## Wind turbine to power Nora Church

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## Staff photo by Fritz Busch

Nora Unitarian Universalist Church members from left, Noah Rosenbloom, the Rev. Lisa Doege (consulting minister) and Darrell Hinsman stand at the wind turbine site southwest of the church, which is located just east of Hanska.

**By Fritz Busch** *Staff Writer* 

HANSKA - A church east of here was recently learned that thanks to a \$20,000 federal grant, plans for a wind turbine project will come true.

A few years ago, the Nora Unitarian Universalist Church Social Justice Committee began exploring alternative energy projects to power the church and sell power back to utility firms.

"After studying solar, wind and geo thermal projects, we found wind is the best choice," said committee member Darrell Hinsman of New Ulm. "People in the congregation said we should look at it. Our beliefs and values are about producing carbon-free energy," Hinsman added.

He is president of Prairie Beacon, Inc., an investor group that got the \$20,000 USDA grant.

The church is the only shareholder in Prairie Beacon. It can take advantage of a 30 percent federal renewable energy tax credit.

Hinsman said the site on a hill is an excellent wind power site with an 11-year project payback, according to a study done by Energy Concepts of Hudson, Wis.

The \$94,000 project includes a Jacobs 20kw wind turbine with 31-foot diameter fiberglass blades on a 120-foot tower similar to windmill towers found on many nearby farms.

The turbine is advertised as being able to generate power with 6 mph wind, has a 20,000 watt rated capacity at 27 mph and monthly output of 480 kw/month at 12 mph.

It will be located about 400 feet from the church, where a gravel road is located, on the south edge of Mount Pisquah Cemetery.

Hinsman said that because the project is less than 40kw, a wind monitor study was not needed.

A county permit has been acquired.

"We used wind maps and learned we have an excellent wind (power) site. The land around where the tower will be built slopes up from the south. Wind accelerates as it goes uphill," Hinsman added.

He said the wind turbine, which was built in Prior Lake, has a mechanical inverter.

According to state law, surplus power will be bought back by Alliant Energy.

"We're excited about it," Hinsman said.

Without a grant, the project would have been much more difficult, he said.

The study concluded that heating and cooling loads draw the most electricity.

It suggested replacing outdated appliances with Energy Star-rated models and keeping lights and computers off when not in use.

The church plans a ground-breaking event Sunday, Nov. 21 following the 10:30 a.m. service.

Cement turbine tower footings will be poured later this month.

The church may be the first in Minnesota with a wind turbine project.

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