

APPENDIX E3

Maximum-Case Scenario Estimates for Offshore Wind Projects

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Introduction

Table E3-1 (parts 1–10) provides maximum-case scenario estimates of potential offshore wind project impacts assuming maximum buildout, using the geographic analysis areas in the Revolution Wind Farm (RWF) and Revolution Wind Export Cable (RWEC) project environmental impact statement (EIS) and construction and operations plan–designated numbers for the RWF and RWEC. The Bureau of Ocean Energy Management (BOEM) developed these estimates based on offshore wind demand, as discussed in its 2019 study *National Environmental Policy Act Documentation for Impact-Producing Factors in the Offshore Wind Cumulative Impacts Scenario on the North Atlantic Outer Continental Shelf* (BOEM 2019). Estimates disclosed in the EIS’s Chapter 3, No Action analyses were developed by summing acreage or number calculations across all lease areas noted as occurring within, or overlapping, a given geographic analysis area. This likely overestimates some impacts in cases where lease areas only partially overlap analysis areas. However, this approach was used to provide the most conservative estimate of future offshore wind development.

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Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 1)

Region	Lease/Project/ Lease Remainder ¹	Status	Resource/Projects ³							Estimated Offshore Construction Schedule ⁴	Expected Turbine Size ⁵
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Underwater Cables	Navigation/ Commercial Fisheries/ Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice		
NE	NE Aquaventus (state waters)	State Project				X				2023	11 MW
NE	Block Island (state waters)	State Project, Built	X	X		X	X	X	X	Built	6 MW
	Total State Waters										
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD				X	X	X	X	2023	up to 14 MW
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	X	X		X	X	X	X	2023	6 - 12 MW
MA/RI	Sunrise, OCS-A 0487	COP, PPA	X	X		X	X	X	X	2024	11 MW
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	X			X	X	X	X	2024-2026	13 to 16 MW
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	X			X	X	X	X	2024-2026	13 to 19 MW
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA				X	X	X	X	2025	12 MW+
MA/RI	Beacon Wind, part of OCS-A 0520	PPA				X	X	X	X	2025-2026	12 MW
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)	X	X		X	X	X	X	By 2030, spread over 2025-2030	12 MW
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the remaining technical capacity is 4,764 MW.				X	X	X	X	By 2030, spread over 2025-2030	12 MW
MA/RI	OCS-A 0500 remainder ^c		X			X	X	X	X		
MA/RI	OCS-A 0487 remainder ^c		X	X		X	X	X	X		
MA/RI	OCS-A 0520 remainder					X	X	X	X		
	Remaining MA/RI Lease Area Total ²	88%									
	Total MA/RI Leases (without Proposed Actions)²										
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA				X			X	2023-2024	12 MW
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA				X			X	2024-2025	10 - 18 MW
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA				X			X	2023-2027	
NY/NJ	Atlantic Shores OCS-A 0499	COP, PPA				X			X	2025-2027	>12 MW
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA				X			X	By 2030, spread over 2026-2030	12 MW
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)					X			X	By 2030, spread over 2026-2030	12 MW
NY/NJ	Central Bight, OCS-A 0537					X			X	By 2030, spread over 2026-2030	12 MW
NY/NJ	Hudson South B, OCS-A 0538					X			X		12 MW
NY/NJ	Hudson South C, OCS-A 0539					X			X		12 MW
NY/NJ	Hudson South E, OCS-A 0541					X			X		12 MW
NY/NJ	Hudson South F, OCS-A 0542					X			X		12 MW
NY/NJ	Hudson North, OCS-A 0544					X			X		12 MW
	TOTAL NY/NJ LEASES										
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA				X			X	2024	12 MW
DE/MD	US Wind, part of OCS-A 0490	COP, PPA				X			X	2024	8.6 - 12 MW
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The remaining capacity may be utilized by demand from NJ or MD.				X			X	By 2030, spread over 2023-2030	12 MW
DE/MD	OCS-A 0519 remainder					X			X		12 MW

Region	Lease/Project/ Lease Remainder ¹	Status	Resource/Projects ³							Estimated Offshore Construction Schedule ⁴	Expected Turbine Size ⁵		
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/ Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice				
	Remaining DE/MD Lease Area Total					X				X			
	TOTAL DE/MD LEASES												
VA/NC	CVOW, OCS-A 0497	Built				X					X	Built	6 MW
VA/NC	CVOW-C, OCS-A 0483	COP				X					X	2024-2025	14-16 MW
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP				X					X	2025-2026	14-18 MW
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)				X					X	2026-2027	14-18 MW
	TOTAL VA/NC LEASES												
	OCS Total (without Proposed Action)^{24, 25:}												

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 2)

Region	Lease/Project/ Lease Remainder ¹	Status	Generating Capacity (MW) (INTERNAL NOTE - FULL MW)							Generating Capacity (MW)							Offshore Export Cable Length (Statute Miles) ⁸	Offshore Export Cable Installation Tool Disturbance Width (feet)	Inter-array Cable Length (Statute Miles) ⁹
			Air ⁶	Water ⁷	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air ⁶	Water ⁷	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice			
NE	NE Aquaventure (state waters)	State Project	NA	NA	NA	11	NA	NA	NA	NA	NA	NA	11	NA	NA	NA			
NE	Block Island (state waters)	State Project, Built	30	30	NA	30	30	30	30	30	30	NA	30	30	30	30	28	5	2
	Total State Waters		30	30	NA	41	30	30	30	30	30	NA	41	30	30	30	28	5	2
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	NA	800	800	800	800	NA	NA	NA	800	800	800	800	98	6.5	171
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	130	130	130	130	130	130	130	130	130	130	130	130	130	130	139	6.5	24
MA/RI	Sunrise, OCS-A 0487	COP, PPA	1122	1122	NA	1122	1122	1122	1122	1122	1122	NA	1122	1122	1122	1122	106	6.5	180
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	804	NA	NA	804	804	804	804	804	NA	NA	804	804	804	804	125	10	139
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	1500	NA	NA	1500	1500	1500	1500	1,500	NA	NA	1500	1500	1500	1500	225	10	201
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA	NA	NA	NA	804	804	804	804	NA	NA	NA	804	804	804	804	744	6.5	497
MA/RI	Beacon Wind, part of OCS-A 0520	PPA	NA	NA	NA	1,230	1,230	1,230	1,230	NA	NA	NA	1,230	1,230	1,230	1,230	120	6.5	163.08
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)	1,092	1,092	NA	1,092	1,092	1,092	1,092	1,092	1,092	NA	1,092	1,092	1,092	1,092	120	6.5	171.96
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the remaining technical capacity is 4,764 MW.	NA	NA	NA	4,200	4,200	948	4,192	NA	NA	NA	3,876	3,876	948	3,876	120	6.5	504.96
MA/RI	OCS-A 0500 remainder ^c		852	120	NA			3,876		71	10	NA					120		
MA/RI	OCS-A 0487 remainder ^c		48	48	NA			3,876		48	48	NA					120		
MA/RI	OCS-A 0520 remainder		NA	NA	NA			3,876		NA	NA	NA					120		

Region	Lease/Project/ Lease Remainder ¹	Status	Generating Capacity (MW) (INTERNAL NOTE - FULL MW)							Generating Capacity (MW)							Offshore Export Cable Length (Statute Miles) ⁸	Offshore Export Cable Installation Tool Disturbance Width (feet)	Inter-array Cable Length (Statute Miles) ⁹
			Air ⁶	Water ⁷	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air ⁶	Water ⁷	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice			
	Remaining MA/RI Lease Area Total ²	88%	48	120	NA					4,767	2,402	NA			948		600	6.5	677
	Total MA/RI Leases (without Proposed Actions)²		5,596	2,632	130	11,682	11,682	20,058	11,674	4,767	2,402	130	11,358	11,358	8,430	11,358	2,157	NA	2,052
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA				1,100			1,100	NA	NA	NA	1,100	NA	NA	1,100	142	5	142
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA				816			816	NA	NA	NA	816	NA	NA	816	40	7	116
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA				1,260			1,260	NA	NA	NA	1,260	NA	NA	1,260	26	7	144
NY/NJ	Atlantic Shores OCS-A 0499	COP, PPA				1,510			1,510	NA	NA	NA	1,510	NA	NA	1,510	342	13	584
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA				1,554			1,554	NA	NA	NA	1,554	NA	NA	1,554	120	5	173
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)					2,198			2,198	NA	NA	NA	2,198	NA	NA	2,198	120	7	242
NY/NJ	Central Bight, OCS-A 0537					868			868	NA	NA	NA	868	NA	NA	868	120	5	120
NY/NJ	Hudson South B, OCS-A 0538					964			964	NA	NA	NA	964	NA	NA	964	120	5	120
NY/NJ	Hudson South C, OCS-A 0539					1,387			1,387	NA	NA	NA	1,387	NA	NA	1,387	120	5	120
NY/NJ	Hudson South E, OCS-A 0541					924			924	NA	NA	NA	924	NA	NA	924	120	5	120
NY/NJ	Hudson South F, OCS-A 0542					934			934	NA	NA	NA	934	NA	NA	934	120	5	120
NY/NJ	Hudson North, OCS-A 0544					523			523	NA	NA	NA	523	NA	NA	523	120	5	120
	TOTAL NY/NJ LEASES					14,038			14,038	NA	NA	NA	14,038	NA	NA	14,038	1510		2121
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA				120			120	NA	NA	NA	120	NA	NA	120	40	10	30
DE/MD	US Wind, part of OCS-A 0490	COP, PPA				1500			1500	NA	NA	NA	1500	NA	NA	1500	190	6.5	151
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The remaining capacity may be utilized by demand from NJ or MD.				1,080			1,080	NA	NA	NA	1,080	NA	NA	1,080	n.d.	n.d.	n.d.
DE/MD	OCS-A 0519 remainder									NA	NA	NA		NA	NA		n.d.	n.d.	n.d.
	Remaining DE/MD Lease Area Total									NA	NA	NA		NA	NA		240	5	139
	TOTAL DE/MD LEASES					2,700			2700	NA	NA	NA	2,700	NA	NA	2,700	470		320
VA/NC	CVOW, OCS-A 0497	Built				12			12	NA	NA	NA	12	NA	NA	12	27	3.3	9
VA/NC	CVOW-C, OCS-A 0483	COP				3,000			3000	NA	NA	NA	3,000	NA	NA	3,000	417	5	301
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP				1,242			1,242	NA	NA	NA	1,242	NA	NA	1,242	112	6.5	149
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)				1,242			1,242	NA	NA	NA	1,242	NA	NA	1,242	200	6.5	149
	TOTAL VA/NC LEASES					5,496			5,496	NA	NA	NA	5,496	NA	NA	5,496	756	NA	608
	OCS Total (without Proposed Action)^{24, 25:}		5,626	2,662	130	33,957	11,712	20,088	33,938	4,797	2,432	130	33,633	11,388	8,460	33,622	4,921	NA	5,103

