an avid birder, and a lifelong sailor.

My 3 reasons for being in favor of Vineyard Wind:

1) We need more renewable energy for Massachusetts! See below for more detail.

2) Vineyard Wind project has been very thoroughly vetted and is supported by major environmental groups such as Mass Audubon, Conservation Law Foundation and Natural Resources Defense Council. There has been careful pre-construction evaluation of the current marine environment in the area. Vineyard Wind has committed to evaluation and assessments during construction, and after installation of the wind turbines. Thus impacts will be closely monitored.

3) With Climate Change bearing down on us rapidly, New England expected to see higher and more rapid temperature rises, more extreme precipitation events than the rest of the country, stronger hurricanes, more extreme wind events, and sea-level rise. Therefore, obtaining electricity from a carbon free source such as wind power, which reduces carbon emissions, and thus reduces the pace of climate change, is terribly important.

Regarding #1: the need for renewable energy in Massachusetts: In Marblehead, our Municipal Light Department, which supplies our electricity, is eager to be able to purchase reasonably priced electricity from renewable sources. Local resources are so constrained that we

PUBLIC

only have 12% Renewable Energy in our portfolio, as well as 26% nuclear. We purchase our power through PSA and PPA's through MMWEC, Mass Municipal Wholesale Electric Corp. MMWEC needs wind options to provide its 22 Muni Light Plant members and currently it has only one small, land-based wind power source, Hancock Wind, which is built out as much as the location and land area allow, so we are all eagerly awaiting Vineyard Wind as an additional option. Sustainable Marblehead has taken the lead to pass a Warrant Article at Town Meeting in 2018, committing the Town to 100% carbon free energy

Many other towns in the Boston area including Natick, Arlington, Melrose, Concord, Wellesley, Belmont are all actively pursuing zero carbon emissions goals by 2040. This goal is more aggressive than Governor Baker's 2050 goal for Massachusetts. To reach these goals, all these communities will need more renewable energy sources in their portfolio.

Therefore, we need more sources of renewable energy, and most of the communities in eastern Massachusetts are too densely populated to have the land area, for either land based wind-power, or solar at utility scale. Thus the offshore wind project of Vineyard Wind holds a very important potential for Massachusetts.

In summary, I would urge that you adopt Proposed Action Alternative D1, for 3 reasons:

- 1) Surveying work that was done, to engineer turbine anchors for each unique location, resulted in some WTG not being in strict East West configuration, but all will have 1 nautical mile (NM) spacing.
- 2) The US Coast Guard has reviewed these alternatives, and has endorsed the 1x1 NM layout of Alternative D1, without need for additional transit lanes or strict East West layout.
- 3) Other alternatives such as E and F, would result in reducing the generating potential of Vineyard Wind, below what is needed and what would be financially feasible.

I feel that approving this project, without delay, is very important. This is not a new technology; it is used extensively in Europe. Most notably, one of the partners for Vineyard Wind is the developer from Denmark who has created the large North Sea installation.

I urge your approval. We, citizens of Massachusetts, need Electricity sourced from Offshore Wind urgently.

Eileen Haley Mathieu  
44 Longview Drive  
Marblehead, MA 01945



July 20, 2020

Mr. James Bennett, Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road (VAM-OREP)  
Sterling, VA 20166

*RE: Vineyard Wind 1 COP Supplement to the Draft EIS*

Dear Mr. Bennett,

Thank you for the on-time release of the Vineyard Wind Supplement to the Draft Environmental Impact Statement (SEIS). I am the Executive Director of the Barnstable Clean Water Coalition a 501 (c)(3) nonprofit coalition based in the village of Osterville. The BCWC uses science to educate, monitor, mitigate, and advocate for clean water throughout the town of Barnstable.

I have followed the offshore wind debate for more than two decades since the Cape Wind proposal, and I applaud BOEM's lengthy stakeholder process to appropriately site offshore wind energy on the outer continental shelf. The wind lease areas sited on the outer continental shelf ensure a minimal impact to residents and mariners while maximizing the potential for new large-scale renewable energy. Renewable energy is vital to reduce carbon emissions, reduce reliance on fossil fuel power generation, and slow the effects of climate change to which Cape Cod is particularly vulnerable.

Vineyard Wind is working to develop offshore wind responsibly to minimize impacts to marine life, benthic habitat, and residents in the town of Barnstable. At every turn, Vineyard Wind has demonstrated willingness to listen and modify their project to address reasonable stakeholder concerns. This perspective has led to a host community agreement with the Town of Barnstable, adjusting turbine spacing to accommodate transit and commercial fishing activities (a significant compromise resulting in a reduction of total generation capacity by roughly 13,000 megawatts total in the region), adjusting cable landfall locations, proposed use of Automatic Detection Lighting Systems to reduce visual impacts, mitigation funds for fishermen, and innovations to improve real-time marine mammal monitoring technology. I am particularly impressed with the company's collaboration in Barnstable to install municipal wastewater infrastructure consecutively with its onshore cables.

Post Office Box 215 • Osterville, MA 02655-0215 • (508) 420-0780 • [BCleanWater.org](http://BCleanWater.org)

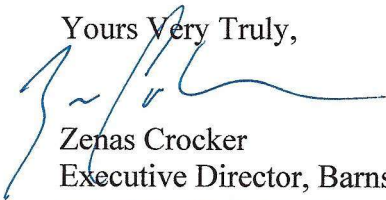
PUBLIC

Beyond mitigating impacts and of most importance to BCWC's mission, Vineyard Wind and the Town of Barnstable are working cooperatively to co-locate critically important municipal wastewater infrastructure concurrently with Vineyard Wind's installation of transmission cables in Barnstable roadways. While this wastewater infrastructure is part of the town's Master Plan for wastewater expansion, the Vineyard Wind's plans allow the town to speed up the installation timeline while saving millions in road construction costs. Long-term, this wastewater infrastructure will help address issues with nitrogen-loading in the region's lakes, rivers, and bays, a problem that causes health, safety, and environmental issues. Tackling this major water quality issue on Cape Cod is vital to maintaining our health and economy and Vineyard Wind has proven to be a strong partner and ally in assisting with local solutions, demonstrating how public-private partnerships can ultimately benefit entire communities.

While the SEIS shows there will be some impact associated with the project, these are overwhelmingly negligible to moderate. I was pleased to see the SEIS acknowledges the existing impacts of climate change on marine life and habitat as well as acknowledging the beneficial economic impacts of this project. As outlined in the SEIS, almost every resource examined is currently subject to pressure from climate change, including coastal habitats (3-6), benthic resources (3-11), finfish, invertebrates and essential fish habitat, marine mammals (3-37) and sea turtles (3-44). The SEIS notes that climate change, if not addressed, would result in ocean acidification, ocean warming, and sea level rise, and other effects that are likely to contribute or lead to "permanent changes of unknown intensity" (3-2) to terrestrial and coastal fauna, "the decline of benthic resources with calcareous shells" (3-14), "noticeable temporary and permanent adverse impacts" on finfish and invertebrate communities (3-30), "long term, possibly high consequence risks to marine mammals (3-38), and "long-term, high intensity risk to sea turtles" (3-49). Launching the US offshore wind industry is a significant and necessary step towards combating its adverse effects and preserving natural resources for future generations.

Offshore wind energy is well-established in Europe and the Vineyard Wind 1 project has been extensively reviewed. While I support efforts to responsibly permit offshore wind energy from the first, it is time to move forward with large-scale offshore wind projects without delay, starting with Vineyard Wind 1. I urge BOEM to approve on Vineyard Wind 1 without delay.

Yours Very Truly,



Zenas Crocker  
Executive Director, Barnstable Clean Water Coalition  
[zcrocker@bcleanwater.org](mailto:zcrocker@bcleanwater.org)

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from John Tzimirangas,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

**ID:** BOEM-2020-0005-0215

**Tracking Number:** 1k4-9hwz-x3wn

### Document Information

**Date Posted:**

Jul 20, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

John Tzimirangas

### Comment

"Our utilities are closely connected to our customers and we know that they want climate-friendly energy at a competitive price. Offshore wind offers our region a unique opportunity to meaningfully expand renewable energy without breaking the backs of ratepayers", said John G. Tzimirangas, President and CEO of Energy New England.

## **BOEM Virtual Hearing, Supplement to the Vineyard Wind Draft Environmental Impact Statement**

---

Prepared remarks of John Rogers, Union of Concerned Scientists

July 2, 2020

Thank you very much for the chance to speak this evening. My name is John Rogers, and I am a senior energy analyst at the Union of Concerned Scientists. UCS “puts rigorous, independent science to work to solve our planet’s most-pressing problems.” That includes our work in the power sector, and that’s why we appreciate BOEM’s efforts and thoroughness, and the opportunity to comment tonight on the Supplemental EIS.

What brings me here is not a single project, but the chance to comment based on the broad scope of the SEIS, and all the projects that it encompasses. As I expect you fully realize, offshore wind offers exciting prospects:

- It can offer large amounts of pollution-free generation, which many states, including along the Eastern seaboard, are demanding. That matters for reducing air pollution from fossil fuel power plants that affects, in particular, the often-marginalized communities that abut those plants. And it matters for reducing climate change’s harmful impacts—including on the marine environment and all that depends on it.<sup>1</sup>
- Offshore wind generates at times that make it an excellent complement to other renewable energy resources, including because of its strength in winter.
- Offshore wind can offer savings to electricity customers, thanks to the strong cost reductions that the industry has achieved, which are themselves thanks in part to the strong state policies that have prompted larger projects and offered economies of scale.

---

<sup>1</sup> In this regard, this SEIS’s conclusion regarding air pollution (p. A-43) is notable:

*The proposed Project and other future offshore wind projects will in fact probably lead to reduced emissions from fossil fuel power-generating facilities and benefit air quality. Under the No Action Alternative, additional, more polluting, fossil fuel energy facilities would come or be kept on-line to meet future power demand, fired by natural gas, oil, or coal.*

Also noteworthy is the text immediately following, in which BOEM suggests that the fossil impacts from not having built the first large-scale offshore wind project in US waters “would be mitigated partially by other future offshore wind projects surrounding the proposed Project area” (p. A-44). Yet it challenging to envision subsequent offshore wind projects succeeding in the near term if a first project failed to proceed not because of its merits but because of the lack of such a smooth, science-based process—hence the importance of this proceeding (as noted below).



- And offshore wind can offer economic development and jobs, with the creation of an entirely new industry, with all the project study, development, installation, maintenance, manufacturing, finance, and more that the industry entails. That job creation potential seems particularly important with high unemployment and an economy in need of rebuilding.

All of those benefits depend on having a smooth, science-based regulatory process, for good decision making. So it's very encouraging to have the BOEM SEIS out for comment. And especially encouraging to see that the SEIS found relatively low impacts even with its consideration of a substantial collection of offshore wind projects, far beyond the one project that has been the focus of this BOEM process.

One area of consideration deserves particular attention and comment: The spacing and layout of the turbines. When the five New England leaseholders proposed to adopt a uniform 1x1 turbine layout, the same east-west/north-south orientation, that was a solid response to many of the concerns expressed about the prior plans and navigation through the projects. And in its recent MARIPARS study, the US Coast Guard confirmed the appropriateness of that spacing.

But spacing the turbines so much farther apart also appreciably reduces the number of turbines and generation possible in the lease areas; Vineyard Wind estimated a 13,000-megawatt reduction for the New England lease areas, with a 30% reduction in potential clean energy.

So we voice our strong opposition to the SEIS's Alternative F, which would require additional transit lanes beyond the hundreds provided by the 1x1 fixed orientation layout. Alternative F would lead to a lot more lost potential. Fewer megawatts and less generation would mean more air pollution impacts from the fossil fuel generation that those turbines could have displaced, less savings on electricity bills, fewer opportunities for economic development and jobs, and a heightened impact on marine wildlife from the worsening impacts of climate change.

None of those should be acceptable outcomes, and we ask you to reject Alternative F in particular.

In my almost three decades of working in the power sector, I have never seen an opportunity like we're seeing now with offshore wind. The lengthy process to date, and now a strongly supportive SEIS, provide a strong basis for moving forward, with appropriate attention to mitigation. What comes of this process isn't about just one project; it's about every project in the queue behind it, and about fidelity to science, and facts, and good decision making.

After years of consideration of offshore wind in these parts, it's time for us to act, and to begin to realize the tremendous benefits of offshore wind. So thank you for all you have done, and for all that is yet to come.

**The Bureau of Ocean Energy Management (BOEM)**

Our ref. JDN20.03.470/WOV/dnje - USVICA

23 July 2020

Dear Sirs,

**Subject: Vineyard Wind Offshore Wind Project (Massachusetts Lease Area OCS-A 0501).**

---

Jan De Nul Group has been closely following developments on the Vineyard Wind supplement to the draft Environmental Impact Statement issued in June 2020. The purpose of this note is to encourage BOEM, to finalize permitting of the Vineyard Wind Offshore Wind project as soon as possible.

As a financially strong Tier 1 global marine contractor, undertaking offshore construction for over 70 years, Jan De Nul Group has witnessed at first hand the development of the European offshore wind market and has been involved in foundation, cabling, turbine and scour installation scopes on many offshore wind farms all across Europe. Jan De Nul Group has also been fundamental in the first significant offshore wind project in Asia, outside China, where we are currently undertaking the build of three complete offshore wind farms in Taiwan.

Jan De Nul Group is also immensely proud of our latest achievement, and our first very important step in the US, the construction of the Virginia demonstrator in June 2020. This project had a number of notable firsts, including the first offshore wind turbine construction in Federal waters, and the first monopiles foundations, installed using noise mitigation to reduce construction noise on local marine mammals and other marine life. On this last point, BOEM were present on site at the Virginia demonstrator to measure the effectiveness of the noise mitigation technology during the installation of the foundations and wind turbines with our jack-up vessel Vole-au-Vent.

To construct the latest generation of offshore wind components, requires very large installation vessels capable of working anywhere in the world. Within its existing fleet, Jan De Nul group has with its Cable Lay Vessel Isaac Newton the largest cable installation vessel in the market. From 2022, we will add to our fleet the market's largest jack-up vessel Voltaire, capable of installing the next generation of turbines, as well as a large floating crane vessel named Les Alizés, capable of installing all forecasted foundations as well as offshore substations.

To supplement our large construction vessels, all the support vessels and services are sourced locally providing many opportunities to the local supply chain.

**PUBLIC**

To have confidence to further invest in these large and expensive installation vessels, that the US will require to construct its impressive @30GW offshore wind pipeline in the US North East, needs government, market and customer certainty. Such certainty and predictability will also trigger the necessary investment and development within the local supply chain to be able to deliver up to the high standards required for safe and efficient offshore wind farm construction.

In Europe, offshore wind farms are carefully developed and constructed with respect to nature and concentration. Many of the offshore wind areas of seabed that have been built out over the years have provided benefits to marine life.

The longer the US delays, the more challenging it will become to secure construction equipment that is in demand. This delay could reduce the contribution offshore wind will make to future individual state renewable energy targets as well as economic recovery and infrastructure investment.

As a company that has offshore wind and marine construction in our DNA, and has witnessed the rapid growth in European offshore wind, Jan De Nul Group urges BOEM to seize the moment, and set the Vineyard offshore wind project on the road to construction. This historic step will unlock the benefits for electricity consumers, local businesses, supply chain companies, new and exciting jobs and skills development, and kick start the wider 30GW US offshore wind pipeline with an estimate USD50bn investment waiting.

Jan De Nul remains very excited about US offshore wind market and the opportunity to support the US in taking action on climate change.

In the meantime, if Jan De Nul Group can provide any further information, then please do not hesitate to get in contact.

Yours faithfully,

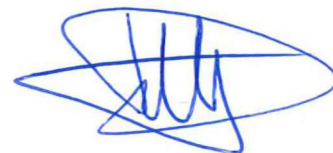
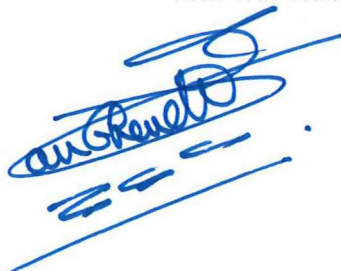
JAN DE NUL LUXEMBOURG SA

Director

Niels VAN GHENDT

Director

David LUTTY



Program Manager  
Office of Renewable Energy, Bureau of Ocean Energy Management  
45600 Woodland Road, VAM-OREP  
Sterling, VA 20166

Re: Vineyard Wind 1 COP Supplement to the Draft EIS

To Whom It May Concern:

I write today on behalf of Greentown Labs in support of Vineyard Wind 1 COP Supplemental to the Draft EIS (BOEM 2020-0005) which was published in the Federal Register on June 12, 2020.

Greentown Labs is a community of climatetech and cleantech pioneers working to design a more sustainable world. As the largest climatetech startup incubator in North America, Greentown Labs brings together startups, corporates, investors, politicians, and many others with a focus on scaling climate solutions. Greentown Labs' 100,000-square-foot campus in Somerville, MA is home to more than 100 startups and has supported more than 280 startups since the incubator's founding in 2011. Just last month, we announced our second location in Houston, TX – the energy capital of the world – launching in Spring 2021.

