

In addition, support vessels may be used including crew boats, hotel vessels, tugs, and other miscellaneous support vessels if needed (e.g., security vessels).



Where turbine installation and commissioning are occurring in the same area, up to eight vessels may be working simultaneously in 1.9 square miles.

Table 6.1.2-1 provides the maximum number of vessels and the maximum number of trips to the Wind Farm Area from port that are anticipated throughout the turbine installation period.

Table 6.1.2-1 - Wind turbine vessel trips.

Vessel Type	Maximum Number of Simultaneous Vessels	Maximum Number of Trips Per Vessel Type
Wind Turbine Foundation Installation		
Scour Protection Vessel	1	50
Installation Vessel	4	99
Support Vessels	16	396
Transport / Feeder Vessels (including tugs)	40	396
- of which are anchored	2	198
Helicopter Support	2	99
Structure Installation		
Installation Vessels	2	99
Transport / Feeder Vessels	12	99
Other Support Vessels	24	594
Helicopters	2	75

6.1.2.5 Offshore Substations

Ocean Wind assumes that offshore substation supply and fabrication will be from an Asia-Pacific domiciled supplier. This assumption reflects alignment with a global supply chain that Orsted applies to its fleet of offshore wind farms, leveraging the most competitive fabrication tender prices from the present global market.

Offshore substations are generally installed in two phases, first the foundation substructure will be installed and then the topside structure will be installed on the foundation structure. The foundation substructure and topside structure may be transported to the site together or separately. An installation vessel will be used to lift the topside onto the pre-installed foundation substructure. Installation is expected to take up to two months per platform, not including cable pull-in, which is included in cable installation. The offshore substation topside and substructure components will be fabricated at a location to be determined, which is not planned to be in the State of New Jersey. Upon fabrication completion, the topside(s) will be sea transported to the site for installation (**Figure 6.1.2-12**). The transportation and installation vessels will be planned to ensure compliance with the Jones Act. The installation window is expected to be 67 days or less for each offshore substation (topside and substructure).