

VIRGINIA OFFSHORE WIND DEVELOPMENT AUTHORITY
Board Meeting
State Capitol ~ House Room 3
Richmond, Virginia
March 14, 2019 | 10:00 a.m.

CALL TO ORDER

Chair Joan Bondareff called the meeting to order at 10:15 a.m.

Members Present:

Primary: Joan Bondareff, Jim McArthur, Art Moye, Hayes Framme, Mark Mitchell, Phil Green

Alternate: Brian Redmond called into the meeting.

Members Absent: Bob Matthias, Laura McKay

Staff: John Warren, Will Payne, Al Christopher, Lynne Astroth, Barbara Simcoe, Brandi Frazier Bestpitch, Evie Christopher, Paul Kugelman

APPROVAL OF PREVIOUS MEETING'S MINUTES

Hayes Framme moved for approval of the December 6, 2018, meeting minutes and Phil Green seconded the motion. The motion carried unanimously.

PRESENTATIONS

U.S. Offshore Wind Market Update: Ross Tyler (Executive Vice President, Business Network for Offshore Wind) presented a brief overview of the Business Network for Offshore Wind and an update on developing offshore wind and its supply chain in the U.S. He addressed global offshore wind projections; U.S. offshore wind pipeline (NE and mid-Atlantic) including projected growth by state and challenges; the new focus on infrastructure and workforce; the Business Network for Offshore Wind Supply Chain Portal; R&D opportunities, specifically the National Offshore Wind R&D Consortium; and next steps. He noted the importance of Virginia's 12-MW, two-turbine demonstration project off the coast of Virginia Beach (CVOW) -- the first turbines to be installed in federal waters.

Business Network for Offshore Wind is talking to USDOE about a Big Data project. Wind resource and site characterization can help develop wind farms that can work collectively to achieve greater efficiency and production. USDOE has a similar project, A2e, focused on onshore wind farms; but there is interest in taking this offshore as well and suggested that this may be something Virginia might consider.

Since Virginia does not have specific finance mechanisms needed to move forward, Mr. Tyler suggested that Virginia focus on and address off-take agreement opportunities. There is definite interest by developers looking for lease opportunities in Europe and Asia, who do not have leases in U.S. Waters. This might be an opportunity to get an idea of where the price points would be from other developers around the world.

Raising awareness is important. Business Network is proposing to host an event this September in Norfolk, as it did last year, with speakers to address topics discussed today, with a Virginia-specific focus.

A copy of his presentation is available on the VOWDA website, <https://www.vaoffshorewind.org/authority/about/>.

U.S. Offshore Wind Contractor Market: Status and Potential Impacts: Andy Geissbuehler (BVG Associates) presented to VOWDA on the East Coast offshore wind opportunities and the critical market changes driving industrial stakeholders. The market is expanding dramatically, especially with recent investments by Ørsted, Shell and EDF. There is a pipeline of reputable companies looking to enter the market. The market forecast for the East Coast indicates that the total of all current leases could deliver the necessary acreage for about 28 GW. The shortage is not with lease areas but with off-take agreements, new permitting, and supply chain. As of now we have about 2 GW secured through PPAs and anticipate nearly 5 GW by the end of his year – a solid base to start this industry.

Well positioned in terms of logistics and business climate, Virginia also needs to have the toolbox ready to implement and apply those advantages. Timing is of the essence that Virginia attract developers and secure anchor tenants. Being proactive and knowledgeable engagement is key, using a multi-track strategy to progress the roadmap for offshore wind supply chain and advance offshore windfarm development, along with enabling market participation through diversified and long-term relationships with developers and ECPI contractors and anchor tenants. A copy of his presentation is available on the VOWDA website, <https://www.vaoffshorewind.org/authority/about/>.

Corps of Engineers Innovative Port Study Update: At the December 2018 VOWDA meeting, Paul Olsen (ODU Office of Research) offered to look into the U.S. Army Corps of Engineers' (USACE)

study on innovative ports for offshore and advise VOWDA how to move forward. He noted that his presentation is not affiliated with ODU but are his opinions, as a former USACE Commander for the Norfolk District and 30 years with the USACE. He shared information that he learned about Section 1207 of the Water Resources Development Act and from his contacts with the USACE to determine who will develop and implement the guidance for this study. There has not been a lot of momentum to move forward. If the mandate for the study is unfunded, payment would have to come from its overhead since the USACE is project funded, not federally funded.

