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Vattenfall Nordic rolls out ROMO Wind's iSpin technology for permanent installation across its onshore portfolio of large wind turbines

Fredericia, Denmark and Zug, Switzerland

ROMO Wind announced today that Vattenfall has accepted ROMO Wind's offer to roll out the ROMO iSpin Monitor technology across the utility's Nordic large onshore wind turbine portfolio, to date consisting of 69 wind turbines in Denmark and Sweden. The purpose is to permanently monitor and correct wind turbine yaw misalignments, which are known to cause significant production losses as well as wear-inducing loads on the turbine drivetrain and rotor.

The agreement also includes an option to extend the application of iSpin to future wind power plants with the clear objective to optimize production by correcting yaw misalignment of those turbines permanently. Vattenfall previously acquired and installed twenty-two iSpin Monitor systems on smaller onshore wind turbines in order to validate the capabilities of ROMO's iSpin Monitor technology.

Anders Sommer, Senior R&D-engineer, Wind Power at Vattenfall Nordic says:

"Based on our previous concrete experiences with the iSpin technology we expect about 2% more production from our wind turbines by installing iSpin Monitor. One of our test wind farms gained 2.5% more annual energy production after yaw misalignment correction. By eliminating yaw misalignments for the rest of the turbines' lifetime we furthermore expect reduction of loads and as a result also reduction of maintenance costs. Furthermore, in each wind farm we install an advanced iSpin Monitor version also enabling us to establish benchmarks for wind turbine performance in the wind farm".

The CEO of ROMO Wind, Søren Mouritsen, says:

"ROMO is very pleased that a so highly knowledgeable wind farm owner like Vattenfall has decided to improve the performance of their wind turbine portfolio with the unique iSpin technology. Over a period of several years ROMO has together with DTU Wind Energy, Denmark, and Vattenfall and with support from the Danish EUDP programme thoroughly documented that the iSpin technology is capable of significantly improving the performance of wind turbines."

About iSpin Monitor:

The patented iSpin Monitor technology - originally invented by DTU Wind Energy - is a unique, efficient and highly cost-effective technical solution for permanent monitoring of yaw misalignments, other flow inclination angles, and accurately determining the free wind speed

as well as turbulence intensity on a wind turbine. The technology was in 2013 included in the international measurement standard for wind turbine performance measurement (IEC 61400-12-2), and the intention of ROMO is that it will be used to monitor absolute power curves according to this standard in the near future.

About ROMO Wind:

ROMO Wind is a Danish/Swiss product led technology company backed by highly acknowledged investors and shareholders like Yellow & Blue and ABB. ROMO's business is to optimize the production and reduce the loads of wind turbines using the patented iSpin technology.

About Vattenfall:

Vattenfall is one of Europe's largest generators of electricity and the largest producer of heat. The main Vattenfall products are electricity, heat and gas. Vattenfall is a leading owner of about 80 wind farms both on- and off-shore with a combined installed capacity of 4 GW wind power and located in Denmark, Sweden, Germany, Holland and the UK.

For more information please contact:

For ROMO: Søren Mouritsen: sm@romowind.com

t: +41 79 832 1645

<http://romowind.com/wind-farm-owneroperator/ispin-technology/>

For Vattenfall: Anders Sommer: anders.sommer@vattenfall.com,

t: +45 27 87 58 69

www.vattenfall.com