## Welcome - Coastal Virginia Offshore Wind





#### **How To Participate**

- The presentation begins in two minutes.
- Your audio will remain muted throughout the presentation.
- To ask questions use Q and A function and "reply all." Please submit your question once, it will not appear on the screen.
- If you are accessing the meeting by calling the 1-855 on number on your phone, you are not able to submit questions to the panel.
- You can submit future questions via email info@coastalvawind.com or by calling 1-844-319-2065
- This meeting will be recorded and posted on our virtual platform for those who were unable to attend.



## Question



Why did you attend today?

(select all that apply)

- General project overview
- How CVOW is helping meet Virginia's clean energy goals
- Jobs and opportunities for vendors
- CVOW and reliability
- Transmission lines
- How CVOW will impact my local community
- I want to provide input on the project

## Why Offshore Wind?



 Creates hundreds of jobs, and millions in tax revenue and economic benefits<sup>1</sup>

- Supports the Commonwealth's goal of 100% zero carbon electricity by 2045
- Complements solar energy generation
- Positions Virginia to become a national leader in offshore wind



**Growing Virginia's Economy** with Renewable and Clean Offshore Wind Generation

<sup>1</sup>Mangum Economics, Potential Impact of the Development of the Offshore Wind Energy Industry on Hampton Roads and Virginia, September 2020.

## **Pilot Project**



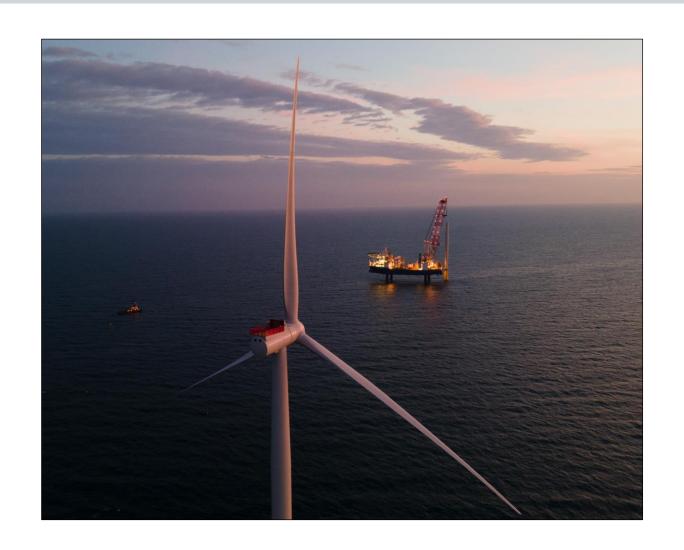
- First offshore wind project installed in federal waters and first owned by an electric utility
- Two 6-megawatt wind turbines
- 12-megawatt total capacity
- Enough to power up to 3,000 homes
- Approximately 600 feet tall, the height of the Washington Monument
- Located within a 2,135-acre research lease area, 27 miles off the coast of Virginia Beach



## **Commercial Project**



- Once complete in 2026, it's slated to be the largest project of its kind in United States
- Planning 188 14-megawatt wind turbines<sup>1</sup>
- 2,640-megawatt total capacity
- Enough to power up to 660,000 homes
- More than 800 feet tall 300 feet taller than the Westin Virginia Beach Town Center
- Located within a 112,800-acre lease area east of the pilot project



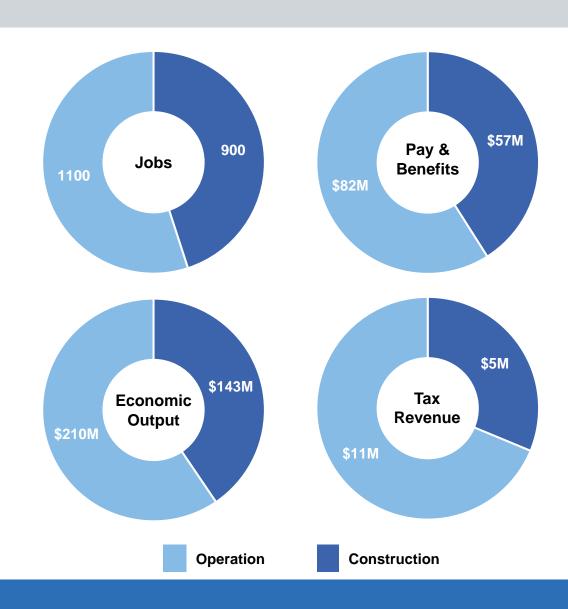
<sup>&</sup>lt;sup>1</sup> Dependent on State Corporation Commission review

## Growing a Clean Energy Economy



- Approximately 900 jobs and \$143 million in economic impact annually during construction
- Approximately 1,100 jobs and almost \$210 million in economic impact annually during operation
- Priority hiring of veterans, local workers, and individuals from economically-challenged communities
- Maximizing opportunities for Virginia vendors, subcontractors, and suppliers
- Actively engaging Virginia businesses through outreach programs
- Workforce Development Partnerships

Source: Mangum Economics, Potential Impact of the Development of the Offshore Wind Energy Industry on Hampton Roads and Virginia, September 2020.



