

Offshore wind projects hit the doldrums

Rising costs stall up to \$120-billion in projects; EU's renewable energy targets in jeopardy

LARS PAULSSON AND PAUL DOBSON - Bloomberg News - May 15, 2008

LONDON -- Twenty-foot waves battered the Lisa A on the night of Sept. 16 in the Irish Sea, damaging two of the turbine-installation platform's undersea legs and forcing the crew to evacuate as it listed to 30 degrees.

The barge has been out of service ever since, halting work on E.ON AG's Robin Rigg wind farm for seven of the past eight months because only one short-term replacement could be found.

Equipment shortages and rising costs are stalling as much as \$120-billion (U.S.) of offshore projects the European Union and other governments are counting on to reduce the use of fossil fuels and combat global warming. Royal Dutch Shell PLC on May 1 said it planned to sell its 33 per cent stake in the London Array, the world's biggest sea-based wind park.

"It's been more difficult to build offshore projects than everyone thought," said Goeran Lundgren, head of Nordic power generation at Stockholm-based Vattenfall AB, which has put a 640-megawatt wind farm in the Baltic Sea on hold. "I don't think we'll see any large-scale offshore parks until we've taken a few big development steps."

London Array, proposed by Shell, E.ON and Dong Energy AS in 2001, would be a collection of as many as 341 turbines 19 kilometres off the southeast coast of Britain. It would generate 1,000 megawatts of power, enough to supply a quarter of London's homes.

The EU has set a goal of producing 4 per cent of the region's electricity from sea-based installations by 2020.

Shell's decision to sell its stake in London Array shows how difficult it will be to meet those goals. After the announcement on May 1, Skaerbaek, Denmark-based Dong Energy and Dusseldorf-based E.ON, Germany's biggest utility, said they may reduce the size of the project. "Rising costs of materials," including steel and turbines "are the reasons for reassessment of our position," said Shell spokeswoman Eurwen Thomas.

Vestas Wind Systems AS of Randers, Denmark, and General Electric Co. of Fairfield, Conn., the world's biggest turbine makers, are focusing on onshore equipment because it's more profitable and easier to install.

Offshore "is a niche," Vestas chief executive officer Ditlev Engel said. "Looking ahead, it will basically be onshore."

Projects also are being held up by a shortage of construction vessels and the high-voltage cables needed to link wind parks to the electricity grid, according to Ben Warren, director of renewable energy at Ernst & Young LLP.

Sea-based wind farms use rotors that are as much as 100 metres in diameter, perched atop towers rammed into the seabed. Installation requires platforms equipped with cranes and stabilizing legs.

There are only four self-powered turbine-installation vessels in the world, according to Lloyds Register Fairplay, a shipping data provider.

The offshore power industry had counted on getting vessels and workers from the North Sea oil and gas industry as those fields become depleted, Mr. Warren said. Instead, a five-year oil rally has drawn resources to Brazil, West Africa and the Gulf of Mexico, where production is more profitable.

Scottish & Southern Energy PLC, Britain's second-biggest electricity supplier, yesterday said it will invest £1.3-billion (\$2.5-billion) in a 504-megawatt wind park off the English coast that is scheduled for completion in 2011. CEO Ian Marchant said offshore wind will make financial sense as soaring oil, gas and coal drive up electricity prices and European countries offer subsidies to achieve the EU target of getting 20 per cent of its energy from renewable sources by 2020. Utilities will hesitate to build larger offshore projects until supplies of material and equipment have stabilized, said Mr. Warren. "At the end of the day, nobody wants a €4-billion white elephant in the middle of the sea," he said.