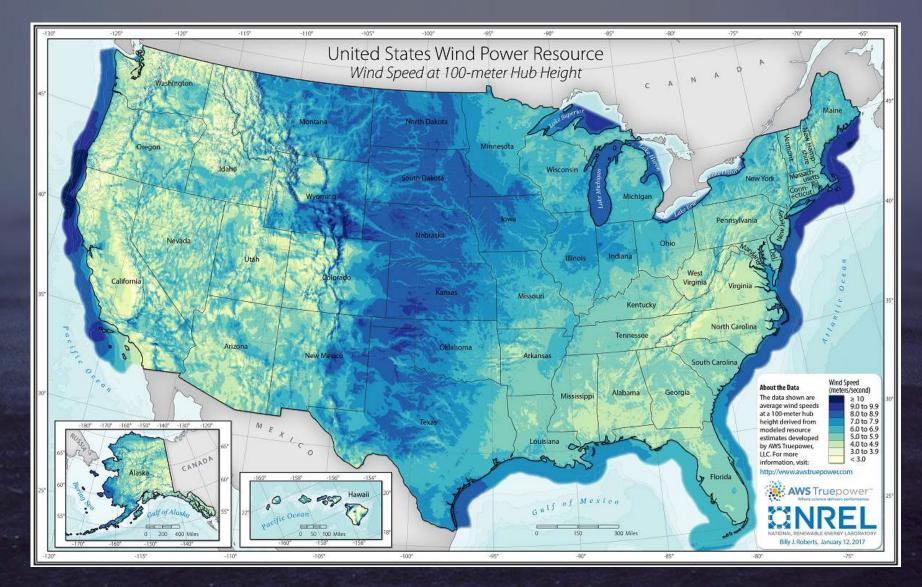
Maryland Offshore Wind Overview

Christopher Rice Maryland Energy Administration

September 17, 2019



Why Offshore Wind?



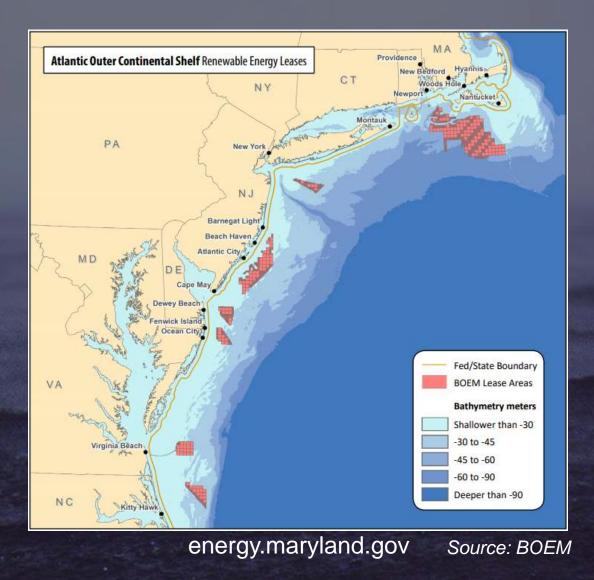


Why Offshore Wind?



ministration

BOEM Lease Areas





Maryland Offshore Wind Energy Act of 2013

- Created a 2.5 percent (500 MW) "carve-out" for offshore wind through Maryland's RPS.
- Created a financial support mechanism for offshore wind projects via Offshore
 Wind Renewable Energy Credits (ORECs).

Established an OREC approval process for proposed offshore wind projects that is conducted by the Maryland Public Service Commission (PSC).

Capped the OREC price to \$190 and rate impacts for residential (\$1.50/mo) and non-residential (1.5% yearly) electric customers.



SB 516 – Clean Energy Jobs Act (2019)

- Increases Maryland's Renewable Portfolio Standard (RPS) to 50 percent by 2030.
- Increases the offshore wind "carve out" to 10 percent with a required additional minimum of 1,200 MW by 2030.
- "Redefines" projects approved by the PSC before July 1, 2017 as "Round 1" and projects approved after July 1, 2017 as "Round 2"
- Round 2 projects are capped to an OREC price of \$190/MWh and rate impacts for residential (\$0.88/mo) and non-residential (0.9% yearly) electric customers.



