



Plug in the wind

By **DIANA GEORGE CHAPIN**

SINCE Wes and Gwen Kinney's dairy farming days, the cost of electricity has been a plaguing challenge. But this Knox, Maine, couple isn't alone.

New England residents, particularly farmers with their above-average energy needs, bear some of the highest energy costs in the nation. Energy costs in New England — and New Jersey, New York and Pennsylvania — trail only those of Alaska and Hawaii. And the costs are rising more than 4% a year, according to projections from the U.S. Energy Information Administration.

Power from the wind

In the mid-1980s, the Kinneys installed a Jacobs Wind Electric Co. windmill on the farm and began working with electrical supplier Central Maine Power to reduce their energy costs.

In Maine, according to Gail Rice, a Central Maine Power spokeswoman, a "net energy billing" statute allows residents to self-generate energy on site via renewable fuels or technology.

"If the energy generated exceeds the usage for that month, it's 'banked' and applied to future bills," explains Rice. "If the energy generated doesn't meet usage for that month, the customer is billed for the difference. The customer can accumulate kilowatt-hour credits for a 12-month period. Any unused amount is forfeited; the customer is billed for any excess."

Not all Northeast states have net metering regulations. Those that don't are considering them as the push for renewable energy intensifies.

Key Points

- Northeast energy costs are the highest on the continent.
- Windmill saves \$150 to \$300 a month in electricity.
- Repair and maintenance services must be available.

The Kinneys' turbine sits atop a 100-foot tower and boasts three 31-foot blades that engage even a light breeze.

"When I set it up, I said to myself, 'Well, I'll do it if I can pay for it in 10 years,'" Wes recalls. "I paid for it in three. We've saved \$150 to \$300 a month on our electric bill."

Not for everyone

"It's like a diesel engine in a truck; they're just not for everyone," notes Wes. "The electronic components can get quite complicated.

"Finding someone to climb it for repairs and maintenance can be a problem. You've got to have someone who's mechanically inclined and tolerant of heights."

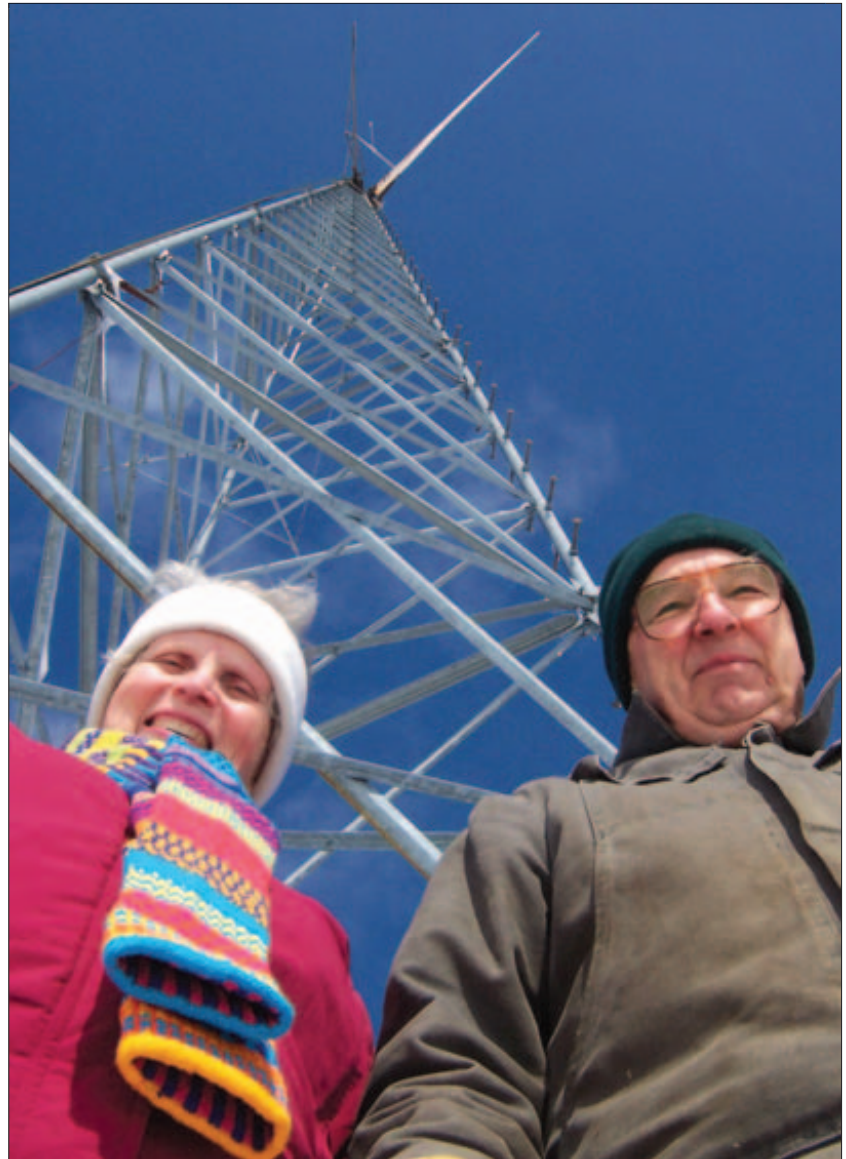
For the first repair job, a crew came from Wisconsin. "To keep it up that way would just be cost-prohibitive," he adds.

This winter, the energy-generating rotors were stilled by an alternator in need of repair. It was possibly a victim of a lightning strike. The job likely will cost more than \$5,000, estimates Wes. But considering the savings over time, he says he can't complain.

"The windmill doesn't owe me anything," he concludes.

Chapin writes from her family's farm in Montville, Maine.

■ **Learn more about the Kinney family's maple and compost enterprises on Page 10.**



PROFITABLE SPIN: Gwen and Wes Kinney's 20-year-old turbine still spins them an energy savings.

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