#### Developing Virginia's Offshore Wind Resource

# Offshore Wind Development Authority Robert Matthias, Chair

Intergovernmental Task Force

September 22, 2016



#### VOWDA Purpose and Mission

- The Virginia Offshore Wind Development Authority (VOWDA) was created in 2010 for the purposes of facilitating, coordinating and supporting the development of the offshore wind energy industry, offshore wind energy projects, and associated supply chain vendors in the Commonwealth.
- ▶ The Authority oversees data gathering, research and planning to support offshore wind development off Virginia's coast, tracks issues as they arise, and makes recommendations for promoting Virginia offshore wind development and associated economic development opportunities for supply chain businesses and Virginia's ports.

#### VOWDA Purpose and Mission

- Four main goals for VOWDA were established by the 2010 legislation:
- 1.) Virginia Offshore Industry Data: Facilitate the definition, collection, and dissemination of relevant metocean data, environmental data, and other information needed by Virginia offshore wind stakeholders, using existing, planned, or projected sources of data collection or activities.
- 2.) Offshore Leasing, Permitting, Financing, and Regulation: Identify existing federal and state barriers to the development of the offshore wind industry in Virginia.

#### VOWDA Purpose and Mission

- Four main goals for VOWDA were established by the 2010 legislation:
- 3.) Virginia Offshore Job Creation and 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.

# Purpose and Mission

Four main goals for VOWDA were established by the 2010 legislation:

#### 4.) Offshore Wind Project Siting and Development:

Communicate and coordinate with stakeholders, including the Bureau of Ocean Energy Management Task Force, to ensure 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.



# Challenges Ahead

The Authority oversees data gathering, research and planning to support offshore wind development off Virginia's coast, tracks issues as they arise, and makes recommendations for promoting Virginia offshore wind development and associated economic development opportunities for supply chain businesses and Virginia's ports.



# Developing Virginia's Offshore Wind Resource

Department of Mines, Minerals and Energy
Al Christopher, Division of Energy, DMME

Intergovernmental Task Force

September 22, 2016



#### DMME Purpose and Mission

- ▶ DMME by statute provides staff support to VOWDA
- ... is lead executive branch agency for energy, reporting to the Secretary of Commerce and Trade and supporting energy policy initiatives of the Governor
- ... by statute produces and helps to implement the recommendations of the Virginia Energy Plan (VEP), which embodies the energy policy strategy of the Commonwealth. The VEP is published in the first year and updated in the 3<sup>rd</sup> year of the Governor's term
- The Energy Plan also reflects the Commonwealth's Energy Policy and Objectives, which periodically are updated and amended by Act of Assembly

# Offshore Wind Development Objectives

- Purpose and mission not distillable to a single goal, but an overarching theme and role of the Commonwealth is to accelerate and support private development of the Virginia Wind Energy Area and the industry supply chain
- Why?
  - Development supports Commonwealth's energy policy goals:
    - renewable generation
    - energy security
    - economic development
    - environmental stewardship



# Offshore Wind Development Objectives

- ... accelerate and support private development of the Virginia Wind Energy Area and the industry supply chain
- ▶ How?
- The how also complicated, evolving, but there is a broad overarching approach gleaned five years ago from a survey of the Virginia Offshore Wind (VOW) Coalition, an industry association, and other stakeholders:
- Make and encourage investments and activities that reduce energy and developer costs and lower investment risks

#### Offshore Wind Research and Development

- ... Make and encourage investments and activities that reduce energy and developer costs and lower investment risks
- That theme motivated more than a dozen Commonwealth funded and supported collaborative research and development projects during the last five years
- George Hagerman will tell you about several of them later today.

#### Offshore Wind Research and Development

- Gov. McAuliffe accepted research lease from BOEM March 24, 2015
  - First of its kind lease enables construction and operation of two grid-connected 6MW demonstration turbines 24 nautical miles east of Virginia Beach
  - Dominion-led Virginia Offshore Wind Technology Advancement
     Project (VOWTAP) turbine demonstration project





#### Offshore Wind Research and Development

#### Virginia offshore wind port readiness study

- **BVG** Associates evaluated 10 Virginia ports for readiness to accommodate seven manufacturing and construction activities.
- Key finding: need to identify port assets suitable for multiple uses to reduce risk of investing in single-use upgrades

