

Vanadis Power GmbH · Zeltnerstr. 3 · 90443 Nürnberg

PRESS RELEASE June 2nd 2014

Vanadis Power delivers one of the biggest battery storage systems in Germany

Nuremberg. Vanadis Power GmbH (founded in 2013) has received an order to deliver and install a battery with the capacity of one megawatt hour for the storage of wind power.

Vanadis Power will deliver a Vanadium Redox Flow Battery to Energiespeicher Nord GmbH, which is a Joint-Venture of Robert Bosch GmbH and the citizenowned wind park BWP Braderup-Tinningstedt. The battery has a capacity of one megawatt hour and a peak power of 325 kilowatt and could cover, as an example, the electricity consumption of 100 family houses for one day.

The storage system is planned to be used for several applications for the optimization of the electricity feed-in of the wind park Braderup-Tinningstedt which is located between Sylt and Flensburg in Germany, for example participation at the electricity trading or for the delivery of ancillary services like regulation energy.

The experiences gained with this system will pave the way to the further expansion of energy storage technology in connection with the expansion and integration of renewables. 'It is our goal to increase the base load capability of renewables, to use its excess energy during grid overload and to minimize necessary grid extensions' says the managing director of Vanadis Power Dr. Andreas Luczak.

The system which is planned to be completed in summer 2014 will be one of the largest battery storage systems installed in Germany and is one of the largest systems in the world using the Vanadium Redox Flow technology. This technology, which has been significantly developed in the last years, uses liquid electrolyte which is stored in tanks and which is pumped through a power



Vanadis Power GmbH · Zeltnerstr. 3 · 90443 Nürnberg

module for charge and discharge. Some of the big advantages of this technology is the extremely long lifetime of at least 20 years during which the battery can be charged and discharged any number of times without capacity degradation, the relatively low costs especially for large capacities and the inherent low risk of fire compared to other battery types.

Vanadis Power has strong strategic partnerships with Rongke Power (www.rongkepower.com) to manufacture worldwide leading battery cells and systems, with Bolong New Materials (www.bnm-bolong.com) to produce vanadium electrolyte with superior quality and with UniEnergy Technologies (www.uetechnologies.com) which has designed and engineered and is commercially manufacturing its breakthrough compact vanadium battery.

Your contact:

Dr. Andreas Luczak

Vanadis Power GmbH

Phone: (0911) 8819 7218 Mobile: 01520 888 4097

E-Mail: andreas.luczak@vanadispower.com

Website: www.vanadispower.com