Greentown has long been a supporter of the offshore wind industry and the Vineyard Wind 1 project. Earlier this year, we partnered with Vineyard Wind to launch the Offshore Wind Challenge, a six-month accelerator program supporting innovations in responsible development of offshore wind energy. The Offshore Wind Challenge is focused on advances in marine mammal monitoring, specifically for data collection and real-time transmission or data analysis. I write today to offer our strong support for Vineyard Wind 1.

As the first commercial-scale offshore wind project in the US, Vineyard Wind 1 will play a critical role in establishing a domestic offshore wind industry and realizing the tremendous potential economic benefits of this rapidly emerging industry. Locally, Vineyard Wind 1 is expected to create 3,600 jobs as the offshore wind industry is built out over the next few years. The project will provide clean, renewable, and cost-effective electricity to 400,000 homes and business in Massachusetts and save ratepayers more than \$1.4 billion in energy-related cost savings over the life of the project.

Offshore wind is a high capacity, domestic renewable energy resource that will improve energy security and reliability. The rapid deployment of offshore wind is essential to achieve state and regional greenhouse gas emission reduction targets and limit the worst impacts of climate change. Vineyard Wind 1 alone will avoid the emission of almost 1.7 million tons of carbon dioxide per year, the equivalent of removing 325,000 cars of the road.

In order to realize the many benefits – both economic and environmental - of Vineyard Wind 1 and future projects, the industry needs certainty that offshore wind can and will be permitted in the US. Without this certainty, the US will lose out on significant investment and economic benefits. According to the American Wind Energy Association (AWEA), the offshore wind industry will invest roughly \$57 billion in the US by 2030 if states continue to meet their procurement goal, and will create more than 80,000 jobs in the next ten years, with economic output reaching upwards of \$25 billion per year by 2030. The business sector needs confidence that demand in the US offshore wind market is real. This means that projects in the permitting and development timeline must be permitted in a timely and reasonable manner. This starts with Vineyard Wind 1. If we launch this industry now, the potential for additional jobs multiplies exponentially, with the potential for hundreds of thousands of jobs in different parts of the country.

We recognize and appreciate your role in understanding and balancing the varying needs of the offshore wind industry, commercial fishing, maritime navigation, and other uses. Late last year, after hearing from many stakeholders, the developers of the New England Wind Energy Areas (NE WEA) collaborated to propose a uniform, 1 x 1 nautical miles spacing between turbines, a layout that was recently endorsed by the United States Coast Guard (USCG). Despite this fact, the fishing industry has proposed additional transit lanes of at least 4 NMs (reflected in Alternative F of the SDEIS), a move that would severely constrain clean energy production and not meaningfully improve navigation or safety. Alternative “F” slashes the generation capacity of the project and puts the entire region at risk of not meeting energy demand even as many of New England’s fossil fuel and nuclear power plants are retiring. For these reasons, we oppose the additional transit lanes outlined in Alternate F. Implementation of those additional transit lanes will only further constrain the economic and environmental benefits of the industry.

This project is the culmination of more than ten years of exhaustive study and analysis, and extensive public consultation, to determine where offshore wind could be built with the least possible impact on existing industries and the environment. To grow a stable and prosperous offshore wind industry and homegrown workforce, we need regulatory predictability and a clear pathway forward. Further delay of Vineyard Wind 1 is not an option.

Sincerely,



Emily Reichert, Ph.D.  
Chief Executive Officer  
Greentown Labs



To the Bureau of Ocean Energy Management:

Green Energy Consumers Alliance is a Providence- and Boston-based nonprofit that advocates for consumers and the environment. We are dedicated to speeding the transition to a low-carbon energy system in New England. We help our members make sustainable energy choices, and we advocate for strong environmental policy in Massachusetts and Rhode Island.

Green Energy Consumers affirms that the Supplement to the Draft EIS demonstrates copious environmental, economic, societal, and energy benefits from the proposed Vineyard Wind Project. We urge the Bureau of Ocean Energy management to fully permit the project at the earliest possible opportunity so that these benefits can begin flowing to New England ratepayers, the regional economy, and the environment.

Developing offshore wind in New England over the next five years is essential to achieving the climate goals of Massachusetts, Rhode Island, and other states, as well as meeting the Paris Agreement, to which several Governors have committed through Executive Order. The inexpensive, reliable renewable energy that offshore wind can provide will be our lifeline as we transition to a low carbon future. That transition can't wait, and every additional delay in the development of Vineyard Wind, the first large scale offshore wind project in the region, is one more significant barrier to meeting our greenhouse gas emissions reductions goals.

Significant alterations to the project, such as the incorporation of wide vessel transit lanes, would reduce the project size, hindering both the economics of the project and the region's ability to use this clean energy to meet decarbonization targets. Alternative D1 provides the best compromise between natural resource conservation concerns, fishing concerns, economies of scale, and our climate and energy needs. This alternative has been supported by the Coast Guard and the developer.

We hope to see Vineyard Wind's excellent clean energy jobs and cheap wind energy coming to our region as soon as possible. The Draft Environmental Impact Statement provides yet another piece of evidence that this project, and particularly Alternative D1, should move forward.

Sincerely,

Kai Salem  
Policy Coordinator  
Green Energy Consumers Alliance  
kai@greenenergyconsumers.org

[greenenergyconsumers.org](https://greenenergyconsumers.org)

**Boston:** 284 Amory Street, Boston, MA 02130 | Phone: 800-287-3950  
**Providence:** 2 Regency Plaza, Suite 8, Providence, RI 02903 | Phone: 401-861-6111

PUBLIC



July 23, 2020

Program Manager, Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
Sterling, Virginia 20166

Re: Supplemental Environmental Impact Statement: Vineyard Wind 1 Project

Dear Program Manager,

Thank you for the opportunity to provide comment on the Supplemental Environmental Impact Statement (SEIS) of the Vineyard Wind 1 project. We submit this letter in support of the proposed Vineyard Wind project and urge the Bureau of Ocean Energy Management (BOEM) to approve this project without delay.

We commend the BOEM on the comprehensive and thorough analysis contained in the SEIS. The SEIS confirms our strong belief that offshore wind energy can be developed in a manner consistent with and protects wildlife, sensitive habitat, and maritime uses such as commercial fishing and marine navigation.

The Cape Cod Climate Change Collaborative is a coalition of hundreds of businesses, institutions, organizations and citizens of Cape Cod and the Islands of Nantucket and Martha's Vineyard, Massachusetts (Cape & Islands). Our mission is to unite knowledge, resources, talent and tools to mitigate climate change impacts, reduce greenhouse gas emissions, and work toward achieving net zero-based goals on the Cape & Islands. The need to address the climate crisis, both worldwide and particularly here on the Cape Cod & Islands has become increasingly urgent.

We note the statement in the SEIS that "The proposed Project and other future offshore wind projects will in fact probably lead to reduced emissions from fossil fuel power-generating facilities and benefit air quality." According to the SEIS, without offshore wind development, "additional, more polluting, fossil fuel energy facilities would come or be kept on-line to meet future power demand, fired by natural gas, oil, or coal."

We support the continued development and growth of offshore wind. Offshore wind energy is critical for meeting the clean energy goals of the Cape & Islands region, New England and beyond. The untapped offshore wind resource along the U.S. Eastern Seaboard is one of the

most powerful in the world and within reach of densely populated areas where energy demands are high and new resource options are few. In our region, offshore wind holds the potential to provide over 50% of the potential clean energy resource for our region. The potential to create 83,000 jobs and deliver \$25 billion in annual economic input by 2030 are additional important benefits. While we understand that this resource must be built responsibly, to transition our grid to locally sourced clean energy, the need to move forward is urgent, and projects such as Vineyard Wind should advance as quickly as responsible development will allow.

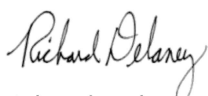
We have the following specific recommendations:

- We support the East-West One Nautical Mile Wind Turbine Spacing without transit lanes (Alternative D2). This Alternative would require that the wind turbine generators are oriented in an east-west direction and have a minimum spacing of 1 nautical mile between them. This could reduce conflicts with existing ocean uses, such as commercial fishing and marine navigation. We believe that this Alternative allows for continued co-existence between a new industry and existing marine users, such as the commercial fishing industry, while protecting the marine environment and setting a path forward. Requiring additional transit lanes, deemed unnecessary by the US Coast Guard would result in Project delay and damage to the offshore wind industry.
- We also support the Covell's Beach Landfall Alternative (Alternative B). This Alternative would limit the cable landfall to only Covell's Beach. We believe that doing this could reduce impacts on environmental and socioeconomic resources, particularly impacts on Lewis Bay.

Projects such as Vineyard Wind which are critical to the efforts to mitigate and prevent the impacts from climate change should advance as quickly as responsible development will allow. The SEIS clearly demonstrates that offshore wind energy can be developed in a manner that protects wildlife, sensitive habitat, and maritime uses such as commercial fishing and marine navigation. We believe the SEIS provides sufficient information supporting the development of the offshore wind industry, including the Vineyard Wind Project, and the much-needed clean renewable energy resource it will provide.

We urge BOEM to complete this review in a timely fashion, provide a pathway for this project to move forward recognizing the immense refinement and compromise, and avoid unnecessary measures that will further delay and jeopardize our ability to get clean energy into the grid.

Thank you,



Richard Delaney, President  
The Cape Cod Climate Change Collaborative



Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Craig Altemose,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-11656

**Tracking Number:** 1k4-9hyk-bobl

### Document Information

**Date Posted:**

Jul 23, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Craig Altemose

## Comment

Dear BOEM Public Servants:

I am testifying on behalf of 350 Massachusetts for a Better Future, a grassroots, member-led climate action network with chapters from the Berkshires to the Cape, from the North Shore to the South Coast. We are united around our concerns about the climate crisis and our determination to advance a just and livable future for all.

Today I want to share with you some science that has been under-reported and misrepresented in the media, namely the Intergovernmental Panel on Climate Change (IPCC)'s Special Report on 1.5 Degrees Celsius put out in 2018.(1) As you know, the IPCC is the largest body of scientists ever assembled in the history of humanity to study a single issue. Their membership was approved by every government on this planet. They do not conduct their own studies, but rather research and summarize the totality of peer-reviewed published scientific articles about the climate crisis to inform the work of policymakers around the world.

You are such policymakers, and we have seen in recent months the toll imposed on society when our policymakers ignore the science-based guidance of our technical experts. The United States has become the global epicenter of the Coronavirus, with some of our individual states having more new Coronavirus cases than the entirety of the European Union. We cannot afford to similarly ignore climate science, for the stakes are even higher.

The IPCC, while not charged with making policy recommendations, painted a very clear picture that we should not exceed a temperature rise of more than 1.5 degrees Celsius (or approximately 3 degrees Fahrenheit). And indeed, one does not need to be a climate scientist to get that we don't want things getting much worse, with the already deadly levels of wildfires, superstorms, droughts, floods, heatwaves,

**PUBLIC**

and locked-in levels of sea level rise. Both science and common sense point to a need to rapidly get our climate pollution levels down to zero.

It was widely reported in the media that the IPCC's recommended pathway to 1.5 degrees Celsius was that we needed to cut global pollution in half by 2030, and to get to net zero greenhouse gas emissions by 2050. However, this reporting leaves out an important detail: those emissions reductions targets are for a 50% chance of avoiding 1.5 degrees Celsius. And that 50% chance includes, as Greta Thunberg put it so eloquently, relying upon her generation "sucking hundreds of billions of tons of [our] CO2 out of the air with technologies that barely exist."<sup>(2)</sup> Even worse, these odds also largely ignore known scientific variables such as tipping points and most feedback loops. Meaning that in reality, the odds of this pathway are already less than a 50% chance.

Would you board a plane with only a 50% of landing safely? More to the point, would you put your children on a plane with only a 50% chance of landing safely? Of course not, that would be reckless.

Yet we are beginning to set such an outcome as the explicit global goal of climate policy, a goal that our Massachusetts Governor has embraced here in Massachusetts.

The IPCC did actually run another scenario, of what we would need to do to achieve a 2/3rds chance of avoiding seeing temperatures rise above 1.5 degrees Celsius. That would require the world to get to net zero greenhouse gas pollution by 2040. A mere 20 years to end all climate pollution on earth.

That is indeed a heavy charge - but don't our children, and their children, deserve better than 50-50 odds of a livable future?

You do not have the power to fully determine their fates, but you do have the power to push the needle powerfully in the right direction. Offshore wind is an essential technology for the United States to transition off of fossil fuels and on to renewable energy. An energy that, as you have heard, will clean our air and water, bring thousands of jobs and billions in economic activity, and help slow the sprint toward climate chaos.

We need to go all in on offshore wind. I implore you to act boldly, now, for all our sakes.

Thank you.

Craig S. Altemose, M.P.P., J.D.  
Senior Advisor, 350 Massachusetts  
Executive Director, Better Future Project

1. <https://www.ipcc.ch/sr15/>
2. <https://www.npr.org/2019/09/23/763452863/transcript-greta-thunbergs-speech-at-the-u-n-climate-action-summit>

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Hilary Fagan,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

To James Bennett, Chief, Office of Renewable Energy Programs  
BOEM,

Thank you for your work in assessing offshore wind development off the US coastline.

The US offshore wind sector represents a unique opportunity to create new jobs, generate clean energy and help states reach their renewable energy targets. With current unemployment rates elevated due to the COVID pandemic, offshore wind growth presents a critical opportunity for our country.

According to the American Wind Energy Association (AWEA), the offshore wind industry will invest roughly \$57 billion in the US by 2030 if states continue to meet their procurement goals. Communities in southern New England have tremendous potential to benefit from clean energy and economic development opportunities from offshore wind.

To maximize these opportunities, the business sector needs confidence that demand in the US offshore wind market is real, and it remains important that projects are permitted and developed in a timely and reasonable manner.

This is why I strongly support proceeding with the permitting process for Vineyard Wind and oppose Alternative F. There is a great opportunity for the US to generate clean energy, create jobs and address climate change challenges. Adding extra transit lane requirements and continued stays could put into question the viability of these projects.

Thank you for your good work and for your consideration.

Sincerely,  
Hilary Fagan

**ID:** BOEM-2020-0005-12242

**Tracking Number:** 1k4-9hzu-oovx

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Hilary Fagan

PUBLIC





July 27, 2020

James Bennett  
Program Manager, Bureau of Ocean Energy Management  
Office of Renewable Energy Programs  
45600 Woodland Road (VAM-OREP)  
Sterling, VA 20166

I write to you on behalf of Building Pathways Connecticut (BPCT) to comment on the Supplemental Environmental Impact Statement (SEIS) issued earlier this summer for the Vineyard Wind Offshore Wind Energy Project.

Building Pathways CT is a program focused on introducing women, people of color, and other underrepresented populations to the building trades. Building Pathways CT works to recruit and train people with little-to no experience in the trades. We offer a training program designed to prepare participants for construction work. BPCT is a strong supporter of the development of the offshore wind energy as a major new source of carbon-free electric power for Connecticut consumers, as well as jobs and economic development for Connecticut workers and their communities. We are very excited about the passion and prioritization from Vineyard Wind on developing a well-trained, diverse workforce in offshore wind.

This venture by Vineyard Wind will provide economic strength and technical expertise to ensure not only that the project is delivered on time and on budget, but that it will produce significant numbers of new high-quality union jobs and investment. It also represents an exciting opportunity to create expanded access to apprenticeships and careers in the construction trades for low-income and workers of color in the communities where the onshore operations of these projects will be based.

Vineyard Wind 1 alone will create 3,600 jobs for local residents, while making a significant contribution to the efforts to tackle climate change by avoiding the emission of almost 1.7 million tons of carbon dioxide per year, the equivalent of removing 325,000 cars of the road. These benefits will be multiplied by each project that is built out over the next few years.

Vineyard Wind has indicated a strong commitment to workforce development initiatives aimed at educating, training, and certifying local residents and students with diverse socioeconomic and professional backgrounds for careers in the offshore wind sector. Vineyard Wind has made outreach to organized labor a priority and pledged to sign the nation's first offshore wind Project Labor Agreement (PLA) for Vineyard Wind 1 to ensure both fair compensation and the highest construction standards for the project. Doing so sets precedent for the industry that offshore wind projects will be constructed by the building trades unions, ensuring fair wages and consistent work for local tradesmen and women as the industry is built out. Vineyard Wind

PUBLIC

has also issued a letter of intent to support our Building Pathways CT program, proving once again their understanding of the need to invest in and train workers who have traditionally been underrepresented in the building trades, including women and workers of color.

Offshore wind power development represents a generational opportunity for the hardworking men and women in the building trades, and will result in thousands of new, local good-paying jobs with good benefits. In fact, a recent study by the American Wind Energy Association (AWEA) found that the offshore wind industry will create more than 80,000 jobs in the next ten years, with economic output reaching upwards of \$25 billion per year by 2030. Vineyard Wind's commitment to Building Pathways and its union-led, union-directed apprenticeship readiness program for construction/energy/infrastructure trades will help the Building Trades grow the next generation of apprentices to support the existing journeypersons who will work and build offshore wind in Connecticut.

Building Pathways CT strongly supports Vineyard Wind's commitment to local communities and their ability to provide good paying union careers in offshore wind power, construction, infrastructure, and energy.