## What CVOW Means for the Environment



CVOW will generate 8.8 million megawatt hours annually, the equivalent of:



Taking more than one million non-EV cars off the road



Growing more than one hundred million trees for 10 years



Switching more than two hundred million incandescent light bulbs to LEDs



Charging almost eight hundred billion smartphones

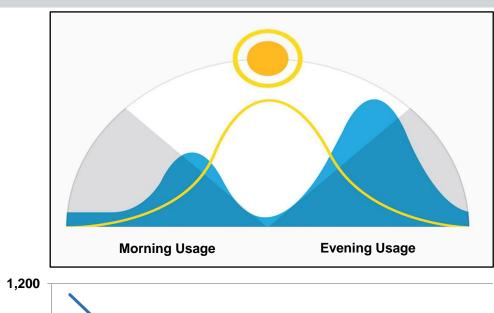


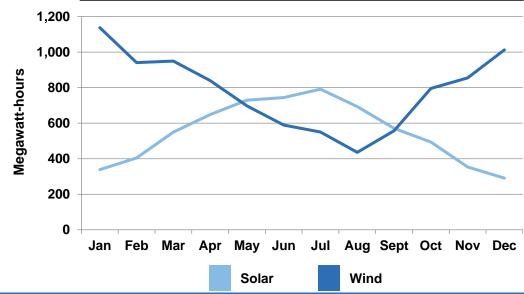
Source: Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator.

## Clean Energy Reliability



- Virginia's fully integrated regulatory model designed to maximize reliability
- Mix of energy resources increases reliability
- Peak solar energy does not align with peak usage
- Wind and solar complement one another on a daily and annual basis
- Wind and solar paired together lead to stable, renewable power in Virginia





## Question



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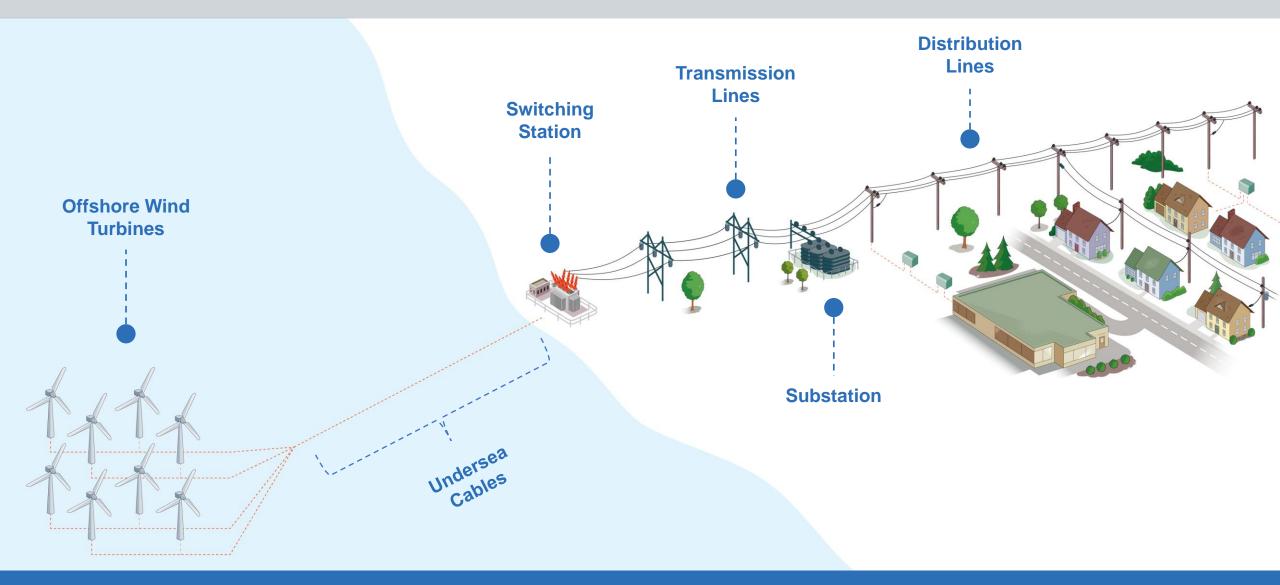
What benefits of the CVOW project are you most excited about?

