Benefits

For our customer, benefits include:

• No wind turbine installation costs
• No maintenance effort or cost
• No end of lifetime disposal costs
• Dedicated Project Coordinator

Simple, boilerplate agreements:

• NDAs
• Demonstration agreements
• Service agreements
• Research agreements

For Industry Partners and Researchers that are interested in demonstrating products on the wind turbines please contact our Faculty Director, for more information.

Contact Us

Prof. David Matthiesen, Ph.D.
Faculty Director

Wind Energy Research and Commercialization Center
Great Lakes Energy Institute
Case Western Reserve University
10900 Euclid Avenue
Cleveland, OH 44106

Phone: 216.368.1366
david.matthiesen@case.edu

Wind Turbines as Research Instruments

Vestas V27 225kW WT located at Sopko site
NorthWind 100kW WT located on the CWRU campus
The WERC Center

The WERC Center is a recognized Center of Excellence that combines the critical expertise of Case Western Reserve faculty with the opportunity to test and demonstrate new technologies in ‘right sized’ wind turbines, be it community scale, intermediate scale, or utility scale. It is our belief that ‘wind turbines as research instruments’ will provide for-profit and not-for-profit organizations alike with a platform for the development of wind power supply chain products.

The Need

With 46,919 MW of wind power capacity installed as of the end of 20111 and over 8,300 MW currently under construction in the U.S., companies large and small see opportunities for expanding into the wind energy market. In order to develop new innovations that can be approved for use in turbines, industry needs to test and demonstrate products on working turbines. By providing the necessary facilities for collaboration, The Wind Energy Research and Commercialization (WERC) Center at Case Western Reserve University can help facilitate industry growth in the wind energy product market.

†(www.awea.org/learnabout/industry_stats)

Facilities

The WERC Center facilities include:

A. Natural Power ZephIR
   • LiDAR wind measurement system

B. NPS NorthWind 100
   • 100kW direct drive
   • 37m tower
   • 21m rotor
   • stall controlled

C. Vestas V-27
   • 225kW gearbox drive
   • 30m tower
   • 27m rotor
   • pitch controlled

D. Nordex N-54
   • 1.0MW gearbox drive
   • 70m tower
   • 54m rotor
   • stall controlled

The CWRU campus is located in University Circle in Cleveland, OH and the Sopko site is located 1.5 miles from Lake Erie in Euclid, OH