Sincerely,

A handwritten signature in blue ink that reads "K. Mamed". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Katherine Mamed  
Executive Director  
Building Pathways CT

## **Sustainability, Energy, and Resiliency Committee (SERC)**

**City of Salem, MA 01970**

TO: Bureau of Ocean Energy Management (BOEM)

FR: John Hayes, Ph.D., Chair of Sustainability, Energy, and Resiliency Committee, city of Salem, MA

RE: Public Comment in support of Vineyard Wind project - as part of SEIS environmental review process

DT: 25 July 2020

I am writing on behalf of the city of Salem's Sustainability, Energy, and Resiliency Committee. We met virtually last week and discussed this offshore wind energy project and voted unanimously to strongly support the project and that I would submit public comments before the deadline of July 27, 2020.

The recent IPCC's 1.5° C Special Report sounded the alarm on the climate crisis that we face and the urgency of confronting this crisis. Our country must contribute to the global effort that is needed by decarbonizing our energy supply. The use of fossil fuels must be systematically phased out across all sectors of our economy and functioning society. We support the building of the Vineyard Wind offshore energy project. We strongly urge the BOEM to permit this project to go forward. The onshore region adjacent to the siting of Vineyard Wind is densely populated with high energy demands. The region also needs and would benefit from jobs in this green economy.

Our committee is impressed with the environmental safeguards outlined in the SEIS that would protect the endangered North Atlantic right whale during project construction and operation. We applaud the collaboration between key environmental NGO's like the National Wildlife Federation, the NRDC, and the Conservation Law Foundation to sign a landmark agreement to adopt measures that will avoid, minimize and mitigate underwater noise, ship strikes, and turbine collisions. These well-respected organizations developed this agreement based on marine ecology and the relevant science and technology that pertains to operating offshore wind in a marine environment.

PUBLIC

We strongly support this project for its economic benefits to the region. It is our understanding that approximately 3,600 jobs will be created for local residents and that Vineyard Wind 1 will save ratepayers more than \$1.4 B in energy-related costs over the 20-year contract with the Commonwealth of Massachusetts. This cost savings amounts to \$70M per year.

In terms of some particulars about the project - we support the 1x1 nautical mile turbine layout that was reached as a compromise proposed in response to commercial fisheries' concerns. We oppose adding additional transit lanes within wind farms because we have learned from a recent Coast Guard study that this has been deemed unnecessary.

We obviously support this offshore wind energy project for its important contribution to climate change mitigation - in terms of producing clean, renewable energy to the grid that does not emit greenhouse gases. We are a coastal community worried about sea level rise, coastal flooding, and storm surges. We wish to support our 'colleague' coastal communities in the Commonwealth that are also in support of this project for the same climate crisis worries!

We believe that this project needs to go forward to begin the United States production of clean energy from offshore wind. We are aware of other future wind projects in the short-term future. It is time for the U.S. to begin to be a leader in the production of offshore wind energy. We have lagged behind other countries of the world for far too long. There is no reason for any further delay. We urge the BOEM to approve the federal permit and the SEIS to allow this important energy project to go forward.

Sincerely,

Dr. John Hayes, Chair, city of Salem's Sustainability, Energy, and Resiliency Committee





**MONTCLAIR STATE**  
UNIVERSITY

**Clean Energy and Sustainability  
Analytics Center (CESAC)**

Office of the Director  
150 Clove Road, Suite 200B  
Office: 973-655-3978  
973-655-3137

Fax: 973-655-4072  
<https://www.montclair.edu/cesac>

July 27, 2020

Walter Cruickshank, Ph.D.  
Acting Director  
Bureau of Ocean Energy Management  
1849 C Street, NW  
Washington, D.C. 20240

RE: Vineyard Wind 1 Offshore Wind Energy Project Supplement to the Draft Environmental Impact Statement

Dear Acting Director Cruickshank,

We are writing you today to show our support for the offshore wind industry here in the U.S. and thank your agency for its work in releasing the draft Supplemental Environmental Impact Statement for Vineyard Wind. This report is a crucial step for this industry to go from plans on paper to steel in the water. We appreciate the opportunity to submit these comments on the draft statement, and we hope you find them helpful.

The Clean Energy and Sustainability Analytics Center at Montclair State University in New Jersey is a public research and technical assistance center whose mission is to identify, quantify and interpret the ramifications of clean energy development and to facilitate energy planning. The Center provides support for clean energy policies, technology, and practices through research and education programs. We develop and execute approaches for clean energy analysis, providing long-term environmental and economic solutions in order to build a sustainable energy economy. We are excited about the enormous economic potential the offshore wind industry brings to our region and country; this industry may very well change the dynamics of sustainable energy growth in many states, and we are eager to follow its growth.

While this may be a relatively new industry for the United States, offshore wind has a successful history across the Atlantic. With thousands of offshore turbines installed across Europe, this industry has created thousands of jobs, revitalized port communities, invigorated energy generation, and invested billions of dollars into local economies. The U.S. East Coast offers some of the most promising conditions in the world for offshore wind. As such, there is no doubt that we can replicate the industry's success right here at home and develop a high capacity, domestic renewable energy resource that will improve energy security and reliability.

PUBLIC

A study by the Special Initiative for Offshore Wind estimates that the nearly 20 GW of offshore wind procurements expected through 2030 will require close to \$70 billion in capital investment. Jobs and economic opportunities have already begun to trickle in – with port investments, vessel construction and factory announcements – even as this industry remains in its infancy. We are already seeing the growth of a domestic supply chain as developers and suppliers look to minimize their own costs and logistical risks. Such a chain provides an influx of new jobs with the creation of an entirely new industry, including those in project study, development, installation, maintenance, manufacturing, and finance, furthering benefits already appearing with investments in coastal communities and opportunities stemming from a brand-new economy. The economic potential seems particularly timely and important with high unemployment and an economy that needs rebuilding.

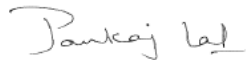
We offer the following recommendations pertaining to alternative adoption for the BOEM.

- BOEM should adopt Alternative D2, comprised of a uniform 1 nm x 1 nm grid layout of turbines across contiguous lease areas, as the preferred alternative. After extensive study and public input, the United States Coast Guard (USCG) recently endorsed this layout as superior from a navigational safety perspective. In the context of its recently released final report “The Areas Offshore of Massachusetts and Rhode Island Port Access Route Study” (MARIPARS), the USCG determined that the grid layout pattern “will result in the functional equivalent of numerous navigation corridors that can safely accommodate both transits through and fishing within the Wind Energy Area.”
- Alternative D2 strikes an appropriate balance by ensuring the cost-effective development of federal wind energy areas without compromising the safety of the recreational and commercial fishing and maritime communities. This alternative provides a best pathway for balancing natural resource conservation and fishing concerns, economies of scale, and our clean energy needs. By contrast, Alternative F would impose a significant burden on offshore wind development with no countervailing benefit from a navigational safety perspective.
- BOEM should reject Alternative F, comprised of a 4-mile wide dedicated transit corridor, either alone or in combination with D2. The uniform 1 x 1 nm layout, without any additional transit lanes, has been assessed by the USCG compared to proposals with transit lanes in its Massachusetts Rhode Island Port Access Route Study. The USCG declined to recommend further formal or informal vessel routing measures such as Alternative F.
- Alternative F is lacking in scientific merits as well as in factual basis. We urge BOEM to defer to the federal agency charged with ensuring safe navigation within federal waters. Alterations to the project, as the incorporation of wide vessel transit lanes as per Alternative F, would adversely impact the viability and the economics of the project, constrain clean energy production, and not meaningfully improve navigation or safety. Large transit lanes are unnecessary, and as the SDEIS itself suggests, will in fact pose

greater risk to navigation than the uniform grid layout as proposed in Alternative D2, as more traffic is likely to be funneled into the lanes. The additional spreading out of wind generation would also add substantially to technical challenges, delays, cost increases to consumers and developers alike, as well as more environmental impacts.

In sum, offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the eastern coast of the United States. We appreciate BOEM's effort to move this industry forward and the care your agency has taken to ensure this industry can be a success for all. As a public university-based research center we hope that our insight can be valuable in bringing this blooming industry success. We look forward to seeing this industry's promises come to fruition and hope we can be a trusted source of information as BOEM ushers in the American offshore wind era. If you have any questions regarding our comments, please contact me at 973-655-3137 or [lalp@montclair.edu](mailto:lalp@montclair.edu).

Sincerely,

A handwritten signature in black ink that reads "Pankaj Lal". The signature is written in a cursive, slightly slanted style.

Pankaj Lal, Ph.D.

Professor and Director


Clean Energy and Sustainability Analytics Center

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Torben Scheller,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

### Comment

I am writing you today to show our support for the offshore wind industry here in the U.S. and thank your agency for its work in releasing the draft Supplemental Environmental Impact Statement for Vineyard Wind.

As a group representing Engineer Consultancy for Offshore Wind, we are excited about the enormous economic potential the offshore wind industry brings to our region and country. It's not often that we get to witness the birth of an entirely new, billion-dollar industry in our country, but that's exactly what we are seeing with offshore wind.

Offshore wind has the potential to drive economic recovery and stimulate coastal economies up and down the east coast. We appreciate BOEM's effort to move this industry forward and the care your agency has taken to ensure this industry can be a success for all. We look forward to seeing this industry's promises come to fruition and hope we can be a trusted source of information as BOEM ushers in the American offshore wind era.

**ID:** BOEM-2020-0005-13148

**Tracking Number:** 1k4-9i20-br80

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

Torben Scheller



PO Box 383  
Madison, CT 06443  
Voice: 646-734-8768  
Email: [fpullaro@renew-ne.org](mailto:fpullaro@renew-ne.org)  
Web: [renew-ne.org](http://renew-ne.org)

July 27, 2020

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road (VAM-OREP)  
Sterling, Virginia 20166

**Subject: BOEM-2020-0005 - Vineyard Wind 1, Supplement to the Draft Environmental Impact Statement**

RENEW Northeast, Inc. (RENEW)<sup>1</sup> submits these comments on the U.S. Bureau of Ocean Energy Management's (BOEM) Supplement to the Draft Environmental Impact Statement (SEIS) for the Vineyard Wind 1 Offshore Wind Energy Project (Vineyard Wind 1) and its analysis of the foreseeable effects of cumulative activities from offshore wind projects on the Atlantic Outer Continental Shelf. On behalf of RENEW, I offer my appreciation to BOEM for its work in considering different viewpoints and creating this comprehensive supplement. RENEW supports BOEM issuing a final Environmental Impact Statement by November 13, 2020, and a Record of Decision by December 18, 2020, approving Vineyard Wind 1, consistent with the revised One Federal Decision Permitting Timeline issued earlier this year.<sup>2</sup>

Approval of the project is pivotal for states on the Atlantic Coast to realize their renewable energy development and carbon reduction legal requirements. In Massachusetts, whose utilities have contracted for the output of Vineyard Wind I, these objectives are codified in its Renewable Portfolio Standard ("RPS"), G.L. c.25A, §11F, and the Global Warming Solutions Act ("GWSA"), G.L. c. 21N.

---

<sup>1</sup> The comments expressed herein represent the views of RENEW and not necessarily those of any particular member of RENEW. RENEW is a non-profit association uniting environmental advocates and the renewable energy industry whose mission involves coordinating the ideas and resources of its members with the goal of increasing environmentally sustainable energy generation in the Northeast from the region's abundant, indigenous renewable resources. RENEW members own and/or are developing large-scale renewable energy projects, energy storage resources and high-voltage transmission facilities across the Northeast. They are supported by members providing engineering, procurement and construction services in the development of these projects and members that supply them with multi-megawatt class wind turbines.

<sup>2</sup> *Vineyard Wind Offshore Wind Facility One Federal Decision Permitting Timeline*, BUREAU OF OCEAN ENERGY MGMT. (last updated Feb. 7, 2020), <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Vineyard-Wind-SEIS-Permitting-Timetable.pdf>.

The 800-megawatt Vineyard Wind I and the several other projects in adjacent lease areas that are now under contract will also provide significant economic development benefits for Atlantic Coast states. At sites located on the Outer Continental Shelf, the Department of Energy estimates offshore wind's technical potential at over 2,000 gigawatts (or double the amount of all existing installed U.S. electricity), 86 gigawatts of which could be developed by 2050. Atlantic Coast states, recognizing the economic and environmental opportunities afforded by the technology, have collectively issued procurement targets for 29 gigawatts of offshore wind. A recent economic development study from the American Wind Energy Association (AWEA) reported that offshore wind development off the Atlantic Coast could translate into \$57 billion in direct investment, add \$25 billion in annual economic output and create 83,000 well-paying jobs by 2030, all while stabilizing retail electricity rates and emitting no climate-altering greenhouse gases.

One of the pivotal outstanding items being reviewed by BOEM is that of navigational lanes. RENEW supports the Alternative D2 uniform 1 x 1 nautical mile layout. The U.S. Coast Guard with its mission to ensure our nation's maritime safety, security, and stewardship determined the layout, which will provide more than 200 transit lanes in all directions, will "maximize safe navigation".<sup>3</sup> It concluded in its final report, *The Areas Offshore of Massachusetts and Rhode Island Port Access Route Study* (MARIPARS), that the 1 x 1 layout, which was agreed to by all New England offshore wind leaseholders, will provide ample and uniform navigation channels and is significantly larger than routes provided in the more mature European offshore wind industry.

The MARIPARS report concluded that the 1x1 nautical mile pattern, orientation and spacing will safely accommodate vessel transits, traditional fishing operations and search and rescue operations. The recommendations on navigation safety in the MARIPARS report show how offshore wind development is compatible with existing commercial and recreational activity in the Wind Energy Area.

The Alternative F proposal to insert unnecessary wider transit lanes would, according to the MARIPARS report, increase risks to navigation safety.<sup>4</sup> That report found that the transit corridors in Alternative F would make "navigation more challenging, [as] most traffic would then be funneled into the corridors thereby increasing traffic density and risks for vessel interaction."<sup>5</sup> RENEW acknowledges the significantly more extensive comments concerning the transit lane issue in the SEIS submitted by AWEA and stands in agreement with AWEA's analysis in support of Alternative D2 and in opposition to Alternative F.

In conclusion, RENEW respectfully requests BOEM expeditiously approve the project consistent with the Alternative D2 1x1 nautical mile turbine layout to enable the states in region

---

<sup>3</sup> U.S. Coast Guard, *The Areas Offshore Massachusetts and Rhode Island Port Access Route Study* (May 14, 2020), [https://www.navcen.uscg.gov/pdf/PARS/FINAL\\_REPORT\\_PARS\\_May\\_14\\_2020.pdf](https://www.navcen.uscg.gov/pdf/PARS/FINAL_REPORT_PARS_May_14_2020.pdf).

<sup>4</sup> U.S. Coast Guard, *The Areas Offshore Massachusetts and Rhode Island Port Access Route Study*, 85 Fed. Reg. 31792, 31795 (May 27, 2020).

<sup>5</sup> *Id.*

Program Manager, Bureau of Ocean Energy Management

July 27, 2020

Page 3

to meet their schedules for renewable energy deployment and carbon reduction. Thank you for the opportunity to provide these comments.

Sincerely,

A handwritten signature in blue ink that reads "Francis E. Pullaro". The signature is written in a cursive style with a large initial 'F'.

Francis Pullaro  
Executive Director



July 27, 2020

Program Manager  
Bureau of Ocean Energy Management  
45600 Woodland Road (VAM)  
Sterling, Virginia 20166

***Re: Vineyard Wind Offshore Energy LLC Offshore Energy Proposed Wind Energy Facility  
Docket No. BOEM-2020-0005***

Dear Sir or Madam,

The Cape Cod Technology Council, Inc. ("CCTC") submits this comment in response to the Bureau's request for public comment following the release of the Supplemental Draft Environmental Impact Statement (SDEIS) for the Vineyard Wind Offshore Energy LLC Offshore Energy Proposed Wind Energy Facility (the "Vineyard Wind Project"). I am writing to express the support of the CCTC for Vineyard Wind Project.

Founded in 1996, the CCTC is a membership based non-profit organization whose mission is to promote technology, education and economic development on Cape Cod, the Islands, and Southeastern Massachusetts. Our membership includes local Cape, Islands, and Southeastern Massachusetts businesses, technology innovators, educational organizations, government entities, working professionals, and community leaders.

The CCTC supports the development of innovative solutions to meet the anticipated energy needs of the Commonwealth of Massachusetts. One of the most promising of these solutions is wind energy. The Vineyard Wind project has the potential to meeting these needs while advancing the state of wind energy technology. The CCTC notes Vineyard Wind Project has been extensively reviewed in a process that has involved dozens of hearings and hundreds of comments.

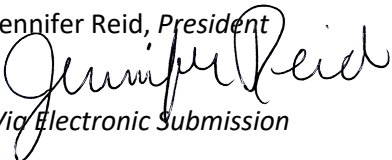
Approval of the Vineyard Wind Project offers significant benefits. It has been estimated that the Vineyard Wind Project has projected to generate more than 3,600 jobs and to reduce costs to taxpayers by an estimated \$1.4 billion. Most significantly, the Vineyard Wind Project will generate, clean renewable energy while reducing significantly carbon emissions. The SDEIS documents significant potential for adverse consequence that If the Vineyard Wind Project is not approved.



