

## **North American Wind Research and Training Center History**

In late 2004 a retired school teacher approached the College President to write a letter to the Governor supporting the concept of renewable energy, specifically wind and the need to begin to educate the community. That letter was distributed at a news conference given by the Governor and as a result there was lots of interest and activity at the State level.

In the spring of 2005, the College met with both the New Mexico Secretaries of Economic Development and Energy Minerals and Natural Resources. These meetings resulted in increased support and excitement grew prompting the name of the project to be called The North American Wind Research and Training Center (NAWRTC). In order to insure that this project was worthy of further development, College officials attended the American Wind Energy Association's conference in 2005 and discussed the project with multiple wind turbine manufacturers and maintenance firms. The response was overwhelming and the College moved forward with the development of the project.

In 2005, the College received a state appropriation with the help of State Senator Clinton Harden and Representative Brian Moore together with a contribution from The Greater Tucumcari Economic Development Center for the College to develop a Feasibility Study, which resulted in the development of a formal Business Plan.

The remainder of 2005 was spent trying to develop support within the State and local governments. Although no funds to purchase a wind turbine were received from the Legislature that year, the College received a \$63,000 grant in November of 2006 from Energy, Minerals and Natural Resources Secretary, Joanna Prukop, for further study, the installation of wind resources monitoring equipment and data collection.

Throughout 2006, the College continued to solicit support from all levels of government. With the encouragement of Senator Domenici, Senator Bingaman, and Representative Udall, the College applied for and was awarded a \$2 million U.S. Department of Labor Grant for the President's Community Based Workforce Development.

In April of 2007, the College received over \$2.1 million in state appropriations from Governor Richardson and the New Mexico Legislature. In 2007 the NAWRTC Research

Agenda, which encompasses operations and maintenance, was finalized with Sandia National Laboratories.

In July of 2007 the College purchased a General Electric 1.5 megawatt wind turbine to be erected in October of 2008. In August of 2008, the first class of wind energy technicians began training through The North American Wind Research and Training Center at Mesalands Community College.

In October of 2008 erection of the GE wind turbine commenced and was completed in November of 2008 with full operations commencing in December of 2008. During erection the turbine was already an integral part of the wind energy technician training program since the students were able to not only observe but also participate in various stages of the erection process.

The Mesalands turbine is a new type of 1.5 megawatt turbine replacing the previous generations of this size of GE turbine. It is an ESS model with simplified and advanced electronics. Thus the Mesalands turbine will be cutting edge and an industry standard for many years to come. Several wind farms are already getting this new type of turbine which started coming off the assembly line in July of 2008.