Quo Vadis 2015 Wind Energy Conference

Pre-Event Dinner on
Wednesday, 21st October 2015
Conference on
Thursday, 22nd October 2015

Hotel Porta Fira
Plaza Europa
Barcelona, Spain

9th Quo Vadis® Conference

The FREE wind conference
only for Owners and Operators

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windpower renewable solutions

ZF

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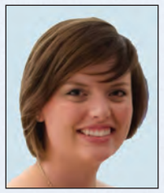
The Speakers

David Morgan, Business Manager, ZF Services UK Limited

David Morgan had worked in the automotive sector for nearly 20 years before joining ZF Services UK Limited in 2003 as a technical sales engineer. He supported the industrial, marine, rail and defence markets until 2008, when David became part of the team created to implement a multi-brand wind turbine gearbox overhaul facility at ZF's Nottingham site.
In his current position of business manager David is responsible for the business strategy and development of the wind market, ensuring ZF meets and exceeds its customers' needs now and in the future.

Keir Harman, Regional Head of Asset Operations and Management (AO&M), DNV GL

Keir Harman is Regional Head of Asset Operations and Management (AO&M) at DNVGL (formerly Garrad Hassan). He has worked in the wind energy industry for 18 years spending the past 12 years founding, developing and running the global operational wind farm services for Garrad Hassan which is now a key business area within DNVGL. Keir has expanded DNVGL's capability to full operational management and control room services. He manages a team responsible for many aspects of renewable operations including asset management, inspections, performance monitoring and energy forecasting. Before joining Garrad Hassan, Keir worked for National Wind Power (now RWE) where he was responsible for the performance evaluation of a large operating wind farm portfolio. Keir holds an MSc in Renewable Energy Systems.



Laura Peach, Wind Turbine Engineer, Centrica Energy Renewables

Laura is supporting the Operations and Maintenance of Lynn and Inner Dowsing, Lincs and Glens of Foudland wind farms. She has worked with Centrica Energy Renewables since 2012 and has played a technical role in wind farm management for Joint Venture clients during operational takeover of wind farms, warranty, and end of warranty periods. She is on track to secure chartered Mechanical Engineer status this year, something she has been working towards since graduating from the University of Sheffield in 2011. She has particular passion for the role engineering and technology has to play in poverty alleviation and has volunteered extensively with Engineers Without Borders since entering the world of engineering; she is also keen to promote engineering as a great career option.

Markus Billmann , Fraunhofer IISB

Markus Billmann worked for more than 8 years at Semikron Elektronik GmbH in the power electronics development department. He was part of the SKIIP-I and SKiiP-II OCP generation IGBT power module design team. Today he provides application support and consultancy in the field of traction and wind power inverters. He joined the Fraunhofer Research Organization in 2000 as a founder member of the Power Electronics Department at the Fraunhofer IISB in Erlangen. Since 2006 he has been involved in M^2C design & topology issues for gigawatt energy transportation as Multi-Level off shore HVDC application.

Paul Sheldon, Technical Engineer, RWE

Paul joined RWE in 2000 and has been involved in renewable energy since 2004. Paul started his career as a Mechanical Engineer in the steel industry and went on to design, install, refurbish and commission gearboxes. He graduated from Sheffield Hallam University with a MBA after successfully completing an HND in Mechanical Engineering and a Postgraduate Diploma in Sales & Marketing.
His responsibilities in renewables include all drive train inspections of the UK fleet both on and off shore. His most recent areas of work have involved identifying a wide variety of drive train failure modes, design reviews and new builds.

Richard Smith, Head of Fleet Engineering Services, Romax Technology Limited

Richard co-ordinates the test team at Romax and has 20 years of experience in rotating machinery, including many years testing jet engines for Rolls Royce. He has designed several types of wind turbine gearbox test rigs and his team supports clients with the commissioning and running of function tests required for validation and certification purposes.
He is involved in onsite support for prototype testing of large wind turbine gearboxes, site witness visits by GL and other certification bodies, for certification and turbine inspection for type approval. Richard has assembled and disassembled dozens of wind turbine gearboxes and has worked both onshore and offshore on models such as Siemens 2.3, Siemens 3.6, Vestas V82, Vestas V80, GE 1.5, Vestas V90, Vestas V29 as well as a range of Korean and Chinese makes.

Steven Lindsay, Business Development Director, Renewable Advice

Steven worked for a number of years with ScottishPower Renewables within onshore development and thereafter for an independent developer. During this time Steven worked on many projects ranging between 10 to 300+ megawatts, before joining Renewable Advice as Business Development Director. With a background in Skills and Education, Steven is particularly passionate about the role Renewable Energy can play in the provision of jobs for both the communities they surround and the countries in which they are based. His current duties include raising awareness of the importance of proper blade maintenance and repair procedures to on and offshore operators and ensuring Renewable Advice continues to grow and provide world leading blade support, blade manufacturing and technical consultancy to the sector.

Tim Morgan, Plant Manager, Robin Rigg Offshore Wind Farm, E.ON Climate & Renewables

Tim started working as a wind farm site manager for E.ON in 2004. He converted two sites to third party maintenance and improved the performance of a third. In 2009, Tim moved to the German headquarters of the E.ON renewables business, where he worked as Head of Asset Strategy. He was responsible for various global wind fleet projects and coordinating O&M strategy across around 4GW of on- and offshore wind farms in 10 countries, in Europe and the US. From June 2013 to present, Tim returned to the UK and has been the Plant Manager for Robin Rigg Offshore Wind Farm, in the Solway Firth. He has been leading the O&M team in the end-of-warranty effort, and converted the team into an E.ON in-house maintenance team, following the E.ON "self-perform" O&M strategy.