Appropriately sited and implemented off-shore wind projects, such as Vineyard Wind offer long-term energy and economic benefits and support of these efforts is consistent with the mission of the CCTC. The CCTC appreciates your consideration of our views. Please contact us if you have any questions.

Respectfully,

Jennifer Reid, *President*

A handwritten signature in black ink that reads "Jennifer Reid". The signature is written in a cursive style with a large initial "J".

*Via Electronic Submission*

James Bennett  
Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
VAM-OREP  
Sterling, Virginia 20166

Re: BOEM–2020–0005 - Vineyard Wind 1 COP Supplement to the Draft EIS

Dear Mr. Bennett:

We write to you on behalf of the members of the Business Network for Offshore Wind and to provide comments on the Vineyard Wind 1 COP Supplement to the Draft Environmental Impact Statement (BOEM 2020–0005) published in the June 12, 2020 Federal Register.

**The Business Network for Offshore Wind strongly encourages the Bureau of Ocean Energy Management to reject Alternative F and *adopt Alternative D2*. By approving the full configuration of the Vineyard Wind project in adherence to the One Federal Decision Permitting Timeline, the Department of the Interior will send a clear message to the OSW market and investors that the U.S. is open for business and intends to be a central player in a global energy industry that will expand to \$1 trillion by 2040.**

The Business Network for Offshore Wind (the “Network”) is a 501(c)(3) nonprofit organization that is exclusively focused on the development of the U.S. offshore wind (“OSW”) industry and its supply chain. Since 2012, the Network has brought together business and government, both domestically and internationally, to educate and enable American businesses of all sizes to enter the OSW market. The Network uses the voice of its diverse membership, comprised of the full spectrum of the OSW supply chain, to educate and support federal, state, and local policies to advance the development of the U.S. OSW industry.

The Network and its members strongly support Vineyard Wind’s proposal and its commitment to installing the project’s turbines in a grid layout with 1 nautical mile (“NM”) spacing between turbines in the east-to-west direction, and 1 NM between turbines in the north-to-south direction.

## I. Introduction

The Network supports the diligent effort that BOEM has undertaken in preparing the Supplement to the Draft Environmental Impact Statement (“SEIS”). The cumulative impact analysis of Vineyard Wind’s Draft EIS considered 926 megawatts (“MWs”) of OSW buildout. By contrast, the SEIS considers development of approximately 22 gigawatts (“GWs”) of Atlantic OSW capacity as reasonably foreseeable. This reflects the significant escalation in demand for U.S. OSW observed between 2018 and the present. Vineyard Wind will be the first utility-scale OSW project in U.S. waters, and the Network supports BOEM’s deliberate consideration and commitment to environmental protection as it approves this vanguard offshore energy installation.

## **II. OSW has Proven Resilient in the Face of COVID-19, Presents an Unmatched Opportunity for Economic Recovery, and Approval of the Vineyard Wind Project is Directly Congruent with a June 4, 2020 Executive Order.**

Before delving into the substance of the SEIS, the Network would like to highlight the unflagging resilience demonstrated by the OSW industry despite the ongoing COVID-19 pandemic. Globally, the first half of 2020 saw a record [\\$35 billion in OSW final investment decisions](#), more than offsetting investment declines observed in global investment in solar, onshore wind, and biomass projects during the same period. U.S. OSW has similarly persevered in the face of COVID. The 12-MW Coastal Virginia Offshore Wind (“CVOW”) project, off of Virginia Beach, was constructed during late May and early June. CVOW’s turbines are now mechanically complete and commissioning is expected soon. In fact, the final steps of CVOW’s construction will be aided by a U.S.-built OSW crew transfer vessel (“CTV”) [launched in mid-July](#).

It is clear that, globally and in the United States, OSW is an energy technology that is eminently capable of shrugging off the challenges imposed by COVID. This solidifies OSW’s role as an infrastructure sector that is well-positioned to kickstart America’s economic recovery. As a result, approving the Vineyard Wind project is consistent with the spirit of a recently issued Executive Order.

On June 4, 2020, the White House issued an [Executive Order](#) on Accelerating the Nation’s Economic Recovery from the COVID-19 Emergency by Expediting Infrastructure Investments and Other Activities. The EO notes that “regulations and bureaucratic practices have hindered American infrastructure investments, kept America’s building trades workers from working, and prevented our citizens from developing and enjoying the benefits of world-class infrastructure.”

The Network could not agree more: [responsibly developed U.S. OSW projects are world-class infrastructure projects](#), and they will serve as unparalleled engines of both immediate-term economic recovery and longer-term sustainable economic development. The Department of the Interior’s approval of Vineyard Wind’s Construction and Operations Plan (COP) will unleash a wave of private sector investment. More importantly, this approval will begin a domino effect that will ultimately put [tens of thousands](#) of hard-working Americans from across the economic spectrum and from all walks of life – including the building trades, vessel captains and deckhands, accountants, dockworkers, economists, welders, divers, aircraft pilots, atmospheric and marine scientists, truck drivers, attorneys, crane operators, project managers, mechanics, and every imaginable engineering discipline, among many other occupations – back to work. Vineyard Wind will also significantly contribute to energy security and improve local air quality in New England.

### ***June 4, 2020 EO - Section 1***

Section 1 (“Purpose”) of the June 4, 2020 EO makes clear that “[u]nnecessary regulatory delays will deny our citizens opportunities for jobs and economic security, keeping millions of Americans out of work and hindering our economic recovery from the [COVID-19] national emergency.” **This is precisely why the Vineyard Wind project must be approved in accordance with Vineyard Wind’s [One Federal Decision Permitting Timeline](#)** (published February 7,

2020). Adherence to this established permitting timeline will enhance regulatory certainty and increase investor confidence in the U.S. OSW industry.

### *June 4, 2020 EO - Section 5*

Furthermore, Section 5(b) of the EO specifically directs the Secretary of the Interior to use **all authorities** (emergency and otherwise) to “expedite work on, and completion of, all authorized and appropriated infrastructure, energy, environmental, and natural resources projects on Federal lands that are within the authority of each of the Secretaries to perform or to advance.” Vineyard Wind specifically qualifies under this provision of the EO, because, pursuant to the **Outer Continental Shelf Lands Act**, all submerged lands lying seaward of state coastal waters (i.e. the land lying between 3 NMs offshore and the exclusive economic zone boundary 200 NMs offshore) are considered Federal lands. Furthermore, this analysis applies to all 22 GWs of proposed Atlantic OSW capacity contemplated under the cumulative impacts analysis of the SEIS. This is because the OSW lease areas from which the 22 GWs will be derived lie upon federally regulated portions of the Outer Continental Shelf. The only two exceptions are the currently operating Block Island Wind Farm and the planned Maine Aqua Ventus project, both of which are located in state coastal waters.

The Network recommends that, consistent with the text and spirit of the June 4, 2020 EO, the Secretary of the Interior **should utilize all authorities to advance and complete the Vineyard Wind federal permitting process in strict compliance with the One Federal Decision Permitting Timeline published February 7, 2020**. Careful adherence to the February 7, 2020 One Federal Decision permitting timeline is of the highest importance. The approval of Vineyard Wind’s 1x1 NM configuration, which is a reasonable compromise solution, will send a clear message that the U.S. is open for business.

By contrast, the failure to issue a Record of Decision (“ROD”) on December 18, 2020 approving Vineyard Wind – or, alternatively, issuing a ROD that requires a dramatic reconfiguration of the Vineyard Wind facility at this late stage – would represent a monumental lost opportunity for robust creation of American jobs. **In terms of market signals, the approval of a severely reconfigured Vineyard Wind project – i.e. requiring a 2 NM or 4 NM wide transit lane – would be tantamount to no approval at all.** This will have drastic broader negative economic ramifications and would serve to further deepen the staggering COVID-19-related recession that is now being experienced by Americans across the width and breadth of the United States. Such a decision would hamper American economic recovery and would exacerbate the exact regulatory uncertainty and unnecessary delays that the June 4, 2020 EO seeks to eliminate.

Moreover, this action would have a direct negative impact on investor confidence in the U.S. OSW market. The SEIS considers approximately 22 GWs of U.S. Atlantic OSW capacity to be reasonably foreseeable. Such a pipeline of projects would generally be considered sufficient to trigger large manufacturing investments, and clear market signals that the U.S. OSW pipeline is advancing will lead to building of American vessels of all types.

However, it cannot be overlooked that OSW is now a global market. The U.S. OSW market does not operate in a vacuum. Given that European and Asian OSW markets continue to surge,

sophisticated multinational Tier 1 suppliers may elect to focus their attention on those markets, rather than the U.S. OSW market. **The failure to issue a ROD approving Vineyard Wind may well lead investors to conclude that it is unlikely that U.S. OSW projects can complete the permitting process.** Seeing this continuing uncertainty, Tier 1 suppliers will elect to continue making manufacturing investments in more certain markets such as Europe, or to expand Asian manufacturing investments, rather than investing in U.S. OSW manufacturing facilities. **By approving Vineyard Wind, the Department of the Interior can send a clear message to the international OSW market and investors that the U.S. is open for business.**

### *June 4, 2020 EO - Section 6*

Finally, Section 6 of the June 4, 2020 EO concerns the National Environmental Policy Act (“NEPA”), which governs the federal permitting process for Vineyard Wind, including the subject SEIS. This Section of the EO notes that the Council on Environmental Quality (“CEQ”) has provided federal agencies with flexibility and alternative arrangements for complying with NEPA in emergency situations, like the COVID-19 pandemic and the associated economic recession. CEQ “has appropriately provided alternative arrangements in a wide variety of pressing emergency situations[,] including threats to energy security . . . and employment and employment and economic prosperity.”

The Network, and the U.S. OSW industry as whole, strongly encourage the Department of the Interior to work with CEQ to ensure that the **Vineyard Wind federal permitting process strictly complies with the One Federal Decision Permitting Timeline published on February 7, 2020.** This approval will be a critical step in enabling Vineyard Wind to deliver the benefits that it can provide in terms of triggering investment and putting Americans back to work.

### **III. Uncertainty and Risk Associated with Broad Cumulative Impacts Analysis**

#### *Process Uncertainty*

The SEIS covers virtually the entire U.S. East Coast, and appears intended to serve as a template for the evaluation of potential impacts associated with future OSW projects. While it may be appropriate for BOEM to acknowledge the existence of future OSW projects, the Network and its members caution against according the same weight to the potential impacts of those projects relative to OSW projects undergoing active federal review. Potential projects, though real, remain unformed, and it is reasonable to infer that those potential projects will adjust to lessons learned from the construction of the first utility-scale OSW projects in U.S. waters. Future OSW projects are likely to use turbines with larger nameplate capacities than those considered in the SEIS, which reducing impacts by decreasing the number of offshore structures. Additionally, there may be adaptive management measures gleaned from the monitoring of constructed OSW projects that could enable reduce their long-term impacts. In these ways, near-term OSW development is anticipated to evolve to support a lower incremental impact when compared to the Proposed Activity.

The Network is in no way recommending that the cumulative impacts study be re-performed, in fact we adamantly urge against that. We are just identifying the risks and uncertainties associated with an analysis of this scope and breadth.

### ***Agency Bandwidth Risk***

Regarding the prospective template that the SEIS may provide for future evaluation, the Network recognizes that the vast geographic extent of the cumulative analysis presents a substantial workload for federal agencies, developers, and stakeholders in developing and reviewing large volumes of material. This undertaking is above and beyond the substantial diligence already inherent in BOEM's standard OSW permitting and approvals processes. This added workload could strain existing resources and adversely impact OSW project federal permitting timelines, while providing only a marginal improvement in the identification of potential impacts as compared to those standard processes.

This concern is particularly relevant in view of BOEM's current staffing and budgetary constraints. Moreover, imposing additional workload upon BOEM would likely inhibit the agency's ability to auction new OSW lease areas. This includes the leasing of the draft New York Bight Wind Energy Areas, which, as acknowledged by the SEIS, will be necessary for both New York and New Jersey to realize their legislatively mandated OSW targets. Based upon the projections presented by BOEM at its November 2018 Intergovernmental Renewable Energy Task Force Meeting on the New York Bight,<sup>1</sup> which cited the announcement of "Final" Wind Energy Areas in 2019 followed by a Lease Sale in "Early 2020", this process is already significantly delayed.

#### **IV. Alternative F, which includes a 4 NM transit lane, is Unnecessary and has Significant Negative Impacts**

BOEM should reject Alternative F and *adopt Alternative D2* in the Final EIS.

### ***Climate Change is an Existential Threat to Fisheries in Southern New England and Beyond***

The SEIS states in Table 3.2-1: "In submerged habitats, warming is altering ecological relationships and the distributions of ecosystem engineer species, likely causing permanent changes of unknown intensity gradually over the next 3 years." On page 3-98, however, the SEIS reads: "Commercial fisheries and for-hire recreational fishing *may* be affected by climate change" [emphasis added]. These statements are somewhat contradictory. It is the Network's position that it is beyond question that climate change *will* have impacts on fishing. This conclusion is supported by the following:

- Food and Agriculture Organization (FAO) of the United Nations, Technical Paper 672, [Impacts of climate change on fisheries and aquaculture](#), 2018 (the "FAO study"), states on page 1: "Aquatic

---

<sup>1</sup> BOEM. November 28, 2018. Intergovernmental Renewable Energy Task Force Meeting On The New York Bight. <https://www.boem.gov/renewable-energy/state-activities/intergovernmental-renewable-energy-task-force-meeting-new-york-0>

systems that sustain fisheries and aquaculture are undergoing significant changes as a result of global warming and projections indicate that these changes will be accentuated in the future.”

- On page 95, the FAO study goes on to examine historical trends within US waters in the Northwest Atlantic from 1968 to 2007. “There were clear poleward shifts consistent with warming in many fish stocks.” This statement clearly shows the historical impacts of climate change in an area that includes the areas under study in the SEIS.
- The FAO study continues with regard to the Atlantic coast, “...projected warming until 2060 is expected to modify the habitats in terms of suitable water temperatures of...85 percent of [the fishery target species] in the United States of America” (pg. 95). This statement shows the FAO’s projected future impacts of climate change.

The National Oceanic and Atmospheric Administration (“NOAA”) issued Technical Memorandum NMFS-F/SPO-89, [Climate Impacts on U.S. Living Marine Resources: National Marine Fisheries Service Concerns, Activities and Needs](#), in August of 2008 (the “NOAA study”).

Page 2 of the introduction section of the NOAA study states: “Depending upon the duration and magnitude of the climate change, species may persevere through periods of adverse conditions, temporarily shift their distributions or behaviors, or modify their ranges, behaviors and movements over the long term. **At the extreme, species may be extirpated from whole regions and potentially become extinct**” [emphasis added]. The position expressed in the NOAA study is certainly consistent with FAO’s conclusions, and is also consistent with Table 3.2-1 of the SEIS. NOAA is clear that species extinction is the extreme case, but nonetheless it is possible, due to climate change.

The NOAA study covered the key climatic changes that impact marine ecosystems, including temperature change, increased ocean acidification, and loss of sea ice. The latter concern introduces less saline water from the Arctic and can drive salinity patterns and distribution as far south as Georges Bank and beyond (page 5).<sup>2</sup> Each of these elements are expected to contribute to shifting behaviors, distributions, and/or ranges of key species as well as potential extinction.

At this point, there is no consensus on what the precise effects of climate change will be on fisheries along the U.S. Atlantic coast and southern New England in particular. However, the United States, and the planet more broadly, are already entering uncharted territory in terms of climatic changes. Siberia has spent all of 2020 in a prolonged heat wave; during June, temperatures exceeded 38°C/100°F, which is the [highest temperature ever recorded north of the Arctic Circle](#).

---

<sup>2</sup> For more information about the impacts of increased levels of freshwater associated with melting polar ice caps, see the National Oceanography Centre’s TERIFIC project at <https://projects.noc.ac.uk/terific/funding>.

It is clear that climate change poses a very real threat and *will* have an impact on commercial fisheries and for-hire recreational fishing along the U.S. Atlantic coast and southern New England.

### ***22 GWs of Offshore Wind in the U.S. Will Have a Significant Impact***

The SEIS states on page 3-98: “Overall, it is anticipated that there will be no impact on climate change as a result of offshore wind projects alone, though they may beneficially contribute to a broader combination of actions to reduce future impacts from climate change.”

