

U.S. Northeast Projects: Federal Permitting

BOEM Current Permitting Queue

Project	Capacity (MW)	ST	Developer	SAP	COP EIS Status	Construction Anticipated	Operation Begins
Block Island	30	NJ	Ørsted, Eversource	Not applicable	N/A (State Waters)	2015	2016
Vineyard Wind	800	MA	CIP, Avangrid Renewables	Approved	Final EIS published	2022	2023
South Fork	130	NY	Ørsted, Eversource	Approved	Draft EIS published	2022	2023
Ocean Wind	1100	NJ	Ørsted, PSEG	Approved	EIS NOI published 3/30	2024	2025
Revolution Wind	400	RI	Ørsted, Eversource	Approved	EIS NOI published 4/30	2023	2024
Revolution Wind	304	CT	Ørsted, Eversource	Approved	EIS NOI published 4/30	2023	2024
Empire Wind I	816	NY	Equinor, bp	Approved	EIS NOI published 6/24	2025	2026
Empire Wind II	1260	NY	Equinor, bp	Approved	EIS NOI published 6/24	2025	2026
Vineyard South (Park City Wind)	804	CT	CIP, Avangrid Renewables	Approved	EIS NOI published 6/30	2024	2025
Coastal Virginia	2640	VA	Dominion Energy (Ørsted construction)	Approved, 12MW pilot	EIS NOI published 7/1	2025	2026
Kitty Hawk	800	(NC)	Avangrid Renewables	Approved	EIS published 7/30	2024	2025
Sunrise Wind	924	NY	Ørsted, Eversource	Approved	EIS NOI expected 8/31	2024	2025
Mayflower Wind	800	MA	Ocean Winds (EDPR, Engie), Shell	Approved	Under BOEM review	2024	2025
Atlantic Shores	TBD	NJ	Shell, EDF Renewables	Under BOEM review	In preparation	2026	2027
Beacon Wind	1260	NY	Equinor, bp	In preparation	In preparation	2027	2028
MarWin	TBD	(MD)	US Wind	Approved	In preparation	-	2024
Skipjack	120	(DE)	Ørsted, PSEG	Approved	In preparation	-	2026
Bay State Wind	TBD	(MA)	Ørsted, Eversource	Approved	In preparation	-	-
Garden State	TBD	(DE)	Ørsted, PSEG	Approved	In preparation	-	-

U.S. Northeast Projects: Power Projections

State	2021	2022	2023	2024	2025	2026	Cumulative (MW)	Target (MW)
	Projected Cumulative Capacity (MW)							
Rhode Island	30 (Block Island 2016)	0	0	400 (Revolution COD)	0	0	430	1,030
Virginia	12 (Coastal VA Operating)	0	0	0	0	2,640 (Dominion COD)	2,652	5,200
North Carolina	0	0	0	0	800 (Kitty Hawk)	0	800	8,000
Massachusetts	0	800 (Vineyard COD)	0	0	804 (Mayflower COD)	0	1,604	5,600
Maryland	0	0	0	270 (MarWin COD)	0	120 (Skipjack COD)	390	1,568
New Jersey	0	0	0	0	1,100 (Ocean Wind COD)	[1148 Ocean Wind 2 1510 Atlantic Shores in 2028]	1,100 [3,758 by 2028]	7,500
Connecticut	0	0	0	304 (Revolution COD)	804 (Park City COD)	0	1,108	2,000
New York	0	0	130 (Southfork COD)	924 (Sunrise Wind 1 COD)	2,076 (Empire I and II COD)	[1,230 Beacon 2028]	3,100 [4,360 by 2028]	9,000
Total	42	842	972	2,870	8,454	11,644	11,184 [15,012 by 2028]	39,890