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 3)

Region	Lease/Project/ Lease Remainder ¹	Status	Hub Height (Feet) ¹⁰							Rotor Diameter (Feet) ¹¹							Total Height of Turbine (Feet) ¹²						
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/ Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/ Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/ Recreation- Tourism	Demographics/ Environmental Justice
NE	NE Aquaventus (state waters)	State Project	NA	NA	NA					NA	NA	NA	450	450	450	450	NA	NA	NA	520	520	520	520
NE	Block Island (state waters)	State Project, Built	NA	NA	NA	328	328	328	328	NA	NA	NA	541	541	541	541	NA	NA	NA	659	659	659	659
	Total State Waters		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	NA	451	451	451	451	NA	NA	NA	721	721	721	721	NA	NA	NA	812	812	812	812
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	358	358	NA	358	358	358	358	543	543	543	543	543	722	722	614	614	614	614	614	853	853
MA/RI	Sunrise, OCS-A 0487	COP, PPA	459	459	NA	459	459	459	459	656	656	NA	656	656	656	656	787	787	NA	787	787	787	787
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	630	NA	NA	630	630	630	630	837	NA	NA	837	837	837	837	1047	NA	NA	1047	1047	1047	1047
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	702	NA	NA	702	702	702	702	935	NA	NA	935	935	935	935	1171	NA	NA	1171	1171	1171	1171
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA	NA	NA	NA	605	605	605	605	NA	NA	NA	919	919	919	919	NA	NA	NA	1066	1066	1066	1066
MA/RI	Beacon Wind, part of OCS-A 0520	PPA	NA	NA	NA	492	492	492	492	NA	NA	NA	722	722	722	722	NA	NA	NA	853	853	853	853
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)	492	492	NA	492	492	492	492	722	722	NA	722	722	722	722	853	853	NA	853	853	853	853
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the remaining technical capacity is 4,764 MW.	NA	NA	NA	492	492	492	492	NA	NA	NA	722	722	722	722	NA	NA	NA	853	853	853	853
MA/RI	OCS-A 0500 remainder ^c		492	492	NA	492	492	492	492	722	722	NA	722	722	722	722	853	853	NA	853	853	853	853
MA/RI	OCS-A 0487 remainder ^c		NA	NA	NA	492	492	492	492	NA	NA	NA	722	722	722	722	NA	NA	NA	853	853	853	853
MA/RI	OCS-A 0520 remainder		NA	NA	NA	492	492	492	492	NA	NA	NA	722	722	722	722	NA	NA	NA	853	853	853	853
	Remaining MA/RI Lease Area Total ²		88%	NA	NA	NA	492	492	492	492	NA	NA	NA	722	722	722	722	NA	NA	NA	853	853	853
	Total MA/RI Leases (without Proposed Actions)²		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA	NA	NA	NA	512	NA	NA	512	NA	NA	NA	788	NA	NA	788	NA	NA	NA	906	NA	NA	906
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA	NA	NA	NA	525	NA	NA	525	NA	NA	NA	853	NA	NA	853	NA	NA	NA	951	NA	NA	951
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA	NA	NA	NA	525	NA	NA	525	NA	NA	NA	853	NA	NA	853	NA	NA	NA	951	NA	NA	951
NY/NJ	Atlantic Shores OCS-A 0499	COP, PPA	NA	NA	NA	576	NA	NA	576	NA	NA	NA	919	NA	NA	919	NA	NA	NA	1049	NA	NA	1049
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA	NA	NA	NA	512	NA	NA	512	NA	NA	NA	788	NA	NA	788	NA	NA	NA	906	NA	NA	906
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)		NA	NA	NA	576	NA	NA	576	NA	NA	NA	919	NA	NA	919	NA	NA	NA	1049	NA	NA	1049
NY/NJ	Central Bight, OCS-A 0537		NA	NA	NA	492	NA	NA	492	NA	NA	NA	722	NA	NA	722	NA	NA	NA	853	NA	NA	853
NY/NJ	Hudson South B, OCS-A 0538		NA	NA	NA	492	NA	NA	492	NA	NA	NA	722	NA	NA	722	NA	NA	NA	853	NA	NA	853
NY/NJ	Hudson South C, OCS-A 0539		NA	NA	NA	492	NA	NA	492	NA	NA	NA	722	NA	NA	722	NA	NA	NA	853	NA	NA	853
NY/NJ	Hudson South E, OCS-A 0541		NA	NA	NA	492	NA	NA	492	NA	NA	NA	722	NA	NA	722	NA	NA	NA	853	NA	NA	853
NY/NJ	Hudson South F, OCS-A 0542		NA	NA	NA	492	NA	NA	492	NA	NA	NA	722	NA	NA	722	NA	NA	NA	853	NA	NA	853
NY/NJ	Hudson North, OCS-A 0544		NA	NA	NA	492	NA	NA	492	NA	NA	NA	722	NA	NA	722	NA	NA	NA	853	NA	NA	853
	TOTAL NY/NJ LEASES																						
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA	NA	NA	NA	492	NA	NA	492	NA	NA	NA	722	NA	NA	722	NA	NA	NA	853	NA	NA	853
DE/MD	US Wind, part of OCS-A 0490	COP, PPA	NA	NA	NA	440	NA	NA	440	NA	NA	NA	722	NA	NA	722	NA	NA	NA	801	NA	NA	801
DE/MD	GSOE I, OCS-A 0482		NA	NA	NA	492	NA	NA	492	NA	NA	NA	722	NA	NA	722	NA	NA	NA	853	NA	NA	853

Region	Lease/Project/ Lease Remainder ¹	Status	Hub Height (Feet) ¹⁰							Rotor Diameter (Feet) ¹¹							Total Height of Turbine (Feet) ¹²						
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/ Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/ Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/ Recreation- Tourism	Demographics/ Environmental Justice
DE/MD	OCS-A 0519 remainder	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The remaining capacity may be utilized by demand from NJ or MD.	NA	NA	NA		NA	NA		NA	NA	NA		NA	NA		NA	NA	NA		NA	NA	
	Remaining DE/MD Lease Area Total		NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	n.d.	NA	NA	n.d.
	TOTAL DE/MD LEASES		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VA/NC	CVOW, OCS-A 0497	Built	NA	NA	NA	364	NA	NA	364	NA	NA	NA	506	NA	NA	506	NA	NA	NA	620	NA	NA	620
VA/NC	CVOW-C, OCS-A 0483	COP	NA	NA	NA	482	NA	NA	482	NA	NA	NA	761	NA	NA	761	NA	NA	NA	869	NA	NA	869
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP	NA	NA	NA	472	NA	NA	574	NA	NA	NA	728	NA	NA	935	NA	NA	NA	837	NA	NA	1042
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)	NA	NA	NA	472	NA	NA	574	NA	NA	NA	728	NA	NA	935	NA	NA	NA	837	NA	NA	1042
	TOTAL VA/NC LEASES		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	OCS Total (without Proposed Action)^{24, 25:}		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 4)

Region	Lease/Project/ Lease Remainder ¹	Status	Turbine Number ¹³							Estimated Foundation Number ¹⁴							Total Footprint of Foundations ¹⁵ (Acres)								
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice		
NE	NE Aquaventus (state waters)	State Project	2	2	NA	2	2	2	2	2	2		2	2	2	2	NA	NA	NA	NA	NA	NA	NA		
NE	Block Island (state waters)	State Project, Built	5	5	NA	5	5	5	5	5	5		5	5	5	5	NA	NA	NA	1	1	1	1		
	Total State Waters		7	7	NA	7	7	7	7	7	7		7	7	7	7	NA	NA	NA	1	NA	NA	1		
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	NA	62	62	62	62	NA	NA	NA	63	63	63	63	NA	NA	NA	1.3	1.3	1.3	1.3		
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	12	12	12	12	12	12	12	13	13	13	13	13	13	13	1	1	1	1	1	1	1		
MA/RI	Sunrise, OCS-A 0487	COP, PPA	102	102	NA	102	102	102	102	103	103	NA	103	103	103	103	3	3	NA	3	3	3	3		
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	5	NA	NA	62	62	62	62	5	NA	NA	64	64	64	64	0.13	NA	NA	1.7	1.7	1.7	1.7		
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	79	NA	NA	79	79	79	79	82	NA	NA	82	82	82	82	2.7	NA	NA	2.7	2.7	2.7	2.7		
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA	NA	NA	NA	147	147	147	147	NA	NA	NA	149	149	149	149	NA	NA	NA	139	139	139	139		
MA/RI	Beacon Wind, part of OCS-A 0520	PPA	NA	NA	NA	103	103	103	103	NA	NA	NA	106	106	106	106	NA	NA	NA	5	5	5	5		
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)	91	65	NA	110	110	110	110	93	67	NA	112	112	112	112	9.3	6.7	NA	11	11	11	11		
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the	NA	NA	NA	323	323	34	323	NA	NA	NA	337	337	35	337	NA	NA	NA	33.7	33.7	3.5	33.7		
MA/RI	OCS-A 0500 remainder ^c		71	10	NA					73	11	NA					219	7.3	1.1					NA	22
MA/RI	OCS-A 0487 remainder ^c		4	4	NA					4	4	NA					0.4	0.4	NA						

