



Pre-assembly works

Site: Clyde Extension, Scotland

Scope: Pre-assembly, installation, mechanical & electrical completion, cold-commissioning, 500-hour service

WTG: 54 x 3.2MW direct drive

Client: Siemens Wind Power



Installation of the rotor-star

Over a period of 11 months Global Wind Service (GWS) worked at Clyde Extension in the Scottish Lowlands.

Pre-assembly

To make the installation process run as smooth and fast as possible, a frontrunner crane assembled the two bottom tower sections on the hardstand. Simultaneously, the nacelle, hub and cooler top were assembled. Having completed these steps GWS technicians could move on to the main installation.

Main Installation

A total of 4 main cranes were utilized during the project to lift the remaining two tower sections, nacelle and rotor. A successful installation process requires an experienced and well-organised team with a solid understanding of best practices - something GWS brought to the project. Consequently, GWS technicians completed installation of the 54 turbines in a safe and efficient manner despite challenging weather conditions.

"It has been a great but challenging project for us, as we were faced with



Installation preparation



Wind farm overview

a lot of wind, with wind speeds up to 35 metres per second. But the guys are very skilled and did a really good and safe job out there"

said Michael Bialaska, Lead Site Manager at Global Wind Service.

Mechanical and Electrical Completion

Once all the turbines was installed, the technicians moved on to mechanical and electrical completion. This was carefully carried out in accordance with the manufacturers' specifications and guidelines before the turbines were ready to be handed over to the cold commissioning teams.

Cold-commissioning & 500-hour service

As a last step in the installation, GWS technicians preformed cold-commissioning of some of the turbines conducting the final checks and assessments to ensure that the turbines were 100% ready to hand-over and power production. After the first 500 hours of production our skilled service technicians conducted the 500-hour service checks on all 54 turbines.

The Project

Clyde Wind Farm in Scotland is the third largest onshore wind farm in Europe, consisting of 206 wind turbines in total. The wind farm originally consisted of 152 turbines, but in 2014 SSE Renewables was granted consent to construct a 54-turbine extension to the wind farm. The wind farm is located between Biggar, Abington and Moffat and provides over 250,000 households with green energy.