

Barrow Offshore Wind farm

Offshore Wind Farm Project relies on Global Marine for subsea cable expertise

Barrow Offshore Wind Farm is located approximately 7 km west of Walney Island in the east Irish Sea, near Barrow-in-Furness. The wind farm comprises 30 modern, efficient wind turbines, each capable of producing 3MW of electricity, delivering power to the existing grid system at Heysham via buried Subsea and onshore cables.

The 'underlying' challenge

The CS Sovereign was chartered with the Atlas ROV for remedial infield cable burial. The Atlas ROV spread also boasted a high resolution sonar system

that was used to measure and record cable spans at the monopole bases.

The CS Sovereign was tasked to try and reduce the size of the cable spans at the second cable lay end whilst increasing the depth and range of burial as close to the monopiles as possible. The Captain's main challenge was to try to ensure that the vessel maintained a safe distance from the active wind turbines, whilst ensuring that the ROV pilots were able to conduct operations from a stable platform.

The ROV pilots had to demonstrate a high degree of proficiency in subsea piloting skills maneuvering the ROV on a wandering umbilical ever watchful of the large scour holes at the bases on the monopiles.

The Verdict

Some positive results were gained during the operations which will help to secure life of the cables for the full life of the wind farm. However, this type of project underlines the difficulties and complexities of subsea cable installation and burial and highlights some of the issues faced when working in such demanding environments.

Resources

Ship:

CS Sovereign, one of the most advanced offshore engineering ships of its kind in the world, is capable of handling the wide variety of subsea tasks required by such diverse industries as Telecommunications, Oil and Gas, Renewable Energy and Deep Sea Research.

Submersibles:

The Atlas class ROV is a state-of-the-art, ultra-heavy work class ROV designed for intervention, trenching, umbilical and power cable maintenance and post lay and inspection roles.

Ship-side team:

The project was led by Captain Chris Neave who were responsible for maintaining the day to day offshore relationships.

Shore-side team:

The Global Marine Commercial Directorate worked seamlessly on this project. The assignment was handled by Chris Berridge. Chris has worked on a number of high profile wind farm installations, including the Danish wind farm, Horns Rev 2, Kentish Flats which is located off the coast of Kent and the Beatrice wind farm demonstrator project.

For more information on Global Marine's capabilities please contact Ian Gaitch, Sales Director for Global Marine Systems, Energy, ian.gaitch@globalmarinesystems.com

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