
Program Chairperson: Marty Crotty, Board Member, Catch the Wind, Inc. and Co-Chair AWEA O&M Working Group

TUESDAY, JANUARY 10

11:30 pm – 1:00 pm

Combined Networking Lunch

Location: *Sapphire Terrace*

Attendees from the Wind Environmental Health & Safety Seminar will be wrapping up their program to join the Project Operations, Maintenance & Reliability attendees in kicking off their program during this special combined networking lunch.

1:00 pm – 2:45 pm

Welcome & Introduction

Efficient, cost-effective operations start with the environmental, health and safety programs for workers. Attendees from the Wind Environmental Health & Safety Seminar will join attendees of this seminar to hear from OSHA on the impact of occupational safety and health programs, regulations, and best practices within the wind industry. The session will give attendees an opportunity to ask OSHA questions and learn from each other. The increased demand for O&M services due to new wind installations in 2011 and the need for long term policies will be summarized by AWEA. In addition to key industry issues and trends, this session will also provide an update on the O&M Recommended Practices and other programs in the AWEA Operations and Maintenance Working Group.

Marty Crotty, Board Member, Catch the Wind, Inc.
Program Chairperson Overview

Richard Fairfax, Deputy Assistant Secretary, Occupational Safety and Health Administration (OSHA)

Tom Vinson, Senior Director of Federal Regulatory Affairs, American Wind Energy Association (AWEA)
Wind Energy 2011 in Review

Michelle Graf, Product Manager, Industrial Additives, The Lubrizol Corporation / Co-Chair AWEA O&M Working Group
O&M Working Group Progress

2:45 pm – 3:15 pm

Networking Break & Exhibits

Location: Sapphire DH and Foyer

3:15 pm - 4:15 pm

End of Warranty: Getting it Right

Wind project owners typically become responsible for operating and maintaining their turbines at the conclusion of the warranty provided by the turbine manufacturer. The project owner is then challenged to determine the current state of the turbine's components, develop or contract for new O&M capabilities and establish a supply chain for replacement fluids and components.

Session Chair: Steve Scott, President & CEO, Outland Energy Services

David Barnes, COO & Vice President Operations, Infigen Energy

Russell Leach, Director of Quality and Performance Engineering, UpWind Solutions, Inc.

Jon Salmon, Technical Advisor, enXco

4:15 pm -5:15 pm

International Availability and National Reliability Indices

Measuring and tracking wind farm, turbine and component performance are crucial to the financial and technical success of a wind project. New multi-national consensus specifications now provide a consistent metric that can be used by wind farm owners and the financial services industry to track availability of a wind farm. The wind industry is also developing a national benchmark against which individual project owners may gauge their performance.

Session Chair: Salvatore A. DellaVilla, Jr., CEO, Strategic Power Systems, Inc.

Valerie Peters, Wind Reliability Analyst, Sandia National Laboratories
Wind Turbine Reliability Benchmark – First Public Presentation

Bob Sherwin, Managing Director, EAPC Wind Energy
Wind Turbine Availability – Technical Specifications being Developed by the IEC

Steven Ignelzi, Executive Director, Energy Investments Asset Management, JPMorgan Capital Corporation
Wind Performance and Reliability Reporting – Key Indicators of Market Value

5:15 pm – 6:15 pm

Networking Reception

Location: *Sapphire West Foyer*



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WEDNESDAY, JANUARY 11

7:00 am

Registration Opens

Location: Sapphire West Foyer

7:00 am - 8:00 am

Continental Breakfast

8:30 am – 9:30 am

Condition Monitoring and Data Analysis

Wind turbine components operate in a harsh environment and under varying operating requirements. Component service and replacement schedules may be made more efficient by tracking the operation of individual components. Project owners will be challenged to process the vast amount of data that will be accumulated from each of the sensors on many turbine components, and to interpret trends and replacement schedules for the individual components.

Session Chair: David Zeglinski, Enterprise Program Manager, OSIssoft LLC

Dietmar Tilch, Managing Director, Bosch Rexroth Monitoring Systems GmbH

Condition Monitoring of Rotor Blades: Damages, Ice, Overload

Jeremy Sheldon, Lead Engineer, Impact Technologies, LLC

Best Practices and Considerations for Condition Monitoring of Wind Turbine Gearboxes

Francis Pelletier, Consultant, ETS

Modeling through High Frequency Data and new Avenues for Condition Monitoring

9:30 am -10:30 am

Balance of Plant Best Practices

Wind turbines typically receive the bulk of attention in a wind project, but project performance may be greatly influenced by the reliability of the rest of the project – the electric power supply and collection system, substations, electronic communication system, road and access infrastructure, etc. Not only do the “balance of plant” systems need to be installed properly, they need regular monitoring and maintenance.

