First power for the world's most powerful turbine

Thursday 7 November 2019

The world's most powerful offshore wind turbine, GE Renewable Energy's Haliade-X 12 MW, has produced its first power.

As Steve Wilson, Project Director of Dogger Bank Wind Farms says, producing its first kWh is an 'incredible milestone' for a pioneering offshore wind farm development.

Dogger Bank Wind Farms, SSE Renewables and Equinor's joint venture, is a pioneering offshore wind farm development.

Set to be the largest offshore wind farm in the world when it's complete, the scale of Dogger Bank demands an equally ground-breaking wind turbine to power it.

That is something we've found in GE Renewable Energy's Haliade-X machine. Utilising state of the art turbine technology combined with the high wind speeds of the Dogger Bank area of the North Sea are fundamental to delivering offshore wind power to UK homes at the lowest ever cost.

The record-breaking turbine is the most powerful on the market and today, 7 November, the world's first 12MW turbine, the prototype Haliade-X, generated its first power.

It's an incredible milestone for any project, but for GE it marks a critical point where the innovation and hard work to develop this impressive machine is realised. It took a team of 500 people a year and a half to reach this point and every single person should be proud of their role in creating a world first.

For Dogger Bank, it marks an exciting stage on our journey to introduce the next generation of offshore wind turbine to the UK.

Our site will be the first European wind farm to install and operate the Haliade-X machines, helping us to provide enough low carbon, renewable energy to power up to 4.5 million homes each year.

The next stage for the Haliade-X is to move into the testing phase, where GE will perform different types of measurements to obtain a Type Certificate for the Haliade-X in 2020. Although this prototype is based in Rotterdam, we are set to welcome a second Haliade-X 12MW nacelle to the UK over the coming weeks.

The nacelle will be shipped to ORE Catapult's testing site in Blyth where it will undergo testing that will replicate real-world operational conditions to progress the validation performance and reliability.

Haliade-X's 107m long blade has been in Blyth since August where it has been undergoing a full range of advanced testing to demonstrate the blade's ability to withstand peak wind conditions and to simulate the blade's readiness for years of operations at sea.

Congratulations again to GE on achieving first power from the world's first 12MW machine.

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