

Successful subsea inspections at Gwynt-y-Mor Wind Farm

James Fisher Marine Services* completed a subsea inspection scope of works on the Gwynt y Mor Off shore Wind Farm in North Wales.

The inspection forms part of the wind farms' ongoing maintenance requirements necessary for the transition piece (TP) and monopile (MP). Once completed, the inspections will allow operations at the Gwynt-y-Mor Wind Farm to continue business as usual.

The challenges

- Gwynt y Mor Off shore Wind Farm Ltd – one of the largest wind farms in Europe – required a subsea inspection solution as part of their ongoing maintenance requirements for the TP and MP.
- The solution involved performing and overseeing subsurface inspection of the grout seal, anodes and steel work.
- A separate visual inspection and sampling of the marine growth was required to assess the general condition of marine life in the surrounding area.

The solution

- JF Renewables sourced local businesses, suppliers and employment wherever possible for the duration of the installation project, including the hiring of the Dover work vessel, Sealift III, and the accommodation of a local dive team.
- The Cathodic Protection (CP) system was designed by Corrosion Prevention Ltd - a specialist engineering consultancy - which acted as the consultant throughout the project to ensure a non-corrosion solution was manufactured and delivered appropriate for the wind farm's subsea environment.
- The anode design was assessed by JF Renewables' Project Engineer, and building on a pre-existing relationship, Impalloy Ltd – a high quality anode supplier - manufactured bespoke anodes in line with the design requirements.

The results and benefits

- The CP system was successfully installed and to the satisfaction of the customer's requirements.
- On inspection completion, a written report and video survey was circulated to provide analysis on each weld and anode installation conducted during the project.
- Inspection results provided over 400 stills of the installed system, monopile and UT readings of the system weld locations to evidence the variety of works carried out.

* A James Fisher Renewables legacy brand