

TAIWAN

Guanyin Offshore Wind Farm

Right: "All aboard" - Kyle Owen, Robertson Geo Logging Engineer, transferring from rig to the jackup vessel on the crew transport basket - that's Kyle on the left!

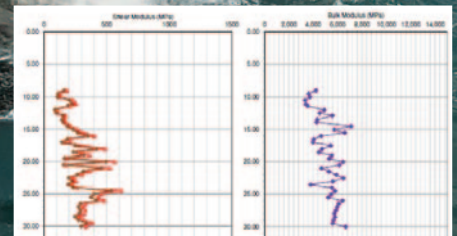


Taiwan is due to meet its target of renewable energy providing at least 20% of the country's electricity generation by 2025, with 20GW of solar PV and 5.7GW of offshore wind online by the middle of the decade.

THE GUANYIN OFFSHORE wind farm project is planned two kilometers off the coast of the Taoyuan district in the north of the island state, with commissioning planned for 2021/2022.

Robertson Geo was contracted by Horizon Geosciences for the logging of multiple boreholes of 35m depth. The nine week project at the site of the 350MW wind farm was for the deployment of the PS Logger probe via a 2000m marine winch.

The seabed geology proved to be 0-10/20m conglomerate with 10/20m-35m of sand and clays. For the logging operation between the mud line and 10/20m below (this varied between boreholes) the layer of conglomerate (gravels and cobbles) frequently caused the borehole to collapse. To minimise this and in an effort to obtain as much data as possible the casing string was removed/pulled in 0.5m sections (this would typically be done in 6m sections) with the actual logging



duration taking up to 12-15 hours on some boreholes. This approach was rewarded with the hole staying open for longer than expected in the conglomerate zone.

The acquired data was successfully processed on site by the Robertson Geo engineer, producing small strain moduli when combined with the density values given by the onboard lab on the jackup vessel.