



US Wind's Construction and Operations Plan (COP)

The Basics – what it is, what's inside, and why it matters

US Wind recently received from the Bureau of Ocean Energy Management (BOEM), an agency within the U.S. Department of the Interior, a Notice of Intent to Prepare an Environmental Impact Statement on our COP.

What is the COP?

- The construction and operations plan – or “COP” – is an application an offshore wind developer makes to the federal government, specifically BOEM, for a permit to develop offshore wind energy.
- The COP presents the project components and potential impacts to the existing environment, which informs the various federal and state permits that US Wind is required to obtain prior to the construction and operation of the project, including the review and eventual decision from BOEM under the National Energy Policy Act (NEPA).
- The COP will provide the basis for the analysis of the environmental and socioeconomic effects and operational integrity of a proposed construction, operation, and decommissioning activities.
- US Wind's COP includes the full build-out of the Lease area, rather than one particular project.
- The Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) on US Wind's COP kicks off a 2-year NEPA process.

A COP must demonstrate that the project is being conducted in a manner that conforms to responsible offshore development; this includes the application of best management practices (BMPs) that are reviewed for sufficiency by BOEM. COP documents include, at a minimum, the following:

- *A description of the project, and any alternative construction and operation plans that may be used to execute the project.*
- *Environmental and technical design reviews of the proposed project.*
- *Potential direct and indirect impacts to resources within the planned project study area.*
- *Mitigation measures and monitoring requirements. Additional mitigation and monitoring activities may be identified or changed during BOEM's review process.*

What is the “proposed project” included in US Wind's COP?

- The “proposed project” includes the following components:
 - Up to 114 wind turbines and 4 offshore substations.
 - Up to 4 offshore export cables that run from the Lease area to shore.
 - The cables would be buried approximately 3-10 ft, though no more than 13 ft, depending on seabed conditions. In limited cases, cable protection in the form of concrete mattresses may be used.
 - Should US Wind receive the appropriate permissions, the offshore export cables would land at the 3R's Beach parking lot in Delaware Seashore State Park. All cables and vaults would be buried.
 - The cables would exit the vaults and enter Indian River Bay. The cables would be buried approximately 3-7 ft in the sandy bottom along a corridor to be determined within the bay.
 - The cables would exit Indian River near the Indian River Power Plant to be connected to new US Wind substations built adjacent to an existing substation.
 - The project would connect into the regional electric grid at Delmarva Power and Light's Indian River substation.

What is the Project Design Envelope in the COP and how is it different from the “proposed project”?

- The “Project Design Envelope,” or PDE, is a permitting tool used by energy developers in applications like the COP that provides flexibility in the design of energy projects.
- In order for BOEM and other agencies to evaluate the maximum impacts of a potential project, a large design envelope is created such that final selections fit within or “under” the PDE.
- US Wind has proposed preferred cable routes, cable landing location, and point of interconnection to the electric grid as the “proposed project” in the COP.
- The proposed project also includes fewer than the maximum number of wind turbines to include a setback from nearby shipping lanes.
- US Wind has not yet made final selections regarding technology, like wind turbines, or spatial elements, like cable routes, landing locations, and grid interconnection points.
- US Wind has not proposed a specific wind turbine model in the proposed project. However, as stated in the COP, US Wind is considering contemporary and near-term offshore turbine models with individual nameplates of up to 18 MW. One wind turbine under evaluation is the GE Haliade-X 14.7 MW turbine.

Logistics

Construction of the project would begin in 2024 once all permits are issued by federal, state, and local agencies. US Wind intends to use Sparrows Point as a marshalling location during construction, where components would be stored and transported, as well as a source of the monopile foundations fabricated by Sparrows Point Steel. An operations and maintenance facility will be located in the Ocean City, Maryland area, likely at West Ocean City Harbor, where crews would be based to support the wind farm.

WIND TURBINES			
Nameplate	Up to 18 MW	Max height	Up to 938 feet
Number	Up to 114	Foundation	Monopile, up to 40 feet dia.
Grid spacing	0.77 NM east to west 1.02 NM north to south	Scour protection	Rock around base, 3x foundation diameter
OFFSHORE SUBSTATIONS			
Number	Up to 4	Foundations	Monopile, Jacket with piles, Jacket with suction buckets
MET TOWER			
Mast height	328 feet	Foundation	Fixed platform
OFFSHORE EXPORT CABLES			
Number	Up to 4	Type	230-275 kV AC
Size	Up to 12-inch diameter	Proposed landing location	3R's parking lot in Delaware Seashore State Park
Burial depth	3-10 feet	Above-ground infrastructure	None, horizontal directional drill from offshore under beach. Cable vaults will be buried under parking lot
ONSHORE EXPORT CABLES			
Number	Up to 4	Type	230-275 kV AC
Size	Up to 12-inch diameter	Proposed route	Through Indian River Bay
Burial depth	3-10 feet	Above-ground infrastructure	None, horizontal directional drilling into and out of Bay
ONSHORE SUBSTATIONS			
Number	2 new substations	Location	Indian River Substation (next to Indian River Power Plant)