

PRESS RELEASE, 17 February 2011

## **World's largest wind farm installation vessel selected for German offshore wind farm DanTysk**

**Vattenfall's German offshore project DanTysk, to be jointly realised with Stadtwerke München/SWM, has reached another milestone. On the 17th of February 2011, the consortium signed a contract with the Danish shipping company Swire Blue Ocean (SBO) on a vessel for the transportation and installation of 80 Siemens wind turbines for DanTysk Offshore Wind Farm. The installation vessel, Pacific Orca, is being built by Samsung Heavy Industries (Samsung) in South Korea to be delivered in 2012.**

**Georg Friedrichs, Head of Offshore Projects Vattenfall, said:** "Since there is limited availability of suitable offshore vessels on the market, we are especially glad to obtain this large vessel to install the eighty turbines for our offshore project DanTysk. When negotiating the contract and carrying out the design review we got to know the Swire Group as an international experienced company with an outstanding offshore expertise and fleet. The newly built vessel Pacific Orca meets our criteria with outstanding safety, efficiency and reliability. Our project team in Hamburg is looking forward to realising the construction of DanTysk together with our new Danish partner Swire Blue Ocean."

SBO won the European wide tender, also based on the strength of its parent company; Swire Pacific Offshore which holds more than 30 years experience in offshore marine operations and operates one of the largest fleets of dynamically positioned vessels in the world. The wind farm installation vessel Pacific Orca has an advanced specification focusing on safety, efficiency and reliability. It offers extended operating weather windows, crane capability of 1,200 t, DP2 station keeping, a transit speed in excess of 13 knots, single cabin accommodation for 111 people, and the ability to operate in water depths of up to 75 metres. Combined with a usable deck area in excess of 4,000 m<sup>2</sup> and a total jackable weight of 8,400 t, the vessel offers operational flexibility in the installation of offshore wind farms. Being in line with strict European environmental standards Pacific Orca will be certified by GL-Group Germanischer Lloyd.

**Lars Blicher, General Manager and Director of Swire Blue Ocean:** "We are delighted to have been selected as the vessel provider for the turbine installations for DanTysk. We look forward to working very closely with Vattenfall and their partner Stadtwerke München on this project which will provide a great opportunity for SBO to showcase the enhanced capabilities and efficiencies of our vessel and the high standards of operational and safety performance of our personnel."

Commencing in 2013, Pacific Orca will load the wind turbines at Esbjerg before being transported to the DanTysk construction site 69 km west of the island Sylt in the German North Sea. In Esbjerg itself, Vattenfall's surveillance centre operates and maintains more than 900 wind turbines. We are currently developing, constructing and own wind farms in six countries, including the neighbouring offshore wind farm Horns Rev I (160 MW) on the Danish border. The DanTysk project is managed by a team based in Hamburg. Vattenfall is building and planning offshore wind farms at the British and Dutch Coast as well. The next offshore wind farm to be commissioned at the end of 2011 is Ormonde, situated in the Irish Sea with the capacity of 150 MW. Electricity Generation from offshore wind farms is part of Vattenfall's climate ambitions and Vattenfall is investing in renewable energy for the long-term reduction of CO<sub>2</sub> emissions.

*Vattenfall discloses the information provided herein pursuant to the Swedish Securities Market Act*

**Key facts DanTysk:**

DanTysk Offshore Wind GmbH	Joint Venture of Vattenfall (51%) and Stadtwerke München SWM (49%)
Total Investment	> 1 Billion €
Capacity	288 MW
Wind Turbine Generator (WTG)	80 Siemens 3,6 MW (120m rotor) <a href="http://www.energy.siemens.com/hq/en/power-generation/renewables/wind-power/wind-turbines/swt-3-6-120.htm#content=Technical%20Specification">http://www.energy.siemens.com/hq/en/power-generation/renewables/wind-power/wind-turbines/swt-3-6-120.htm#content=Technical%20Specification</a>
Installation vessel WTG	Pacific Orca, Swire Blue Ocean (DK) <a href="http://www.swireblueocean.com/Techspec.pdf">http://www.swireblueocean.com/Techspec.pdf</a>
Transformer substation	Jacket/Topside; Strukton/Hollandia (NL) <a href="http://www.strukton.com/en-us/Recent/Archive/Pages/Constructionofoffshoresubstationforwindfarm.aspx">http://www.strukton.com/en-us/Recent/Archive/Pages/Constructionofoffshoresubstationforwindfarm.aspx</a>
Foundations	in progress
Array Cabling	in progress
Grid connection	provided by TenneT TSO, constructed by SIEMENS/ Prysmian Powerlink; converter platform SylWin alpha <a href="http://www.tennet.org/english/projects/news/tennet_orders_its_seventh_grid_connection_for_north_sea_wind_farms.aspx">http://www.tennet.org/english/projects/news/tennet_orders_its_seventh_grid_connection_for_north_sea_wind_farms.aspx</a>
Sea cable	160 km
Geographical data	Exclusive Economy Zone German North Sea, 69km west to the island Sylt
Area	71 km <sup>2</sup>
Water depths	21-31 m
Construction Kick-Off	2012/2013
Commissioning	2013/ 2014

**For pictures of the installation vessel and technical data see:**

<http://www.swireblueocean.com/fleet.html>  
<http://www.swireblueocean.com/Techspec.pdf>

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