Region	Lease/Project/ Lease Remainder ¹	Status	Turbine Number ¹³							Estimated Foundation Number ¹⁴							Total Footprint of Foundations ¹⁵ (Acres)						
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice
MA/RI	OCS-A 0520 remainder	remaining technical capacity is 4,764 MW.	NA	NA	NA					NA	NA	NA					NA	NA	NA				
	Remaining MA/RI Lease Area Total ²	88%	166	79	0	433	433	362	433	170	82	NA	449	449	366	449	17.0	8.2	0	45	45	37	45
	Total MA/RI Leases (without Proposed Actions)²		364	193	12	1,000	1,000	929	1,000	373	198	13	1,029	1,029	946	1,029	23	12	1	199	199	190	199
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA	NA	NA	NA	98	NA	NA	98	NA	NA	NA	101	NA	NA	101	NA	NA	NA	4	NA	NA	4
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA	NA	NA	NA	71	NA	NA	71	NA	NA	NA	72	NA	NA	72	NA	NA	NA	42	NA	NA	42
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA	NA	NA	NA	103	NA	NA	103	NA	NA	NA	104	NA	NA	104	NA	NA	NA	61	NA	NA	61
NY/NJ	Atlantic Shores OCS-A 0499	COP, PPA	NA	NA	NA	200	NA	NA	200	NA	NA	NA	210	NA	NA	210	NA	NA	NA	9	NA	NA	9
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA	NA	NA	NA	111	NA	NA	111	NA	NA	NA	113	NA	NA	113	NA	NA	NA	5	NA	NA	5
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)		NA	NA	NA	157	NA	NA	157	NA	NA	NA	159	NA	NA	159	NA	NA	NA	7	NA	NA	7
NY/NJ	Central Bight, OCS-A 0537		NA	NA	NA	72	NA	NA	72	NA	NA	NA	74	NA	NA	74	NA	NA	NA	7	NA	NA	7
NY/NJ	Hudson South B, OCS-A 0538		NA	NA	NA	80	NA	NA	80	NA	NA	NA	82	NA	NA	82	NA	NA	NA	8	NA	NA	8
NY/NJ	Hudson South C, OCS-A 0539		NA	NA	NA	116	NA	NA	116	NA	NA	NA	118	NA	NA	118	NA	NA	NA	12	NA	NA	12
NY/NJ	Hudson South E, OCS-A 0541		NA	NA	NA	77	NA	NA	77	NA	NA	NA	79	NA	NA	79	NA	NA	NA	8	NA	NA	8
NY/NJ	Hudson South F, OCS-A 0542		NA	NA	NA	78	NA	NA	78	NA	NA	NA	80	NA	NA	80	NA	NA	NA	8	NA	NA	8
NY/NJ	Hudson North, OCS-A 0544		NA	NA	NA	44	NA	NA	44	NA	NA	NA	45	NA	NA	45	NA	NA	NA	4	NA	NA	4
	TOTAL NY/NJ LEASES		NA	NA	NA	1207	NA	NA	1207	NA	NA	NA	1237	NA	NA	1237	NA	NA	NA	174	NA	NA	174
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA	NA	NA	NA	16	NA	NA	16	NA	NA	NA	17	NA	NA	17	NA	NA	NA	0.7	NA	NA	0.7
DE/MD	US Wind, part of OCS-A 0490	COP, PPA	NA	NA	NA	125	NA	NA	125	NA	NA	NA	129	NA	NA	129	NA	NA	NA	5	NA	NA	5
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The remaining capacity may be utilized by demand from NJ or MD.	NA	NA	NA	90	NA	NA	90	NA	NA	NA	93	NA	NA	93	NA	NA	NA	3.7	NA	NA	3.7
DE/MD	OCS-A 0519 remainder		NA	NA	NA		NA	NA		NA	NA	NA		NA	NA		NA	NA	NA		NA	NA	
	Remaining DE/MD Lease Area Total		NA	NA	NA	90	NA	NA	90	NA	NA	NA	93	NA	NA	93	NA	NA	NA	4	NA	NA	4
	TOTAL DE/MD LEASES		NA	NA	NA	321	NA	NA	321	NA	NA	NA	332	NA	NA	332	NA	NA	NA	13	NA	NA	13
VA/NC	CVOW, OCS-A 0497	Built	NA	NA	NA	2	NA	NA	2	NA	NA	NA	2	NA	NA	2	NA	NA	NA	0.1	NA	NA	0.1
VA/NC	CVOW-C, OCS-A 0483	COP	NA	NA	NA	205	NA	NA	205	NA	NA	NA	208	NA	NA	208	NA	NA	NA	8	NA	NA	8
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP	NA	NA	NA	69	NA	NA	69	NA	NA	NA	70	NA	NA	70	NA	NA	NA	3	NA	NA	3
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)	NA	NA	NA	121	NA	NA	121	NA	NA	NA	123			123	NA	NA	NA	5	NA	NA	5
	TOTAL VA/NC LEASES		NA	NA	NA	397	NA	NA	397	NA	NA	NA	403	NA	NA	403	NA	NA	NA	16	NA	NA	16
	OCS Total (without Proposed Action)^{24, 25,}		371	200	12	2,932	1,007	936	2,932	380	205	13	3,008	1,036	953	3,008	23	12	1	403	199	190	403

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 5)

Region	Lease/Project/ Lease Remainder ¹	Status	Seabed Disturbance Based on Addition of Scour Protection (Foundation+Scour Protection) (Acres) ¹⁶							Offshore Export Cable Seabed Disturbance (Acres) ¹⁷						Offshore Export Cable Operating Seabed Footprint (Acres) ¹⁸					
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice
NE	NE Aquaventus (state waters)	State Project	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NE	Block Island (state waters)	State Project, Built	NA	NA	NA	6	6	6	6	11.61	NA	11.61	11.61	11.61	11.61	11.61	NA	11.61	11.61	11.61	11.61
	Total State Waters		NA	NA	NA	6	6	6	6	11.61	NA	11.61	11.61	11.61	11.61	11.61	NA	11.61	11.61	11.61	11.61
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	NA	32.7	32.7	32.7	32.7	NA	NA	69	69	69	69	NA	NA	77	77	77	77
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	11	11	11	11	11	11	11	555	555	555	555	555	555	7	7	7	7	7	7
MA/RI	Sunrise, OCS-A 0487	COP, PPA	108	108	NA	108	108	108	108	1,259	NA	1,259	1,259	1,259	1,259	84	NA	102	102	102	102
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	6.7	NA	NA	86	86	86	86	NA	NA	263	263	263	263	NA	NA	22	22	22	22
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	98	NA	NA	98	98	98	98	NA	NA	243	243	243	243	NA	NA	32	32	32	32
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA	NA	NA	NA	1,697	1,697	1,697	1,697	NA	NA	2,480	2,480	2,480	2,480	NA	NA	586	586	586	586
MA/RI	Beacon Wind, part of OCS-A 0520	PPA	NA	NA	NA	265	265	265	265	NA	NA	143	143	143	143	NA	NA	95	95	95	95
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)	93	67	NA	112	112	112	112	NA	NA	143	143	143	143	NA	NA	95	95	95	95
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the remaining technical capacity is 4,764 MW.	NA	NA	NA	337	337	35	337	NA	NA	713	713	856	713	NA	NA	473	473	567	473
MA/RI	OCS-A 0500 remainder ^c		73	11	NA					150	NA					48	NA				
MA/RI	OCS-A 0487 remainder ^c		4	4	NA					150	NA					48	NA				
MA/RI	OCS-A 0520 remainder		NA	NA	NA					NA	NA					NA	NA				
	Remaining MA/RI Lease Area Total ²	88%	170	82	0	449	449	366	449	300	NA	856	856	999	856	96	NA	567	567	662	567
	Total MA/RI Leases (without Proposed Actions)²		394	201	11	2,747	2,747	2,664	2,747	2,114	555	5,868	5,868	6,011	5,868	187	7	1,488	1,488	1,583	1,488
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA	NA	NA	NA	80	NA	NA	80	NA	NA	169	NA	NA	169	NA	NA	86	NA	NA	86
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA	NA	NA	NA	645	NA	NA	645	NA	NA	50	NA	NA	50	NA	NA	16	NA	NA	16
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA	NA	NA	NA	936	NA	NA	936	NA	NA	33	NA	NA	33	NA	NA	10	NA	NA	10
NY/NJ	Atlantic Shores OCS-A 0499	COP, PPA	NA	NA	NA	135	NA	NA	135	NA	NA	427	NA	NA	427	NA	NA	137	NA	NA	137
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA	NA	NA	NA	96	NA	NA	96	NA	NA	150	NA	NA	150	NA	NA	48	NA	NA	48
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)		NA	NA	NA	135	NA	NA	135	NA	NA	124	NA	NA	124	NA	NA	40	NA	NA	40
NY/NJ	Central Bight, OCS-A 0537		NA	NA	NA	74	NA	NA	74	NA	NA	150	NA	NA	150	NA	NA	48	NA	NA	48
NY/NJ	Hudson South B, OCS-A 0538		NA	NA	NA	82	NA	NA	82	NA	NA	150	NA	NA	150	NA	NA	48	NA	NA	48
NY/NJ	Hudson South C, OCS-A 0539		NA	NA	NA	118	NA	NA	118	NA	NA	150	NA	NA	150	NA	NA	48	NA	NA	48
NY/NJ	Hudson South E, OCS-A 0541		NA	NA	NA	79	NA	NA	79	NA	NA	150	NA	NA	150	NA	NA	48	NA	NA	48
NY/NJ	Hudson South F, OCS-A 0542		NA	NA	NA	80	NA	NA	80	NA	NA	150	NA	NA	150	NA	NA	48	NA	NA	48
NY/NJ	Hudson North, OCS-A 0544		NA	NA	NA	45	NA	NA	45	NA	NA	150	NA	NA	150	NA	NA	48	NA	NA	48
	TOTAL NY/NJ LEASES		NA	NA	NA	2505	NA	NA	2505	NA	NA	1853	NA	NA	1853	NA	NA	625	NA	NA	625
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA	NA	NA	NA	14	NA	NA	14	NA	NA	48	NA	NA	48	NA	NA	50	NA	NA	50
DE/MD	US Wind, part of OCS-A 0490	COP, PPA	NA	NA	NA	110	NA	NA	110	NA	NA	226	NA	NA	226	NA	NA	150	NA	NA	150