The SEIS considers approximately 22 GWs of U.S. Atlantic OSW capacity to be reasonably foreseeable. These OSW GWs will be injected into the onshore electricity systems operated by ISO New England, NYISO, and PJM. Based on the annual CO<sub>2</sub> emissions and net generation for these three grid operators, the interconnection of 22 GWs of OSW would result in an estimated 8% reduction in carbon emissions in those regions<sup>3</sup>. On a planetary scale, the total emissions reductions from these projects might be considered small, but the reduction is quite significant in terms of decarbonizing the electricity supply of the Eastern Seaboard. Relative to other renewable energy technologies, OSW is a cost-effective and viable means of delivering large quantities of clean electricity to coastal load centers. **Approving the Vineyard Wind project sends the right signal: that America is open for business and ready to take a leadership role in this global clean energy industry.**

### ***Transit Lanes are Unnecessary with a Uniform 1x1 NM Spacing***

The United States Coast Guard (“USCG”), in the Final Report on [The Areas Offshore of Massachusetts and Rhode Island Port Access Route Study](#), Docket Number USCG-2019-0131, dated May 14, 2020 (“MARIPARS”), gave the following Final Recommendation:

**That the MA/RI WEA’s turbine layout be developed along a standard and uniform grid pattern with at least three lines of orientation and standard spacing to accommodate vessel transits, traditional fishing operations, and search and rescue (SAR) operations, throughout the MA/RI WEA. The adoption of a standard and uniform grid pattern through BOEM’s approval process will likely eliminate the need for the USCG to pursue formal or informal routing measures within the MA/RI WEA at this time.**

- Lanes for vessel transit should be oriented in a northwest to southeast direction, 0.6 NM to 0.8 NM wide. This width will allow vessels the ability to maneuver in accordance with the COLREGS while transiting through the MA/RI WEA.
- Lanes for commercial fishing vessels actively engaged in fishing should be oriented in an east to west direction, 1 NM wide.

---

<sup>3</sup> Based on data from EPA’s Emissions & Generation Resource Integrated Database (eGRID) 2018 data file accessed July 20, 2020 at <https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid>



- Lanes for USCG SAR operations should be oriented in a north to south and east to west direction, 1 NM wide. This will ensure two lines of orientation for USCG helicopters to conduct SAR operations.

**In the event that subsequent MA/RI WEA project proposals diverge from a standard and uniform grid pattern approved in previous projects, the USCG will revisit the need for informal and formal measures to preserve safe, efficient navigation and SAR operations.**

Final MARIPARS at p. 38 [emphasis in the original].

The SEIS describes the proposed turbine layout in Section 2.2.2 and again on Page A-9. The SEIS document states on page 2-5: “The five Rhode Island and Massachusetts offshore wind leaseholders have proposed a collaborative regional layout for wind turbines (1 x 1 nautical mile apart in fixed east-to-west rows and north-to-south columns, with 0.7-nautical-mile theoretical transit lanes oriented northwest-southeast) across their respective BOEM leases (Geijerstam et al. 2019), which meets the layout rules set forth in the Draft MARIPARS report recommendations.” The Joint Developer Agreement Layout is depicted in the SEIS in Figure A.7-17 on page A-41.

Examining the cumulative impacts of structures, the SEIS states in Table 3.11-1: “The cumulative impacts from the presence of structures on navigation hazards with the Proposed Action when combined with past, present, and reasonably foreseeable future activities would be major on commercial and for-hire recreational fisheries **if offshore wind projects in the RI and MA Lease Areas do not all adopt a uniform 1x1 nautical mile WTG spacing with east–west/north–south orientation**” [emphasis added]. This statement from Table 3.11-1 makes clear that major cumulative impacts to fisheries are expressly conditioned upon a **failure to adopt uniform 1x1 NM spacing**. By contrast, because the Joint Developer Agreement Layout **does** adopt a uniform 1x1 NM spacing for the MA/RI WEA, the impacts will be less than major.

The Joint Developer Agreement Layout is consistent with both the Draft and Final MARIPARS and BOEM’s assumptions for future OSW development of up to 22 GWs as described in Section A.4 of the Draft SEIS.

It is also important to recognize that the MARIPARS was specifically tailored for the unique circumstances of the MA/RI WEA. While the uniform 1x1 NM spacing may be appropriate for the MA/RI WEA, the recommendations made by the MARIPARS should be construed as applicable to the MA/RI WEA only, and not determinative with respect to other currently existing WEAs, or any future OSW lease areas that may be delineated. Designing an optimized layout for an OSW array requires a case-by-case consideration of site conditions and other highly localized factors.<sup>4</sup> Rigidly imposing the recommendations of the MARIPARS across other presently-

---

<sup>4</sup> Giebel, G., & Hasager, C. B. (2016). An Overview of Offshore Wind Farm Design. In W. Ostachowicz, M. McGugan, J-U. Schröder-Hinrichs, & M. Luczak (Eds.), MARE-WINT. New Materials and Reliability in Offshore Wind Turbine Technology (pp. 337-346). [https://backend.orbit.dtu.dk/ws/portalfiles/portal/127708307/An\\_Overview\\_of\\_Offshore\\_Wind\\_Farm\\_Design.pdf](https://backend.orbit.dtu.dk/ws/portalfiles/portal/127708307/An_Overview_of_Offshore_Wind_Farm_Design.pdf)

existing projects or WEAs, or future lease areas, would not adequately address the need for an area-specific analysis.

### ***Transit Lanes Result in Longer Cables which Increase Impacts***

Alternative F proposes 2 NM or 4 NM wide transit lanes through the Vineyard Wind lease area and adjacent OSW lease areas. The SEIS states on page 3-29: “Recent forecasts by Vineyard Wind estimate that the length of inter-array cabling would be approximately 221 miles (355 kilometers) under Alternative F with a 4-nautical-mile transit lane and the Proposed Action layout, and 234 miles (376 kilometers) with a 4-nautical-mile transit lane and the Alternative D2 layout; if the transit lane were only 2 nautical miles wide, the length of inter-array cabling would still exceed that in the COP PDE but would be somewhat less than with a 4-nautical-mile transit lane.”

On the same page, the SEIS also states: “the potential impacts on finfish, invertebrates, and Essential Fish Habitat (EFH) of Alternative F do not depend on the other turbine layout constraints (Proposed Action, Alternative D2, or any other alternative) or on the width of the transit lane (2 nautical miles or 4 nautical miles), **with the exception that a greater amount of cable would lead to greater impacts**” [emphasis added].

Finally, the SEIS states on page 3-30: “...establishment of additional transit lanes could require increased lengths of offshore export cable and therefore effects to finfish, invertebrates, and EFH.”

Based on the foregoing, the 2 NM or 4 NM wide transit lanes considered by Alternative F would have impacts to the aforementioned species due to increases in the length of the Vineyard Wind project’s export and inter-array cables.

### ***Transit Lanes Reduce Area Available for WTGs, Thereby Constraining a Significant Mechanism for Mitigating Climate Change***

The SEIS states on page 2-5: “As explained in Section 3.14.2.4, BOEM assumes that the addition of all six of the 4-nautical mile transit lanes proposed by RODA would reduce the technical capacity of the Rhode Island and Massachusetts (RI and MA) Lease Areas by approximately 3,300 MW, which is 500 MW less than the current state demand for offshore wind in the area. Furthermore, Alternative F combined with the Alternative D2 layout would not be able to meet existing announced demand as described in Chapter 1.”

Climate change **must** be a principal consideration in the decision to approve Vineyard Wind. As related previously, climate change presents an existential threat to commercial fishing interests, not only in southern New England, but along the entire Eastern Seaboard. The deployment of 22 GWs of U.S. Atlantic OSW capacity that the SEIS assumes to be reasonably foreseeable will provide a significant positive cumulative impact by providing significant climate mitigation benefits.

Given the uniform 1x1 NM Joint Developer Agreement Layout, USCG has made a final determination that transit lanes are unnecessary. In fact, the inclusion of transit lanes will directly

constrain the U.S. OSW industry's ability to mitigate climate change, the end result being even greater negative impacts upon fisheries in southern New England and along the Eastern Seaboard.

***Transit Lanes Reduce Area Available for WTGs, Thereby Reducing Economic Benefits and Undermining Public Investment***

The SEIS considers approximately 22 GWs of U.S. Atlantic OSW capacity as reasonably foreseeable. A recent study by the American Wind Energy Association (“AWEA”) states U.S. OSW will support **up to 83,000 jobs and \$25 billion per year in economic output by 2030**, while also delivering investment in critical coastal infrastructure. This pipeline of projects is considered sufficient to trigger large manufacturing investments; however, reducing the area by transit lanes will reduce the overall economic benefit that will be realized.

UMass Dartmouth's Public Policy Center conducted a study examining the contribution to employment and economic development to be made by the 800-MW Vineyard Wind project. The study considered impacts to both the economy of the Commonwealth, and the regional economy of southeastern Massachusetts (“SEMA”), and found:

- The Vineyard Wind project will support an estimated 3,180 direct FTE job years in Massachusetts across all phases over the project period under the Base scenario and 3,658 direct FTE job years in Massachusetts in the High scenario.
- The 800 MW project will produce nearly \$79 million in direct value-added impacts for Massachusetts and just under \$170 million in direct output.
- The study estimates that the amount paid in state and local taxes as a result of the development, construction, and the first year of O&M of the 800 MW Vineyard Wind project is \$14.7 million in the Base scenario and \$17.0 million in the High scenario.

A reduction in the WEA jeopardizes the project's economic potential and undermines public sector investment. BOEM has entered long-term lease contracts with developers and received lease payments in return for material use of the defined areas in the ocean. Reducing the WEA in a substantial manner results in unstable public policy and creates market uncertainty. A substantial material change in the WEA could lead to re-evaluation of the private sector infrastructure investments. This could ultimately affect the United States or any State's (with an offshore wind policy commitment) ability to secure the supply chain and facilities required to create jobs and develop the offshore wind industry.

## V. Conclusion

The Business Network for Offshore Wind and its members strongly encourage BOEM to **reject Alternative F and *adopt Alternative D2* in the Final SEIS. This approval should occur in strict compliance with the One Federal Decision Permitting Timeline published February 7, 2020.**

Offshore wind is poised to make an immediate positive impact on America's economic recovery from the COVID-19 pandemic. The approval of Vineyard Wind is the first step to asserting America's position in this \$1 trillion global energy industry, which is a one-in-a-generation economic opportunity in a cutting-edge industry. This is directly consistent with the Administration's focus on infrastructure and the spirit of the June 2020 Executive Order encouraging the development of world-class infrastructure as a means of COVID-19 economic recovery.

By approving Alternative D2, BOEM will solidify investor confidence and drive the U.S. offshore wind industry forward into reality. Offshore wind has already demonstrated its remarkable resilience to the ongoing COVID-19 pandemic.

Make no mistake - the failure to issue a ROD approving Vineyard Wind will likely have catastrophically negative consequences, and hundreds of millions of dollars in high-tech manufacturing investments will be made in markets outside the U.S. **This is an entirely avoidable outcome.**

BOEM should not require additional transit lanes. The United States Coast Guard has determined that, from a navigational perspective, the transit lanes are not necessary given the agreed-upon 1 x 1 nautical mile Joint Developer Agreement Layout. The inclusion of transit lanes will also result in longer export cables, which have greater impacts. Economic development in southeastern New England associated with the Vineyard Wind would also be constrained by the inclusion of transit lanes.

**In conclusion, the Business Network for Offshore Wind and its members reiterate that BOEM should reject Alternative F and *adopt Alternative D2* in the Final SEIS.**

Very truly yours,



Liz Burdock  
President & CEO  
Business Network for Offshore Wind

Public information Meeting  
Vineyard Wind SEIS Public Meeting Transcript  
Virtual Public Meeting Day 1  
June 26, 2020  
5:00PM

Abby Watson

Excellent. Thank you. My name is Abby Watson, A-b-b-y W-a-t-s-o-n. I am the head of Government Affairs for North America so Siemens Gamesa could make the renewable energy, and Advanced Court Reporting alongside the entire industry, we've eagerly awaited the outcomes of BOEM's work to assess the cumulative impacts of offshore wind off the Northeast Coast of the U.S. We applaud the agency's rigorous effort to quantify and analyze all of the associated benefits and impacts across multiple stakeholders and users of ocean resources. We deeply appreciate the opportunity to provide testimony to you today as one of those interested stakeholders. Siemens Gamesa Renewable Energy is the world's leading offshore wind turbine manufacturer with extensive experience entering new markets and establishing offshore wind supply chains to serve those markets. SGRE is proud to have secured conditional orders and preferred supplier status for over 4300 megawatts of future U.S. offshore wind projects. We're also actively in the process of supplying the turbines, including the construction program for their installation, and ultimately will support the operations and maintenance services for the Coastal Virginia Offshore Wind Pilot Project. This project is being led by our partners Dominion Energy and Earth Shed who have shown a deep Advanced Court Reporting commitment to advancing offshore wind and the opportunities it provides to communities. Construction on this important pilot project, the first turbines to be installed in federal waters here in the U.S., is nearing final completion with both turbines now fully installed. We're very proud to be part of this project, which brings us one step closer in positioning the U.S. as a global leader in the offshore wind market. The public benefits of the Vineyard Wind offshore wind development extend well beyond the geographic boundaries of the offtake seeds. As other people have commented today, the American Wind Energy Association estimates that offshore wind will create 83,000 new U.S. jobs and \$25 billion in annual economic output through 2030. And Vineyard Wind as the first utility scale project is the tipping point for this pent-up commercial energy. The market signal that will come from Vineyard is clearly seen in the range of offshore stakeholders that have come here today to offer their support and hope for future investment opportunities. Given the broader implications of BOEM's final assessment of the Vineyard Wind supplemental Advanced Court Reporting EIS which will impact the development of a majority of the U.S. offshore wind market, many elements of the U.S. offshore wind value chain are poised to make investments pending the outcome of this process. The success of Vineyard Wind is crucial to the success of the U.S. future offshore wind industry. As an equipment manufacturer, we cannot provide detailed comments on the majority of BOEM's findings in their draft SEIS that pertain to areas outside our expertise. However, we would like to express concern about alternative F and its potential impact on the capacity of the lease areas currently available to the offshore wind industry. This proposal to create additional transit lanes beyond the one by one nautical mile grid lanes that have already been established, would substantially reduce the areas available for development without significantly improving national navigational safety for vessels. Such a reduction in potential capacity for these lease areas may pose a threat to the ability for adjacent states to meet their clean energy goals. Siemens Gamesa has a long-standing commitment to investment in the U.S. In the last few years Advanced Court Reporting alone, we've invested \$35 million

PUBLIC

in capital expenditures that our two U.S. onshore wind manufacturing facilities in Kansas and Iowa, are now actively engaged in discussions with stakeholders in several states on how to localize our offshore wind supply chain to benefit local communities. Such discussions cannot come to fruition if offshore wind developers are not able to proceed with their planned projects due to a significant shift in project economics or timeline. In conclusion, we urge the Bureau of Ocean Energy Management to consider the vast potential benefits that offshore wind can bring to the U.S. and strike an appropriate balance that helps bring this transformative industry to our shores. Thank you for the opportunity to provide comments today.

Public information Meeting  
Vineyard Wind SEIS Public Meeting Transcript  
Virtual Public Meeting Day 1  
June 26, 2020  
5:00PM

Maria Hanna

Good evening. My name is Maria Hanna. M-a-r-i-a, Hanna, H-a-n-n-a and I represent Survival Systems USA in Groton, Connecticut. We are a Connecticut safety training provider. And we have historically provided training to over 100,000 military and civilian aviation and maritime personnel around the U.S. and the world. We cannot more strongly voice our enthusiastic support for the Vineyard Wind Project. New industries don't come along very often. The approval of the Vineyard Wind project will have significant positive, immediate and long-term benefits to local companies such as ours. In order to invest in and develop a skilled trained workforce, there needs to be a consistent predictable project to allow the existing workforce time to assimilate the new skills and time for the younger workforce and those who are still in school to consider entering new industry. Vineyard 1 is an ideal example of the type of project that could foster and grow an entire U.S. based workforce, specifically in the New England area, for decades to come. Additionally, there's always a concern regarding safety improvements, and that the rush to embrace a new industry will Advanced Court Reporting sacrifice safety protocols. The wind industry has had the benefit of adopting and improving on the safety standards that have been developed in the aviation, the maritime, the oil and other related industries, like the ones that I already trained. I cannot understate the significant investment in focus and safety protocols and safety training that the wind industry has chosen, voluntarily mind you, to implement as a standard. A Global Wind organization, GWO training standards, are mandated for all participants in the industry. As a training provider involved in all training of many of those industries, I can directly speak to the quality safety standards and preparation that the new workforce will embrace as they come into the wind industry. Downstream effects from providing training to local companies such as ours will bring revenue into the local areas as the trainees, not just from the local area, from other areas around the U.S. and around the world attend training at local training centers in order to work on the wind farm. As a GWO provider, we are excited to embrace this industry and we cannot more strongly voice our enthusiastic support for the Vineyard Wind Advanced Court Reporting project. Thank you for your time.

