

WELCOME!

**U.S. Department of Energy
U.S. Army Corps of Engineers**

**PUBLIC SCOPING INFORMATIONAL MEETING
DRAFT ENVIRONMENTAL ASSESSMENT
FOR**

NEW ENGLAND AQUA VENTUS I



Purpose of Today's Meeting:

- Provide update on UMaine NEAV I Offshore Wind Demonstration Project
- Solicit feedback on issues to be considered in Draft Environmental Assessment

Today's Meeting Will Cover:

1. Overview of NEPA Process and Public Involvement
2. UMaine New England Aqua Ventus I (NEAV I) Project Timeline
3. Project Overview and Changes Since 2017



Virtual Platform Information

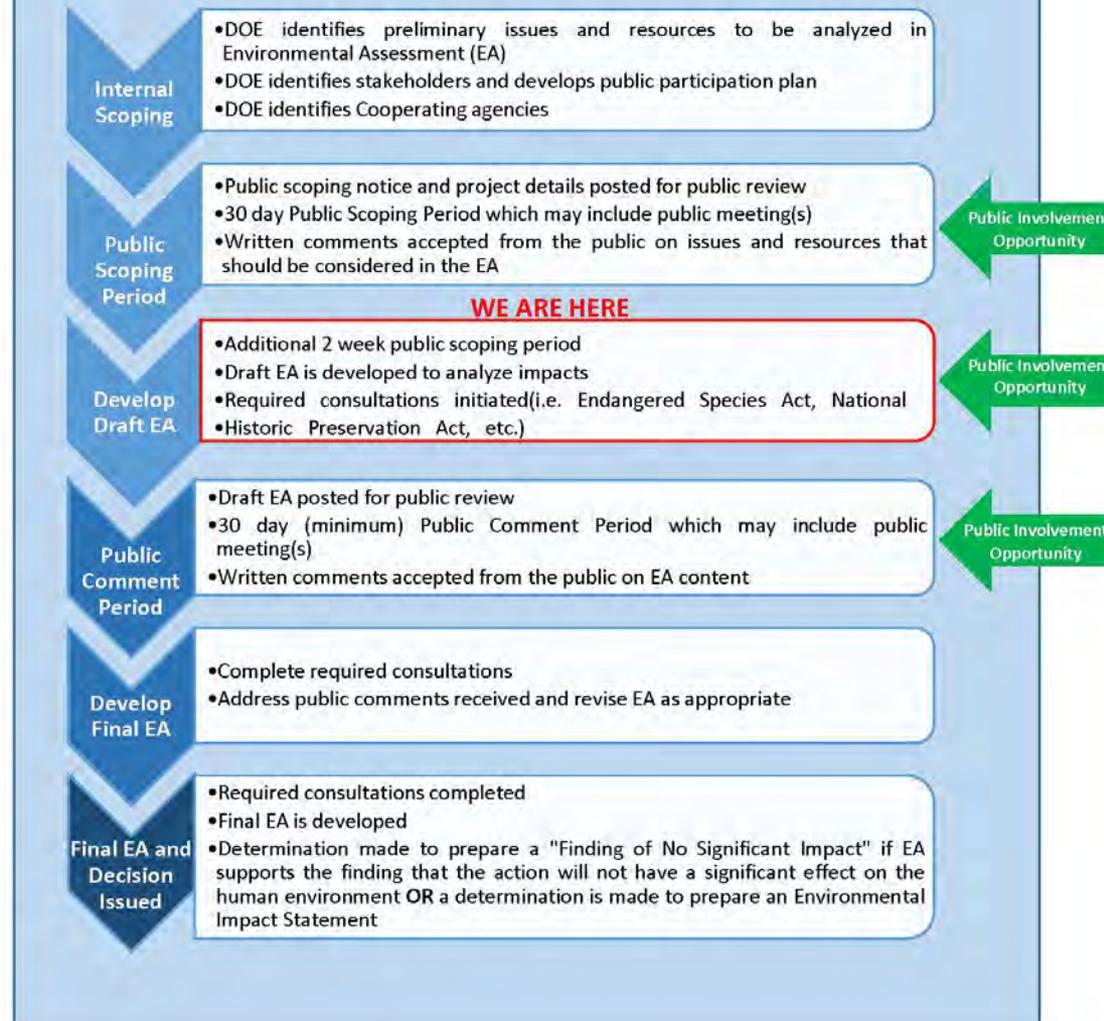
- **GoToWebinar** is being used as today's meeting platform.
- The platform allows for a video and PowerPoint presentation. All participants (public) will be muted.
- The meeting will have two presenters, one from DOE and one from University of Maine, with additional subject matter experts, if needed, to answer questions. Following the presentation, participants may submit a question using the "Questions" function on their screen. The questions will only be seen by the moderator and panelists.
- Questions can be asked at any time during the presentation. Moderator(s) will consolidate and chart questions and will verbally pose questions to the presenters/subject matter experts following the presentation.
- Participants are reminded that the presentation is informational only. Questions or comments posed during these sessions will not be part of the official record, and participants will be directed to where comments or suggestions can be made as part of the official record.
- This PowerPoint presentation will be posted at www.energy.gov/node/2053718 after the meeting.