Agenda

09.00h Welcome and Preliminaries

Kevin Donovan, GWA Supplies Limited
(Host and Organiser)

Clifford McSpadden, GWA Supplies Limited
(Moderator)

09.25h Reducing the kWh cost of wind energy

David Morgan, ZF Services UK Limited

How can gearbox manufacturers work with the end-users to achieve this goal? With a consultative and open approach to the operator, ZF looks to share its experience and practical knowledge to minimize down-time and plan the optimal time to carry out maintenance. This presentation will explain how new gearbox designs are supporting up-tower serviceability, and show new design features that allow for easier maintenance without having to remove the gearbox from the nacelle.

09.50h How can wind projects increase income and help balance our grid systems?

Keir Harman, DNV GL
With the rapid increase of renewable energy penetrating our grid systems there is a strong demand for all projects to operate more like conventional generating plants, in a more visible, predictable and controllable way. This presentation will focus on the need and opportunities on the UK grid system for wind farm owners to offer balancing and other ancillary services. Such services need to be underpinned with accurate forecasting and reliable communications with the system operator.

10.15h Break for Coffee, Exhibition, Networking

11.00h Post-warranty operations – An engineer's view

Laura Peach, Centrica Energy Renewables

As more wind farms are coming to the end of the OEMs' warranty periods, owner/operators are looking for ways to minimise costs but maintain efficiency, availability and reliability of assets. Increasing the level of competition in the maintenance services market is one of the ways this can be achieved but there are several technical aspects that need to be considered in parallel, both ahead of and after the warrantied periods. Topics will include: end of warranty negotiations, holistic wind farm management, appropriate tender scopes, maintaining good safety performance, and managing major component failures.

11.25h Reducing maintenance time in IGBT inverters on site – An engineer's vision

Markus Billmann, Fraunhofer IISB

Cutting down IGBT inverter maintenance time on site could be achieved by the introduction of explosion proof housings for the main inverter section. The technique is mature and used in M^2C based HVDC Energy transmission. Slightly higher initial inverter cost can significantly reduce service time on site and create a financial benefit over lifetime. Today most suppliers do not provide such options, because this later trade-off is far away from their focus. Are the operators aware of such options? A vision of a cabinet that has not to be excessively cleaned after an inverter damage is explained.

11.50h Quo Vadis Hall Of Fame

Update on old and new members

12.00h Lunch Break

13.30h Yaw drives - Concentric or eccentric - What impact does this have?

Paul Sheldon, RWE

This presentation will explain the differences between concentricity and eccentricity and the impact they can have on the condition of turbines over a period of time. It will consider if there are mechanisms to deal with any inaccuracies found, due to any out-of-roundness within the yaw ring gear, and the impact it can have on the long-term condition of the turbine.

13.55h Data-driven inspections as part of a predictive maintenance strategy

Richard Smith, Romax

The wind industry has come to recognise that turbine inspections require highly skilled engineers to inspect and thoroughly understand all aspects of a drivetrain's possible issues. But what if inspection engineers already knew exactly what to look out for, before they even set foot on a ladder? Romax will be revealing its pioneering, unique and proven 'data-driven' inspection approach, which is founded upon the company's vast experience and expertise in wind farm analysis and monitoring. Using this technique, 'punch lists' are created to guide the detailed inspections – perfect for end of warranty campaigns and more time and cost effective maintenance strategies.

14.20h Break for Coffee, Exhibition, Networking

15.00h Long and oft forgot. How blade service providers and wind farm owners can work together to maximise AEP

Steven Lindsay, Renewable Advice

Turbine blades are an oft forgotten but crucial component to maximising AEP. With Renewable Energy drivers changing on a global basis there is an increasing focus on maximising energy production from existing sites. Learn how better interaction with your blade service provider can reduce turbine constraint times, reduce your O&M costs and create more energy from your existing assets.

15.25h An ordinary year in the life of an offshore wind farm

Tim Morgan, E.ON Climate & Renewables

Robin Rigg was E.ON's first large offshore wind farm when it became operational in April 2010. At the end of 2014, E.ON implemented a major change in the way the O&M was run, by allowing the supplier service agreement to expire and taking in-house all responsibility for turbine maintenance at the wind farm. This short talk will tell the story of this year in the life of the wind farm, from before until after this significant event. Expect to hear whether this strategy change has delivered the expected benefits and hear of the typical sort of challenges faced at this or at any other times.

15.50h Summary

Kevin Donovan, GWA Supplies Limited

16.00h Official closing of Quo Vadis

A Hearty Welcome to Barcelona from Your Hosts

Kevin & Sigrid Donovan

Kevin got involved in the wind industry some 10 years ago and co-founded GWA Supplies Limited to serve the growing wind energy market in the UK, Europe and overseas with offices in Germany and the UK. His wife Sigi has been involved in Marketing for 3 decades.

Kevin and Sigi held the first Quo Vadis Conference in 2007. The conference is now in its ninth year and is recognised by wind farm owners and operators as one of the most important and valuable events in the wind industry.

The history of Quo Vadis Conference

This year's event is co-hosted by ZF Services UK Limited.

It would not be possible for us to offer our Quo Vadis Conference free of charge without the support of our Platinum Sponsors DNV GL, Renewable Advice, and Romax Technology who contribute towards the costs.

In addition, the following companies have booked exhibition space and will show their portfolio: GasTOPS, Hove, Hydratech Industries, Morgan Advanced Materials, Romo Wind AG, Winergy.