Public information Meeting  
Vineyard Wind SEIS Public Meeting Transcript  
Virtual Public Meeting Day 1  
June 26, 2020  
5:00PM

Nicole DiPaolo

Awesome. Thank you. My name is Nicole DiPaolo, I'm from the National Wildlife Federation, and I want to start by thanking you for your work on this cumulative impact report and for the opportunity to speak on it. The National Wildlife Federation has been advocating for responsibly developed offshore wind power for over a decade. Climate change is the greatest threat to American wildlife, wild places and communities around the country. We know that strong action must be taken to make a rapid transition to a responsible clean energy economy. We believe that the Vineyard Wind 1 Project will be a positive contribution to this transition and that it move forward. Responsible development of offshore wind avoids, minimizes and mitigates impact to wildlife every step of the way. Vineyard Wind has supported our high standards for wildlife protection. And last winter, they signed a historic agreement with the National Wildlife Federation and our partners at the Natural Resource Defense Council and Conservation Law Foundation to protect the critically endangered North Atlantic Right Whale. This agreement commits Vineyard Wind to restricted period for construction, limiting the times of year that pile driving can occur to those when right whales are less likely to be present. Also in the agreement, the developer commits to enhance monitoring protocols and the best technology available to be employed throughout construction, Advanced Court Reporting taking the strongest possible measures to reduce noise, observe and detect marine mammals and report and share data and adapt strategies guided by the best and most current science. Last but certainly not least, vessel speed restrictions are implemented in all seasons. Vessel strength and entanglement in fishing gear are the leading cause of the North Atlantic Right Whale death. There were only 400 of these whales remaining in the world today, and of these only 95 are breeding females. And just yesterday, one was found dead on the New Jersey coast. We believe that the precedent-setting agreement between Vineyard Wind, ourselves and our partners will help avoid these tragedies. We also believe that these practices should be a standard for all projects and simply a barrier to entry for the industry. And we appreciate Vineyard Wind's commitment to leading by example and demonstrating the commercial viability of our request. Our high standards for renewable energy development allow for us to make every attempt to avoid the most devastating impacts of climate change, while also avoiding and minimizing Advanced Court Reporting disruption to vulnerable species and habitat. We must stand these projects up as soon as the responsible development will allow. Over 10,000 megawatts of coal, nuclear and oil-fired power plants providing energy to New England are likely to retire in the next few years. We have no time to lose. The technology is ready. The cost is competitive. And the time is right for launching this global industry in the United States that could create over 83,000 jobs by 2030 and invest tens of billions of dollars into our economy. Thank you so much.


PUBLIC





## Comment from Richard Payne,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

### Comment

I would like to see Vineyard Wind go forward now as soon as possible without any further decrease in density. I am a Ph.D. physical oceanographer retired from the Woods Hole Oceanographic Institution after a 30 year career.

**ID:** BOEM-2020-0005-0076

**Tracking Number:** 1k4-9hio-yynth

### Document Information

**Date Posted:**

Jun 29, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

Richard Payne



## Comment from William Leavenworth,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0035

**Tracking Number:** 1k4-9hgg-e7m4

### Document Information

**Date Posted:**

Jun 29, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

William Leavenworth

### Comment

In 1980, I was second license on an offshore crew boat in the Texas oil patch. After we had delivered our people and supplies, we would move to a cluster of unmanned rigs, and fish with hook and line. We caught monster fish. Why? Because mobile net gear could not be deployed in among the rig clusters, and they acted as reefs for the local fish. If Wind farms are built around the Cape, cod and haddock, among others, will come back over time. They might even grow to the size they were when my 8th great grandfather Andrew Newcomb moved from the Isles of Shoals to the Vineyard--then, mature cod went upwards of 50 lbs, and were prolific spawners.


Regards, and be well,

Dr. William Burgess Leavenworth, Ph.D., retired environmental historian & mariner, Searsmont, Maine.



## Comment from John Brazier,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

**ID:** BOEM-2020-0005-0082

**Tracking Number:** 1k4-9hj2-dl7j

### Document Information

**Date Posted:**

Jun 29, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

John Brazier

### Comment

The Vineyard Wind offshore wind turbine project should be authorized to proceed as quickly as possible. I have viewed their presentation of the project, and as an engineer, can appreciate its technical merits.

Their reaching out to the many stakeholders, listening closely to their concerns, and addressing these concerns in their planning has been extraordinary.

As a resident of Cape Cod where we pay some of the highest electricity rates in the country, I welcome the project. The jobs creation alone will benefit us greatly. I will be proud to have it off our shores in its ideal location.

Michael McGarty

6/26/2020

PO Box 5023

New Bedford, MA 02742

Docket #: BOEM-2020-0005

Hello, my name is Mike McGarty and I am a resident of New Bedford, MA. I would first like to thank BOEM for completing the draft of this detailed cumulative analysis of ten years' worth of current and future offshore wind farm development in less than a year. I am glad that this next, critical step has been taken toward the creation of the domestic OSW industry.

As shown by the format of this hearing, we are living in challenging times. The pandemic gripping the world has had both evident and still untold effects on our lives and livelihoods. With the uncertainty that comes with living through this, the approval of Vineyard Wind 1 can provide us with a reliable source of clean, renewable energy that, because of the record low bid for this project, will save MA ratepayers more than \$1 billion over the project's lifetime.

I am one of the many people that are ready, willing, and able to begin careers in this industry that may be new in the US, but well established and led by our European friends who have been building and operating OSW farms for almost 30 years. The approval of this project will directly lead to the creation of thousands of jobs in trades that come with good pay and benefits. I just received my diploma today for my first, albeit late in coming, college degree, an Associate's in Engineering Transfer from Bristol Community College here in MA. Bristol has established the nation's first undergraduate degree program in OSW that begins this Fall that will help train a

PUBLIC

new domestic workforce that will be necessary for the many new jobs that will be created along the Atlantic coast for decades to come.

In order to complete this draft, BOEM identified and chronicled many impact-producing factors (IPFs) to determine both direct and cumulative impacts, whether adverse, neutral, or beneficial. I will cover these findings in future comments. However, I would like to comment on our shared ocean resource. In order for a domestic OSW industry to exist, our established marine industries will have to learn to adapt and share the vast potential that does and will continue to exist on the Atlantic OCS. Vineyard Wind has devoted great resources and time to engage stakeholders throughout this process. Since the release of the DEIS in 2018, they have incorporated stakeholder concerns by agreeing to the 1 X 1 NM grid placement of turbines (as shown in Alternative D2) and taken steps to use Covell's Beach for the cable landfall. Mitigation should be undertaken when it can benefit affected parties, but not to undermine the economic feasibility of this project or future projects. For this reason, I urge BOEM not to select Alternative F using either the 2NM or 4NM transit lanes.

I just wanted to provide this initial comment today. I may have questions to pose and I will be providing further written comments. Thank you for your time.



## Comment from David Charles,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0072

**Tracking Number:** 1k4-9hbw-opgb

### Document Information

**Date Posted:**

Jun 29, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

David Charles

### Comment

I am a long time summer resident of Martha's Vineyard (22 Saddle Club Road, Edgartown) and a long time supporter of the Vineyard Wind Project.

For our future, I support developing all types of power, particular wind in areas well suited to it, such as off Cape Cod and the Islands. Wind reduces the need to use fossil fuels and is sustainable.

The project is the culmination of more than ten years of exhaustive study and analysis to determine where offshore wind industry could be developed with the least possible impact on existing industries and the environment.

It's time to move forward and we urge BOEM to approve this project without any further delay.

# Bradley K. Lima

48 Christopher Hollow Road  
Sandwich, Ma 02563

**RECEIVED**

24 June 2020

**JUN 30 2020**

Program Manager  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
Sterling, Virginia 20166.

**Office of Renewable  
Energy Programs**

Ref: Letter of support for the Vineyard Wind and additional offshore wind projects

To whom it may concern,

I write this letter of support today for the Vineyard Wind and all offshore wind projects being considered along the continental United States. Most of my 50-year career has been intricately linked to the field of power generation. As we address the challenges associated with the development of offshore wind, we also should look back into the history of power generation and determine if there are lessons learned from the past.

In the 1940s and 1950s power generation in the U.S. was primarily focused on oil and coal fired generation stations which were built with a 40-year life expectancy. Coal and oil were abundant and low in cost but yielded high CO<sub>2</sub> emissions along with high levels of Sulfur Dioxide. In the 1960 and 1970s the focus became nuclear power generation. These plants were built with 40-year life expectancy. The government understanding there were risks associated with nuclear power, responded with the creation of the Nuclear Regulatory Commission for oversight of this industry. As the U.S entered the 1980s and 1990s there was a change of thought towards building plants for a 15-20 life expectancy with the understanding that higher overall plant efficiencies must be attained. The concept of combined cycle power generation was adopted where plant efficiencies could be achieved at 55% or even higher while using natural gas as a fuel source. As we enter a new century, the power generation industry now must take into consideration of impact items such climate change, carbon dioxide emissions, capacity of fossil fuels while experiencing an increase in global demand for electricity.

**PUBLIC**

The direction taken on new power generation concepts which was adopted was wind power. It is quite evident based on the number of companies which have won leases for the Atlantic Coast sites that offshore wind is where power generation wants to be. Globally today there is nearly 600 Gigawatts of wind power with approximately 23 Gigawatts of power coming from offshore wind. Offshore wind is no longer a new industry as offshore wind has been around for 20 years, predominately in Northern Europe. Many of the concerns addressed in the BOEM report can be answered by communicating with those who have met the challenges associated with offshore wind. As I reviewed the BOEM report, I took notice of the study on avian fatality and the model that was created indicated one fatality every 6.25 years. It is nice to know that a wind turbine is not a bird Cuisinart.

In reading the BOEM white paper, there was one statement which was continually used: "To the degree wind energy development offsets the use of fossil fuel used to generate power, it will reduce carbon emissions and further efforts to reduce global warming". Calculated risks are a necessity when adopting a concept for the first time. Global warming is a subject that must be addressed now, and corrective measures must be adopted so future generations are not burdened by lack of decisiveness by regulatory authorities.

As a country who takes great pride in wanting to be a global leader, we have decided to an overly cautious approach to the development of offshore wind power generation. Yes, when considering projects of this magnitude, there are risks along with entities which could be impacted. There are also lessons learned from existing offshore wind projects which should assist BOEM in moving the necessary permitting for the Vineyard Wind project forward.

Respectfully submitted,



Bradley K. Lima



Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from WILLIAM HAMNER,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

Sirs:

I am a homeowner in Chilmark Town on Martha's Vineyard with a direct interest in the Vineyard Wind project. I strongly support the proposed project and I am very concerned it will be delayed because the Vineyard Wind EIS is defective under NEPA for failing to include a reasonable alternative that would largely eliminate the major environmental impacts of the project. I believe the EIS will be challenged in court, the BOEM will lose, and it will have to start the EIS process over and the project will be significantly delayed.

The EIS states that the turbines will be installed on monopole or jacket foundations. These foundations require scouring the seabed at the installation site, destroying habitat, and they are driven into the seabed, creating significant sound effects and potential impacts on endangered whales. They require the use of new offshore crane ships to lift and install the turbines on the foundations. These ships also create environmental impacts.

These impacts are eliminated if mobile jack-up platforms are used as foundations for offshore wind turbines. They do not require pile driving so create no significant sound effects. They are easily removed if they do create adverse environmental impacts. They do not require specialized construction ships and thus eliminate their environmental impacts. They have been used in the Gulf of Mexico for over 60 years and are proven to withstand Category 5 hurricanes. Jackup platforms can readily support turbines of up to 16MW, in depths to 300 feet, using proven offshore oil field construction with ABS-certified design. Thousands of

ID: BOEM-2020-0005-0101

Tracking Number: 1k4-9hfv-8sv7

### Document Information

**Date Posted:**

Jul 1, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

WILLIAM HAMNER

jack-up platforms have been installed around the world.

The first mobile jack-up platform for offshore wind turbines, called the "Titan", has already been built and is installed in the sea offshore Sweden, where it supports a meteorological tower. See [www.windbaseoffshore.com](http://www.windbaseoffshore.com). The design is certified by ABS for wind turbines as well as met towers. The design is suitable for depth to 300 feet. In contrast, no monopole foundation for a wind turbine has ever been certified, much less built and proven, for water deeper than 100 feet.

Jackup platforms are known, effective, and eliminate most of the impacts of constructing and decommissioning an offshore wind farm. Their use in the Vineyard Wind project will eliminate the most significant impact of concern on endangered whales protected by law. NEPA requires assessment of reasonable alternatives, especially concerning affected endangered species.

The EIS and the supplement are defective because they do not include the reasonable and obvious alternative of mobile jackup foundations. It is very likely that the EIS will be challenged in court and will be found defective, and the EIS will have to redone. This will delay the project, costing the proponents and governments more money and raising the cost of the project which will be passed on to rate payers. BOEM must include a reasonable analysis of the foundation technology alternatives in the Final EIS to avoid this.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Michael Fieleke,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

I fully support developing clean energy potential off our shores. The Block Island Wind Farm demonstrates the feasibility of this job-creating, wildlife-friendly energy opportunity along the Atlantic Coast. It is so important for combatting climate change that we advance the nation's first utility-scale offshore wind project.

Projects contracted along the Atlantic-coast could generate \$25 billion in annual economic output and 83,000 well-paying jobs by 2030 alone. Whether we reach these goals will depend on swift action, starting with the approval of Vineyard Wind's 800 megawatt offshore wind project.

The untapped offshore wind resource along the Eastern Seaboard is one of the most powerful in the world. Offshore wind is within reach of some of the most densely populated areas in the country where energy demands are high and new energy options are few.

We can already see the effects of climate change threatening our wildlife and coastal communities. It's time to chart another energy course, and embrace the environmental and economic benefits of responsibly developed offshore wind power.

I urge you to act expediently to move the Vineyard Wind project forward and ensure responsibly developed offshore wind power plays a major role in our nation's energy future.

ID: BOEM-2020-0005-0114

Tracking Number: 1k4-9hkj-3mtf

### Document Information

**Date Posted:**

Jul 1, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Michael Fieleke

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Olivia Gieger,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

I write to show my wholehearted support for the Vineyard Wind project. Massachusetts is the place where I have grown up, learned to love the outdoors, and developed a consciousness of how badly we need to protect it. I know that this project is a crucial step in building a future where air is clean to breathe and sea levels stalled from rising.

In 2016, I was one of fourteen plaintiffs in *Kain et al. v. Massachusetts Department of Environmental Protection*. In my testimony, I wrote specifically about how the beaches and shorelines of Martha's Vineyard were an important part of my connection with my state and sense of self. In our case, the SJC ruled that the state's existing environmental efforts "fell short" and in response, the state needs to offer annual reductions in greenhouse gasses. Following this decision, Governor Charlie Baker issued Executive Order No. 569, Establishing an Integrated Climate Change Strategy for the Commonwealth. Massachusetts has a deep obligation to deliver on green energy solutions that reduce greenhouse emissions, and the Vineyard Wind project is the opportunity we must seize in order to do so. Offshore wind is central to Massachusetts' and our region's goals of reducing greenhouse gas emissions to limit the effects of climate change. For me, this is far greater than a political issue, it is an issue of whether the Massachusetts of my adulthood will be one where I can walk along Martha's Vineyard beaches, sit at the Boston waterfront, or ski in the hills of Wachusett, as I grew up doing. It is an issue of whether the privileges I've received in the land surrounding me clean water, clean air, grass and trails free of toxic waste will be rights guaranteed to everyone, rather than privileges; we know

ID: BOEM-2020-0005-0098

Tracking Number: 1k4-9hjt-dqb3

### Document Information

**Date Posted:**

Jul 1, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Olivia Gieger

PUBLIC

that our electric power has major public health impacts, typically on disadvantaged communities, that wind does not bear. It is an issue of whether we will be able to create jobs in the clean energy sector, rather than perpetuating an unproductive reliance on the stagnant coal, oil, and gas industry.

I have always been proud of my state, and proud to fight for the environment I know we deserve here. Please approve the construction plan for the Vineyard Wind project as soon as possible so that Massachusetts can continue to be a state I am proud of, and a place that will be a habitable home for generations to come.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Don Mallinson,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

I use to be a "live-aboard" on a sailboat, now I'm a "wash ashore" in a seaside community on Cape Cod. Although retired, I consider myself an environmental activist. My comments are based more on observations and readings than scientific study.

Ocean as a habitat is constantly changing. Human activity is warming the globe. According to the Audubon Society, this habitat warming is having a more devastating effect on birds than wind farms on the eastern seaboard. This warming is also causing the sea life to migrate or perish. Follow the lobsters.

Humans are at the top of this food change. Commercial fishermen have to adapt or perish, too. Historically, commercial fishermen have always objected to limits on size, amount, type, number of days and types of gear. Even they would admit that without these imposed limits, there would be little if anything worth fishing for today.

Commercial fishermen have something in common with coal miners. Too many working depleted resources. There is need for retraining programs. On the other hand they have nothing in common with farmers. Farmers have to sow prior to reaping. Fishermen just rape.

Now I see their expressed need for a 2-4 mile wide transit lane through wind farms in order for them to get from one side to the other. This cannot be true. No self-respecting sea captain needs even a mile wide channel never mind a 2-4 mile one.

It has been ten years since the proposal for Vineyard Wind was initiated. How much longer will this process take? Or is the Administration's goal death by a thousand studies?

I have concerns that BOEM, under this present

ID: BOEM-2020-0005-0118

Tracking Number: 1k4-9hl8-cxca

### Document Information

**Date Posted:**

Jul 5, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Don Mallinson

administration, will favor ocean exploitation over conservation. To preserve planet Earth for humans and all animal life we must convert from energy based on burning fossil fuels to energy based upon renewable, sustainable sources such as solar panels and wind farms.

There is no planet B.

Respectfully,  
Don Mallinson

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Williams, John

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

### Comment

As a 35-year resident of Massachusetts, I support the Vineyard Wind project for a variety of reasons, chief among which is the positive impact it will have on our environment. Massachusetts should lead the way in converting our energy dependence from fossil fuels to renewables, and the proposed project is a major step in accomplishing that leadership. The Vineyard Wind project will also result in a substantial number of high-quality jobs. Vineyard Wind is an outstanding project to put people to work helping to convert to renewable energy and I support it fully.

