

MARINE RENEWABLE ENERGY



In 2010 Bureau Veritas extended its commitment to marine renewable energy, establishing a special team to work on wind, tide and wave power generation offshore.

BV is a founding member of the HiPRWind consortia of nineteen European companies which are working with EU funding to stimulate market

developing a vertical axis offshore wind turbine.

A key initiative was to develop and publish guidelines for the Classification and Certification of Floating Offshore Wind Turbines. The guidelines specify the environmental conditions under which floating offshore wind turbines may serve the principles of structural

Offshore Wind Turbine Vessel on transit operation.

covers floating platforms supporting single- or multiple-turbines with horizontal or vertical axes.

In addition to classification and certification of offshore wind projects, Bureau Veritas delivered expertise through Tecnicas to provide risk assessment studies for wind farms in the Channel and Mediterranean areas and bid selection, design review, site analysis and meteo-ocean studies for a meteorological mast for the future site of a wind farm in the Channel.

A new notation for wind turbine Installation, Maintenance and Repair vessels will be published in 2011, and BV is working with a number of yards on designs for these specialised vessels.

A demonstrator of the Sabella seabed current generator has been built, with Bureau Veritas providing assessment of the structural integrity of the system. A set of guidelines for tidal current generators is currently under development.

Bureau Veritas is also working with the IEC on new rules for floating wind turbines and is part of the EU MARINA project, which assesses the impact of marine renewable energy projects.



LOUIS QUESNEL
Assistant Co-ordinator, HiPRWind, Fraunhofer IWES

Case Study

"HiPRWind is an EU project which will deliver a fully functional floating wind turbine installation at one tenth scale of future commercial systems, deployed in real sea conditions. What is important is that it will allow the team of European researchers to collect data on the structure, its behaviour and performance in real conditions. We can then share that data in a way which the many commercial developments in this new and fast moving technology area cannot, so we will really provide a knowledge platform for

future development and for reliability and maintenance of new fields now under development. There are nineteen complementary partners in the HiPRWind project, strong industry participants supported by research institutes and universities. Bureau Veritas is a key industrial partner and is helping with the design to ensure that the structure is built and installed on time and safely. They are skilled and open minded, and show real commitment to making things happen."

development in floating wind technology and to improve the cost efficiency of offshore wind energy. It is also a partner in the VertWind project, which is

design, load cases for the platform and mooring system, stability and the structural division and design criteria for the top structure. The Guidance Note