

**Multibrid Entwicklungsgesellschaft mbH**

Barkhausenstr. 60, D-27568 Bremerhaven

## **Press Release of May 27<sup>th</sup> 2005**

### **Offshore Wind Energy Plant Multibrid M5000 Inaugurated**

Bremerhaven, 27<sup>th</sup> May 2005. Happy faces were seen on Ingo de Buhr, CEO of the Multibrid shareholder PROKON Nord, and the round 400 invited guests from business and politics at the inauguration of the prototype of the Multibrid M5000.

In a pavilion at the bottom of the plant the speakers highly valued the innovative technology of the M5000 and the beacon effect that it would have for the development of offshore wind energy in Germany.

In his opening address Mr. de Buhr expressed his gratitude to guest speaker state secretary Baake for the support of the Ministry of Environment and to representatives from Bremerhaven and Bremen for the support of the city of Bremen which was given within the course of the development of the new drive train concept of a 5 MW offshore plant.

The mayor of the city of Bremerhaven, Jörg Schulz, was especially happy about the inauguration, because "it is a visible sign that we are – during the existing structural change of our city – open for innovation, new concepts and new products."

Dr. Rita Kellner-Stoll, department head at the Senator for Construction, Environment and Traffic of the city of Bremen emphasised the prominent economic potential of the offshore technology for Bremerhaven. By the settlement of a turbine manufacturer in Bremerhaven a further objective of the senate's conception has been achieved in establishing on and offshore wind energy businesses in the state of Bremen.

Following the tradition of a ship's naming ceremony – „ after all the M5000 has been conceived for offshore deployment“, as Mr. de Buhr stated, his wife Carolin Weise de Buhr concluded the ceremony by throwing a bottle of champagne against the tower foundation while wishing „always a fresh breeze of wind in her wings“.

After the official part ended the guests had the chance to acquire some information in the pavilion about the M5000 technology and on the challenges that are tied to the installation of a 5MW wind energy turbine.

„The installation of the first M5000 was finished December 2nd 2004 in a record breaking time of only eight days; only three weeks later the plant fed the first power into the grid“, Multibrid's managing director Dipl.-Ing Niels Erdmann explains.

Multibrid plans the installation of three further M5000 in Bremerhaven in 2006 in order to erect the first plants offshore in 2007 on the grounds of the experiences gathered.

In mid April the commissioning of the Multibrid M5000 had been successfully completed with highly satisfactory results following extensive tests under all operating conditions and optimisations. Since then the prototype of the world's first 5MW wind energy converter that is especially optimised for offshore application operates in the fully automated mode.

„The experiences gained during the past months have shown that the plant's performance has exceeded the high expectations towards the innovative concept, especially with respect to output performance, drive train dynamics and structure born sound emission.“ Multibrid's managing director Martin Lehnhoff explains and sees in this „an impressive confirmation of the chosen technology



concept and an excellent basis for further development stages.“ The integrated design, the single stage planetary gearbox as well as the permanent magnet generator lead to an extraordinary low weight for a 5 MW wind energy turbine. This in turn results in advantages in the height of millions for the foundation costs. Further, the low nacelle weight makes it possible to install the nacelle as a single piece, whereby extremely cost consuming offshore working time can be minimised during offshore installation.

Quality requirements following railway technology provide an availability of the M5000 far above average.

Multibrid is an enterprise of the PROKON Nord Group. PROKON Nord is within the ENERTRAG AG one of Germany's leading wind farm developers and operators. Further PROKON Nord develops technology for large scale biomass thermal heating stations and also operates these plants. PROKON Nord views the vast expertise gain that has been accomplished with the acquisition of Multibrid as a necessary precondition for the operation of offshore wind energy plants.

Further information: [www.multibrid.com](http://www.multibrid.com) and [www.prokonnord.de](http://www.prokonnord.de)