Part 1: Overview of NEPA Process and Public Involvement



Key Steps in DOE NEPA Process



Issues and Resources to be Considered in the Draft Environmental Assessment

- Aesthetics and Visual Resources
- Air Quality
- Biological Resources
 - Including Benthic, Avian and Bat Species, Marine Mammals, and Protected Species
- Cultural Resources
- Floodplains and Wetlands
- Geology, Sediments, and Soils
- Noise
- Ocean and Land Use
 - Including Commercial Fishing, Recreation, Navigation, Transportation, and Traffic
- Socioeconomics
 - Including Environmental Justice
- Water Quality
 - Including Sedimentation, Spills, and Hazardous Material Management
- Climate Change



National Environmental Policy Act (NEPA) How Can You Be Involved?



Stay involved.

Written comments on DOE's Proposed Action, alternatives, and the issues and resources that should be considered in the Draft EA will be accepted by mail or by email no later than **June 11, 2021**.

By Email: AquaVentus1EA@ee.doe.gov

By Mail: Ms. Diana Heyder, NEPA Division
U.S. Department of Energy
Golden Field Office
15013 Denver West Parkway
Golden, CO 80401

If you would like to be notified of upcoming meetings, please provide your name and address via email to AquaVentus1EA@ee.doe.gov.

Check DOE website for NEPA updates.

Once completed, the Draft EA will be available for your review at:
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Part 2: UMaine New England Aqua Ventus I (NEAV I) Project Timeline



Project Timeline

2013

- DOE awards funds for research on the proposed Aqua Ventus project.

2016

- DOE determines that an EA is required for proposed two-turbine project. DOE begins EA process.

2017

- DOE conducts initial public scoping informational meetings.

2017-18

- UMaine undertakes key studies to support Draft EA development and permitting efforts.

2018

- NEPA paused while UMaine explores potential changes to proposed project.

2020

- Modified proposed project include reduction to single turbine and new cable route; UMaine names NEAV as project developer.

2021

- DOE and USACE (participating agency) re-initiate NEPA for proposed one-turbine project.
- DOE to hold additional two-week public scoping period (**WE ARE HERE**), complete environmental analyses, and prepare Draft EA.

2021-22

- DOE to complete Final EA / Release Decision Document.

Part 3: Project Overview and Changes Since 2017



Project Overview

- One approx. 11-MW* wind turbine on floating concrete foundation
- Three potential foundation fabrication/assembly options*
 - Foundation fabrication in Brewer, ME, assembly in Searsport, ME (Mack Point)
 - Foundation fabrication and assembly in Searsport, ME (Mack Point)
 - Foundation fabrication in Brewer or Searsport, ME (Mack Point) and assembly in Eastport, ME
- Launch assembled foundation at State Oil Transfer Area or in Eastport, ME*
- Installation of turbine onto foundation west of Sears Island, ME in the previously dredged area
- Unit deployment location in the test site ~2.5 miles SW of Monhegan Island, ME
- Subsea cable route and landing location in East Boothbay, ME*
- Interconnection to Central Maine Power in Boothbay Harbor, ME*

