

Energy Sector Division Power Transmission

Erlangen, Germany, August 13, 2008

Siemens to connect world's largest offshore wind farm to the grid

Siemens Energy has won a major contract from Fluor Ltd. to connect Greater Gabbard offshore wind farm to the British power grid. With a capacity of 500 megawatts (MW), the Greater Gabbard project will be the world's largest offshore wind farm. Siemens will also supply 140 wind turbines for this project, which will be constructed 25 km off the coast of Suffolk in the UK. The wind farm will be commissioned in two phases, with the entire construction scheduled to be completed in 2011. The Greater Gabbard project is owned by Airtricity, the renewables arm of Scottish and Southern Energy. The project was jointly developed by Airtricity and Fluor, where Fluor is the balance of plant contractor. The volume of the order for the grid connection is approximately EUR84 million.

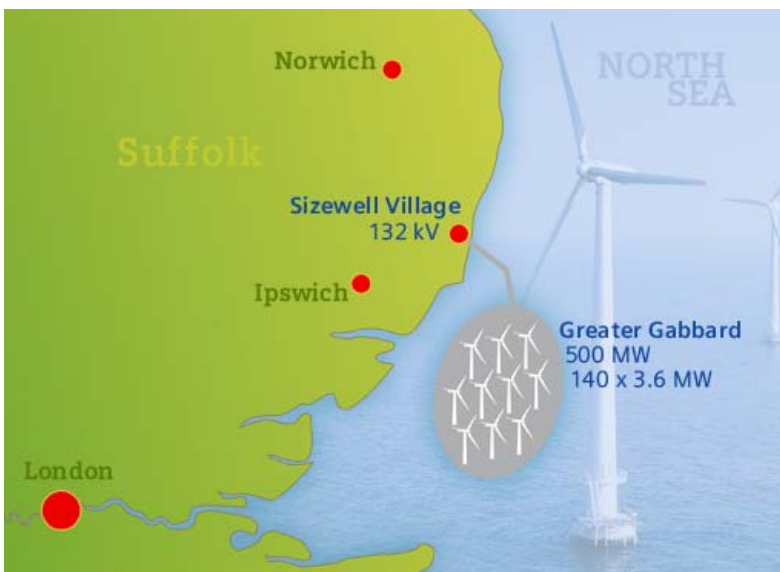
"Siemens Energy has a unique wind power portfolio. Not only do we manufacture and supply high-tech wind turbines, we also efficiently connect wind farms to the grid. This includes carrying out the necessary preliminary network studies," said Udo Niehage, CEO of the Power Transmission Division of the Siemens Energy Sector. As part of the grid connection for the Greater Gabbard offshore wind farm, Siemens is constructing two substation platforms to be positioned at sea in the immediate vicinity of the project. As well as housing the transformers, the substations will also feature high-voltage and medium-voltage switchgear with the necessary protection and control technology. Each platform will have an auxiliary system for emergency power supply. One platform will carry a transformer substation with three 180-MVA power transformers, and the other platform will carry a substation with two 90-MVA transformers. This separation between two platforms allows cable distances within the wind farm to be minimized, reducing power losses.

The two substation platforms concentrate the energy generated by the Greater Gabbard wind farm and boost the voltage from 33 kV to 132 kV for transmission to shore. The three three-phase 132-kV high-voltage subsea cables will transport the power to the feed-in point, which will be located near Sizewell in Suffolk. At this grid connection point, a system for reactive-power compensation

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will be installed based on SVC (Static Var Compensator) technology. The reactive-power compensation system fully meets the grid requirements of the British power supply system (Grid Code). It provides the necessary power factor correction and improves the voltage quality. Siemens carried out the design studies for all electrical components of the wind farm's grid connection, as well as the network studies for verifying compliance with the grid code. The energy efficient connection of offshore wind farms to the electrical power grid is an important feature of Siemens' environmental portfolio. In 2007, revenue from the products and solutions of Siemens' environmental portfolio was nearly EUR17 billion. The environmental portfolio is growing 10 percent annually; the revenue target for 2011 is EUR25 billion.

The **Siemens Energy Sector** is the world's leading supplier of a complete spectrum of products, services and solutions for the generation, transmission and distribution of power and for the extraction, conversion and transport of oil and gas. In fiscal 2007 (ended September 30), the Energy Sector had revenues of approximately EUR20.3 billion and received new orders totaling around EUR28.5 billion and posted a profit of EUR1.8 billion. The Energy Sector had a work force of 73,500 at the beginning of fiscal 2008. Further information is available at: www.siemens.com/energy.



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Caption:

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