Region	Lease/Project/ Lease Remainder ¹	Status	Seabed Disturbance Based on Addition of Scour Protection (Foundation+Scour Protection) (Acres) ¹⁶							Offshore Export Cable Seabed Disturbance (Acres) ¹⁷						Offshore Export Cable Operating Seabed Footprint (Acres) ¹⁸					
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The remaining capacity may be utilized by demand from NJ or MD.	NA	NA	NA	79.05	NA	NA	79.05	NA	NA	286	NA	NA	286	NA	NA	145	NA	NA	145.455
DE/MD	OCS-A 0519 remainder		NA	NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA	
	Remaining DE/MD Lease Area Total		NA	NA	NA	79	NA	NA	79	NA	NA	286	NA	NA	286	NA	NA	145	NA	NA	145
	TOTAL DE/MD LEASES		NA	NA	NA	282	NA	NA	282	NA	NA	846	NA	NA	846	NA	NA	491	NA	NA	491
VA/NC	CVOW, OCS-A 0497	Built	NA	NA	NA	2	NA		2	NA	NA	33	NA	NA	33	NA	NA	11	NA	NA	11
VA/NC	CVOW-C, OCS-A 0483	COP	NA	NA	NA	177	NA	NA	177	NA	NA	1,971	NA	NA	1,971	NA	NA	253	NA	NA	253
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP	NA	NA	NA	60	NA	NA	60	NA	NA	134	NA	NA	134	NA	NA	88	NA	NA	88
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)	NA	NA	NA	105	NA	NA	104.55	NA	NA	238	NA	NA	238	NA	NA	158	NA	NA	158
	TOTAL VA/NC LEASES		NA	NA	NA	343	NA	NA	343	NA	NA	2,376	NA	NA	2,376	NA	NA	509	NA	NA	509
	OCS Total (without Proposed Action)^{24, 25}		394	201	11	5,883	2,753	2,670	5,883	2,126	555	10,954	5,880	6,023	10,954	198	7	3,126	1,500	1,595	3,126

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 6)

Region	Lease/Project/ Lease Remainder ¹	Status	Offshore Export Cable Hard Protection (Acres) ¹⁹							Anchoring Disturbance (Acres) ²⁰						Inter-array Construction Footprint/ Seabed Disruption (Acres) ²¹					
			Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	
NE	NE Aquaventus (state waters)	State Project	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NE	Block Island (state waters)	State Project, Built	NA	NA	NA	NA	NA	NA	0.5	NA	0.5	0.5	0.5	0.5	12	NA	4	4	4	4	4
	Total State Waters		NA	NA	NA	NA	NA	NA	0.5	NA	0.5	0.5	0.5	0.5	12	NA	4	NA	4	4	4
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	35	35	35	35	NA	NA	4	4	4	4	NA	NA	129	129	129	129	129
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	7	7	7	7	7	7	663	663	663	663	663	663	340	340	340	340	340	340	340
MA/RI	Sunrise, OCS-A 0487	COP, PPA	25	NA	25	25	25	25	11	NA	11	11	11	11	462	NA	462	462	462	462	462
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	NA	NA	22	22	22	22	NA	NA	34	34	34	34	NA	NA	222	222	222	222	222
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	NA	NA	32	32	32	32	NA	NA	50	50	50	50	NA	NA	321	321	321	321	321
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA	NA	NA	471	471	471	471	NA	NA	442	442	442	442	NA	NA	1408	1408	1408	1408	1408
MA/RI	Beacon Wind, part of OCS-A 0520	PPA	NA	NA	43	43	43	43	NA	NA	442	442	442	442	NA	NA	247	247	247	247	247
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)	NA	NA	43	43	43	43	NA	NA	442	442	442	442	160.8	NA	264	264	218	264	264
MA/RI	Liberty Wind (OCS-A 0522)		NA	NA	214	214	257	214	NA	NA	60	60	72	60	NA	NA	775	775	775	775	775

Region	Lease/Project/ Lease Remainder ¹	Status	Offshore Export Cable Hard Protection (Acres) ¹⁹						Anchoring Disturbance (Acres) ²⁰						Inter-array Construction Footprint/ Seabed Disruption (Acres) ²¹					
			Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice
MA/RI	OCS-A 0500 remainder ^c	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the remaining technical capacity is 4,764 MW.	4.3	NA					12	NA					24	NA				
MA/RI	OCS-A 0487 remainder ^c		4.3	NA					12	NA					10	NA				
MA/RI	OCS-A 0520 remainder		NA	NA					NA	NA					NA	NA				
	Remaining MA/RI Lease Area Total ²	88%	9	NA	257	257	300	257	24	NA	502	502	514	502	194	0	1,039	1,039	993	1,039
	Total MA/RI Leases (without Proposed Actions)²		41	7	892	892	935	892	698	663	2,148	2,148	2,160	2,148	996	340	4,168	4,168	4,121	4,168
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA	NA	NA	51	NA	NA	51	NA	NA	14	NA	NA	14	NA	NA	221	NA	NA	221
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA	NA	NA	14	NA	NA	14	NA	NA	4	NA	NA	4	NA	NA	173	NA	NA	173
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA	NA	NA	9	NA	NA	9	NA	NA	3	NA	NA	3	NA	NA	250	NA	NA	250
NY/NJ	Atlantic Shores OCS-A 0499	COP,PPA	NA	NA	12	NA	NA	12	NA	NA	262	NA	NA	262	NA	NA	504	NA	NA	504
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA	NA	NA	43	NA	NA	43	NA	NA	12	NA	NA	12	NA	NA	271	NA	NA	271
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)		NA	NA	35	NA	NA	35	NA	NA	10	NA	NA	10	NA	NA	382	NA	NA	382
NY/NJ	Central Bight, OCS-A 0537		NA	NA	43	NA	NA	43	NA	NA	12	NA	NA	12	NA	NA	173	NA	NA	173
NY/NJ	Hudson South B, OCS-A 0538		NA	NA	43	NA	NA	43	NA	NA	12	NA	NA	12	NA	NA	197	NA	NA	197
NY/NJ	Hudson South C, OCS-A 0539		NA	NA	43	NA	NA	43	NA	NA	12	NA	NA	12	NA	NA	283	NA	NA	281
NY/NJ	Hudson South E, OCS-A 0541		NA	NA	43	NA	NA	43	NA	NA	12	NA	NA	12	NA	NA	190	NA	NA	190
NY/NJ	Hudson South F, OCS-A 0542		NA	NA	43	NA	NA	43	NA	NA	12	NA	NA	12	NA	NA	187	NA	NA	185
NY/NJ	Hudson North, OCS-A 0544		NA	NA	43	NA	NA	43	NA	NA	12	NA	NA	12	NA	NA	105	NA	NA	103
	TOTAL NY/NJ LEASES		NA	NA	422	NA	NA	422	NA	NA	377	NA	NA	377	NA	NA	2,935	NA	NA	2,929
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA	NA	NA	14	NA	NA	14	NA	NA	4	NA	NA	4	NA	NA	38	NA	NA	38
DE/MD	US Wind, part of OCS-A 0490	COP, PPA	NA	NA	68	NA	NA	68	NA	NA	19	NA	NA	19	NA	NA	300	NA	NA	300
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The remaining capacity may be utilized by demand from NJ or MD.	NA	NA	85.68	NA	NA	85.68	NA	NA	24	NA	NA	24	NA	NA	216	NA	NA	216
DE/MD	OCS-A 0519 remainder		NA	NA		NA	NA		NA	NA		NA	NA		NA	NA		NA		
	Remaining DE/MD Lease Area Total		NA	NA	86	NA	NA	86	NA	NA	24	NA	NA	24	NA	NA	216	NA	NA	216
	TOTAL DE/MD LEASES		NA	NA	253	NA	NA	253	NA	NA	71	NA	NA	71	NA	NA	770	NA	NA	770
VA/NC	CVOW, OCS-A 0497	Built	NA	NA	10	NA	NA	10	NA	NA	3	NA	NA	3	NA	NA	5	NA	NA	5
VA/NC	CVOW-C, OCS-A 0483	COP	NA	NA	42	NA	NA	42	NA	NA	42	NA	NA	42	NA	NA	1781	NA	NA	1781
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP	NA	NA	40	NA	NA	40	NA	NA	11	NA	NA	11	NA	NA	166	NA	NA	166
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)	NA	NA	71	NA	NA	71	NA	NA	20	NA	NA	20	NA	NA	290	NA	NA	290
	TOTAL VA/NC LEASES		NA	NA	163	NA	NA	162	NA	NA	76	NA	NA	76	NA	NA	2242	NA	NA	2242
	OCS Total (without Proposed Action)^{24, 25}		41	7	1,730	892	935	1730	698	1,326	2,672	2,148	2,160	2,672	1,008	340	10,119	4,168	4,125	10,113