*Project change



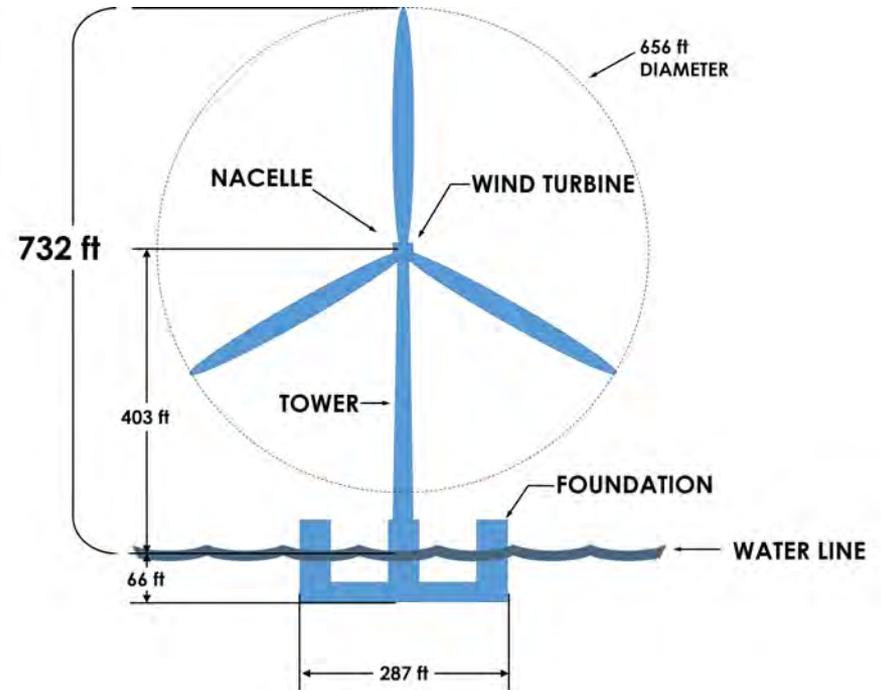
Project Updates and Changes Since 2017 Scoping Meetings

1. Turbine / foundation / mooring changes
2. Transmission cable landing and onshore cable route
3. Foundation fabrication / assembly location
4. Foundation assembly, launch, and turbine installation
5. Subsea cable construction and layout



1. Turbine / Foundation / Mooring Changes

Approx. Specifications	2 @ 6 MW	1 @ ~11 MW
Base diam. (feet)	301	325
	2 @ 71,158	
Base area (sq. ft)	total: 142,316	82,702
Column diam. (feet)	30	41
Rotor diam. (feet)	495	656
	2 @ 192,637	
Rotor swept area (sq. ft)	total: 385,274	337,986
Hub height (feet)	328	403
Tip height (feet)	576	732
Platform above water (feet)	44	44
Platform below water (feet)	66	66
Mooring and Anchors	2 sets of each	1 set of each



Approximate dimensions for 1, approx. 11-MW turbine and floating foundation ($\pm 5\%$)

CHANGE HIGHLIGHT

2017	2 turbines 6 MW each (total approx. 12 MW)
2021	1 turbine Approx. 11 MW



2. Transmission Cable Landing and Cable Route

East Boothbay, ME

- Export cable would interconnect with existing Central Maine Power (CMP) distribution line.
- Cable landing location under consideration in East Boothbay, ME.



CHANGE HIGHLIGHT

2017 Port Clyde, ME

2021 East Boothbay, ME

Note: All design details are preliminary.



OVERVIEW TABLE:

Fabrication, Assembly, Launch, and Installation*

	Fabrication	Assembly	Launch
Option 1	Brewer (Cianbro Modular Facility)	Searsport (Mack Point)	State Maintained Oil Transfer Area
Option 2	Searsport (Mack Point)	Searsport (Mack Point)	State Maintained Oil Transfer Area
Option 3	Searsport (Mack Point) <u>or</u> Brewer	Eastport (MDOT Facility)	Eastport (MDOT Facility)

*Tower and turbine installation for all foundation fabrication / assembly and launch options would occur in the same location west of Sears Island.



