

Erie Community Unit School District No. 1

Erie, Illinois



Small school district thinks big with wind generation

The Erie, Ill., Community School Unit District No. 1 has only 700 students, but it's making a big name for itself through an innovative renewable energy project. Johnson Controls is working with the district to construct a 230-foot wind turbine that will generate enough energy to power the schools and an annex facility. The project is expected to save the district millions in energy costs while teaching students valuable lessons about the environment.

Saving energy costs

The wind turbine is the first in the state to power multiple buildings for a school district. It will decrease the school district's purchased electrical energy consumption by 87 percent, which represents approximately \$5.5 million in total energy savings over 30 years. The turbine's 97-foot blades will generate 1.2 megawatts, giving the school district enough capacity to power more buildings in the future.

Just as important, the school district anticipates \$3 million or more in net revenue by selling excess energy to the local energy provider for placement on Commonwealth Edison's distribution grid.

Johnson Controls is constructing the turbine and installing a direct digital control system to provide real-time remote monitoring and operation of the turbine's energy production. Eventually, the entire community will be able to monitor actual energy consumption through the Internet.

Finding funding

As part of the renewable energy project, Johnson Controls helped obtain grants and other funding. The Illinois Clean Energy Community Foundation provided a \$720,000 construction grant, and the remaining money was raised through a tax exempt lease-purchase agreement to be repaid with money saved in utility costs.