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 7)

Region	Lease/Project/ Lease Remainder ¹	Status	Inter-array Operating Footprint/ Seabed Disruption (Acres) ²²						Inter-array Cable Hard Protection (Acres) ²³						Total of Coolant fluids in WTGs (gallons)						
			Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice
NE	NE Aquaventus (state waters)	State Project	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NE	Block Island (state waters)	State Project, Built	7.15	NA	7.15	7.15	7.15	7.15	0.00	NA	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA
	Total State Waters		7.15	NA	7.15	NA	7.15	7.15	0.00	NA	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	90	90	90	90	NA	NA	22,491	22,491	22.5	22,491	NA	NA	NA	42,300	42,300	42,300	42,300
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	19	19	19	19	19	19	20.2	20.2	20.2	20.2	20.2	20.2	41208	41208	NA	41208	41208	41208	41208
MA/RI	Sunrise, OCS-A 0487	COP, PPA	145	NA	145	145	145	145	129	NA	129	129	129	129	350,268	350,268	NA	350,268	350,268	350,268	350,268
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	NA	NA	92	92	92	92	NA	NA	129	129	129	129	25,360	NA	NA	314,470	314,470	314,470	314,470
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	NA	NA	117	117	117	117	NA	NA	14	14	14	14	72,277	NA	NA	475,826	475,826	475,826	475,826
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA	NA	NA	213	213	213	213	NA	NA	122	122	122	122	NA	NA	NA	73,500	73,500	73,500	73,500
MA/RI	Beacon Wind, part of OCS-A 0520	PPA	NA	NA	152	152	152	152	NA	NA	152	152	152	152	NA	NA	NA				
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)	132.99	NA	160	160	133	160	NA	NA	0	0	0	0							
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the remaining technical capacity is 4,764 MW.	NA	NA	482	482	482	482	NA	NA	0	0	0	0	NA	NA	NA	136,629	136,629	136,629	136,629
MA/RI	OCS-A 0500 remainder ^c		14.3	NA					0	NA					30,033	4,230	NA				
MA/RI	OCS-A 0487 remainder ^c		6	NA					0	NA					1,692	1,692	NA				
MA/RI	OCS-A 0520 remainder		NA	NA					NA	NA					NA	NA	NA				
	Remaining MA/RI Lease Area Total ²	88%	153	0	642	642	615	642	0	NA	0	0	0	0	70,218	33,417	0	183,159	183,159	183,159	183,159
	Total MA/RI Leases (without Proposed Actions)²		317	19	1,470	1,470	1,443	1,470	149	20	588	588	589	588	559,331	424,893	0	1,480,731	1,480,731	1,480,731	1,480,731
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA	NA	NA	134	NA	NA	134	NA	NA	0	NA	NA	0	NA	NA	NA	39,690	NA	NA	39,690
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA	NA	NA	103	NA	NA	103	NA	NA	0	NA	NA	0	NA	NA	NA	61,912	NA	NA	61,912
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA	NA	NA	149	NA	NA	149	NA	NA	0	NA	NA	0	NA	NA	NA	89,816	NA	NA	89,816
NY/NJ	Atlantic Shores OCS-A 0499	COP, PPA	NA	NA	317	NA	NA	317	NA	NA	0	NA	NA	0	NA	NA	NA	820,000	NA	NA	820,000
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA	NA	NA	162	NA	NA	162	NA	NA	0	NA	NA	0	NA	NA	NA	44,953	NA	NA	44,953
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)		NA	NA	239	NA	NA	239	NA	NA	0	NA	NA	0	NA	NA	NA	643,700	NA	NA	643,700
NY/NJ	Central Bight, OCS-A 0537		NA	NA	106	NA	NA	106	NA	NA	0	NA	NA	0	NA	NA	NA	47,790	NA	NA	47,790
NY/NJ	Hudson South B, OCS-A 0538		NA	NA	115	NA	NA	114	NA	NA	0	NA	NA	0	NA	NA	NA	36,450	NA	NA	36,450
NY/NJ	Hudson South C, OCS-A 0539		NA	NA	165	NA	NA	166	NA	NA	0	NA	NA	0	NA	NA	NA	34,020	NA	NA	34,020
NY/NJ	Hudson South E, OCS-A 0541		NA	NA	110	NA	NA	110	NA	NA	0	NA	NA	0	NA	NA	NA	38,475	NA	NA	38,475
NY/NJ	Hudson South F, OCS-A 0542		NA	NA	111	NA	NA	112	NA	NA	0	NA	NA	0	NA	NA	NA	38,070	NA	NA	38,070
NY/NJ	Hudson North, OCS-A 0544		NA	NA	62	NA	NA	63	NA	NA	0	NA	NA	0	NA	NA	NA	25,515	NA	NA	25,515
	TOTAL NY/NJ LEASES		NA	NA	1774	NA	NA	1775	NA	NA	0	NA	NA	0	NA	NA	NA	1,920,391	NA	NA	1,920,391
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA	NA	NA	24	NA	NA	24	NA	NA	0	NA	NA	0	NA	NA	NA	6,768	NA	NA	6,768
DE/MD	US Wind, part of OCS-A 0490	COP, PPA	NA	NA	184	NA	NA	184	NA	NA	0	NA	NA	0	NA	NA	NA	52,875	NA	NA	52,875

Region	Lease/Project/ Lease Remainder ¹	Status	Inter-array Operating Footprint/ Seabed Disruption (Acres) ²²						Inter-array Cable Hard Protection (Acres) ²³						Total of Coolant fluids in WTGs (gallons)						
			Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The remaining capacity may be utilized by demand from NJ or MD.	NA	NA	481.91	NA	NA	481.91	NA	NA	0	NA	NA	0	NA	NA	NA	38070	NA	NA	38070
DE/MD	OCS-A 0519 remainder		NA	NA		NA	NA	NA	NA	NA		NA	NA		NA	NA	NA		NA	NA	
	Remaining DE/MD Lease Area Total		NA	NA	482	NA	NA	482	NA	NA	0	NA	NA	0	NA	NA	NA	38,070	NA	NA	38070
	TOTAL DE/MD LEASES		NA	NA	1173	NA	NA	1173	NA	NA	0	NA	NA	0	NA	NA	NA	135,783	NA	NA	135,783
VA/NC	CVOW, OCS-A 0497	Built	NA	NA	3	NA	NA	3	NA	NA	0	NA	NA	0	NA	NA	NA	846	NA	NA	846
VA/NC	CVOW-C, OCS-A 0483	COP	NA	NA	297	NA	NA	297	NA	NA	0	NA	NA	0	NA	NA	NA	86,715	NA	NA	86715
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP	NA	NA	100	NA	NA	100	NA	NA	0	NA	NA	0	NA	NA	NA	29,187	NA	NA	29,187
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)	NA	NA	176	NA	NA	176	NA	NA	0	NA	NA	0	NA	NA	NA	51,183	NA	NA	51,183
	TOTAL VA/NC LEASES		NA	NA	576	NA	NA	576	NA	NA	0	NA	NA	0	NA	NA	NA	167,931	NA	NA	167931
	OCS Total (without Proposed Action)^{24, 25}		324	19	4,999	1,470	1,443	5,000	149	20	588	588	589	588	559,331	424,893	NA	3,704,836	1,480,731	1,480,731	3,704,836

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 8)