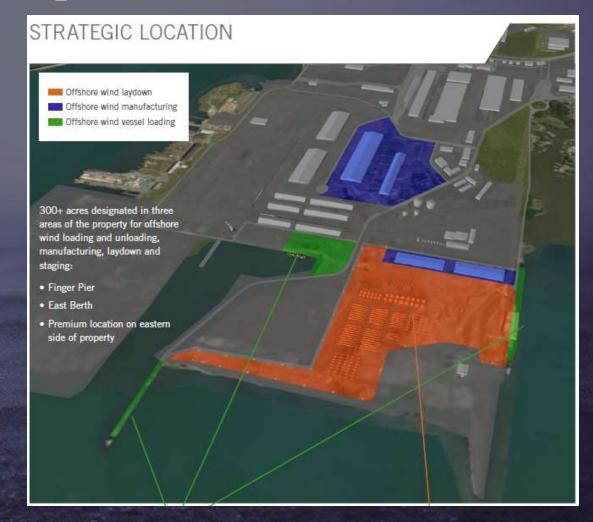
Comparison

	MD OSWEA 2013	MD CEJA 2019
OSW Carve Out	2.5 percent	10 percent
Estimated Generation	1.7 Million MWh/yr	6.8 Million MWh/yr
Estimated Capacity	500 MW	2,000 MW (Additional 1,200 MW minimum)
Distance	10 – 30 miles	10 – 80 miles
Location	Atlantic OCS in a BOEM Lease	Atlantic OCS in a BOEM Lease
OREC Price	\$190/MWh (2012\$)	\$190/MWh (2012\$)
Res Rate Impact	\$1.50/month Total (2012\$)	\$0.88/month Total (2018\$)
Non-Res Rate Impact	1.5%/yr Total	0.9%/yr Total



Ørsted & Tradepoint Atlantic

- Received a \$20 million grant from the US Department of Transportation for infrastructure upgrades (March, 2018).
- In July, 2019 TPA announced a partnership with Ørsted where Ørsted will invest \$13.2 million in the upgrades at TPA and lease 50 acres of the space to be used for staging/marshalling of the Skipjack windfarm.

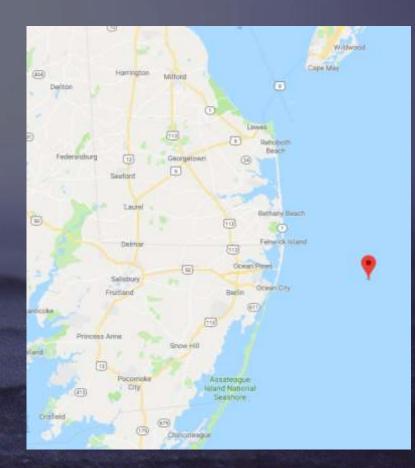




US Wind's Met Tower

The Met Tower will collect data to be used to quantify the wind resource, calculate the energy yield and develop an annual energy production report for the proposed wind farm. Details

- September, 2019 Completion Date
- 15 nm offshore Ocean City, MD
- 328 feet tall
- Located in waters 88 feet deep
- Deck elevation is 70 feet above sea level
- Galvanized steel lattice mast
- Steel deck
- Braced caisson foundation



Location of the Met Tower



Maryland OSW Capex Program

Provides grant funding to help offset Capital Expenditures for Maryland companies entering the offshore wind industry.

- \$1.6 million available in FY 2020
- Grants capped at \$400,000
- MEA has issued about \$2 million in business grants to date



Maryland OSW Workforce Training Program

Supports new or existing training centers that provide vocational training of technical skills and safety standards utilized by the offshore wind industry.

- \$1.2 million available in FY 2020 budget
- Grants are capped at \$300,000
- MEA has issued about \$1 million in workforce training grants to date



National OSW R&D Consortium

The National Offshore Wind Research and Development Consortium consists of public and private members which are committed to collaborative, mutually beneficial research and development focused on addressing offshore wind technology challenges specific to reducing the levelized cost of energy of offshore wind projects in the United States.

R&D priorities are focused on 1) Wind plant technology advancement 2) Wind power resource and physical site characterization, and 3) Installation, operations and maintenance, and supply chain technology solutions.

- MEA joined on January 22, 2019
- MEA provided an additional \$4 million in research funding



Questions?

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