EEA Habitat Working Group on Offshore Wind Energy

> January 10, 2022 1:00 – 3:00 PM



Zoom Functions

Zoom Meeting					-		×
		Talking:		~	Chat		
	Meeting Topic:	Lisa Engler's Zoom Meeting					
	Host: Passcode: Numeric Passcode: (Telephone/Room Systems)	Lisa Engler E8t7Px 996952					
	Invite Link:	https://us02web.zoom.us/j/88997 Copy Link	481001?pwd=RnZhM2p6				
	Participant ID:	404721					
Co	Join Audio	Share Screen	Invite Others				
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Meeting Protocols

- Meeting will be recorded for note taking purposes
- Add your name and affiliation to the chat box
- Raise hand to speak
- Remain muted unless it is your turn to speak
- Use chat function to post questions for presenters
- Constructively receive and provide input on discussion topics
- Respectfully acknowledge and articulate differences of opinion or perspective

Agenda

- 1:00 Welcome and Introductions and state updates
- 1:15 Offshore Wind Developer Updates: Vineyard Wind Equinor Mayflower Ørsted
- 2:00 Overview of Passive Acoustic Monitoring Activities (Nils Bolgen, MassCEC))
- 2:20 Regional Wildlife Science Entity (RWSE) (Emily Shumchenia, RWSE)
 - General update
 - Marine mammal aerial survey
- 2:40 Announcements/Updates (All)

3:00 Adjourn

Thank you



Beacon Wind

EEA Habitat Working Group January 10, 2022



Beacon Wind | Agenda

- Beacon Wind Timeline
- Status update on Survey Program
- Status update on Monitoring
 Program
- Metocean Buoy Deployment
- Questions?





Beacon Wind | Time line



2019 – Lease Acquired

2020 – Aerial Wildlife and Marine Survey Commencement

2021 – Deployment of Metocean Buoys

2022 – Federal & State Permit Submission

2024 – Permits Approved

2025 – Construction and Fabrication



Beacon Wind | Survey Program Update





Stril Explorer Beacon ECR geotechnical survey Completed December 2021



Danielle Miller Beacon ECR geotechnical FLO Bruce Bannick Completed January 2022



Saentis Beacon Wind Lease Area geotechnical Projected Completion – April 2022



Dina Polaris

Beacon Wind Lease Area geotechnical FLO David Monohan Projected Completion April 2022



Deep Helder Beacon ECR HRG FLO Maxwell Hall Projected Completion – January 2022



F/V Karoline Marie Captain Thomas Hill Scout support as needed

Beacon Wind | Monitoring Program Update



High-resolution aerial surveys Final flight October 2021

https://remote.normandeau.com/eqn22_overview.php



Beacon Wind Lease Area Facilities

1. Metocean Facilities

Deployed November 2021 for 2 years and included the deployment of acoustic tag receivers for birds/bats. Data will be captured should species fly in proximity to the buoys.

2. Highly Migratory Species Sensors

In partnership with the NEAq, 13 seabedmounted acoustic receivers were deployed in the Lease Area. In December 2021, those receivers were recovered and data is now being assessed.

Beacon Wind | Metocean Buoy Deployment

Met Buoy (SW Corn



2 Meteorological and Oceanographic Monitoring Buoys

2 Current Moorings

1 LiDAR Buoy

Deployed November 2021

2-year deployment

Position Coordinates will be updated to the LNM following future 6-month maintenance visits as necessary

PATON approved through USCG



equinor SHAPING THE FUTURE OF ENERGY

Thank you for your attention. Questions?

Michelle Fogarty MFOG@equinor.com

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Ørsted Offshore North America

Northeast Program Update



MA EEA Habitat Working Group Meeting on Offshore Wind January 2022

Ørsted Offshore North America portfolio

Awarded over 4,000 MW of offshore capacity on the East coast



In Operation

Block Island Wind Farm (BIWF): 30MW

Awarded

Revolution Wind (REV): 50/50 JV w/ Eversource, 704MW (400MW to RI, 304MW to CT) South Fork Wind (SFW): 50/50 JV w/ Eversource, 132MW Sunrise Wind (SRW): 50/50 JV w/ Eversource, approximately 924MW Ocean Wind 1 (OCW1): 75/25 JV with PSEG, 1,100MW Ocean Wind 2 (OCW2): 1,148MW Skipjack Wind 1 (SJW1): 120MW Skipjack Wind 2 (SJW2): 846MW



Orsted Northeast Program 50/50 JV with Eversource

South Fork

- Lease Area OCS-A 0517
- Deliver power to the East Hampton, NY
- NY Article VII approved March 2021
- COP Approval expected January 18, 2022

Revolution

- Lease Area OCS-A 0486
- Interconnect to the existing Davisville Substation, RI
- RI EFSB Hearings underway
- RI CRMC and RI DEM permit applications under review
- DEIS July 2022, FEIS March 2023

Sunrise

- Lease Area OCS-A 0487
- Proposed interconnection at Holbrook Substation, NY
- NY Article VII Settlement meetings underway
- DEIS October 2022, FEIS July 2023



Northeast Program Update

FISHERIES SURVEYS

- SFW (underway)
 - Beam Trawl
 - Gillnet Survey
 - Fish Pot Survey
 - Ventless Trap Survey
- REV/SRW (mobilizing)
 - Bottom Trawl Survey
- REV (planned)
 - Ventless Trap Survey

ACOUSTIC TELEMETRY SURVEYS

- Highly Migratory Species (SFW/REV/SRW-underway)
- Export Cable (SFW-underway/SRW-planned)

BENTHIC SURVEYS (planned)

- Soft and Hard Bottom Habitats (SFW/REV)
- Soft Bottom Habitats (SRW-plan still under review)



Thank you

Melanie Gearon Northeast Program Permitting Manager melge@orsted.com



Vineyard Wind Ownership Transition



Overview

- Avangrid Renewables and Copenhagen Infrastructure Partners are restructuring their 50/50 Vineyard Wind joint venture
- Vineyard Wind 1 will remain a 50/50 joint venture between the two companies
- Lease Area OCS-A 534, containing Park City Wind and Commonwealth Wind, will be owned by Avangrid Renewables
- Lease Area OCS-A 522 will be owned by Copenhagen Infrastructure Partners



Massachusetts Habitat Working Group

Lease Area OCS-A 0534 Update

AVANGRID

January 10, 2022



New England Wind

Federal Permitting

New England Wind COP

New England Wind (formerly Vineyard Wind South) consists of two phases.