Sources: Business Network for Offshore Wind – OSW Market Dashboard

State (Year)	RI (2009)	LIPA: (2017)	MD (2017)	MA (2018)	CT (2018)	RI (2018)	NJ (2019)	NY (2019)	MA (2019)	CT (2019)	VA (2020)	NY (2021)	NJ (2021)
Project Name	Block Island	South Fork	Skipjack & MarWin	Vineyard Wind	Revolution Wind		Ocean Wind	Sunrise & Empire	Mayflower Wind	Park City Wind	Coastal Virginia Offshore Wind	Empire Wind 2 & Beacon Wind	Ocean Wind 2 & Atlantic Shores
Capacity	30 MW	130 MW	368 MW	800 MW	300 MW	400 MW	1,100 MW	1,696 MW	804 MW	804 MW	12 MW pilot 2,640 MW total	2,490 MW EW2: 1,260 MW Beacon: 1,230 MW	2,658 MW OW2: 1,062 MW AS: 1,596 MW
Winning Developer	Deepwater Wind (Ørsted)	Deepwater Wind(Ørsted)	Deepwater Wind (Ørsted)and US Wind	Vineyard Wind	Ørsted		Ørsted	Equinor and Ørsted	Mayflower Wind	Vineyard Wind	Ørsted for 12 MW	Equinor	Ørsted and Shell/EDF Renewables
Published StrikePrice (Description)	N/A	(as below)	\$131.93/MWh (\$2012)	\$64.97/MWh (\$2017 ¹)	\$74/MWh (\$2017 ¹)		\$116.82/MWh (\$Nominal ¹)	(as below)	\$77.76/MWh (\$Nominal ¹); \$58/MWh (\$2019 ¹)	TBD (filed with CTPURA May 25, 2020)	TBD (ratepayer cost for 12 MW pilot is \$300million)	TBD	OW2: \$84.30 MW/h ASOW: \$86.62 MW/h
Apples-Apples Strike Price (levelized \$2018)	>\$320/MWh	\$181/MWh (\$211 for first 90MW, \$114 for additional 40 MW)	\$148.50/MWh	~\$74.16/MWh ¹	~\$7.11/MWh ¹		\$87.11/MWh (\$46.46/MWh OREC)	\$83.36/MWh (\$25.14/MWh OREC)	~\$64.49/MWh ^{1,2}	TBD (filed with CTPURA May 25,2020)	TBD	TBD	OW2: NLOC \$42.30 MW/h AS: NLOC \$58.81 MW/h
Lease Area	N/A	OCS-A 0486	Skipjack: OCS-A 0519 Marwin: OCS-A 0490	OCS-A 0501	OCS-A 0486		OCS-A 0498	Sunrise: OCS-A 0487 Empire: OCS-A 0512	OCS-A 0521	OCS-A 0501	OCS-A 0483	Empire: OCS-A 0512 Beacon: OCS-A 0520	Ocean Wind: OCS-A 0498 Atlantic Shores: OCS-A 0499
Point of Interconnection	South Kingstown, RI	East Hampton, Long Island, NY	Skipjack: Fenwick Island State Park, DE	Barnstable, MA (Covell’s Beach landfall)	Brayton Point, MA		Oyster Creek, NJ (former Nuclear Facility)	Sunrise: Holbrook, LI(and/or adjacent Westbus) Empire: Gowanus, Brooklyn	Falmouth, MA	(TBD)	Camp Pendleton	EW2: Long Beach, NY & Beacon: Astoria, NY	OW2: Ocean City, NJ (former B.L. England generating plant Beesleys Point, Upper Township) AS:
¹ MA, CT, and RI contracts are bundled for energy and RECs, but not capacity. This may represent a ~\$10/MWh revenue stream that is monetized outside of the contract. These projects are also all expected to monetize the 18% federal tax credit except as noted under footnote 2.													
² If Mayflower Wind is able to qualify for an ITC > 12%, project will “reduce the pricing based on any incremental ITC benefits”													

