

# Alfred University/Alfred State College Farm



## THE STORY

**In conjunction with the Center for Environmental and Energy Research (CEER) at Alfred University, the 10kW wind turbine was installed at the Alfred State College Farm Lab during a five-day installers workshop.** The turbine produces power for the milking barn at the farm and provides the students and faculty with a renewable energy laboratory. Alfred U and Alfred State students monitor the performance of the wind turbine to determine how much power is produced and when it is available. "Small wind turbines can play an important role in supplying clean energy to rural areas," says Jim Adams, the project manager from AWS Scientific. The information will be used to determine the economic viability of other small wind energy installations. According to Dr. Chris Sinton,

## THE BACKGROUND

An on-site or small wind power energy system can provide consumers in windy locations with a cushion against electric power price increases. Wind energy systems not only help customers reduce their electricity purchases from utilities, they also help reduce U.S. dependence on fossil fuels, and they are nonpolluting. Cash incentives for installing wind energy are available in New York and vary **between 15-70%** depending on the installation.

the former director of CEER who arranged for installation of the turbine, "Alfred is in a region with both a large agricultural base and very good wind resources."

The purpose of the workshop was to train qualified wind installers. Fifteen people, some of whom had installed smaller wind systems, attended the workshop in order to gain hands-on training installing wind systems.

**"The state needs qualified people to install and maintain the equipment, and the workshops NYSEERDA and AWS are conducting ensure that knowledgeable installers are available."**

**For more information on wind incentives log on to [www.PowerNaturally.org](http://www.PowerNaturally.org) or call 1-866-NYSERDA**

**Thanks to the NYSERDA Small Wind Program, places like Alfred can install affordable small wind systems. It's part of NYSERDA's commitment to help make New York State energy efficient now and into the future.**

## THE TEAM

- **NYSERDA:** Funding and coordination of the On-Site Small Wind Incentive Program for New York State.
- **AWS Scientific:** Coordinated the design, site assessment, installation and interconnection, hired the local subcontractors, and conducted the State Environmental Quality Review (SEQR). Working closely with NYSERDA, the team they led was able to complete the job within six months from the initial site visit to final approvals, installation and interconnection.

## THE SYSTEM

The wind turbine located on the Alfred State College Farm in Alfred NY, is a 10 kW Bergey Excel-S mounted on a 100 foot guyed lattice tower. The average annual wind resource at this site, as projected by the New York State Wind Map, is about 5.1 m/s (12 mph). The total installed cost of this system was approximately \$55,000, and the NYSERDA incentive was \$39,000.

## THE SAVINGS

The estimated annual output of the Alfred University/Alfred State College Farm system is **11,000 kWh**. A typical home in New York State uses about **6,000 kWh** of electricity annually.