Region	Lease/Project/ Lease Remainder ¹	Status	Total Coolant Fluids in ESP/OSP (gallons)							Total of Oils and Lubricants in WTGs (gallons)							Total Oils and Lubricants in ESP/OSP (gallons)								
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish- Invertebrates- EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/ Commercial Fisheries/Other Uses	Visual/Recreation- Tourism	Demographics/ Environmental Justice		
NE	NE Aquaventus (state waters)	State Project	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NE	Block Island (state waters)	State Project, Built	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total State Waters		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	NA	46	46	46	46	NA	NA	NA	383,000	383,000	383,000	383,000	NA	NA	NA	123,559	123,559	123,559	123,559	123,559	123,559
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	27	27	NA	27	27	27	23	69,732	69,732	NA	69,732	69,732	69,732	69,732	80,045	80,045	72,076	80,045	80,045	80,045	80,045	80,045	
MA/RI	Sunrise, OCS-A 0487	COP, PPA	23	23	NA	23	23	46	23	307,326	307,326	NA	307,326	307,326	307,326	307,326	199,956	199,956	NA	199,956	199,956	199,956	199,956	199,956	
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	2,113	NA	NA	4,226	4,226	4,226	4,226	82,553	NA	NA	165,106	165,106	165,106	165,106	185,978	NA	NA	371,956	371,956	371,956	371,956	371,956	
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	3,170	NA	NA	9,510	9,510	9,510	9,510	37,944	NA	NA	249,798	249,798	249,798	249,798	185,978	NA	NA	557,934	557,934	557,934	557,934	557,934	
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA	NA	NA	NA	1,500	1,500	1,500	1,500	NA	NA	NA	433,650	433,650	433,650	433,650	NA	NA	NA	755,000	755,000	755,000	755,000	755,000	
MA/RI	Beacon Wind, part of OCS-A 0520	PPA	NA	NA	NA					NA	NA	NA				NA	NA	NA							
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)																							
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand-for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected).	NA	NA	NA	322	322	322	322	NA	NA	NA	1,237,090	1,237,090	1,237,090	1,237,090	NA	NA	NA	864,913	864,913	864,913	864,913	864,913	
MA/RI	OCS-A 0500 remainder ^c		23	23	NA					271,930	38,300	NA		0	0	0	61,780	61,780	NA						
MA/RI	OCS-A 0487 remainder ^c		0	0	NA					15,320	15,320	NA					0	0	NA						

Region	Lease/Project/ Lease Remainder ¹	Status	Total Coolant Fluids in ESP/OSP (gallons)							Total of Oils and Lubricants in WTGs (gallons)						Total Oils and Lubricants in ESP/OSP (gallons)							
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish-Invertebrates-EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/Commercial Fisheries/Other Uses	Visual/Recreation-Tourism	Demographics/Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish-Invertebrates-EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/Commercial Fisheries/Other Uses	Visual/Recreation-Tourism	Demographics/Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish-Invertebrates-EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/Commercial Fisheries/Other Uses	Visual/Recreation-Tourism	Demographics/Environmental Justice
MA/RI	OCS-A 0520 remainder	Collectively the remaining technical capacity is 4,764 MW.	NA	NA	NA					NA	NA	NA					NA	NA	NA				
	Remaining MA/RI Lease Area Total ²	88%	92	69	NA	368	368	368	368	635,780	302,570	NA	1,658,390	1,658,390	1,585,620	1,658,390	247,118	185,339	NA	988,472	988,472	247,118	988,472
	Total MA/RI Leases (without Proposed Actions)²		5,425	119	NA	15,700	15,700	15,723	15,696	1,133,335	679,628	NA	3,267,002	3,267,002	3,194,232	3,267,002	899,075	465,340	72,076	3,076,922	3,076,922	2,335,568	3,076,922
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA	NA	NA	NA	0	NA	NA	0	NA	NA	NA	187,964	NA	NA	187,964	NA	NA	NA	238,707	NA	NA	238,707
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA	NA	NA	NA	0	NA	NA	0	NA	NA	NA	290,177	NA	NA	290,177	NA	NA	NA	105,669	NA	NA	105,669
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA	NA	NA	NA	0	NA	NA	0	NA	NA	NA	420,961	NA	NA	420,961	NA	NA	NA	158,503	NA	NA	158,503
NY/NJ	Atlantic Shores OCS-A 0499	COP,PPA	NA	NA	NA	10,300	NA	NA	10,300	NA	NA	NA	606,200	NA	NA	606,200	NA	NA	NA	370,050	NA	NA	370,050
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA	NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	212,888	NA	NA	212,888	NA	NA	NA	160,732	NA	NA	160,732
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)		NA	NA	NA	8,240	NA	NA	8240	NA	NA	NA	475,867	NA	NA	475,867	NA	NA	NA	296,040	NA	NA	296,040
NY/NJ	Central Bight, OCS-A 0537		NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	226,324	NA	NA	226,324	NA	NA	NA	287,423	NA	NA	287,423
NY/NJ	Hudson South B, OCS-A 0538		NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	172,620	NA	NA	172,620	NA	NA	NA	219,221	NA	NA	219,221
NY/NJ	Hudson South C, OCS-A 0539		NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	161,112	NA	NA	161,112	NA	NA	NA	204,606	NA	NA	204,606
NY/NJ	Hudson South E, OCS-A 0541		NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	182,210	NA	NA	182,210	NA	NA	NA	231,400	NA	NA	231,400
NY/NJ	Hudson South F, OCS-A 0542		NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	180,292	NA	NA	180,292	NA	NA	NA	228,964	NA	NA	228,964
NY/NJ	Hudson North, OCS-A 0544		NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	120,834	NA	NA	120,834	NA	NA	NA	153,455	NA	NA	153,455
	TOTAL NY/NJ LEASES		NA	NA	NA	18,540	NA	NA	18,540	NA	NA	NA	3,237,449	NA	NA	3,237,449	NA	NA	NA	2,654,770	NA	NA	2,654,770
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA	NA	NA	NA	46	NA	NA	46	NA	NA	NA	61,280	NA	NA	61,280	NA	NA	NA	61,780	NA	NA	61,780
DE/MD	US Wind, part of OCS-A 0490	COP, PPA	NA	NA	NA	184	NA	NA	184	NA	NA	NA	478,750	NA	NA	478,750	NA	NA	NA	247,118	NA	NA	247,118
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines).	NA	NA	NA	322	NA	NA	322	NA	NA	NA	344700	NA	NA	344700	NA	NA	NA	185338.5	NA	NA	185338.5
DE/MD	OCS-A 0519 remainder	The remaining capacity may be utilized by demand from NJ or MD.	NA	NA	NA		NA	NA		NA	NA	NA		NA	NA		NA	NA	NA		NA	NA	
	Remaining DE/MD Lease Area Total		NA	NA	NA	69	NA	NA	69	NA	NA	NA	344,700	NA	NA	344,700	NA	NA	NA	185,339	NA	NA	185338.5
	TOTAL DE/MD LEASES		NA	NA	NA	621	NA	NA	621	NA	NA	NA	1,229,430	NA	NA	1,229,430	NA	NA	NA	679,575	NA	NA	679,575
VA/NC	CVOW, OCS-A 0497	Built	NA	NA	NA	0	NA	NA	0	NA	NA	NA	7,660	NA	NA	7660	NA	NA	NA	0	NA	NA	0
VA/NC	CVOW-C, OCS-A 0483	COP	NA	NA	NA	69	NA	NA	69	NA	NA	NA	785,150	NA	NA	785150	NA	NA	NA	185,339	NA	NA	185338.5
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP	NA	NA	NA	23	NA	NA	23	NA	NA	NA	264,270	NA	NA	264,270	NA	NA	NA	61,780	NA	NA	61,780
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)	NA	NA	NA	46	NA	NA	46	NA	NA	NA	463,430	NA	NA	463,430	NA	NA	NA	123,559	NA	NA	123,559
	TOTAL VA/NC LEASES		NA	NA	NA	138	NA	NA	138	NA	NA	NA	1,520,510	NA	NA	1520510	NA	NA	NA	370,677	NA	NA	370677
	OCS Total (without Proposed Action)^{24, 25}:		5,425	119	NA	34,999	15,700	15,723	34,995	1,133,335	679,628	NA	9,254,391	3,267,002	3,194,232	9,254,391	899,075	465,340	72,076	6,781,944	3,076,922	2,335,568	6,781,944

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 9)