**ID:** BOEM-2020-0005-0122

**Tracking Number:** kca-m9bw-338r

### Document Information

**Date Posted:**

Jul 7, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

John Williams



Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Matthew Perzanowski,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#) 

**ID:** BOEM-2020-0005-0130

**Tracking Number:** 1k4-9hof-l1qv

### Document Information

**Date Posted:**

Jul 8, 2020

[Show More Details](#) 

### Submitter Information

**Submitter Name:**

Matthew Perzanowski

### Comment

As a life-long islander and current student at George Washington University, I fully support the Offshore Wind project south of Martha's Vineyard. An emphasis on wind energy is crucial in protecting our planet as we wane off environmentally harmful energy sources. The additional benefits to the surrounding economy further show how important and impactful this project will be.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from David Cole,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0129

**Tracking Number:** 1k4-9hoe-9fdb

### Document Information

**Date Posted:**

Jul 8, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

David Cole

### Comment

Testimony for BOEM Hearing, June 7th 2020

My name is David Cole. I am a member of Mass Audubon's Climate Change Committee and was co-founder of a local organization named the South Coast Climate Change Coalition. Others appearing today will provide you with more professional information on the environmental impact of the offshore wind projects. I would like to present you a personal perspective.

I live at Westport Point on the South Coast of Massachusetts in a house built in 1776 - an auspicious year. Our house on the bank of the Westport River Estuary has survived hurricanes and floods for 244 years. But it now faces the threat of being underwater in the coming decades due to rising sea levels, or being destroyed by more powerful hurricanes and storm surge.

I am 92 years old, born in the year when Herbert Hoover was elected president, lived through the Great Depression and World War II, worked in a destitute and impoverished China immediately after the war, served in war-ravaged South Korea with the US Army in the early 50s, worked in Vietnam between the wars in the mid-1950s, was in Washington in the State Department in 1963 where I attended Martin Luther King's "I have a dream" speech and suffered the agony of President Kennedy's assassination. My professional career as an economist was devoted to assisting major Asian countries such as South Korea and Indonesia to achieve rapid economic development.

So, I have a sense of living history, sometimes tragic, sometimes hopeful. But the awareness that climate change could radically alter life on this earth within only one-half of my lifetime terrifies me. That feeling is further compounded by the thought that my nine grandchildren will be struggling to survive the existential threat of the climate crisis in their lifetimes if we fail to act now to prevent that threat.

After consulting with experts and examining the alternatives, I have concluded that offshore wind power at the numerous sites along the

PUBLIC

Atlantic Coast offers the most promising way of slowing climate change. As the Bureau is clearly aware, these sites could provide vast amounts of clean energy.

State of the art wind turbines along the Atlantic Coast will be among the most, if not the most, efficient means of generating electricity. That means we can have the direct benefits of low-cost power, more jobs, more revenue for governments and adequate profits for investors. But of much greater significance will be the indirect benefits, or externalities, of less harm to public health and less property damage from forest fires, floods and strong winds. The current Covid crisis provides a painful example of the kinds of threats that will be faced in the future if we fail to cut carbon emissions.

This past winter and spring, we had many very windy days and nights along the New England Coast. As we were buffeted by these winds, I kept thinking if only those wind turbines were in place, just imagine how much power they could be generating, and how much carbon emission they could be avoiding.

A number of highly qualified companies are ready to begin construction on these projects and are just awaiting your approval. I urge you to complete this already too lengthy review process as quickly as possible and let this most hopeful activity begin. Please act now to preserve as livable world as possible for my grandchildren and your children.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Alexander Boyle,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0171

**Tracking Number:** 1k4-9hrx-c3ev

### Document Information

**Date Posted:**

Jul 13, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Alexander Boyle

### Comment

As a property owner on Martha's Vineyard and citizen who is concerned about preserving our environment, I am dismayed at the interminable length of time it has taken to start developing offshore wind energy on a commercial scale in the US. We all know from multiple studies that the Northeast US is one of the most desirable places on earth for the development of wind energy. The studies have been more than thorough and exhaustive. The Vineyard Wind developers have been incredibly patient in working out solutions which protect the interests of the fishing industry. The 1 X 1 NM layout has significantly reduced the economic return of the developers, and yet, they have agreed to compromise in order to meet all possible concerns about fishing and navigational interests. Significant capital has been invested in preparing to launch the Vineyard Wind project. Residents on Martha's Vineyard, as a result of the developers' strenuous efforts to communicate and explain every aspect of their plan, are enthusiastically behind the project.

Of special concern to many of us is that if additional constraints are placed in the way of the Vineyard Wind project, the entire offshore wind industry is likely to collapse, resulting in the loss of tens of thousands of good paying jobs, and losing a major opportunity to reduce damage to our oceans through increased acidification and increased temperature.

I sincerely hope that BOEM will approve the project as proposed by Vineyard Wind with the 1 X 1 NM layout as rapidly as possible. It is time the US joined the company of so many nations around the world in safely and effectively harnessing the benefits of offshore wind energy.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Steven Wenner,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0154

**Tracking Number:** 1k4-9hq0-vte4

### Document Information

**Date Posted:**

Jul 13, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Steven Wenner

### Comment

Thanks for the opportunity to comment. I'm Steve Wenner, a resident of Cohasset Massachusetts and a volunteer with several climate activist organizations. I want to urge the BOEM to expedite approval of a robust option for the Vineyard Wind project. The scientific community agrees that we must greatly reduce our greenhouse gas emissions to mitigate the worst impacts of climate change, and we have about ten years to accomplish this. If we fail, the cumulative impacts of climate change will likely overwhelm societies' ability to adapt. The stresses induced by climate change will endanger our very civilization. I recognize that this offshore wind project has some short term environmental and societal problems; but, these risks are surely much less than the irreversible and overwhelming damage certain to hit us if we fail to curtail our dependence on fossil fuels.

What do we want to tell our grandchildren? Will we be forced to admit that we put obstacles in the path to saving civilization, or would we rather be able to say that we did everything in our power to save the environment for our grandchildren and for future generations. Thank you.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Sheila Place, 350 Cape Cod, and Faith Communities Environmental Network.

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0159

**Tracking Number:** 1k4-9hqq-yimn

### Document Information

**Date Posted:**

Jul 13, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Sheila Place

**Organization Name:**

350 Cape Cod, and Faith Communities Environmental Network.

### Comment

I have resided on Cape Cod for 25 years, and for most of that time, I have been involved in environmental activism. I've watched with alarm the acceleration of climate change and the threat it represents. It is front and center here on Cape Cod, and it threatens every aspect of life on the Cape and Islands and beyond. The science behind my concern is solid and informed by the robust science community right here. We ignore it at our peril. The iconic Cod, along with other fish species are moving north in search of cooler waters, posing a severe threat to our regions fishing communities. Warmer ocean waters bring the threat of increasingly severe storms, and we have seen plenty of evidence to support that concept.

Projects such as Vineyard Wind are increasingly essential if we are going to slow the advance of climate change and the looming crisis it represents. I have been impressed with Vineyard Wind's collaboration with other off shore wind companies, in response to area stakeholders, which resulted in subsequent standardizing of transit lanes. Vineyard Wind has been a model for responsiveness to local communities.

We are clearly at the point where we are running out of time with regard to the signals that climate is sending, loud and clear. Adding more fossil fuel capacity at this time will make a frightening situation worse, with ever more habitat degradation for marine and terrestrial life. Wind energy, along with solar energy can be a major part of the recovery we need after the last disastrous five months, and counting, due to Covid-19. These energy sources are largely clean energy and have tremendous employment opportunities, with hundreds of well paying jobs, along with providing a much needed boost to local economies.

To delay any longer is not in the best interests of anyone. We are presented with a win win situation. Let's grasp it!

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Kirsten Sauter DVM ,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0184

**Tracking Number:** 1k4-9hsg-pzph

### Document Information

**Date Posted:**

Jul 15, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Kirsten Sauter DVM

### Comment

YES to Vineyard Wind. I am a year-round island resident, and a business owner for the last 26 years. Change is hard for many people. But that doesn't mean we can just keep doing what we're doing and expect it to get better by itself. Climate change is real. The threat is imminent. Look at the comparison photos during covid when areas sheltered in place. The environment was so much cleaner. The planet needs so much more clean energy! Wind power is not new. Its time for fisherman and the shipping industry to share the ocean with wind turbines. Wind happens over water. Vineyard Power did extensive homework. Years of feasibility studies and research have led to this current plan and design. Our population continues to grow and we are dependent on electricity, let's use what we know about clean energy now and move forward to help the planet.

In addition, bringing so many new jobs to the island is a huge benefit. I love that the plan includes going into the high school to expose and train local kids to the current pertinent jobs and valid careers of the future in sustainable energy.

Please, I urge BOEM to permit the project without delay and choose alternative D2. Thank you.

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Madeleine Bell,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-4487

**Tracking Number:** 1k4-9hxg-qb30

### Document Information

**Date Posted:**

Jul 21, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Madeleine Bell

### Comment

Renewable energy is the only sustainable framework that can provide a secure future for not only the island but the world. I am a fourth generation summer visitor in support of Vineyard Wind 1 under the assessment of the Supplementary Environmental Impact Statement through alternative D2, specifically the proposed 1x1 nautical mile turbine layout deemed permissible by the U.S. Coast Guard. Failure to follow through with these plans will put the Vineyard behind the times and on the wrong side of history.



Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Ashley Koster,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-11289

**Tracking Number:** 1k4-9hyd-g8u2

### Document Information

**Date Posted:**

Jul 22, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Ashley Koster

### Comment

I am a resident on Martha's Vineyard and in Connecticut. I believe that we need more renewable energy instead of fossil fuels, as fossil fuels contribute to climate change and to additional environmental problems. Allowing the construction of this offshore wind farm and additional wind farms will help in this endeavor. Permitting the construction of this wind farm will also create numerous jobs. Particularly in the aftermath of COVID-19 with the high level of unemployment, this wind farm is needed all the more. As Vineyard Wind will be able to create 3,600 jobs as the industry is built over the next few years. Furthermore, the offshore wind industry is expected to create more than 80,000 jobs within the next decade. Permitting this wind farm to proceed without delay will allow these benefits to be realized sooner, and not additional years down the line. Additionally, wind farms are financially viable and can in fact save ratepayers money. The Vineyard Wind wind farm will save ratepayers more than \$1.4 billion in energy costs during the first 20 years of the project. And Vineyard Wind 1 will also save ratepayers more than \$3.7 billion in energy related cost savings over the lifespan of the project. Thank you for the opportunity to comment and I urge BOEM to permit this project to move forward without delay and choose Alternative D2.

Comment from Bert Jackson,

Posted by the Bureau of Ocean Energy Management on Jul 22, 2020

I'm writing in support of the Vineyard Wind project proposed for installation offshore south of Martha's Vineyard, Massachusetts. As a community leader in the Cape Cod region with strong interests in the health of our coastal and ocean environments, the sustainability of our local blue economy enterprises, and the dire need to address carbon emissions to curb climate change, I am completely in support of this project. Respected environmental advocacy groups in our region have studied the Vineyard Wind plan, have provided feedback on concerns, and then gave their approval based on Vineyard Wind's responses and plan modifications. Vineyard Wind has demonstrated they are a viable environmental partner.

I urge the BOEM to approve the Vineyard Wind project, which will also pave the way for other sustainable offshore energy production in our region.

Thank you.

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from DarrochMannix, John

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

I am a resident of New Haven, CT and I am writing in support of the Vineyard Wind 1 project. The project is the culmination of more than 10 years of exhaustive study and analysis and extensive consultation to determine where winds project could be built with the least impact on the environment and existing industries, including and not limited to the fishing industry's. This project will help the entire Northeast United States get closer to their renewable energy targets, which is crucial for a region that is already experiencing the effects of climate change and sea level rise.

The Vineyard Wind project will also create 3,600 jobs for local residents and save ratepayers in several states more than \$1.4 billion.

**ID:** BOEM-2020-0005-13012

**Tracking Number:** kd4-wavq-07jd

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

John DarrochMannix

July 27, 2020

U.S. Bureau of Ocean Energy Management  
Program Manager  
Office of Renewable Energy  
45600 Woodland Road  
Sterling, Virginia 20166

Submitted via <http://www.regulations.gov>

**Re: Docket ID: BOEM-2020-0005, Supplement to the Draft Environmental Impact Statement (including Cumulative Effects Analysis) for Vineyard Wind**

I am writing to share my thoughts on the vessel navigation and national security analyses set forth in the Bureau of Ocean Energy Management's (BOEM) supplement to the draft environmental impact statement (SDEIS) for Vineyard Wind.

Based on my 35 years in the Navy, including as Commander of the Third Fleet, and nearly ten years focused on the nexus between national security, clean energy and climate issues, including as the Assistant Secretary of the Navy for Energy, Installations and Environment, I strongly recommend that BOEM in the final EIS:

(1) Adopt Alternative D2 as the Preferred Alternative for addressing vessel navigation safety issues because, among other benefits, it has a lower impact on national security than Alternative F.

(2) Reduce the overall cumulative impact rating for military and national security issues to minor or, at least, moderate.

Offshore wind has significant potential in the U.S. Advancing a domestic, non-polluting energy resource like offshore wind will improve our energy security and contribute to our economic security. Based on my experience in the Navy, I have no doubt that offshore wind can be deployed in a way that is consistent with safe vessel navigation. And, in light of my engagement with the Department of Defense's (DoD) Military Aviation and Installation Assurance Siting Clearinghouse's ("Siting Clearinghouse") review process for proposed energy projects during my time as Assistant Secretary of the Navy, I am confident that offshore wind developers, DoD and BOEM can design projects ways that are fully compatible with military testing, training and operational activities and ensure that any potential impacts will be mitigated or minor.

The ability to navigate safely across the ocean is obviously critical to all users, whether they are military vessels, commercial fishermen, recreational boaters or sailors, cargo vessels, or others.

PUBLIC

The U.S. Coast Guard (USCG), as the ultimate arbiter of what measures are needed to maintain safe navigation for ocean users, should be given deference in making safety recommendations. With respect to offshore wind development off the coasts of Massachusetts and Rhode Island, the USCG has been clear. In the final Massachusetts and Rhode Island Port Access Route Study (MARIPARS) published in May 2020, the USCG concluded that 1x1 nautical mile (nm) spacing between turbines in a uniform grid layout across the multiple adjacent leases areas will “maximize safe navigation within the MA/RI WEA” and that “formal or informal vessel routing measures would not be required as such a grid pattern will result in the functional equivalent of numerous navigation corridors that can safely accommodate both transits through and fishing within the wind energy area.” The 1x1 nm spacing and uniform layout the USCG found is the best alternative to help ensure vessel navigation safety, and it is reflected in Alternative D2 in the SDEIS.

By contrast, the USCG found that imposing 2 nm to 4 nm mile transit lanes, as proposed in Alternative F, through the lease areas would make “navigation more challenging, [as] most traffic would then be funneled into the corridors thereby increasing traffic density and risks for vessel interaction.” This is consistent with BOEM’s analysis in the SDEIS that these broad “[t]ransit lanes may . . . cause funneling of transiting traffic and may create choke and intersection points . . . and result in increased space use conflict if any commercial fishing activity occurs in the transit lanes.” Further, the SDEIS finds that “the implementation of transit lanes could increase the risk of allision or collision (and resultant spills).” In addition to being more impactful on vessel navigation safety, similarly, BOEM found Alternative F to be more impactful to military and national security—with a cumulative impact rating of moderate to major—versus the moderate rating for Alternative D2.

I would also strongly urge BOEM to adjust the major rating for cumulative impacts to military and national security in the final EIS to minor, or at most, moderate. As BOEM recognizes in the SDEIS, there is already a robust DoD review process managed by the Military Aviation and Installation Assurance Siting Clearinghouse. Under that process, offshore wind energy project developers are already required under federal law, BOEM regulations, FAA regulations, and DoD regulations (which includes an instruction memorandum process that defines engagement on offshore wind) to engage with DoD and resolve concerns. And if DoD so chooses, it can object to a proposed energy project.

As someone who participated in the DoD review process from the inside when I was Assistant Secretary of the Navy, I can validate the process is thorough and is solely focused on what is needed to protect the military mission. In my experience, neither DoD nor the individual military services will sign-off on a proposed project that may pose a major impact to military testing, training, or operations. Further, under federal law, the potential for any “adverse impact” on military operations and readiness triggers discussions with project proponents about potential ways to resolve DoD concerns. If those concerns can be resolved, the solution is typically memorialized in a signed memorandum of agreement and, in the case of an offshore wind project, could be memorialized in conditions imposed by BOEM through the issuance of a permit.

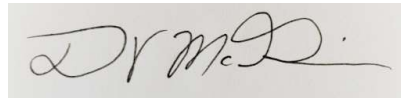
In the unlikely event DoD concerns cannot be resolved in a mutually agreeable way, developers of land-based renewable energy projects have usually cancelled development of those projects. However, if they do not do so in rare cases, then DoD can object to a proposed project as an “unacceptable risk to the national security of the United States.” No project has ever been built over a DoD objection.

