# Wind impacts: From to taxes to power lines

BY ANNE ADAMS • STAFF WRITER

MONTEREY — From a list of concerns from the Highland County Board of Supervisors, the Industrial Development Authority held discussions on industrial wind development research. IDA chairman Dave Smith introduced the following issues:

### ■ Wind resources in Highland

Smith presented a "wind map" created by James Madison University, showing how stronger winds were along the ridges of each mountain range. Each area with high winds could be a potential site for wind facilities, he said. Though the map only reflected a couple of places JMU had studied for small wind development (individual use towers measuring about 100 feet), Smith said the map showed where the potential for "large wind" might be. Industrial plants wouldn't necessarily get developed on public lands, since state and federal governments would have to make that decision, he said. "It would be nice if we knew what locations would be available but that doesn't mean it could be economically feasible (in those places)."

## **■** Carrying the power

Smith had contacted BARC electric cooperative and Allegheny Power about the utilities' current infrastructure. He questioned whether there was enough available capacity in the east side of Highland to carry more power, since BARC's service area is limited. He read a letter from BARC CEO and general manager Bruce King, who said BARC's facilities in Highland "would seem to offer limited possibilities for being connected to any sizeable electric generation capacity." King explained BARC's transmission lines "would not be adequate to connect and carry the electric output" of a wind facility.

"As far as BARC is concerned, you could not have a wind farm there (eastern Highland) unless you wanted to build (more lines)," Smith said. Alleghany Power is a completely different situation though, because it has more capacity, he said. Smith believes a proliferation of wind plants is possible, from developers much larger than Highland New Wind Development, but not likely to happen. A larger company might be willing to install new transmission lines and substations, and might have the authority to condemn property for rights of way, but it would be expensive. "It comes down to money," Smith said. "If (developers) have got to go through Highland

County, they've got a lot of rock. It would be harder to pencil out a bottom line that would be acceptable. I wouldn't want to tackle that rock, that type of terrain. What is the likelihood?"

#### ■ Green Bank's array

Smith read a letter from the National Radio Astronomy Observatory in Green Bank, W.Va., that had been sent to the county and HNWD owner H.T. "Mac" McBride. Observatory administrator Denise Wirt explained if 400-foot turbines were installed on Allegheny Mountain, they would be governed by FCC rules for "unintentional and/or incidental emitters." Those rules, Wirt wrote, are for protecting radio services from harmful interference. NRAO consists of enormous satellite dishes that listen in outer space, and there is a "quiet zone" surrounding the facility. Wirt said given the proposed location for McBride's turbines, and the distance from Green Bank, a general evaluation indicates interference from them "seems unlikely due to the presence of some terrain shielding." However, she added, "without knowing what the specific emissions are from the proposed equipment, the final location of the equipment, and whether any terrain anomalies exist between the actual location and our facility, it is not possible to say with certainty that harmful interference will not occur."

Wirt said the observatory would be happy to perform a more detailed evaluation if it knew the exact location of the turbines, along with their technical data.

County administrator Roberta Lambert said she did not know whether that information had been submitted by HNWD.

Smith said he found it hard to believe the observatory's "quiet zone" would be an obstacle for HNWD.

### ■ Military training zones

Smith reviewed a Jan. 21 letter to Congressman Bob Goodlatte from the U.S. Air Force office of legislative liaison written by Col. Eden J. Murrie. "Our staff has reviewed the available military special use airspace used for training in Highland County, and identified concerns that could impact that SUA," she wrote

Murrie explained there were three military training routes, and the Evers Military Operations Area, located over Highland. The "floor" of the MOA is 1,000 feet above ground level. Flights in the area require 500 feet of clearance from any obstacle. "Therefore, it is our

considered opinion that if construction does not exceed 500 feet above ground level, including the blades of the windmills, there will be no impact to flying operations. Any construction exceeding 500 feet," she added, "would force aircraft to fly higher in the MOA, resulting in a degradation to combat training requirements by encroaching upon and restricting flight operations."

Murrie said the Navy also owns three military training routes over Highland and she would forward information to the Department of the Navy for further review. The county does not yet have a reply from the U.S. Navy.

Smith felt McBride's turbines would not interfere with the military.

IDA member Richard Shamrock asked Lambert whether HNWD had submitted an application for the military to consider yet. Lambert said she didn't know.

"It appears we have a lot of uncertainties," Shamrock said.

"Well this doesn't look uncertain to me," Smith replied.

#### ■ Tax revenue

Lambert explained to the IDA how the State Corporation Commission might assess taxable value on the HNWD project using a 25-year depreciation schedule. Based on HNWD's information, Lambert assumed the project would be valued at \$60 million, yielding about \$5,000 per year per megawatt in tax revenue for Highland County under the SCC's formula— a total of \$289,440 the first five years, down to about \$80,000 a year at the end of the project's life the last 4-5 years.

Someone attending asked whether tax revenue would be guaranteed, especially if Virginia considers legislation for renewable portfolio standards or tax breaks that substantially ease financial burdens on wind developers. "I guess counties would have to lobby against that," Smith said.

After reviewing Lambert's estimates of tax revenue, IDA member Jim White said, "It seems to me this might look great up front, but it doesn't look great down the road when (county) expenses are higher. You're getting \$200,000 less after 20 years and then you're really in trouble."