Dr. Kate White, a senior USACE staffer, is compiling a team to develop the plan to study the Atlantic, Pacific, Great Lake, and Gulf Coasts' ports. The USACE will coordinate with the National Research Lab to develop criteria and complete the initial screening. The Engineer and Research Development Command will address the technical aspects. In carrying out the study, they will also consult with the Governors of each state in which a port was identified.

Virginia qualifies to be one of these ports due to its highly developed infrastructure. In November 2018, Governor Northam sent a letter to the Assistant Secretary of the Army that included Virginia's interest in becoming an innovative port for offshore wind development. Mr. Olsen continues to engage with the USACE to ensure they know why Virginia is interested in and well positioned for this designation. He proposes as a way to move this forward, we contact Virginia's congressional delegation – Senators Kaine and Warner and Representatives Luria and Whitman – to ask for their support. With the combined efforts of the Governor, congressional delegation, major industries, POV, and VOWDA, Virginia can bring focus to this study and to the benefits of the Port of Virginia as the location for offshore wind innovation.

The USACE will submit its report to the Secretary of the Army by October 2019. Once the three ports have been identified, it could lead to a new port classification that could provide states some funding, i.e., the Harbor Maintenance Fund. Joan Bondareff noted that the AAPA was instrumental in getting set aside funding of \$280M for port infrastructure in the January 2019 federal spending bill with \$79M allocated to the 15 largest ports.

Offshore Wind Research and Development Planning: George Hagerman (ODU Center for Coastal Physical Oceanography) briefed VOWDA on the National Offshore Wind Research and Development Consortium's competitive solicitations of \$32 million in research funds that it will award over the next four years. The solicitations have not yet been released. Virginia is well positioned to receive multiple year funding to advance activities in its research leases and do some leading work. Mr. Hagerman reviewed the three research pillars – (1) offshore wind plant technology advancement [March 2019], (2) offshore wind power resource and physical site characterization [April 2019], (3) installation, operations and maintenance, and supply chain. [May 2019] – as well as the challenge areas identified for Pillar #1. The focus of challenge area 1, array performance and control optimization, could lead to more turbines in the existing lease

areas and create a larger market demand, giving Hampton Roads businesses access to a pipeline of 27 GW. The second challenge area, cost-reducing turbine support structures, provides the opportunity to demonstrate an innovative foundation that will reduce costs and give Virginia a strong position in the foundation/substation supply chain. A copy of his presentation is available on the VOWDA website, <https://www.vaoffshorewind.org/authority/about/>.

Coastal Virginia Offshore Wind Project and Commercial Wind Energy Lease: Mark Mitchell (Dominion Energy) reported that the CVOW project is on track. One key factor for this project is that these two turbines will be the first installed in federal waters through the BOEM process. Recent accomplishments include completion of the UXO cable route survey and submittal of the revised Research Activities Plan to BOEM, with approval expected in April 2019. The second phase of the cable survey and onshore construction, beginning with the directional drill machine, will begin in May 2019. Onshore Interconnect electrical work will continue through next year. Installation of foundations should start in May 2020, followed by the turbines. Commercial operation is expected by the end of 2020. Hayes Framme emphasized the importance of this CVOW project timeline milestone. Within the next two years, Virginia – the first state with turbines in federal waters –will be getting offshore wind off its coast.

Mr. Mitchell also reported that the Site Assessment Plan, approved by BOEM for development of the 2 GW commercial wind energy area, is substantially complete. Eventually, it could support more than 2 GW of energy. The next step is to work through the requirements for the Construction and Operations Plan, which will include some of the ocean surveys, and begin looking at specific project layouts and what turbines can be supported. The first block could be installed and operational as early as 2024.

