

Crystal Rig II Wind Farm

In 2008 Fred Olsen Renewables appointed Jones Bros Civil Engineering and Powersystems to carry out the civil and electrical balance of plant contract for the 138MW Crystal Rig II wind farm.

The £20 Million pound contract was successfully completed in 2010 on time and to budget.

During the 26 month project duration Powersystems completed the design and installation of the site electrical infrastructure works to power the 60No 2.3MW turbines.

The electrical works carried out by Powersystems in completing the contract comprised of:

- ▶ Electrical design studies to ensure grid code compliance
- ▶ Electrical design drawings
- ▶ Installation of 110km of 33kV cable
- ▶ Installation of 40km fibre optic cable
- ▶ Earthing of 60No turbine bases

Design and installation of 60No turbine substations each comprising of:

- ▶ 33kV switchgear
- ▶ 2.8MVA turbine transformers
- ▶ GRP enclosures
- ▶ SCADA control
- ▶ Termination of 732 33kV cables
- ▶ Installation of 11km LV power cabling into turbines from substations.
- ▶ Building services installation at Friardykes control depot
- ▶ Installation of 2No 3MVAR harmonic filters
- ▶ Testing and commissioning of the complete installation

Once installed Powersystems commissioned all of the site electrical infrastructure and handed over the project to the client on time and on budget.