- Phase 1: Park City Wind (804 MW), which is located immediately southwest of Vineyard Wind 1.
- Phase 2: Commonwealth Wind (1,232 MW), which is located southwest of Phase 1.

Completed StepsPending StepsCOP received (July 2, 2020)Scoping report published (pending)NOI published (June 30, 2021; BOEM-2021-0047)Draft EIS published (pending)Scoping/comment period ends (July 30, 2021)Public comment period for the Draft EIS ends (pending)Notice for additional scoping published (November 22, 2021; BOEM-2021-0047)Final EIS published (pending)

Recent Public Comment period occurred Nov – Dec 2021





New England Wind

Massachusetts State Permitting

Overview

- New England Wind 1 Connector
 - Scope of the review: New England Wind's Phase 1 Project (Park City Wind) offshore export cable located in state waters and onshore infrastructure in Massachusetts
- MA Environmental Policy Act (MEPA) review underway
 MEPA certificate anticipated Q1 2022
- Energy Facilities Siting Board review underway
 o EFSB petition filed May 28, 2020
 o Docket #EFSB 20-01
- State permitting follows MEPA





New England Wind

Research Partnerships

Overview

Connecticut's Initiative on Environmental Research of Offshore Wind

- **Project Partner**: UConn Department of Marine Sciences
- **Commitment**: \$2.5 million in funding to support fisheries research and education to improve the understanding of environmental impacts from offshore wind.

Offshore Wind Protected Marine Species Mitigation Fund

- **Project Partner**: Mystic Aquarium
- **Commitment**: \$2.5 million in funding to better understand potential impacts of underwater noise generated by offshore wind farms on marine life.

This partnership will also work to advance understanding of biodiversity modifications preand post- construction, capturing the "artificial reef" affect.

Passive Acoustic Monitoring for Whales

Update for Mass. Habitat Working Group

Nils Bolgen, Program Director January 10, 2022



Background



ENDANGERED SPECIES CONSERVATION

Passive Acoustic Research in the Atlantic Ocean

We use innovative passive acoustic technologies to study the behavior, movements and distribution of marine animals and their contribution to soundscape ecology. We also evaluate how man-made sounds affect marine animals.

New England/Mid-Atlantic



More Information

- > Passive Acoustic Cetacean Map
- > Sounds in the Ocean
- > Passive Acoustic Research Staff
- > Past Members of Our Staff
- > Passive Acoustic Staff Publications
- > Passive Acoustic Group News & Media
- Protected Species Research in the Northeast
- Passive Acoustics Research Group Outreach

Recent News

FEATURE STORY

High School Students Bring Seafood to Low-Income



2

NOAA Fisheries studies marine animals by using a variety of technologies to record underwater sounds, including



Updates on recent PAM activities: events

- PAM BOEM NOAA Workshop #1: June 1 & 2 2021 -- exploring a regional monitoring approach
- PAM State-Federal Deployment Group: July 2021 & on-going monthly: coordinating to deploy PAM detectors from various funding sources in the near term
- PAM BOEM-NOAA Workshop #2: Planning team includes developers and states; focus on lessons from other large scale PAM efforts elsewhere; current and near-term PAM deployments and questions such can answer; data management, consistency, and archiving; longer-term approaches. Early March 2022

Slide credit: Emily Shumchenia, RWSE



Planning





SOURCE: Draft Report – NOAA and BOEM Minimum Recommendations for Use of Passive Acoustic Listening Systems in Offshore Wind Energy Development Monitoring and Mitigation Programs, Sofie M. Van Parijs, et al.



Updates on recent PAM activities: data

NORTHEAST OCEAN DATA



RWSE is supporting discussions and planning for regional Passive Acoustic Monitoring

Proposed regional PAM grid on regional data Portals

- Interactive maps
- Download

www.NortheastOceanData.org Portal.MidAtlanticOcean.org

Slide credit: Emily Shumchenia, RWSE



Current Deployments







Updates on recent PAM activities: Duke Project WOW



- 15 institutions, includes RWSE
- Proposed PAM deployments in NY Bight and MA/RI WEAs, likely not until 2023
- Detailed work plan still being negotiated between Duke and DOE
- First year of project (~2022) is a planning year
- https://offshorewind.env. duke.edu/

Slide credit: Emily Shumchenia, RWSE



Discussion

- How to build out the network?
- Coordination and integration of platforms (e.g. fixed and mobile; aerial and acoustic)
- Data report-out, e.g. format
- Data access and uses
 - ➤ Real-time
 - Analysis
- Innovation
 - NOWRDC Solicitation: https://nationaloffshorewind.org/solicitations/
 - MassCEC AmplifyMass: https://www.masscec.com/amplifymass



THANK YOU

Source: NEAq quarterly report, Oct. 2021. Right whale Catalog 4546 and 4360 travelling together during the October 3, 2021 aerial survey. Right whale photos taken under NOAA Permit 19674.



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