



CASE STUDY

Temporary power provision for Neart na Gaoithe offshore wind project

OEG's topside team was contracted to provide a temporary power solution during the installation and commissioning phase of the Neart Na Gaoithe (NnG) offshore wind farm, inclusive of personnel and a crew transfer vessel.

The Neart Na Gaoithe offshore wind farm, located 15.5km off the Fife coast in Scotland, covers an area of approximately 105 km² and has 54 turbines. NnG will provide enough power for around 375,000 homes and will offset more than 400,000 tonnes of carbon dioxide emissions.

Challenge

The client required temporary power during the installation phase prior to a grid connection to the turbines being available. Power is vital during this phase of wind farm construction, as it is used to power auxiliary services within the turbine and to power the nacelle, reducing the strain from components being stationary.



Ben Hughes, Construction Project Manager at SGRE, commented:

"OEG were awarded this work scope in May 2023, following a successful competitive tender. From the commencement of works, OEG have brought a competent team to diligently manage and deliver on providing temporary power solutions.

Siemens Gamesa have valued OEG's technical know-how, and their problem solving, cooperative and collaborative approach in supporting our needs. The OEG team have delivered on their scope effectively and efficiently and it has been a pleasure to have OEG as our temporary power solution supplier for the Neart na Gaoithe construction project."

Solution

OEG delivered a complete temporary power solution for the duration of the project, including provision of temporary power generators and ancillary equipment suitable for the installation and mechanical and electrical completion of all commissioning activities of wind turbine generators (WTG) located at the NnG wind farm site.

OEG's solution was inclusive of refuelling operations, onsite maintenance of the temporary power generators, and the supply of personnel, tools and equipment associated with the work scope. Crew transfer vessels from OEG's fleet, along with onboard crew, were supplied to the client during the project to facilitate the refuelling and maintenance of the temporary power generator sets.

Throughout the duration of the project, a total of 54 JCB G140QS generators were provided to the client, alongside 2000 litre mountable fuel tanks and 690v transformers. The generators, fuel tanks and transformers are installed on each turbine transition piece as a modular set, reducing the number of lifts and reducing the footprint of the temporary power equipment in the restricted space available.

Three crew transfer vessels were present onsite during the project, with the Manor Victor, Manor Vulcan and Manor Venture providing essential crew transfer services. At the peak of the project, OEG conducted operations using two offshore technical teams, supported by dedicated onshore project staff and vessel crew.

OEG's integrated services allowed the topside team to deliver a seamless solution to the client, by utilising OEG's own fleet of vessels. Our broad range of complementary in-house services significantly streamlined our operations, allowing the project team to have full control over maintenance schedules, vessel availability, and logistics.