

The Oregonian

The wind: Couple turn to turbine to tap power

Thursday, September 14, 2006

GAIL KINSEY HILL

A bright red box in the back room of Warren and Elizabeth Griffin's hilltop Salem home reads "Windy Boy."

The digital monitor flashes data on the electricity pulsing from a 106-foot wind turbine that rises from a tawny field outside. Cumulative kilowatt hours, DC input voltage, run times.

Next to the 106-foot turbine tower, a solar photovoltaic array tracks the sun. If a patch of blue opens up on a cloudy day, the 12-panel surface turns toward the light, like the searching face of a sunflower.

The solar panel, like its windy cohort, connects to underground wires leading to that back room. Here, another red box -- this one's "Sunny Boy" -- switches the current from DC (direct current) to AC (alternating current) and sends electricity throughout the house.

"We use it as it's being made," Elizabeth said. "Any excess goes back into the (utility distribution) grid."

These cutting-edge devices are the Griffins' security blanket, protections against rising electricity costs. But Windy Boy and Sunny Boy are about more than providing heat, power and a comforting financial hedge. They also reflect the couple's desire to do right by the environment.

"Long term, fossil fuels aren't a viable option," says Elizabeth. "We wanted to figure out what we could do to help out."

Taking this route to environmental consciousness wasn't cheap. The Griffins spent about \$23,000 for the purchase and installation of the 1.5-kilowatt wind turbine and \$15,000 for the 1.8-kilowatt solar array.



They used a \$16,350 grant from the nonprofit Energy Trust of Oregon and \$3,000 in state tax credits to cut project costs in half.

They haven't been using the homespun power long enough to know the extent of their savings, but they figure they will slash by 50 percent the electricity they buy from Portland General Electric.

Day by day, if the solar panels and wind turbine generate more electricity than the Griffins use, the surplus feeds into PGE's distribution network. A metering system tracks the ebb and flow, and credits the Griffins accordingly.

So far this year, the Griffins have produced more power than they have used. They expect an eventual turnaround to the utility's favor, but for now, "PGE owes us," said Elizabeth, smiling.

The Griffins bought 48 acres on a hill in South Salem in 2002. After a protracted battle with blackberry brambles and abandoned cherry trees, they turned the property into a smoothly mounded pasture of orchard grass. A long gravel driveway now leads to the hilltop where the Griffins' new barn-inspired, 3,000-square-foot home rests.

From the beginning, they knew what they wanted: a place with a view and a comfortable, energy-efficient home for themselves and their two children.

They met with Robert Preus, owner of Abundant Renewable Energy, the Newberg company that sold them the African Wind Power-brand turbine, "even before we broke ground," Elizabeth said.

In addition to the wind turbine and the solar array, they secured solar panels to a south-facing section of the roof for the hot-water heater.

Warren, a pediatrician, said they would have spent the extra money for the wind and solar devices regardless of the state subsidies -- out of concerns about effects of carbon fuels.

"I've always worried about things like this more than others," he said. "The point is, even before they run out, supplies will be low, and there will be misery all around -- economic, political, environmental.

"Something has to happen. I haven't seen a lot of movement by government. Why not me?"

Gail Kinsey Hill: 503-221-8590, gailhill@news.oregonian.com