Session Chair: Mary Chiles, Asset Startup, Commissioning & Turnover Specialist, BP Wind Energy NA Inc.

Paul Idziak, Director of Renewable Energy Services, Shermco Industries

Developing a “Collector System” Reliability and Safety Based Maintenance Plan

Benjamin Lanz, Manager of Applications Engineering, IMCORP - Power Cable Reliability Consulting & Diagnostics

Assuring Reliability of Wind Farm Cable Systems

10:30 am – 11:00 am

Networking Break & Exhibits

Location: Sapphire DH and Foyer

11:00 am – 12:00 pm

Generator Best Practices

Generators perform the crucial function of converting mechanical (rotational) energy into electricity. Wind turbine generators have the added challenge of performing that function under widely varying local weather conditions and in extremely harsh environments. Maintaining peak generator efficiency includes both electrical and mechanical maintenance procedures.

Session Chair: Kevin Alewine, Wind Services, Shermco Industries

Jari Wickström, Global Product Market Manager, ABB, Wind Power Generator Service
Issues Affecting Premature Wind Power Generator Ageing

Roland Roberge, Manager of Design and Application Engineering, MorganAM&T
Carbon Brush Performance on Slip Ring

Chris Petrola, Operations –Electrical Engineer, Acciona Energy North America
An Owner / Operator Generator Maintenance in a Wind Turbine Application

12:00 pm – 1:30 pm

Networking Lunch

Location: *Sapphire Terrace*

1:30 pm – 2:30 pm

Gearbox Best Practices

Of all the components of a wind turbine, the gearbox is typically faced with the most severe challenges. Not only must it increase the rotational speed of the turbine rotor from a few revolutions per minute to generator speed, it must do so with vastly varying stresses caused by wind speed variations, differential rotor loading and changing directions of the turbine nacelle (yaw). Gearboxes need to be adequately lubricated and aligned to maintain peak efficiency and long life.

Session Chair: Brent Reardon, Principal Turbine Engineer, GL Garrad Hassan

Jerry Magnuson, VP – Sales and Marketing, The Gear Works,
Best Practices for Wind Turbine Gearbox Repair

Matthew Malkin, Senior Engineer, DNV Renewables
Misalignment as a Potential Source of High Speed Bearing Failure

Dan Gerke, Technical Manager – Remanufacturing & Components Division, Caterpillar, Inc.
Advanced Metallurgical Deposition for the Repair of Drive Train Damage – Main Shaft Repair Case Study

2:30 pm – 3:30 pm

Best Practices for Blades/Rotor/Hub

Wind turbine rotors (blades and hubs) are constantly becoming more sophisticated and complex. Turbine blades are designed to convert higher portions of the energy in the wind to rotational mechanical motion. The pitch of a blade may be adjusted independently of the other blades in the rotor. The rotor may be operated under variable speed. Each of the systems (blade surfaces, control systems, pitch mechanisms) require effective monitoring and maintenance procedures.

Session Chair: Gary Kanaby, Director of Sales for Wind Energy, Molded Fiber Glass Companies

Chris Wraith, Engineer, Complete Wind Corporation
Benefit of a Rotor Blade Inspection and Maintenance Program

Steffen Bunge, President/ Lead Engineer, Dynamic Wind Technologies North America
Wind Turbine Rotor Imbalance a Matter of Overlooked Quality Control

Chad Charles, President& Founder, INWind LLC
Aerodynamic Imbalance and Correction

3:30 pm – 4:00 pm

Networking Break & Exhibits

Location: Sapphire DH and Foyer

4:00 pm - 4:25 pm

Operations and Maintenance Trends in 2011: A Year in Review

A review of the trends in operation and maintenance from more than 100 wind farms operating in the United States and Canada over the 2011 calendar year will be discussed, including end of warranty, condition monitoring and data analysis, balance of plant, project curtailment, environmental compliance and major component failure rates. This presentation will cover how the costs associated with each measure have changed over the past year and provide a market perspective of why these costs are changing. Finally, the presentation will close with a discussion on expectations for increased or decreased investment in balance of plant, end of warranty, condition monitoring and resolving component failures in 2012.

Speaker:

Cathy Syme, Senior Project Manager, GL Garrad Hassan

4:25 pm – 5:30 pm

Owner Operator Panel: Trends Leading to Optimal Performance

Project owners are faced with the daunting task of blending together the myriad challenges, opportunities and solutions when optimizing the performance of their wind assets. What better source of information on current initiatives or trends to cost effectively deliver clean energy throughout the project life than from the operators themselves.

Session Chair: Marty Crotty, Board Member, Catch the Wind, Inc.

Krys M. Rootham, Managing Director Wind Generation, Edison Mission Energy

Dick Williams, President, Shell Wind Energy

Eddie Kolitz, EDPR

More panelists TBA
