



# Annual Report

October 15, 2023



## **Contents**

Introduction .....	1
Recommendations .....	2
Mission and Objectives.....	3
Offshore Wind Activities and Developments .....	4

## **Appendices**

- A. Mission Statement and Objectives
- B. VOWDA Board Members

## Introduction

The Virginia Offshore Wind Development Authority (VOWDA) supports the efforts by the Virginia Department of Energy (Virginia Energy), the Federal Bureau of Ocean Energy Management (BOEM), Dominion Energy, Avangrid Renewables, and other stakeholders to help accelerate offshore wind development projects in Virginia, address environmental and financial issues, and create port and supply chain economic opportunities.

VOWDA's 2023 Annual Report addresses the activities VOWDA has undertaken since its 2022 Annual Report. This report represents a high-level overview the meetings of the full VOWDA membership, as well as those of several subgroups, which were formed to help inform and execute VOWDA's 2023 Work Plan and to provide informed recommendations based on input from subject matter experts.

This year, members began researching several topics, including:

- Electrical off-taker research and recommendations
- How to best leverage the Commonwealth's ocean planning efforts
- Research and recommendations on OSW workforce training and preparedness
- R&D needs and recommendations

Based on activities and accomplishments in 2022-2023, the Authority makes the following recommendations for 2023-2024 to further advance offshore wind development and related supply chain activities in Virginia. The recommendations are ranked in order of priority.

## RECOMMENDATIONS

**RECOMMENDATION 1:** Continue to support the current CVOW Commercial and Kitty Hawk projects, and other future projects, through public meetings, comments on BOEM documents and reports, facilitate resolution of potential use conflicts with all stakeholders, and work toward meeting the offshore wind goals enumerated in the Code of Virginia in a responsible manner.

**RECOMMENDATION 2:** Continue to work with all stakeholders to create a regional supply chain and workforce for the CVOW Commercial, Kitty Hawk Offshore, and future offshore wind projects. Collaborate with stakeholders, including Dominion Energy, Avangrid Renewables, other East Coast Developers, Siemens Gamesa, Virginia Economic Development Partnership, universities, the Virginia Port Authority, the Virginia Maritime Association, Virginia and European manufacturers, and others to promote Virginia companies as part of the supply chain for offshore wind.

**RECOMMENDATION 3:** Actively solicit research and development opportunities and activities to reduce the cost and risk of developing wind

resources and the supply chain, including leveraging the CVOW project and other uses of the Virginia Energy Research Lease in conformance with existing agreements. Work with Virginia colleges and research universities to create a platform to promote the benefits of using other areas adjacent to the Research Lease for important wind research, e.g., impacts of hurricanes, and impacts on marine life and commercial fishing.

**RECOMMENDATION 4:** Continue to work to identify and resolve barriers and find pathways to enable power off takers in the Commonwealth with clean energy commitments.

**RECOMMENDATION 5:** Continue to support and further define the tri-state SMART-POWER MOU between VA, NC and MD to support workforce development and job creation in the Mid-Atlantic region, bring clean energy to the tri-state electric grid, and bring benefits to the disadvantaged coastal communities.

**RECOMMENDATION 6:** Promote the continued refinement and deconfliction of BOEM's Central Atlantic Lease Areas off the East Coast in consultation with the Department of the Interior and all interested Virginia stakeholders.

As required by § 45.2-1808 of the Code of Virginia, the Authority submits this 11th annual report to the Governor and the Chairpersons of the House Appropriations Committee, the Senate Finance Committee and the House and Senate Commerce and Labor Committees.

## MISSION AND OBJECTIVES OF VOWDA

The Virginia General Assembly created the Virginia Offshore Wind Development Authority (VOWDA or the Authority) in 2010 for the purposes of facilitating, coordinating, and supporting the development of the offshore wind energy industry, offshore wind energy projects, and related supply chain opportunities. Code of Virginia § 45.2-1804 tasks the Authority with supporting Virginia offshore job creation and supply chain development, in cooperation with relevant local, state, and federal agencies and nongovernmental entities. A copy of the Authority's Mission Statement and Objectives can be found in *Appendix A*.

