New York State Maritime Technical Working Group (M-TWG) Meeting Summary April 17, 2024

Next Steps

- **M-TWG members:** Review the Vessel Analysis for Deepwater Wind Development and Operation report and provide feedback by May 3, 2024.
- M-TWG members: Complete poll on Shared Research Agenda by April 26, 2024, if not previously submitted.
- **NYSDOS/Cadmus:** Update meeting materials with full presentation slides and meeting summary via <u>nymtwg.com/meeting-summaries</u>.

Meeting Purpose

To hear an update on the Master Plan 2.0 Studies, share State and member updates, and continue discussion of M-TWG priorities for 2024.

Summary

State Updates

Tess Arzu from NYSERDA provided updates on relevant State activities on offshore wind, including the fourth OSW solicitation, which was provisionally awarded to the Empire Wind 1 (810 MW) and Sunrise Wind (924 MW) projects.

An overview of the New York State Master Plan 2.0 studies and timing were also provided. Upcoming milestones include the completion of Track 1 studies in 2024 to inform future BOEM lease areas, with Track 2 studies advancing through 2025 to support the Master Plan 2.0 Synthesis Document. Technical Working Group meetings and study reviews are scheduled throughout 2024, concluding with the late 2024/early 2025 publication of the final Synthesis Document. The M-TWG will have an opportunity to review the draft Vessel Analysis report.

Port and Supply Chain Study

Josh Gillespie, HDR, provided an overview of the draft Offshore Wind Port & Supply Chain Study as part of NYSERDA's Master Plan 2.0 aimed at maximizing State benefits by identifying port and supply chain needs for floating and fixed-bottom wind technologies. Key components addressed included defining port requirements through stakeholder interviews, mapping and evaluating regional ports, undertaking a comprehensive supply chain assessment, and prioritizing foundation technologies. The study also compared costs and financial risks of floating versus fixed-bottom wind projects and outlined investment options with respect to meeting New York's 2035 offshore wind targets and overcoming supply chain bottlenecks.

M-TWG members asked questions and provided some comments:

- Specificity of Port Usage: A member asked whether certain ports, such as Montauk, Port Jefferson, and South Brooklyn Marine Terminal (SBMT), are designated for specific projects or if they could be used more broadly. HDR explained that many ports today are planning for future use with fixed-bottom projects. The Port of Coeymans is actively pursuing support for floating wind projects. Other ports are hopeful to support the floating wind industry in the future, but improvements including ground stabilization and dredging are required to accommodate the heavy concrete foundations. Opportunities for lighter-weight steel jacket foundations and the associated fabrication and assembly needs are also being explored.
- **Dedicated Use of SBMT:** In response to the question on port usage, a member noted that SBMT is expected to undergo a 3-year staging and marshalling phase for an Equinor project, involving activities such as heavy wharf dredging focused on interconnection and substation setups. Ongoing projects are anticipated to also use this facility.
- Infrastructure Challenges in Lower Hudson: A member asked about the lack of infrastructure at potential port sites along the lower Hudson River, like Newburgh, Roseton, and Tomkins Cove, given the limited infrastructure currently in-place. HDR responded that these areas offer potential due to available acreage and the ability to transport smaller components downriver, considering the 135ft vertical bridge clearance.

Vessel Analysis for Deepwater Wind Development Study

Jesse Broehl, ERM, and Oliver Thompson, Clarksons, provided an update on the draft Vessel Analysis for Deepwater Wind Development and Operation study, focusing on the methodologies and vessel requirements necessary to support offshore wind projects in deep waters off NYS. The study, which covers fixed and floating offshore wind projects in water depths of 60 to 150 meters, evaluated U.S. shipyard capabilities for constructing necessary vessels and the challenges posed by the Jones Act. The study identified a need for Heavy Transport Vessels, Floating Crane Vessels, and Cable Lay Vessels, with emphasis on the high demand and limited availability of these assets in the U.S. market. For floating wind scenarios, the analysis highlighted the less stringent vessel requirements compared to fixed-bottom installations, although noting the higher costs and difficulties involved.

M-TWG members asked questions and provided comments:

- Vessel Spread and Routing: A member asked whether the vessel spread required to transport floating wind components from port facilities was a consideration in these two studies. ERM explained that specific logistics and routing were not evaluated as part of the current studies.
- **Construction Sequence:** Questions were raised about the possibility of reordering the construction sequence to prioritize components without Jones Act compliance issues, such as mooring installations. ERM will look into this.
- **Onshore Assembly and Transportation:** The need for air draft free ports was discussed. One member indicated components could be assembled onshore and towed offshore as a set. The study leads identified options including building subcomponents elsewhere

and transporting them to a final assembly site, including sites outside of NYS (e.g., NJ Wind Port). The NYS Ports study is evaluating smaller components.

