Business Secretary announces new Wind Energy programme in Edinburgh

A MAJOR ANNOUNCEMENT OF A NEW OFFSHORE WIND RESEARCH AND DEVELOPMENT PROGRAMME took place in Edinburgh today.

Technology which will assist the programme was developed at the University of Edinburgh's offshoot company Artemis Intelligent Power bought by Mitsubishi Heavy Industries in December 2010. Artemis IP was founded as a result of fluid power research guided by Professor Emeritus Stephen Salter and has its offices and engineering base at premises in Loanhead.

It was there in Loanhead that Mitsubishi Power Systems Europe, SSE, Technip Offshore Wind and Wood Group Renewables were joined by Dr Vince Cable, Secretary of State for Business, Innovation and Skills for the official public programme announcement of the £33m Efficient Offshore Wind Programme (EOWP) – set up to overcome challenges in the offshore wind industry, create over 100 jobs in the UK's energy sector and help the UK drive for clean energy.

The EOWP is a globally significant research and development programme involving four leading energy sector companies. It was formed to investigate many elements of offshore wind farm design, with the overall objective of improving the viability of offshore wind, creating value for customers with reduced operational costs, and boosting confidence in the UK offshore wind market.

Following an initial memorandum of understanding between Mitsubishi Power Systems Europe, The UK Department for

Business, Innovation and Skills (BIS) and the Department for Energy and Climate Change (DECC), the project commenced in April 2010 and was awarded a government grant for research and development of £14 million, which is managed by the UK's innovation agency, the Technology Strategy Board. The four consortium members and the Secretary of State for Business Innovation and Skills met today to unveil the exciting EOWP research programme.

SSE's Managing Director of Group Services, Jim McPhillimy, said:-*"We are delighted this programme builds on our Memorandum of Understanding with Mitsubishi Power Systems Europe to work together on the deployment of low carbon technologies. We anticipate this programme will provide real breakthroughs in the challenge to reduce the cost of energy in the offshore wind industry. We received consent to build Scotland's first offshore wind test facility at Hunterston in North Ayrshire in February this year, and look forward to prototype turbines being installed including MPSE's SeaAngel™ turbine. We are also continuing to develop our Centre of Engineering Excellence for Renewable Energy in Glasgow which includes a number of colleagues from MPSE adding their valuable engineering experience. We very much see the Efficient Offshore Wind Programme as the next step towards a sustainable offshore wind industry with SSE, MPSE, Technip and Wood Group leading the way."*

Business Secretary Vince Cable said: -*"The UK is well placed to seize the benefits of a transition to a low carbon economy boasting the largest single market for offshore wind in the world and a strong engineering heritage.*

"Mitsubishi are an innovative company with a history in developing successful technologies. This project, supported by £14.3m in Government funding, demonstrates that they have

recognised the UK's strengths in offshore engineering and chosen to develop their next generation turbine here."

By 2015, the EOWP will have completed a number of projects focussed on more efficient and cost effective offshore wind technology. Examples of the consortium's work include; optimised and designed-for-manufacture substructures, more efficient land and marine-based transport and installation, as well as the new game changing wind turbine transmission on display at the launch today – which omits the need for traditional wind turbine components (gearboxes and power converters) that are often the source of faults in conventional wind turbines.

Mr Akio Fukui, Chairman of MPSE said: *"I am delighted to be unveiling the exciting work that MPSE and our partners SSE, Technip, and Wood Group have been undertaking in the UK with the support of BIS. It is a great opportunity for MPSE to be able to complement the development of the game-changing SeaAngel™ offshore wind turbine with collaborative R&D between four high-calibre partners to address the technology and interface challenges that face the offshore wind industry. I am proud that MPSE and our partners are making a further contribution to the development of an efficient offshore wind sector in the UK".*

Bringing together the four consortium members, who have an enviable track record in delivering energy projects around the world, the EOWP maximises the skills and expertise of Mitsubishi Power Systems Europe – part of the global industrial giant Mitsubishi Heavy Industries (MHI), with leading technology across a wide range of power generation products; SSE – the UK's largest generator of renewable energy; Technip Offshore Wind part of the leading energy

focused international project management, engineering and construction group; and Wood Group Renewables – a global energy services company; to work together in the UK, at an early stage, to develop technology to support the mass deployment of offshore wind.

Vince Cable with Dr Win Rampen managing director of Artemis

Mike Straughen, Wood Group Board Director, commented:- *"We are very excited to be a partner in this important collaboration programme as Wood Group is a broad based energy company and is committed to playing a key part in the delivery of clean energy solutions. This new offshore wind programme presents an opportunity to apply our oil & gas industry experience and expertise in substructure design and installation, operations & maintenance and health & safety, to improve the efficiency and cost effectiveness of offshore wind power."*

David Hodkinson, VP, UK Business Delivery for Technip Offshore Wind said: *"Technip is really pleased to be part of the EOWP consortium and is proud to be working alongside such world class companies as SSE, Mitsubishi Power Systems Europe and Wood Group. Through a collaborative approach, we are confident that the consortium will develop safer, more efficient solutions to the challenges presented by industrial-scale offshore wind projects, contributing towards a long-term sustainable future for the sector."*

This combined effort will assist both the UK and Scottish Government in meeting renewables targets, and help the companies to develop their businesses in the UK in advance of the significant Round 3 expansion of offshore wind. The recently published Offshore Wind Cost Reduction Task Force

report highlighted a number of critical factors for offshore wind. The EOWP consortium has already been working to address a number of those including, how innovation can deliver improvements in wind turbine technology, contracting strategies and the financing of offshore wind.