Region	Lease/Project/ Lease Remainder ¹	Status	Total Diesel Fuel in WTGs (gallons)							Total Diesel Fuel in ESP/OSP (gallons)						
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish-Invertebrates-EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/Commercial Fisheries/Other Uses	Visual/Recreation-Tourism	Demographics/Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish-Invertebrates-EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/Commercial Fisheries/Other Uses	Visual/Recreation-Tourism	Demographics/Environmental Justice
NE	NE Aquaventus (state waters)	State Project	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NE	Block Island (state waters)	State Project, Built	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Total State Waters		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	NA	79,300	79,300	79,300	79,300	NA	NA	NA	5,696	5,696	5,696	5,696
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	9,516	9,516	9,516	9,516	9,516	9,516	9,516	52,834	52,834	52,834	52,834	52,834	52,834	52,834
MA/RI	Sunrise, OCS-A 0487	COP, PPA	80,886	80,886	NA	80,886	80,886	80,886	80,886	24,304	24,304	NA	24,304	24,304	24,304	24,304
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	49,135	NA	NA	98,271	98,271	98,271	98,271	5,467	NA	NA	10,935	10,935	10,935	10,935
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	22,190	NA	NA	146,087	146,087	146,087	146,087	8,201	NA	NA	24,604	24,604	24,604	24,604
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA	NA	NA	NA	132,300	132,300	132,300	132,300	NA	NA	NA	200,000	200,000	200,000	200,000
MA/RI	Beacon Wind, part of OCS-A 0520	PPA	NA	NA	NA					NA	NA	NA				
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)								NA	NA	NA	105,668	105,668	105,668	105,668
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the remaining technical capacity is 4,764 MW.	NA	NA	NA	256,139	256,139	256,139	256,139	NA	NA	NA	39,872	39,872	39,872	39,872
MA/RI	OCS-A 0500 remainder ^c		56,303	7,930	NA					5,696	5,696	NA				
MA/RI	OCS-A 0487 remainder ^c		3,172	3,172	NA					0	0	NA				
MA/RI	OCS-A 0520 remainder		NA	NA	NA					NA	NA	NA				
	Remaining MA/RI Lease Area Total ²	88%	131,638	62,647	0	343,369	343,369	328,302	343,369	11,392	8,544	NA	145,540	145,540	145,540	145,540
	Total MA/RI Leases (without Proposed Actions)²		293,365	153,049	9,516	889,729	889,729	874,662	889,729	102,198	91,378	52,834	463,913	463,913	463,913	463,913
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA	NA	NA	NA	77,714	NA	NA	77,714	NA	NA	NA	158,502	NA	NA	158,502
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA	NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	105,673	NA	NA	105,673
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA	NA	NA	NA	n.d.	NA	NA	n.d.	NA	NA	NA	6,604	NA	NA	6,604
NY/NJ	Atlantic Shores OCS-A 0499	COP, PPA	NA	NA	NA	80,000	NA	NA	80,000	NA	NA	NA	75,000	NA	NA	75,000
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA	NA	NA	NA	88,019	NA	NA	88,019	NA	NA	NA	105,673	NA	NA	105,673
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)		NA	NA	NA	62,800	NA	NA	62,800	NA	NA	NA	60,000	NA	NA	60,000
NY/NJ	Central Bight, OCS-A 0537		NA	NA	NA	93,574	NA	NA	93,574	NA	NA	NA	190,849	NA	NA	190,849
NY/NJ	Hudson South B, OCS-A 0538		NA	NA	NA	71,370	NA	NA	71,370	NA	NA	NA	145,563	NA	NA	145,563
NY/NJ	Hudson South C, OCS-A 0539		NA	NA	NA	66,612	NA	NA	66,612	NA	NA	NA	135,859	NA	NA	135,859
NY/NJ	Hudson South E, OCS-A 0541		NA	NA	NA	75,335	NA	NA	75,335	NA	NA	NA	153,650	NA	NA	153,650
NY/NJ	Hudson South F, OCS-A 0542		NA	NA	NA	74,542	NA	NA	74,542	NA	NA	NA	152,033	NA	NA	152,033
NY/NJ	Hudson North, OCS-A 0544		NA	NA	NA	49,959	NA	NA	49,959	NA	NA	NA	101,894	NA	NA	101,894
	TOTAL NY/NJ LEASES		NA	NA	NA	739,925	NA	NA	739,925	NA	NA	NA	1,391,300	NA	NA	1,391,300
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA	NA	NA	NA	12,688	NA	NA	12,688	NA	NA	NA	2,848	NA	NA	2,848
DE/MD	US Wind, part of OCS-A 0490	COP, PPA	NA	NA	NA	99,125	NA	NA	99,125	NA	NA	NA	11,392	NA	NA	11,392
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The	NA	NA	NA	71370	NA	NA	71370	NA	NA	NA	8544	NA	NA	8544
DE/MD	OCS-A 0519 remainder		NA	NA	NA					NA	NA	NA		NA	NA	

Region	Lease/Project/ Lease Remainder ¹	Status	Total Diesel Fuel in WTGs (gallons)							Total Diesel Fuel in ESP/OSP (gallons)						
			Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish-Invertebrates-EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/Commercial Fisheries/Other Uses	Visual/Recreation-Tourism	Demographics/Environmental Justice	Air	Water	Benthic/Cultural Resources	Birds/Bats/Finfish-Invertebrates-EFH/Marine Mammals/Sea Turtles/Land-Use	Navigation/Commercial Fisheries/Other Uses	Visual/Recreation-Tourism	Demographics/Environmental Justice
		remaining capacity may be utilized by demand from NJ or MD.														
	Remaining DE/MD Lease Area Total		NA	NA	NA	71,370	NA	NA	71370	NA	NA	NA	8,544	NA	NA	8544
	TOTAL DE/MD LEASES		NA	NA	NA	254,553	NA	NA	254,553	NA	NA	NA	31,328	NA	NA	31,328
VA/NC	CVOW, OCS-A 0497	Built	NA	NA	NA	1,586	NA	NA	1586	NA	NA	NA	0	NA	NA	0
VA/NC	CVOW-C, OCS-A 0483	COP	NA	NA	NA	162,565	NA	NA	162565	NA	NA	NA	8,544	NA	NA	8544
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP	NA	NA	NA	54,717	NA	NA	54,717	NA	NA	NA	2,848	NA	NA	2,848
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)	NA	NA	NA	95,953	NA	NA	95,953	NA	NA	NA	5,696	NA	NA	5,696
	TOTAL VA/NC LEASES		NA	NA	NA	314,821	NA	NA	314821	NA	NA	NA	17,088	NA	NA	17088
	OCS Total (without Proposed Action)^{24, 25:}		293,365	153,049	9,516	314,821	889,729	874,662	2,199,028	102,198	91,378	52,834	1,903,629	463,913	463,913	1,903,629

Table E3-1. Offshore Wind Leasing Activities in the U.S. East Coast: Projects and Assumptions (as of February 1, 2022) (part 10)

Region	Lease/Project/ Lease Remainder ¹	Status	Constructio n Emissions NOx (tons)	Constructio n Emissions VOC (tons)	Constructio n Emissions CO (tons)	Constructio n Emissions PM10 (tons)	Constructio n Emissions PM2.5 (tons)	Constructio n Emissions SO2 (tons)	Constructio n Emissions CO2 (tons)	Operation Emissions NOx (tpy)	Operation Emissions VOC (tpy)	Operation Emissions CO (tpy)	Operation Emissions PM10 (tpy)	Operation Emissions PM2.5 (tpy)	Operation Emissions SO2 (tpy)	Operation Emissions CO2 (tpy)
			Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
NE	NE Aquaventus (state waters)	State Project	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NE	Block Island (state waters)	State Project, Built	585.96	25.73	101.16	37.15	NA	0.424	42,940.00	21.40	0.80	2.80	1.40	NA	0.01	1,572.00
	Total State Waters		585.96	25.73	101.16	37.15	NA	0.424	42,940.00	21.40	0.80	2.80	1.40	NA	0.01	1,572.00
MA/RI	Vineyard Wind 1 part of OCS-A 0501	COP, PPA, ROD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MA/RI	South Fork, OCS-A 0517	COP, PPA, ROD	1,451	59	284	49	47	33	97,026	281	6	58	10	10	2	18,894
MA/RI	Sunrise, OCS-A 0487	COP, PPA	5,876	138	2,441	108	108	6	637,986	590	14	246	11	11	1	64,145
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 1 [i.e., Park City Wind]) ^a	COP, PPA	237.80	5.61	98.79	4.39	4.39	2.73	30,627.80	31.21	0.55	7.65	1.06	0.98	0.10	2,665.08
MA/RI	New England Wind, OCS-A 0534 and portion of OCS-A 0501 (Phase 2 [i.e., Commonwealth Wind]) ^b	COP	1,255.64	26.73	292.36	50.36	48.73	7.45	85,811.09	76.18	1.35	18.55	2.55	2.36	0.24	7,704.73
MA/RI	Mayflower (North), part of OCS-A 0521	COP, PPA														
MA/RI	Beacon Wind, part of OCS-A 0520	PPA														
MA/RI	Bay State Wind, part of OCS-A 0500	SAP (the MW of this proposed project is included in the description below)														
MA/RI	Liberty Wind (OCS-A 0522)	This group is exposed to 4,200 MW of demand--for MA (2,400 MW remaining), CT (900 MW remaining), and RI (900 MW expected). Collectively the remaining technical capacity is 4,764 MW.														
MA/RI	OCS-A 0500 remainder ^c															
MA/RI	OCS-A 0487 remainder ^c															
MA/RI	OCS-A 0520 remainder															
	Remaining MA/RI Lease Area Total ²	88%	16,388.00	401.00	3,686.00	569.00	547.00	127.00	1,052,650.00	234.00	7.00	60.00	8.00	8.00	1.00	18,126.00
	Total MA/RI Leases (without Proposed Actions)²		17,881.44	433.33	4,077.15	623.76	600.12	137.18	1,169,088.89	341.39	8.90	86.20	11.61	11.35	1.33	28,495.80
NY/NJ	Ocean Wind, part of OCS-A 0498	COP, PPA														

Region	Lease/Project/ Lease Remainder ¹	Status	Constructio n Emissions NOx (tons)	Constructio n Emissions VOC (tons)	Constructio n Emissions CO (tons)	Constructio n Emissions PM10 (tons)	Constructio n Emissions PM2.5 (tons)	Constructio n Emissions SO2 (tons)	Constructio n Emissions CO2 (tons)	Operation Emissions NOx (tpy)	Operation Emissions VOC (tpy)	Operation Emissions CO (tpy)	Operation Emissions PM10 (tpy)	Operation Emissions PM2.5 (tpy)	Operation Emissions SO2 (tpy)	Operation Emissions CO2 (tpy)	
			Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air	Air
NY/NJ	Empire Wind 1, part of OCS-A 0512	COP, PPA															
NY/NJ	Empire Wind 2, part of OCS-A 512	PPA															
NY/NJ	Atlantic Shores OCS-A 0499	COP,PPA															
NY/NJ	Ocean Wind 2, part of OCS-A 0532	PPA															
NY/NJ	Atlantic Shores North, part of OCS-A 0499 (remainder)																
NY/NJ	Central Bight, OCS-A 0537																
NY/NJ	Hudson South B, OCS-A 0538																
NY/NJ	Hudson South C, OCS-A 0539																
NY/NJ	Hudson South E, OCS-A 0541																
NY/NJ	Hudson South F, OCS-A 0542																
NY/NJ	Hudson North, OCS-A 0544																
	TOTAL NY/NJ LEASES																
DE/MD	Skipjack, part of OCS-A 0519	COP, PPA															
DE/MD	US Wind, part of OCS-A 0490	COP, PPA															
DE/MD	GSOE I, OCS-A 0482	Collectively the technical capacity of this is group is 1,080 MW (90 turbines). The remaining capacity may be utilized by demand from NJ or MD.															
DE/MD	OCS-A 0519 remainder																
	Remaining DE/MD Lease Area Total																
	TOTAL DE/MD LEASES																
VA/NC	CVOW, OCS-A 0497	Built															
VA/NC	CVOW-C, OCS-A 0483	COP															
VA/NC	Kitty Hawk Wind, OCS-A 0508	COP															
VA/NC	Kitty Hawk Wind South, OCS-A 0508 remainder	(pre-COP)															
	TOTAL VA/NC LEASES																
	OCS Total (without Proposed Action)^{24, 25:}		17,881.44	433.33	4,077.15	623.76	600.12	137.18	1,169,088.89	341.39	8.90	86.20	11.61	11.35	1.33	28,495.80	

