

In 2006 the Heartland Community College Board of Trustees adopted the vision of a wind turbine as part of the Campus Master Plan. This vision was consistent with the College's strategic commitment to environmental and fiscal stewardship and would provide a "classroom" for students preparing for the new economy. This piece describes the six years of planning, design and construction of the now operational 1.65 MW Turbine on the College's Normal campus.

December 2006
HCC identified wind turbine project on campus master plan.

October 2009 - April 2011
Grant funds secured:
• \$950,000 from the U.S. Department of Energy through the American Recovery and Reinvestment Act of 2009
• \$500,00 from the Illinois Clean Energy Community Foundation
Siemens Building Technologies, Inc. selected as performance contract partner.

April 2011
HCC Board of Trustees approved wind turbine project in principle and the \$130,000 Notice to Proceed with Siemens.

September 2011
Owner match financing secured with \$3.3 million debt certificates.

September 2011 - October 2011
Initial location required the wind turbine generator to shut down at 36 degrees F due to ice throw issues. An alternative wind turbine location was identified to address these issues.

December 2011 - January 2012
HCC Board of Trustees and Vestas approve moving turbine west of initial site.

January 2012
Wind turbine effect on cell tower assessed.

February 20, 2012
Groundbreaking and road construction.

March 31-April 2, 2012
Turbine components arrived on a convoy of 9-semi trucks.

April 11-12, 2012
Nacelle is lifted into place and the blades are attached.

May 2012
Transformer arrived, but a configuration issue was discovered and a rebuilt transformer was ordered. The switchgear was installed and the wiring system was connected to Heartland's electric grid.

2006

2008

2009

2010

2011

2012

February 2008 - October 2009
Possible turbine location identified and one-year wind data feasibility study conducted.

August 2011
Initial project site identified.
Geotechnical testing and topographical survey completed on initial site.

October 2011 - November 2011
Finalized:
• Civil engineering design
• Microwave beam and air navigation interference reports
• Electrical interconnection agreement
• Siemens performance contract
• Vestas turbine supply agreement

March 1, 2012
54' diameter foundation consisting of 315 cubic yards of concrete and 32 tons of steel was poured and allowed to cure for 3 weeks.

April 3-9, 2012
Four sections of the turbine tower are connected.

June 12, 2012
Rebuilt transformer arrives and is installed.
Wind turbine placed on-line and begins producing energy.

\$ Planning/Funding Stage

Design Stage

Construction Stage