The Governor appoints the nine non-legislative citizen members. The Director of Virginia Energy serves as the Director of the Authority, and Virginia Energy serves as staff to the Authority. The list of VOWDA Members is included as *Appendix B*.

The legislation requires the Authority to provide an annual summary of Authority activities and policy recommendations to the Governor and the Chairmen of the House Committee on Appropriations, the Senate Committee on Finance and Appropriations, the House Committee on Labor and Commerce, and the Senate Committee on Commerce and Labor. For the 2022 VOWDA annual report, click here: [2022 VOWDA Annual Report](#).

## DIVISION REPORT

Pursuant to § 45.2-1802, which establishes the Division of Offshore Wind within the Virginia Department of Energy (Virginia Energy), Virginia Energy staffs and supports the Administration's Offshore Wind Coordination Team (OWCT), a whole of government approach to managing and advancing offshore wind and associated workforce and supply chain development under the leadership of the Governor's Office.

In this regard, Virginia Energy collaborates with agencies and offshore wind stakeholders to provide data and other information in recurring and ad hoc, usually confidential, communications and meetings with the Governor's Office. This collaboration includes identifying regulatory and other barriers to the deployment of offshore wind, controlling the cost to rate payers, minimizing negative impacts to other ocean users and wildlife, and attracting offshore wind supply chain investments.

The efforts of VOWDA, Virginia Energy and the OWCT are synchronized, sharing objectives and mission, including identifying measures that will facilitate the establishment of the Hampton Roads region as a wind industry hub and create opportunities for Commonwealth-based businesses to participate in the offshore wind industry supply chain, and attract out-of-state and foreign offshore wind-related businesses to locate within the Commonwealth.

## VOWDA ACTIVITIES

To accomplish its goals and objectives, the Authority regularly updates and works to implement a comprehensive work plan. To improve communications and coordination regarding VOWDA's work tasks and other state activities to facilitate development of the offshore wind resource and supply chain, Virginia Department of Energy staff held monthly calls with stakeholders listed in Objective 2 below.

In 2022-2023, VOWDA focused on five objectives. Members developed tasks to achieve these objectives, completing several activities this year that support offshore wind power development.

1. Accelerate the drive for resources and policies to ensure that the first phase of the commercial wind energy buildout will support initial generation of energy by 2024 and that additional phases will come online in 2025 and 2026 to fully develop up to 2,600 MW of wind energy off Virginia's shore in six years.
2. Develop a coordinated policy, economic development, and workforce development strategy to incentivize and thereby ensure offshore wind supply chain opportunities for Virginia. Collaborate with stakeholders, including Dominion Energy, Ørsted, Avangrid Renewables, Virginia Economic Development Partnership, universities, the Virginia Port Authority and the Virginia Maritime Association, Virginia and European manufacturers, and others to promote Virginia companies as part of the supply chain for offshore wind.
3. Actively solicit research and development opportunities and activities to reduce the cost and risk of developing the wind resource and supply chain, including leveraging the CVOW

project and other uses of the Virginia Department of Energy's Research Lease in conformance with existing agreements.

4. Identify barriers and possible pathways to advance the offshore wind industry and enable potential power off takers in the Commonwealth with clean energy commitments.
5. Work towards a multi-state regional supply chain cluster in Mid- and South Atlantic coastal states, offering the industry a larger pipeline of projects and a wide network of the best of what each state has to offer.

VOWDA held four regular meetings and two committee meetings to discuss research and development needs and priorities. An overview of each meeting follows. Presentations from various stakeholders and subject matter experts at meetings can be viewed on the Authority's webpage at: <https://energy.virginia.gov/offshore-wind/Presentations.shtml>.

