

Harnessing the winds

■ Cape towns should form wind power consortium.

It seems so simple: the wind is free, so the town puts up a turbine on a handy hill, it spins out the electricity to run the water pumps, the sewage treatment plant, the transfer station, and the taxpayers save a ton of money.

Well, maybe yes and maybe no. The calculations about the physical aspects of the project – the power that's needed and when, how hard the wind blows and when – are the simple part. After them lie a maze of complicating financial and ownership issues.

To begin with, the town's need for power and the production of wind power are difficult to match. One reason is that as big wind farms spring up across the country the machines are getting bigger and more costly. Orleans is paying \$5.3 million for two of them. It's not that Orleans really needed two, but when all the numbers were crunched, that was the economical thing to do.

Another reason is that both wind power and the need for power fluctuate hour by hour and from season to season, rarely in synchronization: So far, the engineers haven't figured out how to bottle the excess power produced on a windy day for use the next day, or next summer. So the turbines are attached to the electric grid; when they don't produce enough power the town can buy some from the grid, and when they produce too much it can sell power to the grid.

A nice source of revenue, right? Maybe not. The town must buy at a retail rate and sell at a wholesale rate, about half. A bill by state Rep. Matthew Patrick, D-Falmouth, would let towns turn excess wind power into future credits rather than instant cash, in effect giving them the retail rate for sales. That deserves prompt consideration.

It's ironic that a private developer, thanks to federal tax credits and depreciation rules, can own and operate wind turbines cheaper than a town. So towns need to seek private developers and sign long-term contracts.

All this takes a tremendous amount of analysis; fortunately for green power enthusiasts of Cape Cod, the Massachusetts Technology Collaborative has an office in Hyannis.

One point the Collaborative is preaching is that the towns, rather than each proceeding alone, ought to pool their wind power interests and projects. A consortium would avoid a town-by-town duplication of effort and would enjoy economies of size. This makes sense; the path-breaking Orleans project, for example, is being closely monitored by wind power committees of neighboring towns and could become the core of a joint enterprise.

Finally, the Cape Light Compact is eyeing a large role in wind power, as a customer for the excess power, as a financing conduit, even as a part owner. Gradually, we all hope, these pieces will come together to make land-based wind power, in the appropriate areas, an important source of the renewable energy we must have.

CCTIMES 1/4/06