

Advocates say the answer to our energy needs is in the wind

40% of a small school's energy needs is not representative of those for a modern nation.

East Bay Rhode Island
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Portsmouth Abbey's 240-foot turbine is projected to churn out 1.2 million kWh by year's end — about 40 percent of the school's consumption.

If you live in the East Bay area and were to ask some people around you what they thought of wind energy, you'd be hard pressed to find more than just a few negative reactions. In fact, preliminary results of a survey of Bristol and Portsmouth residents show overwhelming approval for the construction of wind turbines in those towns.

When shown simulations of how the turbines would look in different areas, more than 75 percent of participants approved. "The results were totally lopsided," said Lefteris Pavlides, director of the Wind Power Rhode Island project, which is expected to complete a final tabulation of the survey results this fall.

Despite the seemingly rosy outlook for wind energy in our area, questions remain: Where will the money to build the turbines come from? How reliable, really, is wind power? Will so many turbines be needed to significantly reduce the strain on our power grid that our picturesque landscape will be destroyed?

Then there are the critics who say proponents of wind energy are putting out a lot of misinformation. Chief among them is Nicholas Ratti Jr. of Bristol, a retired project engineer for General Electric. He says the reason so many people seem to be in favor of wind energy is simple: They're being snowed.

"All of the misrepresentation on wind power stems from one single fallacy in the premise, that windmills and solar power are the only alternatives to fossil fuel. That's a lie," he said.

Mr. Ratti said the debate over alternatives to fossil fuel should include nuclear energy, which is already supplying Rhode Islanders with 27 percent of their energy, according to the disclosure label on electric bills from National Grid. Electric power suppliers are required by the state Public Utilities Commission to provide customers with a breakdown of their energy sources, such as natural gas (the most common energy source), oil, nuclear power and others.

"This is extremely important for a couple of reasons. At 27 percent, (nuclear power) is almost tied for first place as our major source of electricity," said Mr. Ratti, adding that "people who advocate windmills have been extremely defensive" about the issue.

"No nukes is a nice dream, but it's not the real world," said Mr. Ratti, adding that countries such as China and France have built many nuclear plants. "The story is over for wind power. The rest of the world has already written them off."

Local wind proponents say they're well aware that much of their energy comes from nuclear and, in fact, aren't necessarily against it. But they're concerned about potential safety issues with nuclear waste.

"I certainly don't say, 'Don't do nuclear,' " said William Saslow, a systems engineer and member of the Raytheon Employees Wildlife Habitat Committee, which is studying the feasibility of wind power for the Portsmouth plant. "The question is, when we take a look at all the elements, including environmental elements, what is the true cost? I'm concerned of how we dispose of the waste from the reactor," he said.

Brother Joseph Byron of Portsmouth Abbey, the main advocate behind the school's 240-foot wind turbine, also said he's not necessarily against nuclear energy. "But where are you going to put all the bad stuff?" he said.

Mr. Ratti responded with some language too colorful for a family newspaper. "Your concerns don't mean anything. There are bigger people than you who are handling this," he said, making mention of Russian President Vladimir Putin's offer to store nuclear waste from the United States. "This is not a Rhode Island issue or a U.S. issue. This is a global issue. The global warming problem is solved. The answer is nuclear."

Richard Talipsky, chairman of Portsmouth's Economic Development Committee, which will make recommendations to the Town Council on the feasibility of wind power, knows his fair share about nuclear power.

"I'm a retired Naval officer who worked in the nuclear navy," he said. "I think we can have nuclear power, but to make it safe could be expensive. I think that anybody who says there's one thing we should go to and nothing else is shortsighted. My personal feeling is that we're going to have to accept the fact that we need to pay a little more to cut down our fossil fuel use. Wind turbines are a good option for chipping away at the power grid."

Wind doesn't always blow

That's the main thrust of wind proponents' argument: Even if just 15 percent of our energy comes from wind power — the state's eventual goal — that lessens the reliance on fossil fuels and eases the strain on the power grid. Brother Joseph estimated that the Abbey's \$1.25 million turbine will produce 1.2 million kWh annually — about 40 percent of the school's consumption — and should pay for itself within five years.

But even he acknowledged that turbines have some drawbacks. "You can't totally rely on wind power because it's so fickle," he said, adding that energy production dips during the less-windy summer months.

This makes turbines inefficient, according to Mr. Ratti. "One of the huge costs of windmills is that the wind does not always blow. In order to provide for continuity of service, National Grid has to have available at all times a same-size backup generator to switch on to the lines," he said. "It's just like your second-string quarterback. He's sitting on the bench idle and collecting a million dollars. You have the same thing with the generator. What they are now is a parasite on the grid. When the windmill doesn't feel like turning, the grid has to pick up the slack."