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Project Name	Block Island	South Fork	Skipjack (120 MW) & MarWin (248 MW)	Vineyard Wind	Revolution Wind		Ocean Wind	Sunrise Wind & Empire Wind 1	Mayflower Wind	Park City Wind	Coastal Virginia Offshore Wind	Empire Wind 2 & Beacon Wind	Ocean Wind 2 & Atlantic Shores
Capacity	30 MW	130 MW	368 MW	800 MW	300 MW	400 MW	1,100 MW	1,696 MW	804 MW	804 MW	12 MW pilot, 2,640 MW total	2,490 MW EW2: 1,260 MW Beacon: 1,230 MW	2,658 MW OW2: 1,062 MW AS: 1,596 MW
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Economic Benefits (roll-up)	(\$Unavailable)	(\$Unavailable)	Skipjack: \$200 million of local investment; MarWin: \$16 billion in net economic benefit	(\$Unavailable)	\$22 million in infrastructure upgrades	Hundreds of local jobs, \$250 million of local economic impact	\$1.17 billion of local economic impact NJ Wind Port: potential for \$500 million in economic activity	\$3.2 billion of local economic impact	More than \$1.2 billion of local economic impact “virtually all in economic distressed areas”	\$890 million of local economic impact; up to\$26.5 million in directly funded initiatives with CT partners	(\$Unavailable)	A combined economic activity of \$8.9 Bn in labor, supplies, development, and manufacturing statewide.	OW2: \$1.657 Bn in total economic benefits AS: \$1.869 Bn in total economic benefits
Community Benefit Agreements		\$29M		\$16M				TBD				TBD	TBD
Jobs	300+ local jobs	(\$Unavailable)	Skipjack: 1,400 jobs; MarWin 5,000 jobs	3,600 local job-years; Goal of 100% O&M being Martha’s Vineyard residents within 5y of operation	(\$Unavailable)	800 total, 50 permanent	3,000 direct jobs annually through development; 15,000 jobs over the project life; 69 FTE in O&M NJ Wind Port: potential for 1,500 jobs (manuf., assembly, ops)	1,600 jobs and more than 16,000 local job-years	6,450 direct FTEs; 2,590indirect FTEs; 4,130 induced FTEs. Total =13,170 FTEs regionally; Subtotal for MA only is10,230 FTEs.	2,880 direct FTEs; 12,000 direct, indirect, and induced FTEs	(\$Unavailable)	5,200 direct jobs	OW2: 146 direct jobs and 371 total FTE years AS: Create 50-70 direct jobs (NJ Port)
Port Infrastructure	Provport , RI used for WTG staging (\$Unavailable)	Commitment to base O&M at Montauk Inlet Seafood dock	\$38 million in MD port and fabrication facilities	Staging in New Bedford Terminal, \$50Kinvestment + \$9millionlease	Staging in New London State Pier and \$77.5 million in infrastructure upgrades and \$20 million in 10-year \$2million/annum lease payments		Staging in Port of Baltimore (50-acres); Port of Paulsboro monopile manufacturing (potential) NJ Wind Port to be built starting in 2021- up to 150 acres at a cost of \$300-400 million for staging, assembly and manufacturing. Specific funding TBD.	Combined: More than \$85 million in investments in long-term port facilities and cutting-edge technologies. Empire: \$67 million Port of Coeymans, Staging TBD, O&M based out of SBMT; Sunrise: \$10 million in port development fund and \$4 million local electric infrastructure, Regional O&M hub in Port Jefferson, LI (Staging from New London, CT)	Staging in New Bedford Marine Commerce Terminal (\$Unavailable)	\$12 million to Bridgeport (18 acre Barnum Landing) O&M Hub	Ørsted leasing 1.7 acres of Portsmouth Marine Terminal for offshore wind staging materials and equipment through 2026; possible expansion to 40 acres. Agreement could result in \$13 million in lease payments and \$20 million in port upgrades	Tower manufacturing facility at the Port of Albany. Staging facility and operations and maintenance hub at the South Brooklyn Marine Terminal. Port of Coeymans turbine foundation manufacturing. O&M out of Port Jefferson and Montauk Harbor.	OW2: Paulsboro monopile facility. GE nacelle assembly facility at the New Jersey Wind Port AS: Foundation manufacturing at the Port of Paulsboro (monopiles) and nacelle assembly with MHI Vestas at the NJ Wind Port

