# Secretary Chu Announces $45 Million to Support Next Generation of Wind Turbine Designs

*New Facility to Allow Testing for Large Turbine Drive Systems*

**WASHINGTON, DC –** U.S. Department of Energy Secretary Steven Chu today announced the selection of Clemson University to receive up to $45 million under the American Recovery and Reinvestment Act for a wind energy test facility that will enhance the performance, durability, and reliability of utility-scale wind turbines. This investment will support jobs and strengthen American leadership in wind energy technology by supporting the testing of next-generation wind turbine designs.

"Wind power holds tremendous potential to help create new jobs and reduce carbon pollution," said Secretary Chu. "We are at the beginning of a new Industrial Revolution when it comes to clean energy and projects like these will help us get there faster."

The Large Wind Turbine Drivetrain Testing facility will enable the U.S., which leads the world in wind energy capacity, to expand development and testing of large-scale wind turbine drive-train systems domestically. Wind turbine sizes have increased with each new generation of turbines, and have outgrown the capacity of existing U.S. drivetrain testing facilities. The new testing capability will ultimately improve U.S. competitiveness in wind energy technology, will lower energy costs for consumers, and will maintain rapid growth in the deployment of wind energy systems.

The new facility will be located at the Charleston Naval Complex, a former Navy base in North Charleston, S.C. and will be a part of the Clemson University Restoration Institute campus. The test facility will operate as a non-profit organization with a business model designed for sustainability while providing ongoing state-of-the-art testing to wind turbine manufacturers.

The Large Wind Turbine Drivetrain Testing facility will feature power analysis equipment capable of performing highly accelerated life testing of land-based and offshore wind turbine drive systems rated at 5-15 megawatts (MW). These dynamometer tests of drivetrains are required to demonstrate compliance with wind turbine design standards, reduce wind turbine costs, secure product financing, and reduce the technical and financial risk of deploying mass-produced wind turbine models.

Learn more about DOE's Wind and Hydropower Technologies Program.

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