3. Foundation Fabrication / Assembly Location Options



Option 1: Foundation fabrication in Brewer, ME (Cianbro Modular Facility); assembly in Searsport, ME (Mack Point)



Option 2: Foundation fabrication and assembly in Searsport, ME (Mack Point)

CHANGE HIGHLIGHT (FABRICATION)

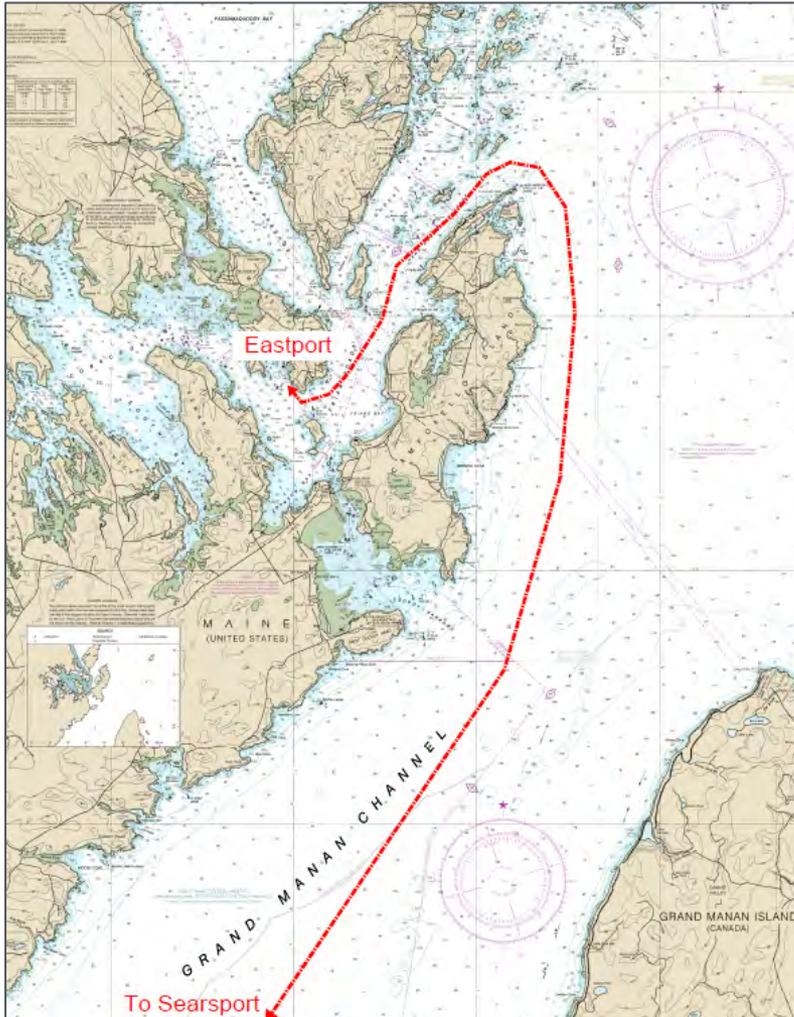
2017 Hampden, ME (with cofferdam)

2021 Brewer or Searsport, ME (Mack Point)

Note: All design details are preliminary.



3. Foundation Fabrication / Assembly Location Options



Option 3: Foundation fabrication in Searsport, ME (Mack Point) or Brewer, ME; assembly in Eastport, ME (MDOT Facility)

Note: All design details are preliminary.



4. Foundation Assembly, Launch, and Turbine Installation Options

Option 1 and Option 2:

1) Foundation Assembly

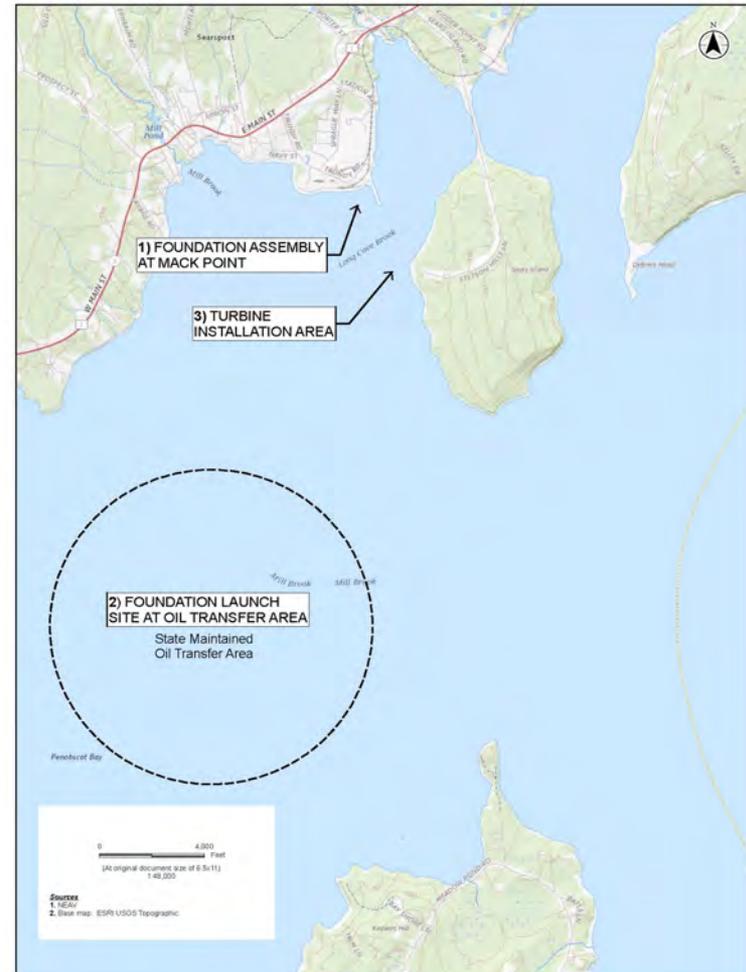
- Foundation assembly at Mack Point
- Assembly will occur on barges

2) Foundation Launch

- Launching barges will be towed to the State Maintained Oil Transfer Area
- After launching, the foundation will be towed to Searsport (Mack Point) for final assembly or to the turbine installation location

3) Turbine Installation onto Foundation

- Installation of turbine onto foundation west of Sears Island, ME
- Complete structure towed to the Maine Offshore Wind Energy Research Center Test Site for commissioning



4. Foundation Assembly, Launch, and Turbine Installation Options

Option 3:

1) Foundation Assembly

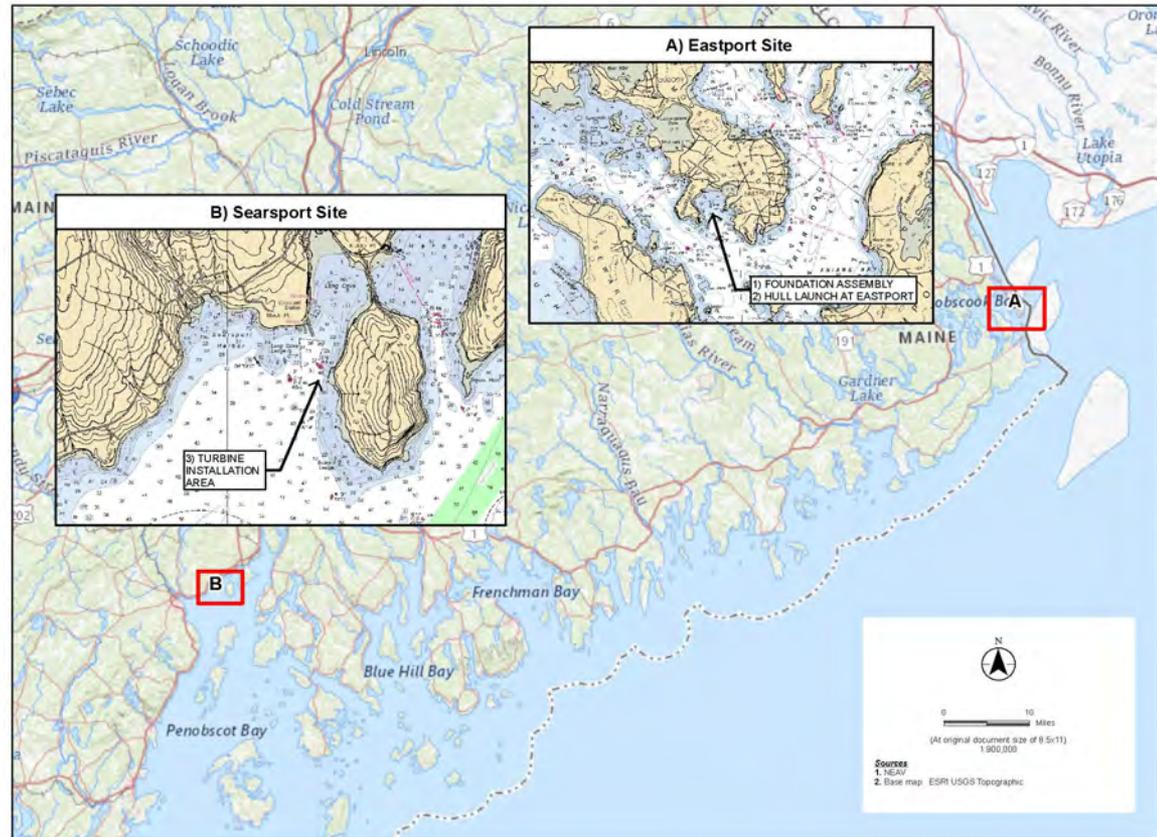
- Eastport used for assembly of segments made in Searsport (Mack Point)/Brewer