In the offshore context, it will likely never come to the point of a DoD objection because DoD is involved with BOEM from the beginning of the offshore renewable energy permitting process, including providing feedback on proposed Wind Energy Areas (WEAs), and identifying any concerns about proposed lease areas within a broader WEA before it is made available for auction. In fact, BOEM has made changes to proposed WEAs and lease areas in response to concerns raised by DoD. So, it is extremely unlikely that DoD would later ever have to raise a previously unidentified concern for a project proposed within one of the previously vetted areas.

In sum, I strongly urge BOEM to select Alternative D2 as the Preferred Alternative, reject Alternative F as unreasonable, and lower the overall military and national security cumulative impact rating to minor.

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "D. McGinn", is centered within a light gray rectangular box.

Honorable Dennis V. McGinn  
Vice Admiral, U.S. Navy, Retired  
Former Assistant Secretary of the Navy

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Ben Tillman,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

I was born and raised on the island of Martha's Vineyard, and I'm a college student at University of Connecticut. Growing up on this island has given me a front row seat to the effects that climate change has on our world. Because of the increasing severity of the effects of climate change, now more than ever, we need to rely 100% on renewable energy and shift away from fossil fuels. Additionally, Vineyard Wind 1 will produce 800MW of clean energy which is a step in the right direction and will help Massachusetts reach its Clean Energy Standards. This wind farm will also produce enough clean energy to power 400,000 homes.

Particularly in the aftermath of COVID with the high level of unemployment, this wind farm is needed all the more. As Vineyard Wind will be able to create 3,600 jobs as the industry is built over the next few years. Furthermore, the offshore wind industry will create more than 80,000 jobs within the next decade. Permitting this wind farm to proceed without delay will allow these benefits to be realized sooner, and not additional years down the line.

While the SDEIS makes clear there will be some impact associated with the project, they are overwhelmingly negligible to moderate. With regard to fishing specifically, the report says that any impact would be moderate. The report also says "the impacts are anticipated to be adverse in the near-term but may become neutral over time if fishing practices adapt to the presence of structures. Additionally, there will be actions taken during the construction of the wind farm to gradually increase the force at which the monopiles will be driven into the earth. Doing so, would be less threatening to marine animals.

Thank you for the opportunity to comment and I hope BOEM permits this wind farm to move forward without any delay and to select Alternative D2.

**ID:** BOEM-2020-0005-12367

**Tracking Number:** 1k4-9hzz-5nud

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Ben Tillman

PUBLIC



## Comment from Natalie MacDonald,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0071

**Tracking Number:** 1k4-9hhu-mrey

### Document Information

**Date Posted:**

Jun 29, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Natalie MacDonald

### Comment

I am a 20 year old female pile driver who has taken the training required to be able to work on building off shore wind farms. To imply that I do not care about the future of our planet, the animals that live here, or the people who also work in these waters for a living is totally incorrect. I see what we have done to our planet through years of reliance on fossil fuels, and yes no solution is perfect. But here we have the opportunity to lead the way. To build turbines in a way that takes into account, wildlife, fisherman and local residents. There is no perfect solution to supply the energy demands of a growing world, but these turbines along with other clean energy solutions are the future. You can resist the change and demand that as an industry fishing should be given precedence over turbines for ocean space, but you can not deny that your industry has also had dire negative impacts on the waters you claim to be here to protect. Overfishing, habitat destruction and an industry that has become one dominated by large conglomerates can not possibly sit here and say they are doing right by our planet. Yes, the project could affect people's livelihoods, but it could also put us one step closer to having cleaner energy. Whilst also showing the rest of the United States that we are serious about the future we want to secure for future generations. Change is hard, not all the world embraced the industrial revolution, but it nonetheless prevailed. We are now at the point where we can make a very positive change on our planet when it comes to creating clean energy, creating jobs in a growing field, and we need to take a stand against increasingly large fishing entities that claim to be working for the best interest of their employees and not just to take all they can from our oceans. We can all share the oceans, but we have to be willing to work together, to concede a little on both sides, and to do what we can to make the world a cleaner and more sustainable planet. I deserve to be able to work just as much as a local fisherman, and we should be able to work together, the world is too often about pitting everyone against each other and speaking as perhaps one of the youngest voices vested in this project we should show the world what collaboration and cooperation can look like.



Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Kyle Martin,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0087

**Tracking Number:** 1k4-9hjb-wrve

### Document Information

**Date Posted:**

Jun 30, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Kyle Martin

### Comment

As a piledriver in Local Union 56 out of Boston, MA, the proposed offshore wind farm means more to me than a paycheck. It is an investment in our states future in renewable energy that could easily be shut down by the commercial fishermen's unreasonable demands. While they have every right to utilize the oceans recourses, they do not have the right to shut down a sector that will employ more people and provide clean energy for many years to come. I have already taken part in the training for the offshore wind farms, and my fellow piledrivers and I have every bit as much right to develop the renewable energy resource presented by the wind farms. If the mariners behind this demand are unable to navigate in the already established navigation lanes they should probably find a new line of work.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Patrick Paul,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

To whom it may concern, I am a Pile Driver Instructor for L.U.56 and NASCTF. I worked on the first offshore wind mill project off the U.S. coast deep water wind project off of Block Island in 2015. I also help train members for the GWO offshore wind mill safety training through Mass Maritime. After seeing pollution destroy our planet, having worked on many hazardous waste sites through out my career, I believe the time is now to issue the permits for Vineyard Wind. I understand the fisherman's concerns but I have a right to work offshore too. I believe the navigation way that Vineyard wind is adequate. Good paying jobs are on the line for thousands of people if these permits are not issued as is.  
Sincerely  
Patrick Paul  
Proud resident of Massachusetts and local 56 member

**ID:** BOEM-2020-0005-0096

**Tracking Number:** 1k4-9hjs-bw5d

### Document Information

**Date Posted:**

Jul 1, 2020

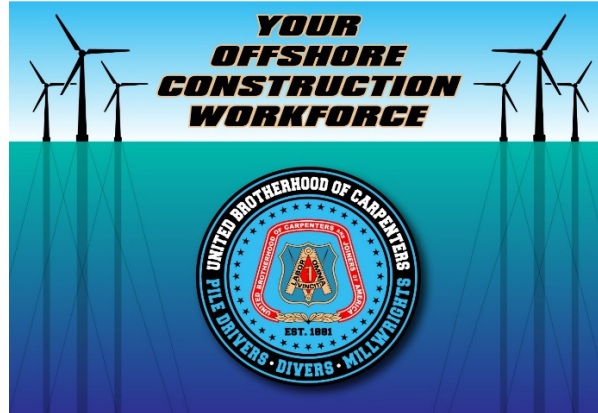
[Show More Details](#)

### Submitter Information

**Submitter Name:**

Patrick Paul

# ***UBC Pile Drivers, Divers and Millwrights***



July 7, 2020

To: U.S Department of the Interior  
Bureau of Ocean Energy Management

From: Joe Byrne, Executive\_ Secretary-Treasurer, North Atlantic States Carpenters  
Robert Loubier, Executive Secretary-Treasurer, Eastern Millwrights Council

RE: Public Testimony in support of the Supplemental Environmental Impact Statement for  
Vineyard Wind, LLC

The Pile Drivers, Divers and Millwrights are proud members of the United Brotherhood of Carpenters, and we are long-time supporters of the Vineyard Wind 800 MW offshore wind energy project at BOEM OCS-A 05 01 Lease Site. Additionally, we believe that the Supplemental Environmental Impact Statement (SEIS) submitted in December 2019 fully addresses the concerns which were raised by other stake holders when reviewing the first EIS. We strongly urge BOEM to approve this SEIS and allow this project, which is critical to the entire US offshore wind industry, to move forward.

Specifically, we want to point out that Vineyard Wind has revised the overall grid layout for the placement of turbine towers to allow for 1 nautical mile ( NM) between each tower, in response to commercial fishing industry concerns for vessels transiting the lease site. We recognize their legitimate worries for how the project will impact fishermen. It is clear that Vineyard Wind has taken their issues seriously. The re- design of the layout, which has the support of the United States Coast Guard , will come at considerable expense to the developer. The longer transmission cables will incur costs, as well as the operational cost of 84 borings at the new locations. And the company has committed a further \$17 million to a fund to mitigate any impacts to fishing that may occur.

PUBLIC

However, we believe the current demand by commercial fishing interests for a *4 NM wide* transit corridor is unnecessary and will make the project financially unfeasible. More to the point, it will jeopardize the future of offshore wind, with major negative impacts immediately for both jobs and the regional economy.

The coastal waters of New England are a shared resource, and our members have a right to make a living and support their families from these waters as well.

We collectively represent more than 1,000 skilled marine construction workers- pile drivers, divers, millwrights, turbine mechanics, welders and riggers - and provided the majority of the offshore workforce for the nation's first offshore wind installation- Block Island Wind. Our New England membership is committed to advancing the offshore wind industry and are more than ready to step up and speak out in favor of Vineyard Wind.

We see this very clearly as a win- win- win opportunity, and we are glad to tell you why.

### **1. Energy Independence**

Vineyard wind will help Massachusetts produce its own clean renewable energy. For generations, the citizens of the Commonwealth have been dependent on imported fossil fuels to power our homes and economy, and always sending a sizeable portion of our earnings to out-of-state power generators. Wind energy will reverse that outward cash flow, and reduce carbon emissions as well.

### **2. Careers in a Changing Economy**

The Vineyard Wind project offers lifelong careers with excellent wages and benefits as our national job market is undergoing fundamental changes. As a trade union, we know that offshore wind is not about "a job"- it's a career in a growing industry. Today, apprenticeships and technical certificate programs are the entry points, and Vineyard Wind LLC has already demonstrated meaningful commitment to workforce development with its Windward Force Fund. The company has contributed more than \$200,000 to Mass Clean Energy Center Workforce Grant program. Pile Drivers Local 56 was awarded \$100,000 in May of 2019 by the CEC to train members in the Global Wind Organisation (GWO) Basic Offshore Safety program. We have so far graduated 24 men and women, journeymen and apprentices from the training facility at Mass Maritime Academy, with plans to train at least 36 more. Vineyard Wind both "talks the talk" and "walks the walk" in its commitment to growing the workforce in New England.

### **3. Real-time Meaningful Response to Climate Change**

Climate change is having immediate impacts on our families and our communities, especially coastal communities. **There are many ways to respond, but inaction is not a choice.**

Wind energy substantially reduces the amount of heat-trapping gases we put into the atmosphere. This project offers us the opportunity to make a difference in our own lives, but more importantly, in the lives of our children and grandchildren.

The men and women who are the Pile Drivers, Divers and Millwrights of New England believe in the offshore wind industry and wholly support the acceptance of the Vineyard Wind SEIS and issuance of permits to move forward.

If you have any questions regarding our statement or position, please contact David Borrus at [dborrus@nasrcc.org](mailto:dborrus@nasrcc.org)

Sincerely,

Joe Byrne	North Atlantic States Carpenters
Robert Loubier,	Eastern Millwrights Council
Joseph O'Brien	North Atlantic States Carpenters
Dennis Lassige	North Atlantic States Carpenters
David Borrus	Pile Drivers & Divers Local 56
Rodney Richer	Millwrights Local 1121
Derek Adamiec	North Atlantic States Carpenters
Gary Rogers	Eastern Millwrights Council
Andy Benedetto	Eastern Millwrights Council

Regulations.gov will start redirecting users to the Beta at <https://beta.regulations.gov> on Thursday, July 30th, at 8 am ET to Friday, July 31st at 8 am ET. Please note that all comments that are submitted through the Beta, both during the redirect and regular operations are provided to agencies.



## Comment from Douglas Nelson,

The is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-12900

**Tracking Number:** 1k4-9i1r-ji85

### Document Information

**Date Posted:**

Jul 27, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Douglas Nelson

### Comment

To the Bureau of Ocean Energy Management:  
IBEW Local Union #223 would like to express its satisfaction with the Supplement to the Draft Environmental Impact Statement which was issued June 12th, 2020. While trying to build a cleaner and more environmentally responsible source for electrical generation it would be reasonable to accept that this cannot occur through a process of doing more ecological damage or by sacrificing the local industries dependent on the resources impacted by Vineyard Winds proposed offshore wind farm.

While it is difficult to compare the environmental impact on the Continental Shelf with the impact of European offshore wind turbine locations, thorough environmental impact studies since construction, have shown temporary disturbance to the existing eco-system and avoidance by local inhabitants during construction phase with a swift rebound and in some cases a more abundant and diverse bio-mass populating area after construction phase.

Spatial requirements and dedicated shipping and travel corridors have been expanded beyond initial Construction and Operations Plans to ensure limited impact on migratory routes and commercial traffic.

Vineyard Wind has respectfully considered all of the environmental concerns related to the Southeastern Massachusetts Lease site of Vineyard Wind 1 and the relation of abutting lease sites in regard to migratory routes of marine mammals, fish, and birds and have employed environmental experts to ensure necessary data has been and will be collected prior to and during construction phase of project. The economic impact of this project to the Southeastern Massachusetts region will provide opportunities in a new industry which has received great support from the State of Massachusetts. The educational and occupational opportunities that Vineyard Wind has committed to provide, through partnerships with local educational institutions and

PUBLIC

Labor organizations, are going to be necessary to the economic stability in Massachusetts in a rapidly changing economic climate.

It is my position that Vineyard Wind has accommodated the relevant parties' requests for information, transparency, project impact evaluations, and public engagements to satisfy the Bureaus and the communities' expectations.

Sincerely,  
Douglas P. Nelson  
Business Manager/Financial Secretary  
IBEW Local 223

Docket (/docket/BOEM-2020-0005) / Document (BOEM-2020-0005-0001) (/document/BOEM-2020-0005-0001) / Comment

**PUBLIC SUBMISSION**

## Comment from Aaron Ott,

Posted by the **Bureau of Ocean Energy Management** on Jul 27, 2020

View More Comments 13.23K (/document/BOEM-2020-0005-0001/comment)

Share ▾

Comment

As a Boston Local 56 Piledrivers and Divers member, I was given the opportunity to become a safety trainer for the Global Wind Organisation (GWO). Working with the union, GWO, and Massachusetts Maritime Academy, I have been preparing a workforce to install the proposed Vineyard Winds offshore wind project. In my 30 years of commercial diving, starting with the Gulf of Mexico oil and gas industry, and now moving towards the wind industry, I am certain that we are prepared to demonstrate a winning project for the United States energy sector. Also, the invested time and proper planning to ensure this project remains committed to providing equity with other regional maritime job sectors has further positioned us to launch the project. Overall, a variety of stakeholders are prepared and ready to exemplify job growth and innovation - let's get to work!

**Comment ID**

BOEM-2020-0005-12699

**Tracking Number**

1k4-9i12-ciun

**Comment Details****Submitter Info****Received Date**

Jul 26, 2020

**Page Count**

1

**PUBLIC**





*Your Voice In Federal Decision Making*

[About](#)   [Agencies](#)   [Learn](#)   [FAQ](#)  
[\(/about\)](#)   [\(/agencies\)](#)   [\(/learn\)](#)   [\(/faq\)](#)

[Privacy & Security Notice \(/privacy-notice\)](#) | [User Notice \(/user-notice\)](#) |  
[Accessibility Statement \(/accessibility\)](#)

[Support \(/support\)](#)



## Comment from Brian Harrington,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

**ID:** BOEM-2020-0005-0040

**Tracking Number:** 1k4-9hgh-rwqs

### Document Information

**Date Posted:**

Jun 29, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Brian Harrington

### Comment

The Vineyard Wind project makes good sense, and especially in the northeast USA. The environmental impacts have been extensively examined and are fully acceptable to most people, and to me as a wildlife biologist who has done extensive work in Massachusetts over the past 35 years. The project should be allowed to proceed now without further bureaucratic delays.

Visit the new Regulations.gov Beta site today at <https://beta.regulations.gov>



## Comment from Daniel Hoble,

This is a Comment on the **Bureau of Ocean Energy Management (BOEM) Notice: Supplement to the Draft Environmental Impact Statement for Vineyard Wind LLC's Proposed Wind Energy Facility Offshore Massachusetts and Public Meetings**

For related information, [Open Docket Folder](#)

### Comment

I've had the opportunity to be on board from the beginning of the on-shore EL Cabo wind project developed and maintained by AVANGRID RENEWWABLES in New Mexico. I've had the chance to see the positive impact it had and continues to have in this rural area that myself and my family calls home. I'm excited to see AVANGRID moving to off-shore operations and know that it will have a positive impact in the area that the project will be developed. I'm looking forward to working at Vineyard Wind once the project gets up and running.

**ID:** BOEM-2020-0005-0097

**Tracking Number:** 1k4-9hjs-q6o7

### Document Information

**Date Posted:**

Jul 1, 2020

[Show More Details](#)

### Submitter Information

**Submitter Name:**

Daniel Hoble



# VINEYARD WIND

**Attachment To:**

**Section 15 of the Proposal Narrative - Community Engagement Plan**

**ATTACHMENT 15-13**

**REDACTED**



# VINEYARD WIND

**Attachment To:**

**Section 16 of the Proposal Narrative - Visibility and Viewshed  
Impacts**

**ATTACHMENT 16-1**

**REDACTED**