

## **UVM turbine will be used for teaching, power**

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A 100-foot-tall wind turbine erected Monday on the University of Vermont campus will be used as a teaching tool as it generates a modest amount of electricity.

The turbine at East Avenue and Main Street could be feeding power into the Burlington Electric Department grid within a month, said Charles Ferreira, an associate professor in the department of Community Development and Applied Economics.

He expects the generator to produce 4,000 to 5,600 kilowatt hours of electricity per year. An average Vermont home uses 600 kilowatt hours per month, Ferreira said. An energy efficient home could derive all of its power from the turbine, if the generator functions at maximum potential, he said.

The turbine stands near the highly visible Main Street commuting route, and Ferreira hopes that university students and the general public will be able to tap the demonstration for practical use. A kiosk near the base will tell visitors what the current wind speed and direction are and how much power the turbine will be generating at a given moment. A similar kiosk now monitors a solar power demonstration behind the university bookstore.

Students will be able to study wind conditions versus actual electric generation. Three UVM courses are folding the turbine data into their classroom studies this semester.

Ferreira said he hopes eventually that the public will be able to tap personal information -- how much electricity their home used in a given period -- and compare it to the turbine's generating capacity in the same period to see how wind power might help offset their energy costs.

The turbine, which has a diameter of 23 feet and is equipped with required red beacons to warn off medical helicopters landing at a nearby pad, cost \$30,000 to erect. A federal grant secured by U.S. Sen. Jim Jeffords, I-Vt., paid for the construction.