**DONG Energy to launch battery solution at offshore windfarm**

 *The global leader in offshore wind power is to integrate a battery system into its Burbo Bank offshore windfarm for the delivery of frequency response. The first of its kind wind power and battery hybrid system at an offshore windfarm is to provide frequency response to help keep the grid frequency stable at 50Hz and maintain the operability of the grid.*

DONG Energy has today announced plans to offer frequency response from its existing Burbo Bank offshore wind farm using a combination of wind power and battery. DONG Energy will present the solution later today as part of its R&D conference at Offshore Wind 2017 – see conference details below.

The addition of the 2MW battery system, set to be installed by the end of the year, will enhance the capability of the 90MW wind farm. It will be the first time an offshore windfarm is integrated with a battery system to deliver frequency response to the grid.

Frequency response is a mechanism used by National Grid to help manage grid stability. The frequency of the grid is a continuously changing variable which must remain close to 50Hz. If the frequency was to deviate from these limits, it would affect everything plugged into the grid, from home appliances to power stations. The ability to inject or reduce bursts of active power allows the grid to rapidly respond to changes in frequency.

Richard Smith, Head of Network Capability (electricity) for National Grid said: “As Great Britain’s energy mix changes, we know that ensuring a safe and stable supply of energy into future will require more flexible services. I’m looking forward to seeing how the DONG Energy solution of storage connected to the offshore wind farm will provide services to help us respond to day-to-day operational challenges and maintain the frequency of 50 Hz on Great Britain’s electricity system.”

Combining a battery system with a windfarm can provide fast and less costly frequency support and thus save money for electricity consumers.

Ole Kjems Sørensen, Senior Vice President, Partnerships/M&A and Asset Management at DONG Energy said: “The need for flexibility is expected to grow, and as a low carbon leader we’re keen to be part of the solution to make the energy system smarter.

“We already offer leading flexibility products to our business customers, and now we’re focussing on enhancing what we offer on the generation side to help National Grid manage grid stability.

“We’re excited to use battery technology to demonstrate this wind power and battery hybrid capability. With eight existing offshore wind farms in the UK and another four under construction, we expect to leverage further technology improvements and innovations and ensure that DONG Energy supports the stability of grid systems as generation capacity becomes cleaner and more sustainable.“

The 2MW battery system will be supplied by ABB. Burbo Bank offshore wind farm has been fully operational since 2007 and is capable of supplying up to 80,000 UK homes.

**About today’s Research & Innovation session at Offshore Wind 2017**

Wednesday 7 June, 13.30-15.00

Capital Suite, Rooms 6 & 13, ExCel London, Royal Victoria Dock

**13:30 Introduction**

Samuel Leupold, CEO DONG Energy Wind Power

Christina Aabo, Head of DONG Energy R&D

**13:40 PISA: Innovation in monopile foundations**

Morten Albjerg Lingaard, Senior Lead Specialist, Foundations, DONG Energy

# 13:55 BEACon: The world’s first radar for offshore wind power

Jesper Skov Gretlund, Manager, DONG Energy R&D

**14:10 Wind farm and battery hybrid system at Burbo Bank**

James Sun, DONG Energy Asset Business Development

**14:25 Panel debate**

Byron Byrne, Oxford University

Simon Hogg, Durham University

Michael Stephenson, Carbon Trust OWA

Steve Wyatt, ORE Catapult

Anders Lindberg, Senior Vice President, DONG Energy EPC

Moderator: Bruce Valpy, BVG Associates