- Clean energy generation
- Complements solar
- Domestic energy resource / energy independence
- U.S. supply chain hub based in the Hampton Roads
- Jobs
- Increased local and state tax revenue



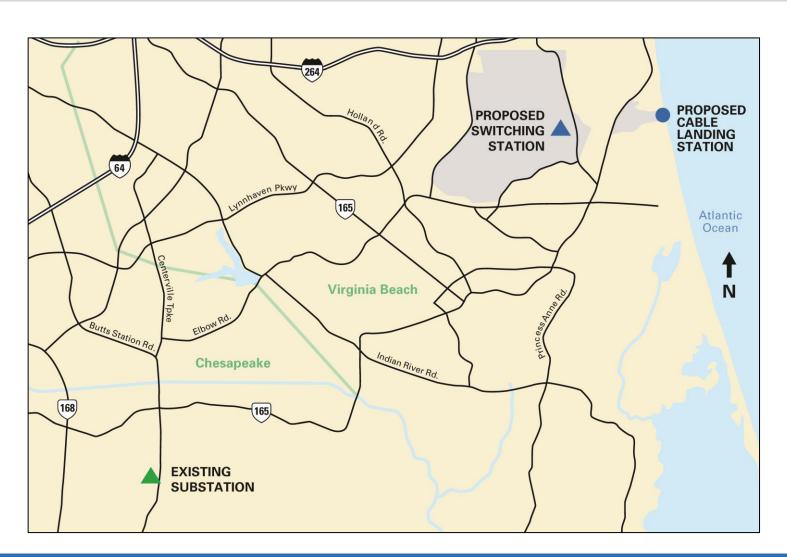
## **Offshore to Onshore**





## **Onshore Project Summary**





- Dominion Energy is exploring all electrical solutions for transmission routes
- Undersea cables are proposed to come ashore at State Military Reservation (SMR) in Virginia Beach
- Transmission lines will interconnect SMR to a proposed switching station located near Naval Air Station Oceana
- Transmission lines will then interconnect from the switching station to Dominion Energy's existing Fentress Substation in Chesapeake
- Approximately 13 miles from the proposed switching station to the substation

## Permitting and Regulatory Agencies





























#### Required Plans, Surveys, and Studies

- Safety Management System
- Emergency Response Plan
- Oil Spill Response Plan
- Cultural Resource Protections
- Marine Debris Prevention Plan
- Acoustics
- Air Emissions
- Avian and Bat
- Aviation Impacts
- Electric and Magnetic Fields
- Fisheries
- Geophysical, Geotechnical, and Benthic
- Historic Architecture
- Marine and Terrestrial Archaeology
- Marine Mammals and Sea Turtles
- Navigational Safety Risk
- Sediment Transport
- Terrestrial Biological Resources
- Visual Impacts

# **CVOW Timeline**

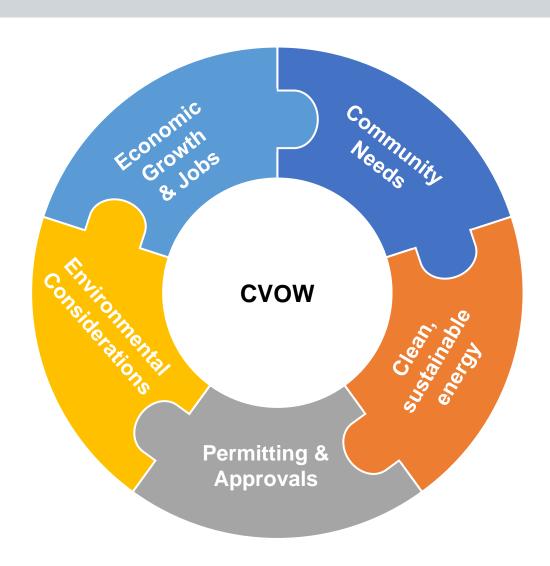




✓ Sep. 2019	2.6GW project announced
✓ Dec. 2020	Construction & Operation Plan (COP) submitted to Bureau of Ocean Energy Management
March 2021	First set of virtual public meetings
March – Mid 2021	Continue public meetings and conduct surveys
Mid 2021	COP updated from public input and routing considerations
Mid to Late 2021	Begin filing for other necessary permits / approvals
Late 2022 – Mid 2023	Final decisions for necessary permits / approvals
Late 2023	Begin construction of onshore transmission
2024 – 2026	Construction of offshore components and remaining onshore transmission

## **Partnering with Communities**





#### **Our Commitment**

- Communication is key to the success of our clean energy future.
- We're here to listen, learn, and receive input.

## We are seeking feedback on developing transmission routes to bring wind-powered energy onshore

- Understanding the communities needs and partnering on opportunities created by the CVOW project
- Minimizing the impacts to landowners, environmental justice communities, sensitive species, and cultural and historic resources
- Maximizing the use of existing rights-of-way while also respecting the land-use concerns of property owners

## Help Shape Virginia's Clean Energy Future



## As you think about your community and your energy needs:

- What would you like us to consider as we develop the project?
- What do you value and how should we think about this project in those terms?
- Can you share information about your community and/or property that we may not otherwise know?
- What is important to you when it comes to your energy needs?

#### Provide input & receive updates

- coastalvawind.com
- info@coastalvawind.com
- 1-844-319-2065



## Question



What additional topics would you like to learn about at future meetings?

(select all that apply)

- More details on the offshore wind energy project
- Onshore progress
- Workforce training and hiring opportunities
- Partnerships available to my local business
- Project next steps, permitting and approvals
- Providing input



## **How to Provide Input**



- You can submit all future questions via email <u>info@coastalvawind.com</u> or by calling 1-844-319-2065
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For more information, please visit: coastalvawind.com

### Thank you for joining!

