

Offshore Wind Energy in the Northeast Region Update

**Michelle Bachman,
NEFMC staff**

**NEFMC Meeting
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Newport, RI**



Outline

1. Siting, leasing, and procurement
2. Individual project updates/timelines
3. Fisheries coordination and engagement
4. Research and monitoring
5. Transit and safety

BOEM updates

- Vineyard Wind SEIS with updated cumulative effects analysis forthcoming (estimated March 2020)
- Gulf of Maine wind energy taskforce meeting 12/12/19 in Durham, NH
- Various SAPs and COPs in review phase or coming soon (see project updates)
- Leasing – nothing new

State procurement updates

- MA RFP awarded to Mayflower Wind Energy on 10/30/19, 804 MW project
- New Jersey announced an increased procurement target from 3,500 to 7,500 MW on 11/19/19
- CT RFP announcement expected soon; three proposals received from Mayflower Wind, Ørsted/Eversource, and Vineyard Wind

State procurement summary

| State | Goal (11/19/19) | Awards |
|--------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| ME | | (1) New England Aqua Ventus I (test floating), 12 MW |
| MA | 3,200 | (1) Vineyard Wind, 800 MW (2) Mayflower Wind, 804 MW |
| RI | 1,000 | (1) Ørsted Revolution Wind, 400 MW |
| CT | 2,300 | (1) Ørsted Revolution Wind, 300 MW |
| NY | 9,000 | (1) Block Island Wind Farm, 30 MW (2) Ørsted South Fork Wind Farm, 130 MW (3) Equinor Empire Wind, 816 MW (4) Ørsted Sunrise Wind Farm, 880 MW |
| NJ | 7,500 | (1) Ørsted Ocean Wind, 1100 MW |
| MD | 1,568 | (1) Ørsted Skipjack Offshore Wind, power for 35,000 homes (2) U.S. Wind MD, 270 MW |
| VA | 2,500 (by E.O.) | (1) Ørsted Coastal Virginia Offshore Wind (test), 12 MW |
| TOTAL | 27,068 | |

Layout announcement

- On 11/19/19, the five leaseholders in the MA and MA/RI WEAs - Equinor, Mayflower Wind, Ørsted/Eversource, and Vineyard Wind - announced a uniform turbine layout proposal submitted to the U.S. Coast Guard with 1 nautical mile (nm) spacing between wind turbines.

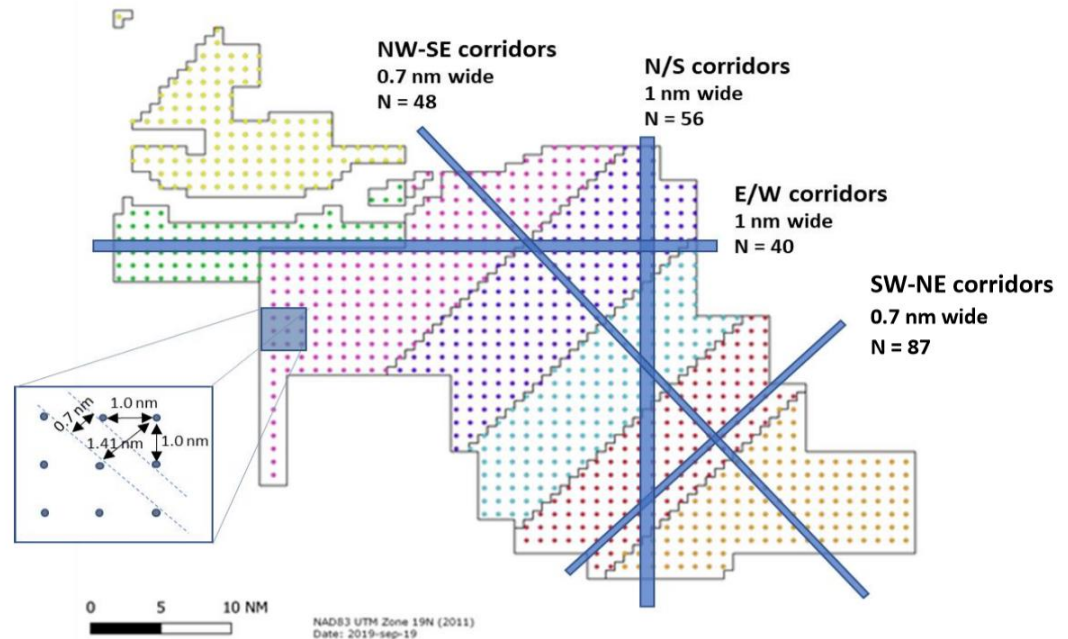
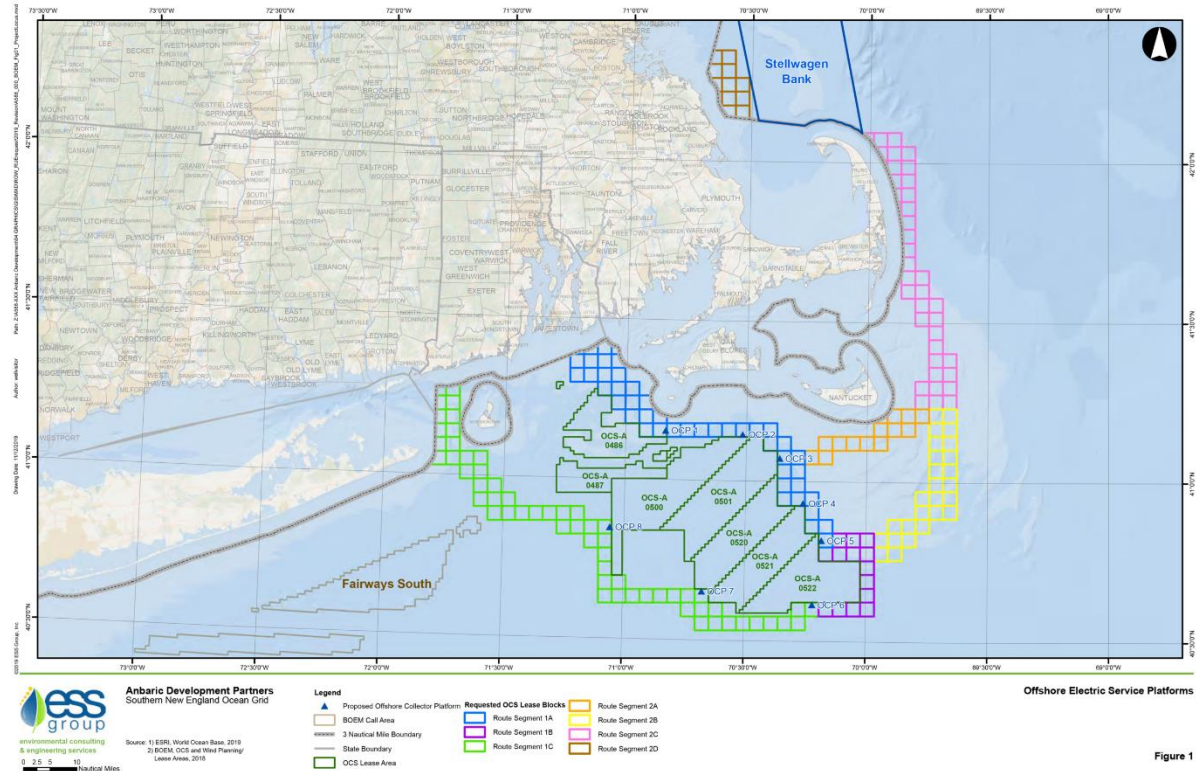


