

CASE STUDY



Temporary Power Provision

Borssele 1 & 2 Offshore
Wind Farm for Ørsted



Industry

Renewable Energy Production /
Offshore Wind Farms

Client

Ørsted

Group company

Manor Renewable Energy

Location

Borssele 1 & 2

Vlissingen, The Netherlands



Manor Renewable Energy (MRE) signed a contract with Ørsted for the provision of temporary power solutions, offshore personnel and crew transfer vessels during the turbine commissioning phase of the Borssele 1 & 2 offshore wind farm.

The construction of Borssele 1 & 2 Offshore Wind Farm consisted of 94 turbines generating 752MW, making it the largest offshore wind farm in the Netherlands and the second largest operating offshore wind farm in the world. Borssele 1 & 2 provides enough green electricity to power one million Dutch households.

Borssele 1 & 2 is Ørsted's first offshore wind farm in the Netherlands.

Challenges

Reducing construction time and reducing high level of multi-discipline personnel at site.

Workscope

Ørsted contracted MRE to provide temporary power during the turbine commissioning phase of the 94 Siemens Gamesa Renewables 8.0-167 type turbines at the Borssele 1 & 2 offshore wind farm.

Solution

MRE supplied modular temporary power packages, consisting of a 116 kVA generator, custom-built fuel tank, transformer and bespoke lifting frames. The MRE owned Manor Venture, Manor Initiative and Manor Enterprise, alongside associated offshore personnel were also contracted by Ørsted to maintain and refuel the offshore generators.

Based out of the port of Vlissingen in The Netherlands, the MRE fleet maintained the 44 generators required during the construction phase of the windfarm; at peak activity

MRE provided three teams of three personnel over each 24-hour period.

MRE personnel created bespoke lifting plans & equipment to enable the generators positioned offshore to be recycled between turbines throughout the project. Over the course of the project, the vessels completed over 4,400 safe transfers of personnel. On completion of the temporary power requirement, MRE demobilised all sets from their respective transition pieces; all 44 units were then delivered to MRE's home port of Portland, Dorset in December 2020.

Simon Oakley Project Manager at MRE

"In what was an extremely challenging year with the COVID-19 pandemic and all the difficulties that entailed, we successfully delivered the complete temporary power solution during the construction phase of the Borssele 1 & 2 wind farm.

We built on our existing relationship with Ørsted during the course of the project and are looking forward to working with them again in the future."