



# Quo Vadis 2017 Wind Energy Conference

Pre-Event Dinner on  
Wednesday, 27<sup>th</sup> September 2017  
Conference on  
Thursday, 28<sup>th</sup> September 2017

Copthorne Tara Hotel  
Scarsdale Place, Kensington  
London W8 5SR, United Kingdom

11<sup>th</sup> Quo Vadis<sup>®</sup>  
Conference

The FREE wind conference  
only for Owners and Operators

 **GWA**  
Supplies

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# The Speakers



## Paul Sheldon, Technical Engineer; RWE

Paul joined RWE in 2000 and has been involved in renewable energy since 2004. Starting his career as a Mechanical Engineer in the steel industry, he 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 post-graduate Diploma in Sales & Marketing. Paul has responsibility for all technical issues of the major spare components during refurbishment and any up tower problems with the drive train for the UK onshore fleet. His most recent areas of work have involved identifying issues during walk-down inspections on new builds prior to acceptance from the OEMs. Since our last conference in Prague he has become the proud grandfather of a precious little girl.



## Sven Uellendahl, Contract and Sales Manager Offshore; E.ON

Sven is responsible for the third party offshore services at E.ON Climate and Renewables. Before joining E.ON he was working for Siemens MD Wind for almost 8 years. During that time he has developed significant expertise in developing service concepts and building up service business in different countries across Europe. He was in charge of negotiations of service contracts with different players in the wind sector.



## John Gates, Wind Farm Operations Manager; Jacobs Wind O&M

John is responsible for the safe management, operation and maintenance of a large portfolio of UK wind farms totalling 130MW, liaising closely with clients, service providers and other stakeholders. He is accountable for pricing and tendering, and for monitoring the financial performance of ongoing projects. He has experience in off-shore operations, wind farm development and construction, turbine installation, commissioning and handover phases, and has managed the decommissioning of several wind farms in connection with re-powering projects. Before this he had worked in the oil & gas industry, particularly on the structural construction phase of offshore modules. He grew up in North West Kent, so used to sound a lot like Kevin, but headed up North to Newcastle in 1986 and has lived there ever since.



## Diego Kieffer, Turbine Maintenance Manager; RES

Diego has worked for Renewable Energy Systems (RES) since 2016 and in his current role is responsible for Turbine Maintenance on the Onshore UK&I fleet. This role focuses on the cost reduction of major component maintenance, managing end of warranty inspections as well as a blade maintenance strategy, and monitoring contractor compliance. Prior to RES Diego worked for Romax Technology for 7 years carrying out gearbox design, testing, inspections and failure investigations for onshore/offshore wind turbines.



## John Skiller, Business Development Manager, Energy Industries; SKF

John Skiller has conducted research and development of rolling bearings with SKF since 1984. He is a member of the Institution of Engineering & Technology. John's experience includes management of the life testing laboratory - supporting research into bearing function, materials, simulation and tribology - and the expansion of railway testing facilities at the SKF Engineering & Research Centre in the Netherlands. Since 2009 he has been with the SKF Energy unit. His role connects with developers and institutes in the field of renewable energy, as well as collaboration on development of customized and industry-specific offers through to market introduction.



## Stuart Naylor, UK Operations Manager; Fred. Olsen Renewables

Following a 22-year career in military aircraft operations and maintenance engineering with the Royal Air Force, Stuart's background in electrical and Aero systems engineering led him to the renewable industry in 2005 when the UK's largest wind farm was being constructed a few miles from his house. Working initially as the Site Technical Manager for Natural Power and then as the Technical Manager across the portfolio for Fred. Olsen Renewables he moved to an operational management role with Fred. Olsen Renewables in 2013 becoming responsible for UK operations at the end of 2016. By the end of 2017 the UK portfolio will comprise 258 wind turbines with an installed capacity of 529 MW across 9 operational sites.



## Benn Faulkner, Director; Renewable Advice

Benn Faulkner, a mechanical engineer, has worked in the wind industry since 2002. All this time has been spent dealing with blades, from wood/wood-carbon blades of NEG Micon, and Polyester blades from LM, to epoxy blades from Vestas, Senvion and GE, to name but a few. Benn's career prior to founding Renewable Advice focused on blade O&M for NEG Micon and Vestas as well as blade production development for Repower (Senvion). The knowledge gained through this time has been utilised effectively to support manufacturers to identify production quality, process, and health and safety issues and also to develop a team of blade maintenance personnel to look after blades throughout Europe and the USA.



## Keir Harman, Director and Regional Head of Asset Operations and Management, DNV GL

Keir Harman is Director and Regional Head of Asset Operations and Management at DNV GL (formally Garrad Hassan). He has worked in the wind energy industry for 20 years spending the past 15 years founding, developing and running the global operational wind farm services for Garrad Hassan. This is now a key business area within DNV GL. Keir has expanded DNV GL'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 Innogy (RWE). A Chartered Engineer, Keir holds an MSc in Renewable Energy Systems from the University of Loughborough, UK.

