# State agency urges caution on wind project

## Turbines serious risk to endangered wildlife

BY ANNE ADAMS
• STAFF WRITER

RICHMOND — Virginia agencies have submitted several comments to the State Corporation Commission regarding Highland New Wind Development's proposal for an electric utility in Highland County. Last month, the Virginia Department of Game and Inland Fisheries supplemented its position with a letter from Raymond Fenald, manager of the non-game and environmental resources division at DGIF.

The department told the SCC in no uncertain terms that it believes harm to certain wildlife species can come from the 400-foot towers if constructed on Allegheny Mountain, and urged caution as SCC reviews HNWD's application for a state permit. "We support the use of alternative energy sources, including wind energy. However, based on our review of the information provided thus far by the Highland project applicant, in the absence of accountable mitigation conditions ... we feel this project presents an unacceptable risk to wildlife," Fenald wrote.

"We are particularly concerned with potential significant adverse impacts upon bats and birds. This is due, in part, to the project's location relative to caves that support large numbers of bats (200,000 plus), including endangered and threatened species, the high passage rates of bats and birds identified by the on-site radar study conducted in the fall of 2005, the significant bat fatality rates at other Allegheny wind farms, and the documented use of ridge tops by eagles," he wrote.

The agency said if HNWD's state permit is approved, there are several key issues that should be addressed: the precedent established for future wind plants; the high potential for significant impacts on bats and birds; and the importance of "rigorous" mitiga-

tion methods to be used with longterm monitoring.

#### Setting a precedent

DGIF says wind energy facilities "cannot be viewed as independent" when it comes to how they may impact migratory animals with a wide range of habitat.

"We currently lack sufficient knowledge to absolutely determine the maximum fatality rates that can be tolerated at a given site without unacceptably impacting local or regional populations of sensitive species; but we are certain that high fatality rates at multiple sites across the landscape would pose an unacceptable risk, as do unmitigated fatalities of endangered or threatened species," the agency told SCC. "If this project is permitted, then standard pre- and post-construction monitoring and mitigation conditions need to be implemented."

At the HNWD project, "where wildlife losses potentially could be very substantial and significant," he wrote, "we must take a conservative approach to assessing risk and designing appropriate mitigation. The data needs for pre- and post-construction evaluation, monitoring, and mitigation should not be dictated by project applicants or consultants; but rather should be developed by the agencies that are responsible for managing Virginia's wildlife resources and wind energy development program. These agencies will bear the responsibility to apply these standards consistently from project to project, and to address concerns expressed by citizens of the commonwealth regarding protection and management of Virginia's wildlife resources.

### Fatality rates for bats and birds

DGIF notes studies by both the applicant and other existing wind facilities in the Alleghenies show plenty of evidence that large fatality rates can occur.

"If this project is licensed including the mitigation and monitoring conditions we request, Virginia will be among the first states to conditionally relate pre- and post-construction surveys to predicted and documented fatalities. In addition, these data will facilitate design and implementation of measures to minimize fatalities and enable preliminary risk assessment for future wind energy sites in Virginia."

HNWD's site, the agency says, "would particularly be devastating to bats because of their reproductive strategy, which is atypical of a small mammal."

DGIF says with the U.S. Department of Energy's goal of generating 5 percent of this country's energy with wind power by 2020, along with the financial subsidies promoting the industry, "we are assured a substantial increase in wind farm proposals for the Appalachians. The high fatality rates documented at existing wind farms in the Alleghenies are strong evidence foretelling high fatality rates in Highland County," the letter states.

In addition to bats, the agency is also concerned about the potential loss of eagles at the project site.

"The high number of bald eagles and golden eagles observed in Highland County, compared to other parts of the Alleghenies, and their use of ridges warrants this concern," Fenald said.

## Monitoring and mitigating

If HNWD's project is permitted, says DGIF, mitigation and monitoring are essential to assess the damage and minimize harm to wildlife. In addition, the agency recommended HNWD consult the U.S. Fish and Wildlife Service about threatened or endangered species.

"We cannot authorize take of federally listed species," the letter states. "The applicant's consultants have downplayed the potential for such take but, in our opinion, the evidence suggests a strong likelihood of take. Proximity of the project to the largest Indiana bat and Virginia big-eared bat colonies in the region, and reported substantial occurrence of bald eagles in the area, suggest great likelihood of take of a federal listed species."

There is no reason to assume rare species are less likely to be killed than common species, Fenald added.

On July 25, DGIF officials conducted a field visit to assess possible habitat for northern flying squirrels, state endangered rock voles, and water shrews. Based on the visit, as long as construction impacts remain within the existing cleared ridges and access roads, the agency believes construction should not impact flying squirrels.

"However, suitable northern flying squirrel habitat does exist along the margins of the impact area ... Similarly, while suitable habitat for water shrews and rock voles does exist on-site, as long as the proposed utility line and stream crossings occur within the existing cleared powerline easement, and as long as the crossings are directionally drilled with adequate setbacks, we do not anticipate a significant adverse impact upon those species due to this project," the letter states.

DGIF is concerned, however. about the potential adverse impacts on native trout in Laurel Fork. According to HNWD's joint permit application to the Virginia Marine Resources Commission, the project will include three utility line crossings of Laurel Fork and two unnamed tributaries. "These crossings are proposed to be directionally drilled," DGIF noted. "However, the application states that the crossings will include equipment pits excavated approximately six feet from both banks of the streams ... Our concern is that this construction activity has a high potential to result in sedimentation of the streams and adverse impacts upon trout. Therefore, in our comments to the VMRC, we recommended increasing the setback of these equipment pits to at least 50 feet and implementation of strict erosion and sediment control measures."

The agency asked for an updated construction plan with those changes.

"To reiterate, if the SCC chooses to license this project," Fenald said, "we request adherence to the monitoring and mitigation recommendations described in this letter and attachments. In the absence of such conditions, we feel this project would pose an unacceptable risk to the commonwealth's wildlife resources."