

New England Aqua Ventus I Demonstration Offshore Wind Project

Draft – May 4, 2017 Agency Meeting Summary

Attendee List: Attached

Purpose: Provide a brief status update for the project, and then provide a forum to discuss roles, responsibilities, timelines and information needs of regulatory agencies in the NEPA Process, and also in separate state and federal permitting efforts.

1. Project Status Overview

Jeff Thaler and Jake Ward (UMaine) provided a summary of the project history including:

- Initial US Department of Energy (DOE) funding contest
- 1/8 test deployment in Castine
- 2014 DOE down-selection resulting in design funding
- 2016 DOE selection
- Broad process considerations of community benefit of the project, location of the test site (how originally selected and why)
- General geographic locations of project components

2. Current Project Description

Peter Browne (HDR) provided a more detailed discussion of locations and component of the project including:

- Construction location in Hampden
- Assembly location in Searsport
- Temporary mooring locations near Searsport
- Unit deployment location in the test site
- Subsea cable route alternatives including Monhegan and St. George

A copy of the presentation slides is attached to this summary. As Peter walked through the Project Description slides, the meeting was then opened with questions and answers.

Sue Tuxbury (NOAA) asked for clarification about the charted cableway that is proposed for use for the subsea cable to the mainland, whether there are existing cables in place, and whether they would be removed.

UMaine explained that there is some documentation of an existing cable but there seems to be an element of uncertainty whether it is still there. It is unlikely that any old cables would be removed for the project, however UMaine will conduct an extensive survey of the cable route

this year for a variety of reasons (e.g., to support installation of the subsea cable and turbine moorings, cultural resource identification) and that information will be summarized when available.

John Noll (MDACF) noted that there is no record of a submerged lands lease for an existing cable. UMaine noted that SGC has done extensive research and if there is any prior permitting documentation they would be aware of it. ***UMaine will inquire to SGC.***

John Noll asked about a comment that fishing is prohibited in the cableway. The group discussed what regulation define those restrictions, whether it was a USCG regulation or MDMR or MDEP. Meredith Mendelson (MDMR) clarified that it is a Marine Resource statute under – [Title 12 6954](#).

Wende Mahaney (USFWS) asked about the size of the subsea hub used to connect the subsea cables together. ***UMaine did not have that information readily available but this information will be provided.***

Wende also asked about the transmission line improvements that CMP will be making inland. UMaine clarified that transmission lines will need to be upgraded to accommodate 34.5 kV from the units, but this will not require and widening of the existing right-of-way, it will just be a pole-for-pole replacement.

Sue asked how much of the subsea cable will be buried vs. not buried. UMaine estimated, based on what is known today that about 60% of the cable will be buried. Best practices are that buried cable should be in 3-6 feet of mud and cable on rock should be armored. There are also guidelines that for where and how cables can be buried in harbor areas.

Carl Wilson (MDMR) how much material will be dredged at Hampden and Jay Clement (USACE) asked about disposal plans. Peter Browne responded that less than an acre in-river dredging is anticipated and it will all be disposed upland.

Bob Stratton (MDIFW) noted that material deposition information will be important given the know presence of mercury in the Penobscot River. A Natural Resources Damage Assessment may also be necessary. Sue also asked if there would be blasting in the river or just inland. UMaine responded that core sampling will be conducted this year to address those issues and others, such as cultural resource issues.

Jay Clement (USACE) asked if the cofferdam plan shown on the Project Description slide accounts for the expanded footprint that was being considered. UMaine noted that the footprint could be approximately 10% larger than shown – that need is being re-evaluated to determine if a larger area is needed as we work to finalize the description.

Mark McCollough (USFWS) asked if the cofferdam will be restored upon completion of fabrication as a temporary facility. Bob noted that he read the NEPA description as stating the cofferdam would be left in place and wondered if there might be long term uses. UMaine responded that at this time the plan is to fill in the hole and remove the barrier to the river after the approximate two (2) year fabrication and construction period. However, the area dredged in the Penobscot River adjacent to the coffer dam will not be restored.

Michelle DesAutels (USCG) asked for clarification about removal of the cable after two years and what that means for power transmission to Monhegan Island. In clarification UMaine noted that use of the Hampden site would be complete after construction (approximately two years) but the life of the demonstration project is 20 years with [DEP General Permit](#) renewal request needing to be submitted every 5 years during that period. It was further clarified that the Monhegan site is designated as a test site for technology indefinitely so as long as there is some energy testing in place, the cable will remain in place.

In response to questions from John about selecting the Hampden location, UMaine noted that barges and dry docks were considered but could not accommodate the necessary size for the hull construction. Several other locations were also evaluated along the coast including formerly proposed LNG facilities, as well as Cianbro's Hampden facility, but various other issues ruled them out. Jay Clement noted that it will be important to include a matrix of locations considered and reasons why they were excluded as part of the USACE permit application.

Sue and Dawn Hallowell (MDEP) asked several questions about why partial construction could not occur at Hampden and height of the assembled units. UMaine responded that the units will be 328 feet from the waterline to the hub of the nacelle and the draft of the platform bases alone would be 12-18 feet causing issues with floating them down the river and under the Penobscot Bay Bridge. Upon deployment the hulls will be ballasted to 66 feet below the waterline and the top of the blades will be approximately 576 feet above the waterline. The rotor diameter is 495 feet.

