





CASE STUDY

# WEST OF DUDDON SANDS - CTVs & Secondary Works

#### **SCOPE**

CWind provided all foundation secondary works, including confined space safety plan, at Dong Energy's West of Duddon Sands Offshore Windfarm. CWind also provided the vessels required to undertake the work. Our teams removed the levelling system, completed and tested earthing arrangements and cut and modifyed jacking brackets where necessary. In addition, works included corrosion protection and TP inspections ready for handover to the client. CWind also provided confined space management, including the design, fabrication of additional equipment required, testing, maintenance and recertification as well as the monitoring of atmospheric conditions.

## **TURNKEY PACKAGES**

CWind provides a comprehensive package to the client. By covering all elements of the required work, CWind ensures tight communication within the teams, and work plans that correspond to client requirements. The use of CWind's modular vessels enabled the team to undertake a variety of tasks with a single vessel during the tight work windows at the site. By combining the confined space operations with the foundation work, CWind provided additional synergies to the client, and delivered a cost and time-effective solution.

### **FLEXIBILITY**

The project site was subject to a high tidal range of 9m. The location of the works on the TP was in the tidal range, therefore working windows were limited to 5 to 6 hours. In order to maximise efficiency, work hours were matched to low tides, with vessels, technicians and equipment ready on the platform as water levels began to drop. Extensive and specialist training ensured that our staff worked in highly skilled teams, in order to maximise time windows. When need and opportunity arose, CWind pro-actively undertook corrosion protection, to correct the damage to the protective layer, that was caused in major installation works.

## SPECIALIST SKILL SETS

A few towers at West of Duddon Sands were suffering from jammed levelling systems, which could potentially damage the transition pieces and cause a major delay to works. CWind's project management designed a solution for cutting out the levelling systems in the confined space, and atmosphere conditions, and then trained all CWind technicians in this process to speed up foundation works and ensure quality delivery. In addition, the removal of the levelling systems required specialist rigging & lifting arrangements, such as hydraulic torqueing.



Project: West Of Duddon Sands

Capacity: 389MW Operation: 2013

Turbines: 108

Client: CT Offshore

Project Owner: Dong Energy (50%)

Scottish Power (50%)