Mr. Saslow countered that backup generators are used for a variety of power sources, not just wind turbines. "Some industries depending on the weather may be totally shut down or totally operating. The generators have to be able to handle that," he said.

Is the money there?

All the debate about wind power is moot if there's no money to build the turbines. The Abbey received a \$450,000 renewable energy grant in support of its precedent-setting project. But the state Office of Energy Resources has made it clear that future funds are limited. "It's obvious to me that the subsidy the Abbey got was simply not sustainable," said Mr. Ratti.

But money is still available, said Mr. Talipsky, in the form of a renewable energy fund surcharge on everyone's electric bill. "We want to tap into that fund," he said, adding that the money could go toward building turbines in Portsmouth if the Town Council approves.

The surcharge is perhaps the most "egregious thing" about the entire wind power debate, said Mr. Ratti. "The subsidies that fund this thing are paid for with money that's taken against people's will," he said.

Wind power proponents are quick to point out that tax dollars go to other forms of energy as well. "We subsidize nuclear energy and coal and gas, too," said Brother Joseph.

Another point skeptics make is that turbines produce relatively little energy, so great numbers of them will be required, causing a blight on our landscape. But proponents say their proposals are small in scale and that they have no intention of using only wind for their energy needs. Mr. Talipsky's group, for example, is looking into the possibility of turbines that would power just the middle school, the high school, or both. Either way, turbines would make it easier on the power grid and, eventually, taxpayers' wallets, he said.

Although many residents have professed to love the sight of the Abbey turbine, some are concerned that a large-scale project such as the South Coast Offshore Wind Project could spoil our tranquil landscape. The newly proposed plan calls for 40 turbines around the Hens & Chicken off Westport; the total number of turbines in the entire Buzzards Bay would range from 90 to 120.

"My main concerns are first, the visual and audio pollution. With 120 turbines, you're going to hear them, especially over the water," said Carol Albright of Little Compton. "Secondly, it seems their placement is based on where the developer can make a profit. He's going to make a profit in shallower waters. That seems to be the tail wagging the dog."

But although she said wind energy is "an unproven technology," Ms. Albright insists she's not against it. She just wants every proposal to be studied vigorously.

"This is a unique area and you can't just place them willy-nilly," she said.

Take wind power survey

William Saslow of the Raytheon Employees Wildlife Habitat Committee invites the public to take a survey about wind power by going to www.windri.org/survey.

Between May 15 and June 6, a random sample of Portsmouth and Bristol registered voters participated in a statistical survey identical in design to the Web survey. The purpose of the survey is:

* To find what information is important to you for deciding whether to support wind energy in Rhode Island. To accomplish this, you will see a slide show with published information offering you a chance to give your opinion.

* To ask you what specific places you would prefer to see wind turbines in Bristol and Portsmouth. You will be shown photographic simulations giving you an opportunity to express your preferences and the reasons for your support or opposition.

Lisa Dady (foreground) and Morgan Devlin of the Newport Restoration Foundation display one of the grinding stones inside the Sherman Mill windmill at Prescott Farm.

Wind power — linking the past and present

Wind energy is making headlines often these days, but of course it's nothing new under the sun.

Wind power has been used to ease manual labor for thousands of years and were a vital part of the farming industry in the 19th century. On Aquidneck Island, a restoration group is making the connection between the past, the present and the future, comparing historic means of wind energy with more cutting-edge technology.

Last Thursday, a "Wind Energy Past and Future" tour was held by the Newport Restoration Foundation, a group founded by Doris Duke in 1968. The tour began at the historic Sherman Windmill at Prescott Farm in Middletown, with participants later heading over to the Portsmouth Abbey turbine. Another tour is scheduled for September.

"I think learning about (the history of windmills) will make more people open to the idea of them as sources of renewable energy," said Lisa Dady, education director of the Newport Restoration Foundation.

Originally built in Warren in 1812 for the distillery trade, the 30-foot-high Sherman Windmill is a smock mill with two sets of grinding stones, a unique construction that made it possible to run the mill constantly. Moved several times during its active years — a common practice because the valuable machinery was easier to move than to build from scratch — it was eventually abandoned as technology changed.

The Newport Restoration Foundation purchased the windmill, moved it to Prescott Farm and restored it between 1970 and 1972. Now, thanks to a \$25,000 grant from Lowe's Charitable and Educational Foundation, the historic windmill is getting another facelift. An expert on historic mills, Andy Shrake of East Dennis, Mass., will replace the shingled bonnet roof of the windmill, using a combination of wood shingles and copper.

Once common to Aquidneck Island, mills similar to the Sherman Windmill — one of only three such structures remaining in Rhode Island — were essential to farming life in the 1800s. "The Sherman Windmill helps us to understand the complex nature of 19th century farming and to maintain a connection with our ancestors on Aquidneck Island," said Robert Foley, preservation director for the Foundation.