Bob asked if a decision had been made on 6 MW or 8 MW units. UMaine clarified that 6 MW units will be used, the same GE units as Block Island.

Kate Tierney (MAG Representative) asked why the base/platforms are not to be constructed in one piece. UMaine responded that it is mainly due to design issues associated with ballast and flotation.

Dennis Nault (MDMR) asked if the project would be connected to the "Green Line" and how far apart they are. UMaine explained that the projects are unrelated and do not have existing compatible technologies. The Green Line will be HVDC (the power from AV will be AC), located about 20 miles from the Monhegan test site, and is on a different timeline.

Wende asked if drag anchors will be used during assembly. UMaine explained that the units will be temporarily anchored prior to towing to the Test Site but not with drag anchors, just temporary moorings. The on-site anchors will consist of 3 or 4 chain mooring lines with drag anchors. It was later noted in a response to a question from Sue about anchor sweep that mooring chains links will be approximately 5 inches by 3 feet. There will be a catenary load but movement should be limited but an analysis is being developed to identify the "watch circle". The units must stay within the boundary of the test site so measures to minimize drift movements will be important. It was also noted that this project is not a stepping stone to a commercial facility at the test site. UMaine will not license the technology for any proposed commercial facilities any closer than 10 miles from any State shoreline [including islands].

Bob asked about lighting being triggered by airlines and potentially water vessels. UMaine responded that right now it is anticipated that a similar arrangement of lighting for the Nacelle and platform as Block Island will be used but that will be determined with USCG and FAA, but the team is open to alternatives.

John asked about the extent and timing of MDOT's pier expansion in Searsport and whether they would occur regardless of the project. Nate Benoit (MDOT) explained that a new platform will be installed and will be permanently secured to the ocean floor with piles. There will be no dredging.

Carl asked about the appearance of the Static Reactive Conditioning System, noting it would look like a small substation. UMaine noted it will be an 80 foot square fenced area with steel containers and transformers. It will be located well inland of the cable landfall in Port Clyde.

Sue asked what monitoring studies are planned. UMaine responded that a significant number of pre-deployment studies were conducted and reported earlier in the process. Post monitoring studies are also included in the Fish and Wildlife Monitoring Plan that is required through the MDEP General Permit process and will be distributed to agencies for review prior to filing the

application with MDEP. Bob suggested that prior to sending out the monitoring plan for formal review, that the UMaine Team arrange for some one-on-one discussions as there is a lot of information to be learned from other projects, including onshore wind, and there may be opportunities to streamline some of the monitoring. UMaine agreed, noting that one of the primary objectives of the AV project is to learn from new technology and understand the needs to adapt and, as appropriate, mitigate. UMaine wants to be proactive working with agencies and learning from other projects like Block Island.

John noted that Searsport will need a submerged lands lease for the DOT expansion.

Stacie Beyer (LUPC) noted that a permit may be needed for the Monhegan power cable. She also noted that LUPC has several zoning districts with different allowed and special uses that may need to be assessed.

Mark noted that there is an eagle nest near the Hampden site that should be discussed further with USFWS.

3. Regulatory Process Roundtable

Andy Qua (Kleinschmidt) provided an overview of the federal, state and local permits that will be required for the project as well as the various consultations required by state and federal regulations.

Diana Heyder and Lori Gray of DOE provided a presentation about the NEPA process associated with the project including a summary of:

- The Energy Efficiency and Renewable Energy (EERE) program and projects
- The scoping process and summary of stakeholder comments received
- Federal and state agency consultation processes
- USACE as a cooperating agency
- NEPA does include a socioeconomic component including effects on fishing, tourism, and residents.

Jay provided additional detail from USACE's perspective including:

- USACE will work as a partner with DOE but will need to conduct its own NEPA evaluation.
- There will be similar milestones between USACE and DOE processes
- USACE plans to time public comment request on NEPA documents with those for DOE's process

- If an issue needs to be assessed by USACE that is not part of DOE's assessment, USACE will provide their own supplemental assessment
- USACE may need to evaluate the overall project under an Individual Permit rather than a General Permit due to the complexity and geographic aspects of the project.

Michelle noted that USCG also requires an assessment of navigation safety and will work with the UMaine Team to address their needs.

Jim Beyer (MDEP) noted that the agency is assessing how to evaluate the project and various components. *Dawn* stated that UMaine and MDEP will meet separately to discuss what components may fall under the General Permit vs. separate permit processes.

4. Next Steps

Discuss need and timing of subsequent meetings

- The group discussed that the process schedule is being refined but overall is anticipated to take approximately 18 months to conduct the NEPA process, including scoping.
- UMaine anticipates the next agency meeting/project update will be in July or August.

Distribute meeting summary and list of process requirements and timelines

- UMaine will distribute a meeting summary, attendee list and slides from the meeting.

** If any questions, please contact Andy Qua (Kleinschmidt) at Andy.Qua@kleinschmidtgroup.com or Jeff Thaler (UMaine) at Jeffrey.Thaler@maine.edu