Figure 1: A full 1 X 1 nm E-W, N-S grid creates the equivalent of 231 transit lanes in four different key directions: E-W, NW-SE, N-S and SW-NE.

Coordinated transmission

- General approach has been to combine generation and transmission, but could take a coordinated approach as well
- Anbaric has filed unsolicited lease/right of way requests off NJ/NY and MA (latter announced 11/21/19)



<https://anbaric.com/press-release-anbaric-files-with-boem-to-develop-independent-oceangrid-for-southern-new-england/>

2. Project updates – Massachusetts WEA

- **Vineyard Wind I** - Vineyard Wind/Copenhagen Infrastructure Partners, selling power to MA. BOEM has delayed EIS in order to conduct an expanded cumulative impacts analysis – SEIS expected in March 2020; will include comment period, public meetings.
- **Vineyard Wind II** – remainder of lease area 501; COP possible early 2020.
- **Bay State** – Ørsted project. NOI expected early 2020.
- **Mayflower Wind** – Shell/EDP Renewables, won MA RFP. COP expected late next year.

SAP = Site Assessment Plan

COP = Construction and Operations Plan

NOI = Notice of Intent (to prepare an EIS)

Updates – MA and MA/RI WEAs

- **Equinor project (MA)** – Lease area 520, SAP early 2020
- **Liberty Wind (MA)** – Vineyard Wind project, lease area 522, COP early 2020
- **South Fork (MA/RI)** – Ørsted project, selling power to NY. NOA for DEIS next spring.
- **Revolution Wind (MA/RI)** – Ørsted project, selling power to RI and CT. BOEM expecting COP submittal expected early 2020.
- **Sunrise Wind (MA/RI)** – Ørsted/Eversource/Con Edison project selling power to NY. COP submittal expected early 2020.

Updates – NY, NJ, DE, MD, VA WEAs

- **Empire Wind (NY)** – Equinor project, 816 MW, OREC agreement with NY; BOEM expected to receive COP during 2020
- **Ocean Wind (NJ)** - Ørsted project, BOEM received COP in August; NOI expected early 2020.
- **Skipjack (DE)** – Ørsted project, BOEM processing COP, NOI expected early 2020
- **US Wind (MD)** – COP expected spring 2020
- **Dominion Energy (VA)** – possible 220 turbine project in early stages; related test turbine project in partnership with Ørsted. COP possibly 2022.

3. Fisheries coordination/engagement

- RODA-SIOW workshop in October
- NYSERDA Fisheries and Environmental Technical Working Groups (F-TWG and E-TWG) – met week of 11/18 to discuss environmental impacts mitigation plans (a requirement for projects procured by NY)
- There will be an offshore wind seminar during the Maine Fishermen's Forum in March

4. Research and monitoring

- MA CEC pilot monitoring RFP – projects currently under review
- Early work underway to coordinate around science to support a better understanding of effects on protected species
- ICES working group (US/European collaboration) on environmental effects of offshore wind recently accepted
- Lots of different types of research underway through the U.S. Department of Energy; interested in further collaboration with NOAA on issues of mutual interest
 - Rader interference studies
 - Wildlife impacts/mitigation
 - Summary of environmental effects; gap analysis
 - Information resources include Tethys (<https://tethys.pnnl.gov/>), WREN (<https://www.wrenuk.co.uk/index.html>)

5. Transit and safety

- Port Access Route Studies underway for MA/RI (MARIPARS) and Atlantic Coast (ACPARS)
 - MARIPARS available soon?
- BOEM requested comments on their lighting and marking guidelines; Council sending a letter
 - <https://www.boem.gov/sites/default/files/documents/renewable-energy/Lighting-and-Marking-Guidelines.pdf>