

MEMO TO: Wind Energy Production and Wildlife Conservation Planners

FROM: Merlin Tuttle, President, Bat Conservation International

SUBJECT: Caution Regarding Placement of Wind Turbines on Wooded Ridge Tops

DATE: 4 January 2005

Wind power offers a remarkable source of renewable, pollution free energy. However, it also can be extremely hazardous to bats. In the eastern U.S., only three wind farms on wooded ridge tops have been investigated for bat kills (in Pennsylvania, Tennessee and West Virginia), but all have killed alarming numbers. Because bats are essential to the balance of nature and human economies, are already in decline and have exceptionally low reproductive rates, we are deeply concerned.

There is a rapidly growing body of evidence indicating that bat fatalities at wind power facilities are considerably higher than previously estimated. We anticipate that, unless solutions are soon developed, high kill rates can be expected wherever wind power plants are built on wooded ridges. More than 600 turbines have already been proposed for construction at such sites within a 70-mile radius of the Mountaineer, West Virginia, and Meyersdale, Pennsylvania, sites where large numbers of bats are already being killed. Based on an extremely conservative estimate of 48 bats per turbine per year killed at Mountaineer (Kerns and Kurlinger, 2003), completion of already proposed turbines in just this one small area could kill close to 29,000 bats annually. My best personal estimate is closer to double this number (Tuttle, 2004). Clearly, further construction of wind farms on wooded ridge tops, prior to finding solutions to prevent or minimize bat kills, poses potentially devastating cumulative threats to bats and to ecosystems that rely on them. Prudence suggests great caution until solutions are found. Failure to act immediately to conduct research needed to protect bats and find solutions for industry could prove extremely costly for all concerned.

Because Bat Conservation International recognizes the need to develop clean energy, it has partnered with the American Wind Energy Association, the U.S. Department of Energy National Renewable Energy Research Laboratory, and the U.S. Fish and Wildlife Service to launch the Bats and Wind Energy Cooperative to conduct research needed to identify causes and develop solutions to prevent or minimize bat fatality at wind farms. The cooperative made excellent progress toward identifying causes and possible solutions during the summer of 2004 and possible methods for reducing fatalities will be tested in 2005.

Although Bat Conservation International cannot condone further turbine construction until solutions are found to minimize or prevent bat kills, we urge that all future permits, at least on wooded ridges, require clear commitments to support both the research needed to develop solutions and appropriate monitoring of mortality impacts.

For more information on the Bats and Wind Energy Cooperative, contact, Ed Arnett, Project Coordinator, Bats and Wind Energy Cooperative, at 512-327-9721 or [earnett@batcon.org](mailto:earnett@batcon.org)

Kerns, J., and P. Kerlinger. 2003. A study of bat and bird collision fatalities at the Mountaineer Wind Energy Center, Tucker County, West Virginia, Annual Report for 2003, 39 pp.

Tuttle, M.D. 2004. Wind energy and the threat to bats. *BATS*, 22(2):4-5.