VINEYARD GAZETTE

Archived Edition: Friday, April 24, 2009

Farmers Seed Plans to Sell Wind Power with Produce

By MIKE SECCOMBE

Imagine a future in which you join a farm share program and receive, along with your in-season fruit, vegetables and flowers, cheap electricity.

A future where you receive a wider range of produce over a longer season, maybe even year-round, as greenhouses proliferate on those farms, taking advantage of that cheaper, price-stable, renewable energy.

A future where four or five big (900kW, 230-foot high) wind turbines on a few of the bigger, windier, Island farms produce enough power to run all the others and ultimately, all the Island's schools and at least some Island homes.

What you are imagining is something called the Martha's Vineyard Farm-School Wind Turbine Concept, originally proposed by Brian Nelson, and increasingly supported by various Island farmers, school administrators and others.

At the moment it is only a concept, and the only tangible commitment to making it happen is a $40,000 grant to permit the building of a meteorological tower on one of the chosen sites, to assess the wind resource.

It's a creative idea thought out by smart, creative people. But the fact is, the Vineyard is knee-deep in wind power concepts and proposals right now, many of them running way out in front of current regulatory regimes, and in some cases, ahead of environmental realities.

To take one example. The Tisbury selectmen were briefed this week by the town's energy committee, and the main topic was the status of a proposal to build a major turbine generator in town.

The news was not good. After more than a year of effort and survey work with a met tower, the Massachusetts Technology Collaborative had deemed the proposed site, on a capped landfill, unsuitable.

Chris Fried, chairman of the committee, still hoped the project could be resuscitated if the town could overcome the practical and regulatory difficulties of building on a landfill site.

But the two other members present saw it differently. Henry Stephenson put his view diplomatically: it was time to consider a new direction, he said.

“If you’re looking for significant wind energy, you’re really going to have to look offshore,” Mr. Stephenson said, an option “fraught with all sorts of complications.”

The third committee member, Peter Cabana, was blunt. “Nothing I have seen leads me to believe the town can have a cost-effective turbine,” he said.

The landfill site simply did not have enough wind.

Furthermore, he doubted whether large-scale wind generation was feasible at all on land on the Vineyard.

It was a fundamental disagreement among people who are all pro-alternative energy. There are plenty more arguments to be had, as the Cape Wind project has shown over the past five years or so. Foremost among them is the one about aesthetics.

This week the Edgartown planning board approved the construction of a private, domestic scale turbine at Swan Neck on the Edgartown Great Pond.

The town zoning board had previously denied the proposal, and David Nash of Katama was furious that the turbine had now won approval.

He also is a conservation-minded individual, but he was worried about the generator’s impact on bird life, and also he frankly said, “the visuals.”

Mr. Nash said he has no doubt about the place for wind power in energy plans, but the prospect of a rash of such small generators worried him.

“I am definitely opposed to covering the Island with small generators, rather than having clustered large ones,” he said.

He remains opposed to Morning Glory Farm’s plan to build a turbine.

It would take 180 small 10kW turbines, such as the one already up at the regional high school, to generate as much power as just one unit the size Tisbury or Mr. Nelson’s farm concept call for.

But conservation-minded individuals remain eager to do it themselves, especially given the slow and uncertain movement of plans for larger-scale generation.

On the federal level, on Earth Day this week, President Obama traveled to Iowa to speak about government commitment to offshore wind power.

Closer to home, the Farm-School Wind Turbine concept is centered around a Mass Technology Collaborative grant that went to Northern Pines Farm in Vineyard Haven, aided by Mr. Nelson.

“We’re working on putting up the met tower. Once that’s up we can move forward with assembling all the pieces, and that will include finding farmers that want to partner in creating the farm-to-farm connection,” he said, adding: “And we’re working with Senator O’Leary and Representative Madden on the legislative side, to be able to connect the farms to schools.”

He said a new regulatory regime is being developed by the state Department of Public Utilities.

“What’s amazing,” he said, “is that the final draft regulations that the power companies

have presented to the DPU permit this CSA concept.

“They are not creating any limitations regarding to whom a turbine owner may transfer power. They’re not seeking to restrict the ownership of the turbine . . . and the owners of the turbine would have the ability to assign power to any other account that they wish.”

The importance of this? Consider the location of Northern Pines and Thimble farms.

Thimble Farm, because of its proximity to the airport, cannot put up turbines. But Northern Pines, near the end of Lake Tashmoo, faces no such restriction.

The Northern Pines turbine could generate enough power for two or more farms, and direct that power, at an agreed price, via the NStar grid, at no extra distribution charge.

“The grid then becomes like a virtual battery — you generate power and put it in, and then decide to whom you provide it and at what cost,” Mr. Nelson said.

Then it becomes a matter of finding customers who will agree to buy the power over a set period of time, so money can be raised to build the turbines.

“And that,” said Mr. Nelson, “is where the farm-to-school bit becomes so important, because schools are such a wonderfully stable customer. Farming is somewhat of a risky venture, and we would imagine that a bank would look more favorably on a school as a customer.”

There are still many legalities to sort out.

Mr. Nelson has received a letter from the Department of Agriculture supporting the plan to supply power to Thimble Farm from Northern Pines.

But that arrangement is a purely agricultural. Distribution of power for nonfarm use raises the inevitable question about when a farm stops being a farm and becomes an electricity company.

Mr. Nelson said he met with the state Commissioner of Agriculture.

“He was adamant that Massachusetts farmers do not leave farming to become electricity generators. The minute you do that you lose the farm structure status for the wind turbine [which allows turbines by right], and that’s a critical distinction,” he said.

But ultimately, he hopes it could be possible for people who buy shares through a Community Supported Agriculture program to also be assigned cheaper power.

“It might be stretching the point, but you would have to say the CSA members would have to have a contractual deal with the farmer which says ‘I am buying your vegetables, I have a contract with a farm.’

And it furthers the cause of agriculture. “That could be a huge stimulus for people to join,” Mr. Nelson said.

And so the discussion continues. To that end, the Vineyard Energy Project will host an energy forum at the Katharine Cornell Theatre in Vineyard Haven on Friday, May 1 at 3 p.m. The public is encouraged to attend.

Reader Feedback

Friday, May 1, 2009 6:31am

People love to make that comment on how it would take so many small turbines to make as much power as one large wind turbine. With that logic we should put one really large 300 gigawatt turbine in the center of the country and forget all the small 3 megawatt machines. Our solution to the energy problem we face will take action from as many ways we can dream up. Distributed energy is more reliable and less susceptible to attack. Small wind gives the island more information about its resource than it has ever had. When testing for the landfill turbine site why did the town of Tisbury put the met tower down in the sepatage lagoon site instead of up on the hill at the landfill? I can tell you from experience that 20' in height makes a huge difference in available energy. Why wouldn't a newspaper ask for both opinions when reporting about a reaction to the Edgartown planning boards unanimous decision I wonder?
- Gary Harcourt , Oak Bluffs
