

# U.S. Offshore Wind Industry

## STATUS UPDATE - OCTOBER 2019

### Offshore Wind Energy Development in the U.S.

The United States has a vast offshore wind energy resource with a technical potential of more than 2,000 gigawatts (GW), or nearly double the nation's current electricity use. Harnessing America's offshore wind resources presents an enormous opportunity to create tens of thousands of highly-skilled jobs, revitalize coastal communities, and deliver large amounts of clean, reliable energy to the country's biggest population centers.

The U.S. currently has one operational offshore wind project with many more on the way. The nation's first commercial offshore wind project, the Block Island Wind Farm, came online in December 2016. Developed by Deepwater Wind, now Ørsted US Offshore Wind, the Block Island Wind Farm is a 30 megawatt (MW) project with five turbines located three miles off the coast of Block Island, Rhode Island.

As of September 2019, the U.S. had a total offshore wind pipeline of over 26,000 MW spanning 10 states off the East and Great Lakes coasts. This includes 7,528 MW of project-specific capacity and approximately 18,800 MW of additional potential capacity in federal lease areas issued to date. Out of this pipeline, project developers expect 11 offshore wind projects totaling 7,492 MW to be operational by 2026.

States are driving strong demand for offshore wind energy and have established nearly 22,000 MW of offshore wind procurement targets to date. As of September 2019, six states had selected more than 4,600 MW of offshore wind through state-issued solicitations. Additional solicitations are planned for the coming years to help states meet their offshore wind energy goals.

On the federal side, the Department of Interior's Bureau of Ocean Energy Management (BOEM) has issued 15 active commercial wind energy leases. In a December 2018 offshore wind lease auction, three separate parcels each went for a record \$135 million, underscoring robust competition and market interest. The record more than tripled the previous \$42 million set in 2016. All offshore wind lease auctions to date have totaled over \$472 million. BOEM is now in the planning stages for areas off of California, Hawaii, New York, and South Carolina, and expects to hold lease auctions for new California and New York Bight lease areas in 2020.

With stable policies in place, the Department of Energy found the U.S. could develop a total of 86 GW of offshore wind projects by 2050. As we continue to develop this homegrown resource, costs will continue to drop, value to consumers will grow, and the U.S. will see new jobs and investments in manufacturing and port infrastructure.



## Recent State Activities Driving Offshore Wind Demand

### Connecticut

- In June 2018, the Connecticut Department of Energy and Environmental Protection (DEEP) selected 200 MW from the Revolution Wind project as a winner of its renewable energy RFP. The Connecticut PUC approved Ørsted's 20-year PPA with Eversource Energy and United Illuminating Co in December 2018. Connecticut selected an additional 100 MW from Revolution Wind through an RFP at the end of 2018.
- In June 2019, Connecticut enacted a law requiring the state to procure 2,000 MW of offshore wind by 2030. The state issued an RFP for up to 2,000 MW of offshore wind capacity in August and received bids from three developers. The winners will be announced in November.

### Maine

- In June 2019, the Governor of Maine directed the PUC to approve a contract for the Aqua Ventus floating demonstration project and announced a new Maine Offshore Wind Initiative.

### Maryland

- Maryland's Offshore Wind Energy Act of 2013 amended the state's RPS to include offshore wind and to provide financial support for projects in the form of Offshore Wind Renewable Energy Credits (ORECs).
- Maryland completed the first large-scale solicitation of offshore wind in the U.S. in May 2017, awarding ORECs to U.S. Wind and Deepwater Wind for two projects totaling 389 MW off the coast of Maryland.
- In May 2019, Maryland passed an offshore wind mandate of 1,200 MW by 2030 with an increase in the state's RPS.

### Massachusetts

- Massachusetts passed a law in August 2016 requiring utilities in the state to procure 1,600 megawatts of offshore wind power by 2027. The state passed new legislation in August 2018 that would double the offshore wind target to 3,200 MW by 2035.
- In May 2018, Massachusetts utilities selected 800 MW from the Vineyard Wind project as the winner of their first offshore wind solicitation. National Grid USA, Eversource Energy, and Unitil Corp signed power purchase agreements to buy energy and RECs from Vineyard Wind at a total levelized price of \$65 per megawatt hour, the lowest offshore wind PPA price in the U.S. to date.
- In December 2018, BOEM held an auction for three offshore wind lease areas off the coast of Massachusetts. After 32 rounds of bidding, the lease areas were awarded to Equinor, Mayflower Wind Energy, and Vineyard Wind for a total of \$405.1 million.

- Massachusetts issued its second offshore wind RFP in May 2019, seeking between 400 MW to 800 MW of offshore capacity. The state received bids from three developers and will announce the winning projects by November 8.

### New Jersey

- In May 2018, New Jersey passed legislation to increase its offshore wind target from 1,100 MW to 3,500 MW by 2030, fulfilling Governor Murphy's earlier Executive Order.
- In June 2019, New Jersey granted the state's first OREC award to Ørsted's 1,100 MW Ocean Wind project, the largest offshore project planned in the U.S. to date. The project has a first year OREC price of \$98/MWh, and an estimated levelized net OREC price of \$46/MWh after revenues are refunded to ratepayers.

### New York

- In January 2017, New York Governor Cuomo announced a commitment to develop 2,400 MW of offshore wind by 2030. In January 2019, Governor Cuomo increased the state's target to 9,000 MW of offshore wind by 2035, which was signed into law in July 2019.
- The Long Island Power Authority signed a 20-year power purchase agreement with Deepwater Wind for the 90 MW South Fork Wind Farm in 2017, and agreed to buy an additional 40 MW in November of 2018.
- In July 2019, New York announced the winners of its first offshore wind solicitation: Ørsted & Eversource's 880 MW Sunrise Wind project and Equinor's 816 MW Empire Wind project. The project developers are currently negotiating contracts with NYSERDA.

### Rhode Island

- In May 2018, Rhode Island selected 400 MW from the Revolution Wind project through a competitive procurement process in collaboration with Massachusetts
- National Grid and Ørsted signed a contract for the project at a real levelized price of \$74 per megawatt hour, which the Rhode Island PUC approved in May 2019.

### Virginia

- In July 2019, Dominion Energy and Ørsted started construction of the 12 MW Coastal Virginia Offshore Wind Project.
- In September 2019, Virginia Governor Northam issued an Executive Order calling for 2,500 MW of offshore wind by 2026. Shortly after, Dominion Energy announced plans to build and own a 2,640 MW offshore project by 2026, the largest project announced in the U.S. to date.

For more information visit [www.awea.org/offshorewind](http://www.awea.org/offshorewind) or email [Laura Morton, Lmorton@awea.org](mailto:Lmorton@awea.org).