# Agenda

## 09.00h Welcome and preliminaries

Sigrid Donovan  
(Host and Organiser)

## 09.25h Are we lubricating low speed main bearings correctly?

Paul Sheldon, RWE  
The presentation will explain how RWE reduced main bearing failures in the KW turbines. Paul will also share his thoughts on how to deal with the MW turbines.

## 09.50h Service with an owner's eye

Sven Uellendahl, E.ON  
E.ON has built up own teams of technicians and engineers to fully self-perform the operations and maintenance of wind assets. This presentation will give a brief overview how performance analysis reduce future failures and optimize energy production. Furthermore it gives some insides how E.ON saves on costs with the owner's eye perspective.

## 10.15h Break for coffee, exhibition, networking

## 11.00h The life & times of the Independent Service Provider

John Gates, Jacobs  
The presentation will take a look at how the wind energy market has changed over the last decade and give a view of the challenges faced by wind farm O&M ISPs.

## 11.25h Driving cost reduction in major component repairs

Diego Kieffer, RES  
This presentation will give an insight into the challenges in delivering cost reduction opportunities within major component repairs. The industry requires faster and cheaper repairs to deliver an alternative to OEM service provision. It shall present examples illustrating the use of failure rate modelling, the establishment of strategic spare pools and key supply chain relationships, and the focus on Performance Ratio not Availability to drive proactive planning and avoid costly downtime.

## 11.50h GWA Supplies update

Clifford McSpadden

## 12.00h Lunch break

## 13.30h Optimised spherical roller bearing for wind turbine rotors

John Skiller, SKF  
Spherical roller bearings were introduced by SKF in 1919, meanwhile enjoying many improvements. Maximization is not necessarily optimization, however; wind turbine main shaft conditions contrast with generic industrial applications and justify a dedicated bearing design. SKF has therefore applied well-established design methods, enhanced with modern calculation tools in a design optimization process. The result was the first SKF spherical roller bearing designed explicitly for wind turbine main shafts.

The presentation will explain how features of the new bearing contribute to its robust performance, and as part of an overall package for reliable rotor support.

## 13.55h Turbine maintenance transition

Stuart Naylor, Fred. Olsen Renewables  
Developing, owning and operating renewable energy projects throughout the lifecycle to decommissioning is a key goal of Fred. Olsen Renewables. Having extensively utilised the manufacturers' warranty period and extended service agreements with turbine OEMs, this presentation will describe the journey Fred. Olsen Renewables has taken to conducting service and maintenance using Natural Power's in house team and how they have transitioned from reliance on the manufacturer to a successful partnership with Natural Power, bringing about a significant improvement in performance and efficiency.

## 14.20h Break for coffee, exhibition, networking

## 15.00h Smart data, smart blades: Is it possible to know what is happening to your blades?

Benn Faulkner, Renewable Advice  
Is it possible to predict blade failure or serial defects? More importantly, can defects be identified when they occur and become too large to be repaired in the air? Can blade life be extended though active control systems? What solutions are available? These are questions being asked industry-wide, globally. In this presentation, Renewable Advice seeks to provide some of the answers to these questions and raise awareness of how data collection, monitoring and predictive analysis can reduce blade-related down-time and, more importantly, keep blade fatigue-life maximised.

## 15.25h Real-time performance management from the control room

Keir Harman, DNV GL  
Implementing real-time prognostic techniques in the wind farm control room can help meet the demand for high levels of performance from the asset. Using higher frequency SCADA data, enabled by increased computing power, allows a deeper understanding of turbine performance in the field. Early fault detection and fast remedial action is essential for near real-time management of performance. This presentation will focus on the resources and infrastructure needed for the implementation of emerging techniques such as the wind farm digital twin and lifetime consumption estimation.

## 15.50h Summary

Kevin Donovan

## 16.00h Official closing of Quo Vadis 2017

## A hearty welcome to London from your hosts



### Kevin & Sigrid Donovan

Kevin and Sigi got involved in the wind industry some 15 years ago, and Kevin 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. She had the idea of a wind conference held exclusively for owners and operators. Thus Kevin and Sigi held the first Quo Vadis Conference in 2007. It was named after Kevin's presentation "Quo Vadis, Wind Energy?" (Latin for "Where are you going, Wind Energy?")

The conference is now in its eleventh 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



## A big Thank You to our sponsors

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 SKF who contribute towards the costs.



In addition, the following companies have booked exhibition space and will show their portfolio: GasTOPS, Hove, Ingeteam, Schunk UK, Winergy, and ZF Services UK.