### **January 13, 2023 Meeting**

- ❖ VOWDA members received an update presentation from G. T. Hollett from Dominion Energy on the progress of their Coastal Virginia Offshore Wind (CVOW) project. The following represents the latest information on the project's status and anticipated milestone dates:
  - Monopile Delivery to Portsmouth Marine Terminal beginning in October 2023
  - Onshore Mobilization for transmission infrastructure upgrades in November 2023
  - Monopile Installations beginning in May 2024
  - Dominion indicated the 2024 installation season ends in October 2024 and the 2025 installation season restarts in May of 2025. Likewise, the 2025 installation season ends October in 2025 and restarts in May of 2026, with construction to be completed in December of 2026.
- ❖ Matt Smith with the Hampton Roads Alliance provided an update on supply chain development and strategy needed to move Virginia forward. The presentation included the supply chain opportunities, a description on the competitive landscape and what other states are doing to attract the supply chain, local constraints, Virginia's strengths, and actions necessary to support near-term goals.

### **April 13, 2023, Meeting**

- ❖ Deputy Secretary Jennifer Walle and Chelsea Jenkins provided an overview of the Offshore Wind Coordination Team and its role to align the tasks and goals of the different secretariats, with monthly meetings to keep everyone on the same page and provide updates as we work to make Virginia a best-in-class place for offshore wind businesses. Members discussed plans for interaction for the coordination team and VOWDA.
- ❖ VOWDA member Kathy Owens gave an overview of the provided SWOT analysis and an update on the need for research in the offshore wind space and the role that VOWDA can fill in that space. Additional research needs would be discussed at a future meeting.

### **July 13, 2023, Meeting**

- ❖ Jerry Barnes with Dominion Energy provided another update on the CVOW project, highlighting accomplishments to date and the objectives ahead, an overview of their industry partners on the project, their land-based transmission route and substation upgrades, construction milestones, the fleet of vessels that will be used during construction and

operation, their current spend and staffing levels, and other project details.

- ❖ VOWDA member Howard Shafferman Led a discussion and presented on Pathways Forward for Future Offshore Wind Projects Interconnecting in Virginia. The major issue is that without financially stable, long-term offtake agreements or other mechanisms, no project can be financed and move forward. The discussion looked at what states to the north were doing, and exploring alternatives to northern states, such as direct PPAs with data centers, the military, and other larger users with green energy goals.

Other meeting activities included an update to the January research SWOT report, a briefing and presentation on Pathways Forward for Future Offshore Wind Projects Interconnecting in Virginia on recently completed actions by the Offshore Wind Coordination Team, provided by Vice Chair Chris Gullickson, who is a member of that team, a briefing and an update from Virginia Energy on their meetings with BOEM, and BOEM's updated Mid-Atlantic Lease Area timeline.

#### **August 7, 2023, R&D Committee Meeting**

- ❖ VOWDA member Kathy Owens provided an update to her R&D presentation from the April meeting and recommended revising the objective R&D actions in the Workplan, exploring BOEM constraints for research in Virginia Energy's research lease area brought on by the completion of Dominion's two-turbine demonstration project, determining the value of maintaining Virginia's NOWRDC membership, create a white paper with recommendations, and exploring whether VOWDA should join other offshore research organizations. These specific organizations would be further explored at the August 21 meeting.

#### **August 21, 2023, R&D Committee Meeting**

- ❖ Virginia's outgoing Coastal Zone Management (CZM) Program Manager gave an overview of the CZM program, as well as several other organizations, including:
  - The Mid-Atlantic Council on the Ocean (MARCO)
  - The Mid-Atlantic Committee on the Ocean created by MARCO,
  - The Responsible Offshore Science Alliance, and
  - The Regional Wildlife Science Collaborative for Offshore Wind.

The discussion included how VOWDA can support and/or be involved with these groups to advance Virginia's offshore wind research and development efforts.

- ❖ The National Offshore Wind Research and Development Consortium (NOWRDC) gave a presentation on the organization's mission and efforts to date.