VOWDA BUSINESS

VOWDA 2019 Work Plan

The 2019 VOWDA Draft Work Plan is based on the recommendations and future activities published in the 2018 VOWDA Annual Report. DMME recommended creating three VOWDA workgroups to implement the tasks and subtasks identified in the Work Plan, the same approach used last year. Workgroups, limited to two VOWDA members in order to comply with FOIA public notification requirements, will include assistance from DMME and collaboration with the rest of the Virginia Offshore Wind Team. The Work Plan is a working plan to be refined to a higher level of detail and adapted as needed over the course of the year to adjust to the changing market and political conditions and to reflect strategies and activities as developed, implemented and reported on by the three VOWDA workgroups. Leads for each Workgroup are identified below.

Workgroup 1: Implement Task 1 – Hayes Framme and Art Moye

Workgroup 2: Implement Tasks 2 and 3 – Mark Mitchell and Hayes Framme

Workgroup 3: Implement Tasks 4, 5 and 6 – Phil Green and Brian Redmond

DMME will coordinate the process and initiate the first planning conference call for each workgroup.

DMME UPDATES

Legislation

DMME did not receive the requested funding for an offshore wind office. Hayes Framme commented that progress was made in educating both legislators and money committee staff on the value of having a dedicated resource to focus on offshore wind and that it provides a good foundation for additional conversations in the future.

Senate Resolution 309, passed by the House and Senate, requests the Virginia Marine Resources Commission (VMRC) study the feasibility of creating protection zones for submerged fiber optic cables along Virginia's shores within the three-mile limit that Virginia regulates. Hayes Framme recommended that VOWDA send a letter to the VMRC or the patron, Senator DeSteph, requesting that electric cables be included in the analysis. He said it is important to emphasize the need given the potential crossings and right-of-way issues with fiber optic cables that could arise with any current and future electric cables that may come from CVOW and the commercial site. The motion that VOWDA send a letter to the VMRC and the patron requesting that electric cables are included in their study carried unanimously. DMME will draft the letter for Chair Joan Bondareff's signature.

Events

DMME, the Port of Virginia, the Virginia Economic Development Partnership and other stakeholders are coordinating efforts to leverage the following offshore wind conferences to share costs and ensure Virginia has a good presence.

- 2019 International Offshore Wind Partnering Forum, April 8-10, New York City
- U.S. Offshore Wind Conference and Exhibition, June 10-11, Boston
- Business Network for Offshore Wind Summit, Tentative for mid-September, Norfolk
- AWEA Offshore Wind Conference and Exhibition, October 22-23, Boston

PUBLIC COMMENTS

Eileen Woll (Sierra Club-VA Chapter): (1) Newport News City Council passed a resolution this week supporting offshore wind. Virginia Beach, Norfolk and Hampton have passed similar resolutions, and she expects that the City of Chesapeake will also adopt a resolution soon. (2) The Sierra Club, ODU and DMME have partnered to present an offshore wind Town Hall at ODU in Norfolk on May 28. (3) Ms. Woll asked what CVOW onshore construction the public/press would be able to see when work starts in a couple months. Mark Mitchell said the directional drill machine would be visible; however, the public will not see it or have access since the work is on Camp Pendleton's property. Dominion is evaluating releases/media events on how to celebrate this important milestone.

OTHER BUSINESS

Joan Bondareff, along with partners at Blank Rome, are hosting a webinar, Offshore Wind: Is Change in the Air, on March 28 from 12:00 to 1:00 p.m.

Members talked about the importance of raising awareness and support for offshore wind opportunities in Virginia. Art Moyer referenced a recent article in the *Inside Business* Reinvent Hampton Roads column, "Leaders need to make sure offshore wind is 'made in Virginia'." Joan Bondareff mentioned another good article published on MarineLink, "Virginia Offshore Wind: A Strong Foundation." Art Moyer will send links to both articles to the DMME staff to distribute to members.

Hayes Framme requested that DMME provide members a summary of VOWDA's statutory authorities at the next VOWDA meeting so members can review opportunities to more actively engage in driving the industry and brainstorm on how to leverage its authority to help add value. It can also serve as an opportunity to inform new members about the extent of VOWDA's authority. Joan Bondareff and Al Christopher will make the presentation.

NEXT MEETING DATE

With all scheduled business concluded, members agreed to convene again on Tuesday, June 18, 2019. Meeting venue to be determined.

ADJOURNMENT

The meeting adjourned at 12:15 p.m.