

Wind energy in Virginia inevitable?

BY LEA CAMPBELL
• STAFF WRITER

ROANOKE — Despite the fact that only about 8 percent of Virginia's land mass has winds consistent enough to support it, "Wind power is on its way to Virginia and there is likely to be a system in Highland County within the next five or six years," a representative of the Virginia Wind Energy Collaborative said last weekend.

Speaking at the Green Living and Energy Expo at the Roanoke Civic Center seminar Saturday, Mark Lotts said generally in Virginia there was a "wait and see" attitude among state and local officials, but that development pressures coupled with federal incentives were driving industrial scale wind power generation in this direction.

VWEC is a pro-wind energy organization made up of several partners, including the James Madison University Department of Integrated Science and Technology where Lotts is employed. According to promotional literature, it "strives to provide forums for collaboration among stakeholders and organizations that support wind energy in Virginia."

Lotts' partner in the presentation, Jeff Briggs, told the 15 or so people in attendance it was his opinion the opposition to a proposed wind power generating facility on Allegheny Mountain in Highland was a "very vocal minority." He said it was his impression most residents were neutral or supportive. "I think there are about 20 leaders who have gotten people to sign a petition opposing it," he said. "There is also a petition of pro people in the works."

Briggs said VWEC had found most localities were open to working with developers on height restrictions regarding zoning regulations that would otherwise prohibit construction of the 400-foot wind machines sprouting up in many locations in the middle Atlantic states.

On a much smaller scale, it was noted Rockingham County had become the first county in Virginia to approve wind specific zoning amendments for home and business use wind power projects. These apply to towers not exceeding 80 feet, which is more than twice the height limit for such towers in Highland County.

Despite the involvement of Rockingham officials, the presenters made it clear small wind projects are not currently economically self-supporting and consequently, there are only a handful up of them and running in the

state. One of them is on VWEC's home base at James Madison University.

Not only are there no tax incentives for home scale wind power in Virginia, but excess power produced by such operations cannot presently be sold back to the major utilities, Lotts said. Payback on systems costing up to \$50,000 to generate 10 kilowatts would take up to 20 years under current conditions, he said. "People who want to get involved at this time need to be motivated by environmental concerns and the satisfaction of being self-sufficient," Lotts said.

On the prospects for Highland County, VWEC director Dr. Jonathan Miles stresses that VWEC staffers at the conference were expressing personal opinions. "I'm afraid they were overexuberant," he told *The Recorder Monday*. "That is certainly not a stand VWEC would be taking."

VWEC, which is in part funded by the state Department of Mines, Minerals and Energy, is an organization designed for educational purposes. "We think the wind energy technology is good if it's implemented responsibly," Miles said. "There are places where we think it belongs and places it doesn't."

VWEC has on hand a panel of environmental experts who are in the process of producing a map classifying areas of Virginia where wind energy development might make sense, and identifying regions where it doesn't. "It will provide a resource for developers," he said, "and it will outline ecologically sensitive areas."

As for where Highland County will be classified on that map, Miles says he's not at liberty to say, since it has not been completed and negotiations about area classifications are still under way. He said he hopes talks among interested parties will result in a map that can be agreed upon soon. And, he noted, if there are areas identified where impacts may be significant, developers can then be referred to those charged with such an area for assistance.

One of the environmental experts on the committee charged with designing the map is Rick Webb, a Highland County resident and research scientist with the University of Virginia. He says the committee has outlined categories for land areas in Virginia including: Unclassified (places that have no data to determine suitability); mapped but unsuitable (places where wind energy should not be developed); and flagged (places identified as needing more study for specific reasons. The area proposed for a wind utility in Highland,

he said, is currently flagged because it is a documented habitat for an endangered species (the northern flying squirrel). "There are a lot of areas in Highland County where suitability is simply unknown," Webb says. "And we (the committee) are insisting that site-specific assessments are needed."

Webb added that VWEC's committee on land classification is not addressing anything cultural, like the McDowell Battlefield, and only briefly addresses view shed issues. "This is nearly all ecological stuff," he explains.

Miles says he wants to see wind energy on any scale developed responsibly in Virginia. "I support wind, or any energy resource technology I feel as a technological edge," said Miles. "And this is a cleaner source (compared with coal or nuclear power plants)."

Miles points to what he sees as an unfounded fear that wind turbines would proliferate on Allegheny Mountain ridges. People fear that once the door is open, he said, "there's no stopping it. There would be turbines at every corner." But, Miles says, even "small wind" resources in Virginia are marginal, and areas supporting that technology would have trouble breaking even. "Nobody wants to see unfettered development," he said.

For large scale projects, like the Highland New Wind Development proposal, federal incentives alone make the prospect of development not only feasible, but potentially very attractive to the developer. In other areas, state and local governments have gotten into the act of offering additional incentives. Landowners leasing property to developers also stand to gain as evidenced by the Liberty Gap project in West Virginia's nearby Pendleton County, proposed by U.S. Wind Force, a Delaware-based development company.

Miles says it's his experience that most "large wind" developers have been fairly open during their processes for permitting, and he does not see Highland County officials following suit with Pendleton for those purposes. "They seem like they're being done in the open so far," Miles said. "I'm not trying to knock Highland County, but there is still plentiful misinformation out there, and a lot of that just has to do with the fact that this is still such a new technology ... Virginia has the potential to provide good (wind) power, but I'm not saying necessarily that it's right for Highland County. That's something the county needs to decide."

In Roanoke, VWEC presenters said bird kills claimed by wind power opponents were

generally overstated. Concern has been raised in Highland that Allegheny Mountain is situated along a migratory path used by raptors. "It is just common sense for developers to avoid birds' migratory paths," Briggs said. "The first contact a developer has to make is to the Audubon Society."

Miles says too that any good developer will take bird and bat kills "very seriously." He says while he can't speak to sites in Highland County, other sites with major bat kills are being studied. "It's just got to be an issue," he said.

According to John Bianchi with the Audubon Society's New York office, his organization is generally supportive of wind power with the only reservation that "it be sited in locations where it will not contribute to bird kills." He noted a case in the early 1990s where Enron proposed a California wind project adjacent to the nesting grounds of the nation's last 28 Giant Condors. "Enron backed off quickly after we publicized the issue," Bianchi said.

Bianchi said European wind turbine manufacturers are producing machines that have greatly minimized bird deaths. They claim to average only one bird fatality per year per tower, he said. Cell towers, he said, are "much more dangerous to birds."

Most wind projects are required to undergo an environmental impact statement, Bianchi said. "At that time we would call for a full accounting of bird activity in the area." He said the U.S. Geological Survey has extensive information of migratory paths in all areas of the country.

Miles noted wind turbines, even on the commercial scale, aren't "going to cause irreparable damage" to a locality. "They can still be taken away again and no one would ever know they were there," he said.

As for VWEC's stance, Miles emphasizes his organization's mission is to provide information. "(Localities) have to decide for themselves. We're certainly available to alleviate unfounded fears. VWEC is not in any way, shape or form allied with the McBrides (owners of the proposed wind project site in Highland County), or any large developer. We're strictly here for the education of it," he said.

© Dec. 10, 2004, Recorder Publishing of Va., Inc.