

Monday, May 12

Welcoming Remarks, Overview

Welcome & Introductions, Tom Ashwill and Daniel Laird, Sandia National Laboratories (Oral presentation)

Wind Energy Industry Overview, Daniel Laird, Sandia National Laboratories

Blades: Trends and Research Update, Tom Ashwill, Sandia National Laboratories

Manufacturers & Fabrication

Turbine Blades from Ground Level, Gary Kanaby, Knight & Carver

Commercial Blade Developments at TPI Composites, Stephen Nolet, TPI

DeWind Blade Experiences, Stefan Sanner, DeWind

Probabilistic Design with Focus on Blades, Dick Veldkamp, Vestas R&D Global Research

Blade Manufacturing at Siemens Wind Power A/S, Christian Brixen Christensen, Siemens Wind Power A/S (NOT currently available)

Small Wind

Overview of Small Wind Turbines, Trudy Forsyth, National Renewable Energy Laboratory

Small Wind Turbine Blade Manufacturing Process Developments 2008, Michelle Corning, Novakinetics

High-efficiency Engineered Blades for Small Turbines, Kyle Wetzel, Wetzel Engineering

Materials and Processes for Volume Manufacturing of Small Wind Turbine Blades, David Calley, Southwest Windpower

Blade Testing

Prototype Laboratory and Field Testing, Josh Paquette, Sandia National Laboratories

Wind Turbine Blade Testing at NREL, Scott Hughes, National Renewable Energy Laboratory

Commercial Blade Testing-Overview of the NREL Large Blade Test Facility Partnerships, Jason Cotrell, National Renewable Energy Laboratory

The Massachusetts-NREL Wind Technology Testing Center-Developments and Opportunities, Ian Springsteel, MTC

Tuesday, May 13

Active Controls & Aerodynamics

Review of IEA Smart Structures Meeting & SNL Active Aerodynamic Flow Control Efforts, Dale Berg, Sandia National Laboratories

Deformable Trailing Edge Geometries and Cyclic Pitch Controller, Thomas Buhl, Risø

Investigation of Stability Issues for an Adaptive Trailing Edge System, Mac Gaunaa, Risø

Smart Rotors for Wind Turbine Blades, Julie Teuwen, Delft

Research on Thick Blunt Trailing Edge Wind Turbine Airfoils, Case van Dam, UC Davis

Aerodynamic Winglet Optimization, Soren Hjort, Siemens Wind Power A/S

Materials and Codes

Recent Fatigue Test Results for Blade Materials, John Mandell, Montana State University

Subcomponent and Materials Test Methods and Results, Rogier Nijssen, WMC

Durable Composite Materials for Wind Turbine Blades, Mala Nagarajan, Owens Corning

Influence of Fiber Glass Sizings and Resin Selection on Laminate Performance, Jim Watson, PPG Fiberglass R&D

Blade Design with Engineered Cores Materials, Fred Stoll, Webcore Technologies

FOCUS5, an Integrated Wind Turbine Design Tool, Niels Duineveld, WMC

NREL Structural and Aeroelastic Codes, Jason Jonkman, National Renewable Energy Laboratory

Vacuum Infused Thermoplastic Composites for Wind Turbine Blades, Julie Teuwen, Delft

Integrated Rotor Design, Lars Fuglsang, LM Glasfiber A/S

NuMAD, Blade Structural Analysis, Daniel Laird, Sandia National Laboratories

Wednesday, May 14

Sensor Technologies & Applications

Low Cost Inspection for Improved Blade Reliability, Doug Cairns, Montana State University

Sensor Projects at Sandia National Laboratories, Mark Rumsey, Sandia National Laboratories

Fiber Optic Sensing, Jason Kiddy, Aither Engineering

Estimation of Operational Loading and Deflection with Inertial Measurements, Jon White, Purdue

Advanced Optical Measurement Technologies for NDE, Matt Crompton, Dantec Dynamics

Fibre Optic Sensing Technology and Applications in Wind Energy, Phil Rhead, Insensys Limited

Blade Reliability

Blade Reliability Initiative, Paul Veers, Sandia National Laboratories

Initial National Reliability Database (NRD) Results, Roger Hill, Sandia National Laboratories