Smith had spoken to Sen. Emmett Hanger about pending legislation that would provide a consistent tax revenue stream for wind energy plants. The bill, as written, uses what Hanger calls a "plug in" number of \$3,000 per megawatt, which Smith felt was too low. But Hanger has said that number could be negoti-

ated to a higher figure before it leaves the House, where it currently awaits review by the House Committee on Finance. Unless the amount was changed, the bill would result in about \$117,000 annually for Highland.

Lambert provided information from the "Windustry" web site, which lists tax revenue from wind plants in other states. The range went from a high end of \$11,700 per megawatt (\$893,000 annually) in Texas to \$2,900 per megawatt (\$330,000/year) in Kansas. Some amounts included payments in lieu of taxes, which have not at this point been offered to Highland by HNWD.

#### ■ Wind energy elsewhere

Shamrock said he heard Maryland had put a moratorium on further wind plant construction and wanted to know why. Smith agreed the IDA should look into it.

White said a moratorium might also be in place in New Jersey. "I think Jersey is worried about their seashore," he said. White explained his problem with urban areas in need of more power that say they should go to Appalachia "where they're dumber and desperate."

"I have a problem with energy that's produced here that doesn't stay here," he said. "Down the road, you might have shot yourself in the foot."

White explained his experiences driving through Meyersdale, Pa., over the years. The first trip, he said, people there thought the couple of "wind farms" built on broad, flat top ridges were neat. But over the last four years, as wind plants have sprouted regularly, the reaction has become quite different. White said turbines are built on sharper ridges there now, where they are visible from almost everywhere.

White again offered to allow the county to place a balloon or other marker on his Jack Mountain property at a height of 400 feet so residents and officials could make a more informed decision about HNWD's proposal. He said he did not believe computer simulated view sheds would provide the same effect as actually seeing something that high on the ridge. "There's a lot left to be studied," he said. "I don't want to feel like I'm desperate to do something immediately (on this project) and I don't want to see a proliferation of these things in Highland County."

"I haven't talked to anyone who disagrees with that," Smith said.

"Maybe there are other alternatives to financing here," White added.

Smith said he had seen California wind plants he described as a "disaster." He had also seen some in North Dakota that didn't bother him. "And I wouldn't have any problem if they were on my neighbor's ground ... There are areas all over the U.S. that has them." However, Smith noted, Virginia was not on the country's top-20 list for wind resources. "I don't know what the answer is," he added. "But siting, I'm convinced, can be done. With a topo map you could see how far you could see it. I've heard some people say they could see McBride's from Monterey. I just don't believe that."

#### ■ Property rights

Shamrock said that in his professional opinion as a long-time real estate broker, a commercial wind plant will negatively affect the value of surrounding property. When transmission lines cross property, that too decreases value, he said.

"That should be easy enough to find out," Smith replied, saying the IDA ought to compare assessed values of Highland properties with power lines overhead.

"It's my understanding," Shamrock said, "that in the U.S. we're running almost full capacity now (on current lines). That means there are going to be increases in transmission lines." And those lines, he said, will most certainly devalue property.

"I don't necessarily agree that transmission lines devalue property," Smith said.

Devalued property would more than offset tax revenue that might be generated from a wind utility, Shamrock said. His local real estate business has been getting calls from potential buyers who are waiting to see whether Highland allows the project, he said. "We already have people putting their contracts on hold ... I had a call less than three weeks ago and now there's another one considering selling who's afraid of losing their value; they're trying to sell it now."

Smith disagreed, saying property values historically increase no matter what's beside them. Shamrock's assumptions, he said, "don't bear out the facts over a period of time."

"It's a risk factor," Shamrock said. "Are you willing to change the aesthetic value of this county?"

Shamrock said people come to Highland County for its beauty, and when they decide to buy property, they examine the zoning designations. Mostly, he said, potential buyers are eager to be near agricultural zones. Wind turbines, by contrast, are industrial development. "I just don't believe they are good for this county."

"Highland County landowners are some of the best property owners anywhere," Shamrock continued. "Even the trailers here look nice ... When people buy land here they buy it because of what it is. We have good zoning laws."

Smith agreed buyers should be able to count on defined land use zones. "I think when a man invests his money, he ought to know the zoning is going to stay, but there should be some areas for discretionary zoning," he said. "I agree with you on zoning and (the zoning map) ought to be the Bible. But we've addressed tough issues here like turkey houses, and I think the same can be done with wind turbines."

White said, "If I could be assured they'd never build another project (in Highland) except this one, I might not be as concerned. But it will never stay that way. Zoning has changed in all areas of this county we never expected. Our comprehensive plan is not followed. Our legislators are not held to their word. I know Highland County is a very special place ... and I have real trouble seeing (wind projects) here."

#### ■ What next?

Smith said there were more concerns to address. "From listening to people, and from what's been written in the newspaper, we have to ask what is our biggest concern?" He proposed listing those issues and prioritizing them. In addition to ones already discussed, he mentioned the project's proximity to other landowners, view shed, substation locations, bird and bat kills, lighting, the impact on county roads, transmission lines, and height. Highlanders might have others, he said. The IDA invited comments and questions from the public to be submitted through Lambert's office: P.O. Box 130, Monterey, Va. 24465; or hcboard@htcnet.org.

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