

Empire Wind Project (EW1 and EW2)

# **Project Construction**

#### **Installation of Foundations**

- Seabed preparation may be completed.
- The foundation is transported to the site by vessel.
- Installation vessel holds position at the foundation installation location.
- Installation using pile driving, drilling, or by lowering the foundation onto the seabed (for gravity base structures).

#### **Installation of Wind Turbine Generators**

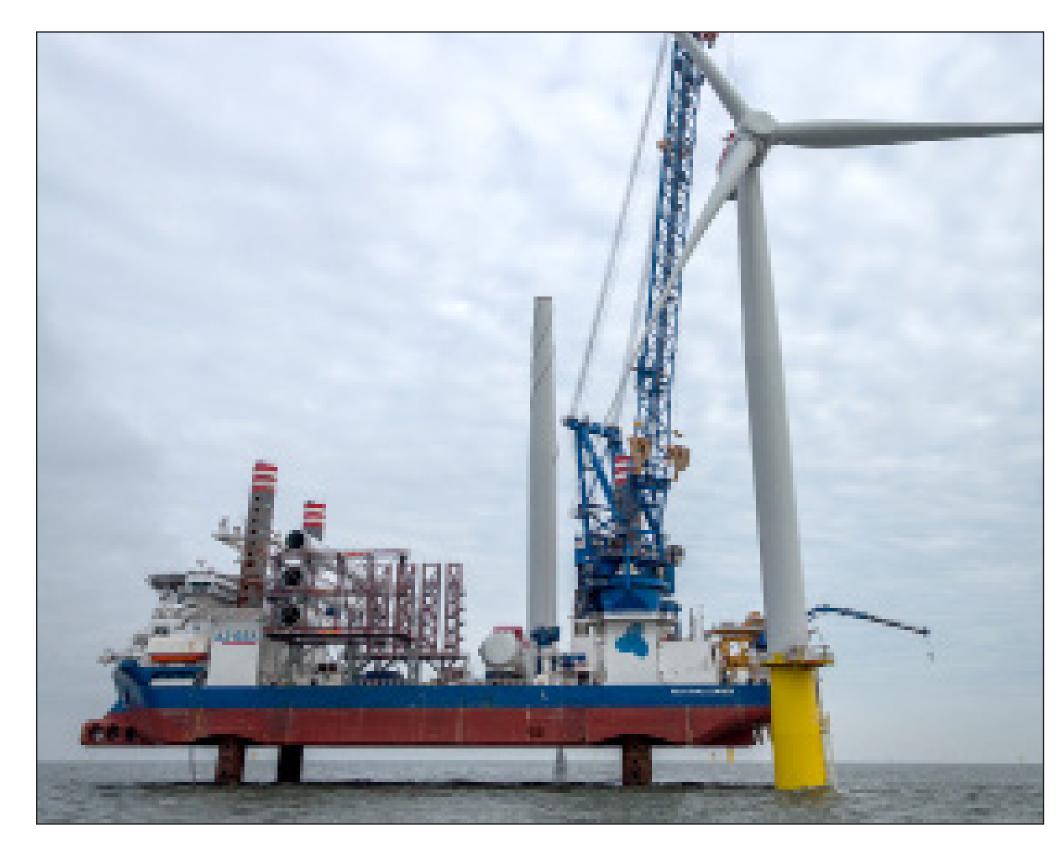
- Wind turbine components will be pre-assembled at a port location or transported separately and assembled offshore at the foundation location.
- The tower is mounted vertically and secured to the foundation.
- The nacelle is placed on top of the tower and secured, and the turbine blades are joined to the nacelle hub.

### **Offshore Substations**

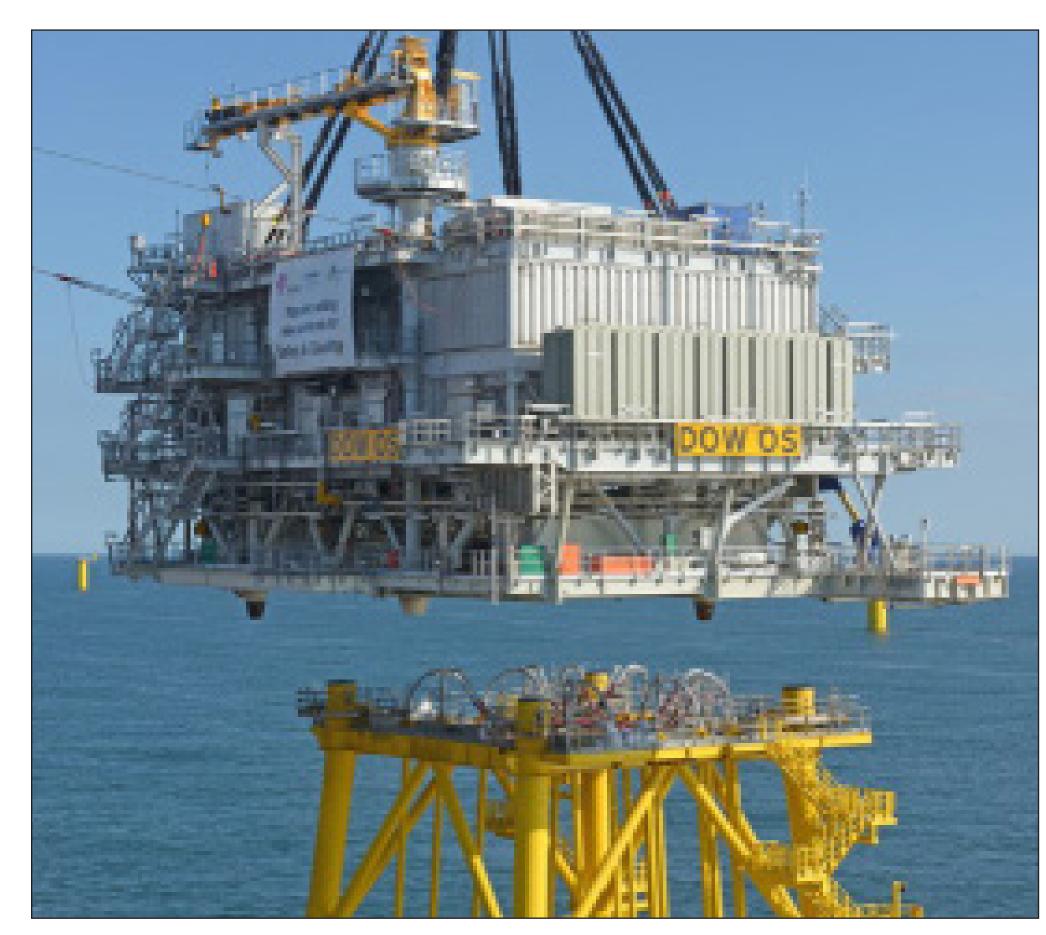
- Following foundation installation, topside structure is transported to the site by vessel.
- The topside is lifted onto the foundation using a heavy lift crane and secured to the foundation.

## **Cable Laying**

- Cable pre-lay activities may include pre-installation grapnel run, route clearance and boulder removal, pre-sweeping, dredging and pre-trenching.
- Installation of submarine cables using specialized installation vessels/barges from a turntable on the lay vessel/barge.
- Cable burial methods may include plowing, jetting, trenching, and dredging.
- Installation of cable protection, as needed.



**Wind Turbine Installation** 



**Installation of Offshore Substation** 



**Cable Laying** 

