



Ocean Wind Offshore Wind Farm

Project Design Envelope

A project design envelope is a permitting approach that allows a lessee to define a range of design parameters within a Construction and Operations Plan. BOEM then analyzes the maximum impacts that could occur within the range of the design parameters — referred to as the "maximum design scenario."

Representative design parameters for the Ocean Wind project are outlined below. Refer to Ocean Wind's Construction and Operations Plan for a detailed explanation of the project design envelope.





Maximum Design Wind Turbine

Monopile Foundation with Transition Piece

Indicative Cable Burial

Project Component	Representative Project Design Parameters
Wind Turbine Generators	 Up to 98 wind turbine generators with rotor diameter up to 788 feet. Upper blade tip height up to 906 feet above MLLW; lowest blade tip height 70.8 feet above MLLW.
Turbine Foundations	 Monopile foundations with scour protection. Foundation piles installed using a pile driving hammer and/or drilling techniques.
Offshore Substations	 Up to three offshore substations on monopile or piled jacket foundation substructure. Foundation piles installed using a pile driving hammer and/or drilling techniques. Maximum 275 kV substation interconnector cables with target burial depth of 4 to 6 feet, and options for cable protection.
Inter-Array Cables	 Maximum 170 kV cables with target burial depth of 4 to 6 feet. Cable protection (e.g., rock placement, concrete or fronded mattresses, rock bags, seabed spacers).
Offshore Export Cables	 Maximum 275 kV cables with a target burial depth of 4 to 6 feet. Two export cable route corridors to Oyster Creek and BL England. Armoring or cable protection may be used.
Landfalls and Onshore Export Cable System	 Alternate landfall and onshore cable route options. Open cut or trenchless (e.g., HDD, direct pipe, or auger bore) installation at landfall.
Onshore Substations and Interconnector Cable	 Two onshore substations with associated infrastructure. Underground cable and overhead transmission options to connect onshore substations to the existing grid.

HDD = horizontal directional drilling; kV = kilovolt; MLLW = mean lower low water.



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