



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







Conceptual Monopile

Conceptual Rendering of the WTGs

Conceptual Piled Jacket Foundation

Project Component	Representative Project Design Parameters
Wind Turbine Generators	• Up to 94 11-MW wind turbine generators at 102 potential positions with rotor diameter up to 656 feet.
	• Upper blade tip height up to 787 feet (AMSL); lowest blade tip height 131.2 feet (AMSL).
Turbine Foundations	 Monopile foundations with scour protection.
	 Foundation piles installed using impact pile driving and/or vibratory pile driving.
Offshore Substations	One offshore converter substation on piled-jacket foundation structure (4 legs).
	• Foundation piles installed using impact pile driving and/or vibratory pile driving techniques.
Inter-Array Cables	 Maximum 161 kV cables with target burial depth of 3 to 7 feet.
	Cable protection (e.g., rock placement, concrete or fronded mattresses, rock filter bags, grout bags).
Offshore Export Cables	Consist of 2 cables bundled together with fiber optic cable; target burial depth of 3 to 7 feet.
	Maximum total corridor length of up to 104.6 miles.
	Armoring or sheathing to protect cable from damage.
Landfalls and Onshore Export Cable System	Landfall location at Smith Point County Park, Town of Brookhaven, New York.
	 HDD and trenching techniques planned for installation at landfall.
Onshore Substations and Interconnector Cable	 One onshore converter station and one onshore interconnection cable with interconnection at existing Holbrook Substation
	HDD and pipe jacking techniques to be used for underground burial

AMSL = Above Mean Sea Level; kV = kilovolt HDD= Horizontal directional drilling



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