Family sets up city's first residential windmill

Wind-generated power will take care of 90 percent of their monthly PG&E bill

By Harold Kruger, Correspondent

A Berkeley family today unveiled an energy source for tomorrow: the city's first residential windmill.

Standing 60 feet high at 3228 Idaho St., the windmill quickly became something of an attraction when it went up earlier this week.

"I'm really happy," said Vossa Wysinger, who invested $13,000 for the machine. "I thought it would be an eyesore, but it looks OK. People are fascinated. We've had traffic jams with people coming by."

Leslie J. May & Co., which installed the system, estimated it will generate about 400 kilowatts a month — about 90 percent of what the Wysingers buy now from Pacific Gas & Electric Co. Thanks to a 55 percent energy tax credit, the windmill should pay for itself within six years.

"PG&E was all for it," Wysinger said. "No problems. They have been having trouble in Fremont. A woman in Fremont wanted to put one up, but the neighbors were against it. She had all the equipment in her yard and everything. That's why I was reluctant."

The giant utility was no obstacle, and neither was the city of Berkeley, which also encouraged Wysinger, he said.

"We just turned it on. I'm kind of excited," he said. "More people should put them in. Instead of buying oil from Iran, put up windmills."

May estimated one-third of Berkeley's 40,000 homes could successfully use wind power.

"Mainly the homes from Grove Street to the bay have the best locations," he said. "There are good winds coming off the bay in the afternoon. That's when PG&E pays the highest for electricity."

PG&E has a 10-year contract to buy Wysinger's excess power at 7.2 cents per kilowatt-hour.

May said the windmill creates little noise and its wooden blades won't play havoc with nearby television reception, a common complaint with older wind systems. Wysinger also has a solar collector on his roof that has been saving him $25 a month since he put it up last December.

The free-standing windmill, produced by Aero Power Systems Inc., needs a start-up wind velocity of about 10 mph for 30 seconds. Wysinger said the windmill is sturdy enough to withstand hurricane-force winds of 125 mph — a condition unlikely to occur in Berkeley.

Wind systems like the one at the Wysinger residence can store power in two ways. Power generated in excess of demand flows to lead acid batteries or into the utility grid where the consumer is credited by the utility company for "co-generated" power.

The windmill as a major source of energy is certainly nothing new. The Persians developed windmills as far back as the seventh century. Extensive use of wind power enabled Holland to become the world's most industrialized nation in the 17th century.

Windmills dotted the American landscape between 1880 and 1930 when power lines snaked across the country connecting the remotest hamlets.

But as energy costs skyrocket, windmills are experiencing a resurgence. The consumer magazine Changing Times estimated the small windmill industry, now worth just $7 million, could be worth 200 times that by the end of this decade. Currently, there are 3,500 home windmills nationwide.

Windmill farms are on the drawing board and, in some places, are already a reality. The state Energy Commission estimated Altamont Pass in Alameda County could produce as much as 1,000 megawatts if properly exploited.