¹ The spacing/layout for projects/regions are as follows: NE State water projects include a single strand of WTGs and no OSSs; for projects in the RI and MA Lease Areas, a 1 x 1-nm grid spacing is assumed; for the projects in the New Jersey/New York and the Delaware/Maryland lease areas, BOEM assumes that a 1 x 1-nm grid spacing also would be utilized; for the Coastal Virginia Offshore Wind Project, the spacing is 0.7 nm; and the Dominion commercial lease area off the coast of Virginia would utilize 0.5 nm average spacing, which is less than the 1 x 1-nm spacing due to the need to attain the state's goals.

² Because development could occur anywhere within the RI and MA Lease Areas and assumes a continuous 1 x 1-nm grid, the actual development for these projects is expected to be approximately 88% of the collective technical capacity. Under the cumulative scenario described in in this appendix (Appendix E), the total area in the RI and MA Lease Areas is greater than the area needed to meet state demand. Therefore, if a project is not constructed, BOEM assumes that another future project would be constructed to fulfill the unmet demand.

³ This column identifies lease areas that are applicable to each resource based on the geographic analysis areas shown in the EIS.

⁴ The estimated construction schedules are for offshore components only. Onshore construction could begin sooner. The estimated dates are based on information as of February 1, 2022, and are subject to change when an applicant submits a COP or as project COPs progress through the approval process. Furthermore, BOEM assumes that construction of all the foundations would be installed during year 1 of a given project's construction schedule with the remaining work completed in year 2.

⁵ It is difficult to accurately predict future technology for planned but currently unscheduled offshore wind awards, including turbine spacing and capacity. For those projects without announced WTG sizes, BOEM used the assumption of an 8- or 12-MW WTG based on maximum-impact case for the resource. BOEM understands that it is feasible that in the future, turbine capacity could be greater than 12 MW. For future procurements and projects under this cumulative analysis, BOEM assumes a 12-MW WTG, to evaluate potential impacts.

⁶ The air quality geographic analysis area includes 100% of SFWF, SRWF, OCS-A 0487 remainder, and OCS-A 0486 remainder; 70% of Bay State Wind Project, 77% of OCS-A 0500 remainder; 4% of Park City Wind; and 10% of Commonwealth Wind.

⁷ The water quality geographic analysis area includes 100% of SFWF, OCS-A 0487 remainder, and OCS-A 0486 remainder; 90% SRWF; 46% Bay State Wind Project; and 30% of OCS-A 0500 remainder. While a small portion of Lease OCS-A 0482 overlaps with the water quality GAA spatially, the construction activities associated with this lease are not expected to overlap temporarily with activities for Revolution Wind. Given the lack of temporal overlap of construction activities, and because all other fluids and discharges associated with O&M are expected to be marginal, this lease was not factored into the water quality geographic analysis area estimates for Revolution Wind.

⁸ BOEM assumes that each offshore wind development would have its own cable (both onshore and offshore) and that future projects would not utilize a regional transmission line. The length of offshore export cable for those lease areas without a known project size has been assumed to include two offshore cables totaling 120 miles (193 kilometers). The offshore export cable would be buried a minimum of 6 feet (1.8 meters) but not more than 10 feet (3.1 meters).

- ⁹ The length of inter-array cabling has been assumed for all lease areas, except the SFWF, SRWF, and Vineyard Wind 1 which have been calculated by the applicant, to be the average amount per foundation based on the COPs submitted to date, which is 1.48 miles (2.4 kilometers). In addition, for those lease areas that require more than one OSS, it has been assumed that an additional 6.2 miles (9.9 kilometers) of inter-link cable would be required to link the two OSSs. Inter-array cable is assumed to be buried between 4 and 6 feet.
- ¹⁰ The hub height for lease areas is based on the most-impactful-case scenario for the resource area.
- ¹¹ The rotor diameter for lease areas is based on the most-impactful-case scenario for the resource area.
- ¹² The total height of the turbine for lease areas is based on the most-impactful-case scenario for the resource area.
- ¹³ The number of turbines for those lease areas without a known project size has been calculated based on the generating capacity and a 12-MW turbine.
- ¹⁴ The estimated number of foundations is the total number of turbines plus OSSs, and it has been assumed that for every 50 turbines there would be one OSS installed. There are some exceptions to this assumption where additional relevant information is available in publicly available COPs for future projects.
- ¹⁵ The foundation footprint has been assumed to be 0.1 acre per turbine, which is based on the largest monopile reported (12 MW) for all lease areas other than the SFWF, SRWF, New England Wind Phases 1 and 2, and Vineyard Wind 1, which have been calculated by the applicant or by using the information available in the COP for each project.
- ¹⁶ The seabed disturbance with the addition of scour protection was calculated based on scour protection expected in submitted COPs. It is assumed that for all lease areas that a 12-MW foundation with addition of scour protection would be 1.0 acre per foundation other than SFWF, SRWF, and Vineyard Wind 1, which have been calculated by the applicant or by using the information available in the COP for each project.
- ¹⁷ Offshore export cable seabed bottom disturbance is assumed to be due to installation of the export cable, the use of jack-up vessels, the need to perform dredging, and boulder removal. If information for a future project could not be obtained from a publicly available COP, export cable seabed disturbance assumed to be 1.25 acres per mile.
- ¹⁸ If information for a future project could not be obtained from a publicly available COP, the offshore export cable operating seabed footprint assumed to be 0.4 acre per mile.
- ¹⁹ For projects other than the SFWF, SRWF, and New England Wind Phases 1 and 2, which have been calculated by the applicant, the offshore export cable hard protection is assumed to be similar to Vineyard Wind 1 Project, which is 0.357 acre (1.445 square meters [m²]) per mile of offshore export cable with up to 10% of the offshore export cable requiring protection.
- ²⁰ Anchoring disturbance for the SFWF and New England Wind Phases 1 and 2 has been calculated by the applicant. Anchoring disturbance for other lease areas has been assumed to be a rate equal to 0.10 acres (405 m²) per mile of offshore export cable, with the exception of Vineyard Wind 1 Project, which is 0.044 acres per mile of offshore export cable.
- ²¹ Inter-array construction seabed disturbance for the SFWF, New England Wind Phases 1 and 2, and CVOW-C has been calculated by the applicant. Inter-array construction seabed disturbance for other lease areas has been assumed to be a rate equal to the average area per foundation, 2.4 acres (9.712 m²) per foundation, with the exception of Vineyard Wind 1 Project, which is 2.04 acres (8.256 m²) per foundation.
- ²² The inter-array operating footprint for the SFWF has been calculated by the applicant. The inter-array operating footprint for other lease areas is assumed to be a rate equal to the average amount per foundation of 1.43 acres (5.787 m²) per foundation for all other lease areas.
- ²³ Inter-array cable hard protection for Vineyard Wind 1, SFWF, SRWF, New England Wind Phases 1 and 2, and Mayflower have been calculated by the applicant. The inter-array cable hard protection for other lease areas is assumed to be zero.
- ²⁴ BOEM recognizes that the estimates presented within this cumulative analysis are likely high, conservative estimates; however, BOEM believes that this analysis is appropriately capturing the potential cumulative impacts and errs on the side of maximum impacts. Totals by lease area and by OCS may not fully sum due to rounding errors.
- ²⁵ New York's demand is not double-counted, this total comes from looking at New York's state demand, not adding up the potential of the areas because that would double-count New York.
- ^a Emissions values represent 4% of the total for Park City Wind, as only 4% of the proposed development lies within the geographic scope of direct impacts from the proposed action.
 - ^b Emissions values represent 10% of the total for Common Wealth Wind, as only 10% of the proposed development lies within the geographic scope of direct impacts from the proposed action
 - ^c Emissions estimated by taking the average for each pollutant per foundation for the Vineyard Wind 1 (13-MW turbine) COP and multiplying by the number of foundations in remainder/unspecified area within air quality GAA.

Literature Cited

Bureau of Ocean Energy Management (BOEM). 2019. *National Environmental Policy Act Documentation for Impact-Producing Factors in the Offshore Wind Cumulative Impacts Scenario on the North Atlantic Outer Continental Shelf*. Available at: <https://www.boem.gov/sites/default/files/environmental-stewardship/Environmental-Studies/Renewable-Energy/IPFs-in-the-Offshore-Wind-Cumulative-Impacts-Scenario-on-the-N-OCS.pdf>. Accessed December 2020.

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