NOWRDC was created with an initial funding of \$20.5 million, which NYSEDA matched to create a funding pool of \$41 million.

Since their formation, 7 states, including Virginia, 12 developers, and 12 other public and independent members have joined the Consortium.

NOWRDC's core activities are to:

- Fund innovation directly responsive to the technical and supply chain barriers faced by offshore wind project developers in the U.S.
- Convene strong networks (and solicit input from) connecting technology innovators, research institutions, offshore wind and transmission developers and supply chain companies, and utilities and state and federal government agencies.

- Increase U.S. content and job opportunities.

To date, NOWRDC has provided over \$4.89 million in funding to 6 projects executing offshore wind research and development activities across Virginia.

#### **September 14, 2023, Meeting**

- ❖ Update from Governor's Offshore Wind Coordination Team
- ❖ Finalizing VOWDA 2023 Annual Report
- ❖ Research & Development Committee and Industry Barriers Committee White Paper Review & Approval
- ❖ 2023 Work Plan items
  - PPA Update
  - Workforce Update





# **APPENDIX A**

## **MISSION STATEMENT AND OBJECTIVES**

# Virginia Offshore Wind Development Authority

---

## Mission Statement

The Virginia Offshore Wind Development Authority (the "**Authority**") is created as a political subdivision of the Commonwealth for the purpose of facilitating, coordinating, and supporting the development (either by the Authority or by other qualified entities) of the offshore wind energy industry, offshore wind energy projects, and supply chain vendors by:

- A. Collecting relevant metocean and environmental data;
- B. Identifying existing state and regulatory or administrative barriers to the development of the offshore wind energy industry;
- C. Working in cooperation with relevant local, state, and federal agencies to upgrade port and other logistical facilities and sites to accommodate the manufacturing and assembly of offshore wind energy project components and vessels; and
- D. Ensuring that the development of such wind power projects are compatible with other ocean uses and avian and marine resources, including both the possible interference with and positive effects on naval facilities and operations, NASA's Wallops Flight Facility operations, commercial shipping lanes, recreational and commercial fisheries, and avian and marine species and habitats.

The Authority shall, in cooperation with the relevant state and federal agencies as necessary, recommend ways to encourage and expedite the development of the offshore wind energy industry.

The Authority shall also consult with research institutions, businesses, nonprofit organizations, and stakeholders, as the Authority deems appropriate.

The Authority shall consider seeking grant and/or loan guarantees and/or entering into public-private partnerships to assist in the development of offshore wind.

The Authority shall provide by October 15 each year, an annual summary of the activities of the Authority and policy recommendations to the Governor, the Chairs of the House and Senate Commerce and Labor Committees and the Chairs of the House Appropriations and Senate Finance Committees (the "Annual Report"). The Annual Report shall include specific policy recommendations that shall be derived from and supported by the actions, results, and deliberations of the Authority in carrying out its objectives listed below.

# Virginia Offshore Wind Development Authority

---

## Objectives

***A. VA Offshore Industry Data: Facilitate the definition, collection, dissemination of relevant metocean data, environmental data, and other information needed by VA offshore wind stakeholders, utilizing existing, planned, or projected sources of data collection or activities.***

1. Direct and provide support to the Virginia Department of Energy to gather, reconcile and disseminate information and data required for the development of the offshore wind industry and offshore wind facilities. Specifically, develop a strategy and action plan to:
  - a. Inventory the available information (e.g., wind data, environmental data, oceanographic data, sea current data, electricity transmission data, port and shipping data, DOD/Navy Coast Guard requirements, integration of the Chesapeake Light Tower, offshore LIDAR buoy data, wind turbine construction and operating cost data, etc.).
  - b. Gather stakeholder input regarding what information is required to support the offshore wind industry.
  - c. Reduce gaps in information required versus information collected<sup>1</sup>.
  - d. Collect, process, and disseminate this information to stakeholders.
2. Collect, monitor, and provide information regarding the delivered cost, rate impact, economic impact, and environmental benefits of electricity generated from offshore wind projects that considers existing studies, legislative and regulatory actions by the Commonwealth, federal government and other states, and information provided by stakeholders and interested parties.
3. Review, support/endorse and possibly participate in federal grant applications and state efforts that support projects that will improve the offshore wind value chain to shorten completion times, reduce the delivered cost of power, and create job opportunities.

