NiMo customers pay for renewable power
'Marketers refer to it as the NiMo model'

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When college senior Sean Marmion and his two roommates on Euclid Avenue pay their monthly electric bill, they shell out an extra $6 or so for renewable power.

The extra money supports a wind farm in Madison County, a landfill generating plant in Seneca County and a small hydropower project.

When employees at Plainville Farms turn on lights and equipment in the turkey barns, the company pays extra to designate the electricity as wind power. Cost: about $10,000 a year on top of the regular electric bill.

Marmion and Plainville Farms are among roughly 6,400 customers of Niagara Mohawk who have opted to buy green energy under a program the utility launched in September.

"It's a really good way, in my mind, to help the environment for a few extra dollars a month," said Marmion, 21, a student at SUNY College of Environmental Science and Forestry.

In the 10 months since it started, Niagara Mohawk's renewable-energy program has attracted a steady trickle of customers - about one out of every 250.

But the program has not been heavily marketed, and it might have much more
potential to grow, some observers say.

Robert Maddox, regional manager for Sterling Planet, one of three energy marketers selling renewable power under the program, said he expects more aggressive marketing eventually to pull in as many as 10 percent of Niagara Mohawk's customers.

Even a fraction of Niagara Mohawk's customers can create enough demand to spur development of green power facilities, said Ron Kamen, director of New York operations at Community Energy, another marketer.

Wind power, in particular, is in limited supply. New facilities will be built if consumers buy the output of the wind farms in operation, Kamen said.

"In New York state, we have 36 megawatts that we're looking to sell this year, and more wind farms that we'll be bringing on next year if there's enough demand," he said.

At this early stage, the ultimate impact of green marketing on New York's power portfolio is hard to predict.

In part, that's because earlier this year Gov. George Pataki ordered a renewable portfolio standard that is expected to spur green power development far faster than retail sales would. Details are being worked out, but the standard will require 25 percent of New York's power to come from renewable sources 10 years from now.

Some experts say that could spawn the development of 4,000 megawatts of green generating capacity.

"The governor's proposal took everybody by surprise and, I think, holds the promise of substantially increasing the market for green power well beyond what we might have seen just from retail interest," said Bill Moore, a principal in Atlantic Renewable Energy Corp.

Moore's company helped develop wind farms in Fenner and Madison, in Madison County, and hopes to build a 300-megawatt project in the Tug Hill Plateau.

Niagara Mohawk's renewable-energy program was hatched in the fall of 2001 during negotiations with regulators and other parties over Niagara Mohawk's proposed merger with National Grid USA. The program helped win support for the merger from the American Wind Energy Association, hydropower producers, environmental groups and others.

Under the program, participating customers sign up with one of three green energy marketers: Sterling Planet, Community Energy or Green Mountain Energy. The marketers sell renewable energy attributes purchased from wind farms, hydro plants, landfill generators and others.

Niagara Mohawk continues to provide the customer's power. A green energy surcharge appears as a line on the monthly bill.

Residential customers pay from 1.3 cents to 2.5 cents per kilowatt-hour in addition to their normal Niagara Mohawk charges. For a residential customer buying 600 kilowatt-hours, going green adds $8 to $15 to the monthly bill.

Because customers do not have to leave the utility to buy green, and because the utility promotes the program with annual bill inserts and a page on its Web site, the costs for marketers are low.

"Customer acquisition numbers are dramatically lower," said John Holtz of marketer Green Mountain Energy.

In other states, forcing customers to leave the utility for a new energy supplier has been a barrier to selling green power, said Maddox, of Sterling Planet, who worked for a non-profit corporation that sold green energy in Connecticut. There, 3,500 customers bought green power despite an estimated $2.5 million spent on marketing, Maddox said. His former employer, Connecticut Energy Cooperative, went out of business.

Marketers say they are advocating the Niagara Mohawk program in other states.

"It has caught national attention," Maddox said. "Green power marketers refer to it as the NiMo model."

At least one energy marketing company, the non-profit Energy Cooperative of New York, sells green power independently of the Niagara Mohawk program. Niagara Mohawk customers can buy the green power if they choose the cooperative as their energy supplier.
Although the theory behind green-energy marketing is simple - consumers pay extra to support renewable power sources - the transaction is fairly complicated.

For one thing, retail green customers do not literally buy the electricity produced at wind farms or hydro plants. Instead, they buy the "attributes" of the electricity, sometimes referred to as green tags or green certificates.

Here's how it works:

In New York, the output of each power plant is labeled according to fuel type: coal, nuclear, natural gas, hydro, oil, wind, biomass, solar or solid waste.

The New York Independent System Operator, which runs the state power grid, keeps track of how much power from each type of fuel is delivered to each utility or energy supplier.

In the wholesale market, fuel source does not determine price. All power producers get the same price.

So for each kilowatt-hour a power plant sells into the wholesale market, green power marketers also can sell a kilowatt-hour of the facility's fuel attribute, at whatever price the retail market will bear. The sale reflects the higher value some consumers place on green energy.

Example: Sean Marmion pays 1.5 cents per kilowatt-hour, over and above his regular Niagara Mohawk bill, for a blend of renewables that is 40 percent wind, 30 percent hydro and 30 percent biomass. To sell him those attributes, Sterling Planet has acquired green attributes from: Fenner wind farm in Madison County; the Seneca Energy methane-burning facility at Seneca Meadows landfill near Waterloo; and a hydro facility the company did not identify.

Of all the green attributes, wind is the most expensive.

Community Energy, which entered the Niagara Mohawk program selling purely wind energy, quickly discovered that its premium of 2.5 cents per kilowatt-hour was too pricey for many residential customers, especially when other marketers were offering cheaper products.

So Community Energy offered a second product - a 50/50 blend of wind and hydro - for 1.3 cents. That price includes a small premium, perhaps 0.1 cents per kilowatt-hour, for hydro power, which Community purchases from two small hydro projects, one in Franklin County and the other near Poughkeepsie, Kamen said.

Hydro merits little premium because New York already gets 16 percent of its total energy from hydro and most facilities have been operating for decades.

"We do hydro because it makes sense financially for some people," said Kamen. "But it doesn't do what we really want to do, which is create the demand for new wind (projects)."

Numerically, commercial customers represent a small piece of the Niagara Mohawk program, about 50 of the 6,400 participants. But some buy large quantities of power, making their impact significant.

Kamen said about two-thirds of Community Energy's wind power, which is marketed under the brand NewWind Energy, has been bought by commercial customers, including universities and government agencies.

Soon each of the turkeys packaged at Plainville Farms every year will be labeled with a new message: "grown with NewWind Energy."

Plainville Farms has opted to pay a premium for enough wind-generated electricity to run the barns that house its turkeys. That's just one-third of the company's total electric load, but it's the equivalent of about 100 households.

The premium will cost the company an extra $10,000 a year or so, said Mark Bitz, president.

"It's a good thing for the country and the environment," he said.

Bitz said it was tough to pay extra when his electric rates are already double what some of his Southern competitors pay. But green power fits with Plainville's image.

"We market into a niche of consumers who care a great deal about the environment - as they care about antibiotics, and animal byproducts, and how the animals are grown and treated. So it's a natural for company like ours," he