- **Reliance on Vessel Construction:** One member highlighted the risks associated with relying on the construction and availability of specific vessels and asked how widespread the adoption of floating foundations might be. The study leads noted that floating foundations are being constructed globally at a cautious pace, as industry seeks to address these challenges.
- **Government Support for Vessel Construction:** Members discussed the possibility of obtaining federal government funding for vessel construction. One member noted the benefits of taking a portfolio approach to identifying needs and building key installation vessels (vs. project-by project). Another member highlighted some challenges that federal agencies face when seeking funding, especially when securing such support outside of national security interests.

Member Updates:

M-TWG members provided relevant updates:

- Equinor provided an update on Empire Wind 1, noting the completion of munitions and geoarchaeological surveys, and the start of onshore preparations at SBMT. Upcoming activities include substation site preparation and environmental surveys scheduled through 2024.
- Attentive Energy highlighted ongoing marine activities including geophysical and geotechnical surveys in their lease area and along the NJ cable corridor. The vessels are conducting scallop work, conducting geophysical survey work, and are engaged in geotechnical surveys in the Upper Bay along the NY cable corridor.
- Community Offshore Wind provided an update on Lease Area OCS-A 0539, selected for Con Edison's Brooklyn Clean Energy Hub to develop 1.3 GW of capacity. They have completed initial surveys with deep geotechnical surveys planned through early 2025, aiming for project delivery by 2030.
- Ørsted announced the kickoff of the Revolution Wind project and operational status of South Fork Wind. They are awaiting issuance of the Construction and Operations Plan approval for Sunrise Wind, with construction expected to commence this year.
- DOS shared that NY ISO released its RFP on the NYC Public Policy Transmission Need project for coordinating at least 4.7GW of offshore wind transmission into NYC. For more information, visit the <u>NYISO website</u>.
- American Clean Power Association reported on the extension of the Coast Guard Atlantic Fairways comment period to May 17, which was originally due on April 18. For more details, see the <u>Federal Register Notice</u>. They also provided a summary map of the new Coast Guard proposed fairways, emphasizing their relevance to New York. See the <u>Summary Map</u>.
- NYC Update: Announced a career awareness event at the cruise terminal with 600 students expected to attend, focusing on next-generation engagement and community involvement.

M-TWG Shared Research Agenda Update:

WSP presented an update on the Shared Research Agenda, highlighting topics of highest interest based on recent M-TWG feedback and survey results. Key priority topics included acceptable levels of risk, set-back distance, impacts to navigation systems, submarine cable routing, and Jones Act-compliant vessel availability, with 'set-back distance' notably identified by some members as a priority topic and by others as being resolved.

Discussion questions were raised to gauge if the survey results reflect the members' interests and if these should guide future research directions. A survey link was shared during the meeting to collect feedback from members who did not respond to the previous survey. Members were encouraged to respond to the survey by April 26.

Feedback during the discussion emphasized the importance of utilizing existing information and industry guidelines on set-back distances, cable routing, and burial depths, as well as revisiting previous studies to ensure full understanding and application in future projects.

Meeting Participants

Tess	Arzu	NYSERDA
Katie	Axt	WSP
Tim	Brown	Ocean Winds
Colleen	Brust	NJ Marine Resources
Mark	Cutter	USCG D1
Brian	LeFebvre	Attentive Energy
Stephen	Famularo	WSP
lan	Corcoran	Hudson River Pilots/HRSNOC
Catherine	Morris	CBI
Alex	West	Cadmus
Bryan	Gray	Community Offshore Wind
Jesse	Broehl	ERM
Naomi	Handell	USACE
Megan	Hayes	Atlantic Shores
Greg	Hitchen	USCG
Julia	Lewis	Equinor
Kate	Korotky	USCG
Stephen	Lyman	Maritime Association NY & NJ
John	Mansolillo	Orsted
Laura	McLean	NYSDOS
Oliver	Thompson	Clarksons
Thomas	Morkan	US DOT MARAD
Claire	Richer	ACP
Rick	Robins	RWE
Josh	Gillespie	HDR
Aiden	Rogers	NJDOT OMR
Lauren	Sidor	NYSDEC
Jeannot	Smith	Vineyard Wind (CIP)
Max	Taffet	NYCEDC
Brian	Thompson	CT DEEP