---

<sup>1</sup> Note that the Department of the Interior plans to make available to lessee's available federal data at the time of the lease sale for offshore wind.

# Virginia Offshore Wind Development Authority

---

## Objectives

***B. Offshore Leasing, Permitting, Financing, and Regulation: Identify existing federal and state barriers to the development of the offshore wind industry in VA.***

1. Define, identify, and provide information regarding:
  - a. Virginia's renewable energy goals with respect to offshore wind as well as state and federal incentives for renewable energy development;
  - b. The current federal and state regulatory framework for the development, transmission, generation and purchasing power for offshore wind in Virginia;
2. Develop a process to gather and validate stakeholder input regarding perceived and/or real federal and state regulatory and administrative barriers to the development of the offshore wind industry in VA and work with stakeholders to create action plans or strategies to remove or reduce those barriers.
3. Incorporate results of these findings into the Annual Report.

***C. VA Offshore Job Creation & Supply Chain Development: Work in cooperation with relevant local, state, and federal agencies to accommodate the manufacturing, assembly, and maintenance of offshore wind energy project components and vessels.***

1. Support the Virginia Economic Development Partnership (VEDP) to:
  - a. Assess the competitiveness of Virginia for the location of manufacturing, assembly, portage, and service centers to support the offshore wind industry.
  - b. Define and implement strategies to attract industry to locate facilities in VA that will support the manufacturing, assembly, service, and transport resources required by the industry participants; and
  - c. Address the training and human resource requirements and the mechanism to provide the necessary human resources.
2. Consider incentives and/or policy initiatives needed to attract offshore-related business to Virginia to create employment opportunities and balance the delivered cost of offshore wind and incorporate any recommendations regarding those incentives/policy initiatives into the Annual Report.

# Virginia Offshore Wind Development Authority

---

## Objectives

***D. Offshore Wind Project Siting and Development: Communicate and coordinate with stakeholders, including the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) Task Force to ensure that the development of offshore wind projects is compatible with other ocean uses and avian and marine resources, including both the possible interference with and positive effects on naval facilities and operations, NASA-Wallops Flight Facility operations, shipping lanes, recreational and commercial fisheries, and avian and marine species and habitats.***

1. Provide input and support to the Virginia BOEM Task Force in their ongoing communication with local, state, tribal, and federal stakeholders concerning the compatibility of offshore wind projects with other ocean uses.
2. Encourage the development of a strategic plan regarding the development and use of the offshore waters of Virginia for wind generation and other uses (recreation, defense, oil and gas exploration, shipping, etc.), using the principles of coastal and marine spatial planning.



## **APPENDIX B**

### **VOWDA MEMBERS**

## **BOARD MEMBERS**

### **Will Fediw, Chair**

Vice President, Industry & Government Affairs  
Virginia Maritime Association

### **Chris Gullickson, Vice Chair**

Director, Economic Development  
Virginia Port Authority

### **James McArthur, Jr.**

Virginia Commercial Space Flight Authority Representative  
Vice Admiral, U.S. Navy (Retired)

### **Laura McKay**

Manager  
Virginia Coastal Zone Management Program

### **Ashley McLeod**

Lead Offshore Wind Public Affairs  
Avangrid Renewables

### **Kathleen P. Owens**

Founder and President  
Beach Development Group

### **Howard Shafferman**

Founder  
Haswell Group, LLC

### **Bryan K. Stephens**

President and CEO  
Hampton Roads Chamber

### **Eileen Woll**

Offshore Energy Program Director  
Sierra Club