2) Foundation Launch

- Foundation launch at existing pier in Eastport
- Foundation then towed to the installation area for turbine installation

3) Turbine Installation onto Foundation

- Installation of turbine onto Foundation west of Sears Island
- Complete structure towed to the Maine Offshore Wind Energy Research Center Test Site for commissioning



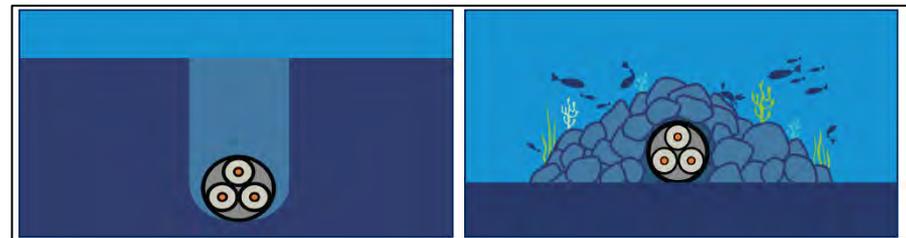
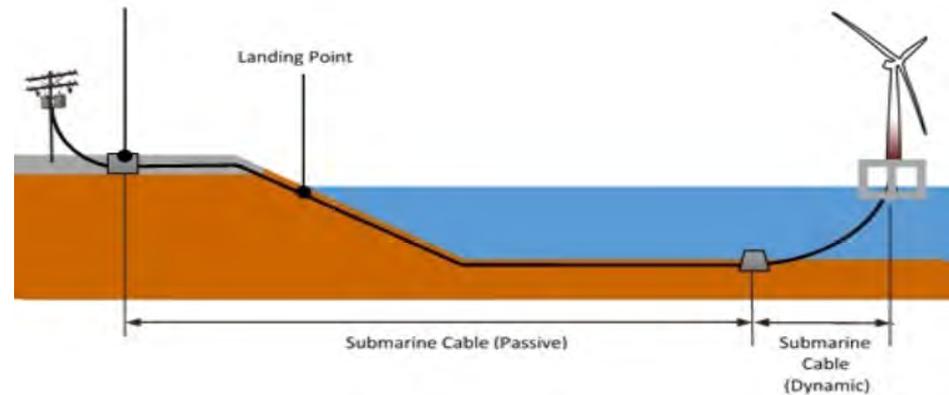
5. Subsea Cable Construction and Layout

Dynamic Subsea Cable

- Suspended in the water column
- Connect to seabed hub
- ~1,200 ft in length
- 6 to 8" diameter

Passive Subsea Cable

- Buried or covered on the seafloor
- Export of power to shore
- ~19 nautical mile (nm) in length to Cable Landing Area
- 6 to 8" diameter



Note: All design details are preliminary.



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