# Gloucester firm's bid to harness wind backed by council, mayor

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By John Laidler, Globe Correspondent | November 8, 2007

A Gloucester firm has cleared a major hurdle in its bid to erect a pair of 480-foot wind turbines at its headquarters in the Blackburn Industrial Park.

The City Council last month granted a special permit for the estimated $11.5 million wind-energy project that Varian Semiconductor Equipment Associates, Gloucester's largest employer, is proposing to help meet its power needs and save money.

The 2.5-megawatt turbines would be built about 700 feet apart on a wooded section of Varian's 23-acre site. One would be located about 130 feet from Varian's front door, and the other on a hill about 200 feet from the east side of the building.

Together, the turbines would generate an amount of power equal to 65 percent of the electricity Varian uses at its Gloucester facility, saving the firm $2 million annually the first five years, and possibly more after that, according to Varian, which is pursuing the project with the help of Massachusetts-based Boreal Renewable Energy Development.

Mayor John Bell and the city's Renewable Energy Committee are strong supporters of Varian's effort.

Bell said he was hopeful that the project, coupled with an ordinance the city adopted in May governing the siting of wind turbines, will help spur other renewable-energy initiatives in the city. The council issued the special permit under the new ordinance.

"Energy issues aside," Bell said, "this helps anchor Varian to Gloucester and to Cape Ann. . . . So I see it as a win for everyone."

The project still requires the approval of the Planning Board because the two turbines would be located within a watershed protection overlay district that surrounds the Babson Reservoir.

Varian earlier obtained approval from the Conservation Commission that it needed because one of the turbines would be within 100 feet of a wetland buffer zone. A resident appealed that decision to the state Department of Environmental Protection. The appeal has been rejected at two agency levels and is still pending at a third, according to Varian.

"We're very pleased," Rick Johnson, Varian's director of facilities, said of the council's unanimous vote. "It was a long process."

Varian began pursuing a wind project three years ago after Boreal, which specializes in renewable-energy projects, suggested the idea. Boreal officials believed that with its proximity to the ocean and the size and consistency of its electrical load, Varian might be "a good candidate for wind," Johnson said.

A study conducted by Varian through a $40,000 grant from the Massachusetts Technology Collaborative - a state-funded agency that promotes renewable energy - found that a wind project would be feasible at Varian's site. With a second $575,000 grant from the collaborative, the company spent a year further analyzing the idea and developing the plan.

Early this year, Varian was poised to move forward after obtaining a needed variance from the Zoning Board of Appeals and the approval from the Conservation Commission.

But the City Council, from whom Varian was seeking an approval because of the height of the turbines, decided the city needed a more comprehensive ordinance governing the siting of wind turbines.

That decision, in January, stopped Varian's project in its tracks. But in May, the council approved the new ordinance, enabling Varian to seek the just-approved special permit.

A manufacturer of ion implanters used to make microchips, Varian employs 1,294 people at its Gloucester facility and 2,006 overall.

The turbines would produce an estimated 14 million kilowatt hours a year, equivalent to about 65 percent of the energy Varian uses at its Gloucester facility. The company would consume about 70 percent of the power generated - the most it could use given the timing of its power needs - and sell the remaining 30 percent to National Grid, the regional power distributor.

Johnson said the turbines would not affect the watershed. Each would hold approximately 50 gallons of gear oil and 10 gallons of hydraulic fluid, but those liquids would be contained within a generating box atop the tower, he said.

Varian has agreed to share with the city any insights on wind energy it might glean from operating the turbines. It also would allow local schools to use the turbines as a laboratory, and the city to place antennae and other equipment on the turbine towers for emergency management purposes.

While he supports wind energy and the Varian project, Ward 1 Councilor Jason Grow said he would have liked to have seen the company offer funding to the city to mitigate the turbine's visual impact.

"What I was hoping they would do would be to step up and acknowledge the effect this would have on the community," he said.

But Rich Hersey, chairman of the Renewable Energy Committee, said the turbines would not block any scenic vistas.

"They will be visible, but they will not be something people typically look at. When you go to the beach, these would be up on the hills," he said, adding that there are some - himself included - who believe

turbines themselves are scenic.

"They are like windmills, like tall church spires, like ships at sea," he said.

The Varian project is occurring as Gloucester is exploring the possibility of a turbine on municipal land. There are already two or three turbines in the city, all small units on residential land, according to planning director Gregg Cademartori. Johnson said that if all goes well, Varian could begin its project next spring and start generating electricity from the turbines by spring 2009. ■

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