

Maine Wind Industry Seminar Series 2010

Leveraging Maine's Composite Industry in Wind Power



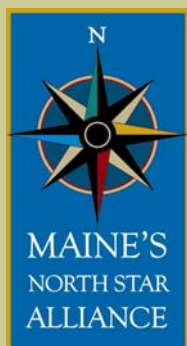
January 12-14

Tue —Thur

**Clarion Hotel Airport
Portland, Maine**

1230 Congress St.
South Portland, ME 04102
207-744-5611

Register at:
www.aewc.umaine.edu



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Wind Seminar Series is **free** and open to all **Maine companies** interested in wind energy and opportunities for composites in wind power markets.

Day 1 Market Overview and Future Opportunity

Overview of Offshore, Large, Commercial and Personal Turbine Markets: **players, growth, requirements, issues**

Wind Power Project Development: **Who makes the decisions?**

Certification and Regulations

Monies for Component R&D: **private and government funding**

Developments in Offshore Wind

Composites Beyond Blades: **nacelle housings, towers, etc.**

How Blades and Turbine Components are Selected by OEMs

Panel Discussion: **How do you enter this market?**

Day 2 Design and Manufacturing

Blade Mfg. Requirements and Future Directions: **Materials & processes overview; cycle times and other turbine OEM demands; issues that the industry must solve.**

Blade Design Standards & New Developments

Design for Reliability and Longer Service Life

Automation in Blade Manufacturing

Reducing Blade Cycle Time with Kitting and Infusion

Faster Blade Manufacturing via Resins and Reinforcements
Latest developments in resins: **epoxy vs. vinyl ester and poly-ester.** The future of carbon fiber and low-labor fiber forms.

Day 3 Installation, Maintenance and Repair

Blade Repair Technology and Requirements

Turbine Manufacturing and Repair

Towers, Nacelles and Outfitting

Installation: **Opportunities and Issues**

Opportunities in Maintenance & Repair