# PRESS STATEMENT

## INSTALLATION ON TRACK FOR 15 MEGAWATT WIND TURBINE NAREC TEST RIG

***Open-access facility should encourage investment in step-up offshore wind turbine technologies sooner***

Inside a new 3000 square metre hall, operations are underway to build one of the world's largest facilities for the accelerated life testing of offshore wind turbines. Due to its scale the assembly of the 15 megawatt (MW) capacity test rig is being done in three phase onsite: Permanent Magnet Motor (PMM), Force Application System (FAS) and support systems. Two 250 tonne capacity cranes have been installed in the hall and components already delivered to the site include a 6m diameter motor rotor drum, which weighs 120 tonnes.

The rig is on schedule to be available for the arrival of a commissioning turbine nacelle in the summer. It will be an open access facility; open to all turbine developers on a commercial basis and will be able to test turbines up to 10 MW at up to 50% over power. Narec expects to use it initially to test prototype and early development models currently available in the 4-7MW class, and then for the next generation of 8-10MW machines.

Andrew Mill, Chief Executive, at Narec said: "To fulfil its long-term ambitions the offshore wind industry recognises that it must continue to innovate to reduce the unit price of electricity generated. This requires the development of larger, more reliable turbines and this facility will get new technologies ready for deployment offshore more quickly, ironing out any problems in a controlled, low risk and confidential environment."

To support the improved development of new offshore turbines, and to help improve the UK supply chain, the Energy Technologies Institute (ETI) is investing more than £25 million in the design and build of the test rig at Narec. The ETI, a partnership between global energy and engineering companies and the UK Government, has commissioned and funded GE Energy - Power Conversion and MTS Systems Corporation to design, develop and install the 15MW capacity test rig.

Andrew Scott, Offshore Wind Programme Manager, at the ETI said: "This facility will recreate the full dynamics of wind on turbine drive trains. Testing the performance of new drive trains at full-scale, before serial production, helps to improve their reliability, reduces risk and accelerates offshore deployment. It should also encourage market competition which further reduces the cost of offshore wind energy and has been designed to accommodate the projected growth in turbine size over its designed 20 year life."

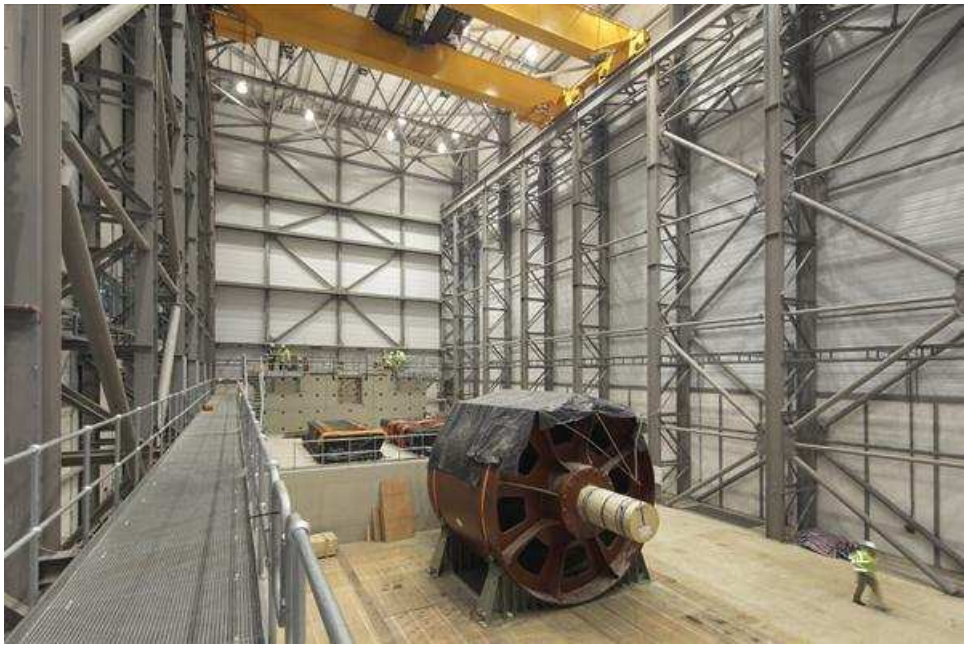
Narec is currently in commercial discussions with turbine manufacturers interested in becoming the commissioning partner for the new facility.

For further information please contact: Steve Abbott, Corporate Affairs Manager at Narec on 01670 357 621 or email: steve.abbott@narec.co.uk

# PRESS STATEMENT

**Images**

1. Rotor for test rig ready to be lifted into place.



2. Completed test rig foundations

For further information please contact: Steve Abbott, Corporate Affairs Manager at Narec on 01670 357 621 or email: steve.abbott@narec.co.uk

# PRESS STATEMENT

**Notes to Editors**

**About Narec**

Narec is the UK's national translational research centre for accelerating grid integration of renewable energy systems and catalysing the development and deployment of offshore wind, wave and tidal energy generation technologies.

The ETI is investing £25m in the design, development and commissioning of the offshore wind test rig. Previously, One North East had invested £10 million in a building to house the rig.

**Energy Technologies Institute**

The Energy Technologies Institute (ETI) is a public-private partnership between global industries – BP, Caterpillar, EDF, E.ON, Rolls-Royce and Shell – and the UK Government.

Public sector representation is through the Department for Business, Innovation and Skills, with funding channelled through the Technology Strategy Board and the Engineering and Physical Sciences Research Council. The Department of Energy and Climate Change are observers on the Board.

The ETI is focused on accelerating the deployment of affordable, secure low-carbon energy systems for 2020 to 2050 by demonstrating technologies, developing knowledge, skills and supply-chains and informing the development of regulation, standards and policy.
www.eti.co.uk

For further information please contact: Richard Robinson, Media Relations Manager on 01509 20 2026/07500 049626 or email richard.robinson@eti.co.uk

For further information please contact: Steve Abbott, Corporate Affairs Manager at Narec on 01670 357 621 or email: steve.abbott@narec.co.uk