



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

April 27, 2006

Ms. Pamela B. Katz, PE
Chairman, Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Dear Ms. Katz:

Migratory birds, especially neotropical songbirds, continue to face growing threats from human development, including the installation of tall structures such as communication towers, power transmission lines, wind turbines, tall buildings, bridges, and monuments. The U.S. Fish and Wildlife Service (Service) has reported that more than 60 bird species of conservation concern are known to be impacted by communication towers.

In addition to collision mortality related to birds striking towers and their guy-support wires, a threat dealing with the impacts of radiation is beginning to be documented in Europe. Tower-emitted radiation appears to be impacting breeding and resident bird populations as new communication towers—especially cellular telephone communication facilities—are installed in areas where migratory birds historically breed or reside.

Service wildlife biologist Dr. Albert Manville first discussed the radiation issue in 2002 at an international conference and published concerns about it in the June 2005 Proceedings of the Third International Partners in Flight Conference (PIF). At that time he noted:

“Preliminary research in Valladolid, Spain, has shown strong negative correlations with levels of tower-emitted microwave radiation and bird breeding, nesting, and roosting in the vicinity of these electromagnetic fields. In the House Sparrow (*Passer domesticus*), White Stork (*Ciconia ciconia*), Rock Dove (*Columba livia*), Magpie (*Pica pica*), Collared Dove (*Streptopelia decaocto*), and other species, nest and site abandonment, plumage deterioration, locomotion problems, and even death were reported among those species found close to cellular phone antennas (A. Balmori, 2003 unpubl. ms). Laboratory mice were treated with radiation to replicate conditions found close to an antenna park by Magras and Xenos (1997) in Greece. After 5 generations of newborns, irreversible infertility occurred. What similar effect antennas may have on birds is unknown.” (Manville 2005: 1056)

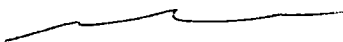
Since the PIF proceedings were released, Mr. Alfonso Balmori has published several technical papers in scientific journals further raising concerns about radiation impacts to migratory birds, including Wood Storks (Balmori 2004, Balmori 2005). The Service would like to see similar research replicated in the eastern United States to determine what radiation impacts, if any, are being documented on North American avifauna.

Notwithstanding other issues that the Service may have, the consideration of the siting of cellular phone antennas on Beebe Hill in Falls Village, Connecticut, proposed by Nextel provides such an opportunity for research, as would an experimental and a control site in the adjacent Berkshire Mountains of Massachusetts. The Service would be glad to help design an independent study, perhaps to be conducted by scientists at the U.S. Geological Survey's Biological Resources Discipline, to assess radiation impacts to migratory birds. A scientifically robust, statistically sound, three-year study could probably be conducted for approximately \$400,000 at both sites and in a laboratory. A detailed budget can be developed.

Other utilities, such as the electric utility industry, have successfully funded independent research efforts exceeding tens of millions of dollars since the 1970s to reduce transmission wire strikes and distribution wire electrocutions. The electric wind turbine industry has funded well over \$7 million since 1994 to minimize bird strikes at turbine blades. By contrast, the telecommunications industry has funded no research to date to minimize impacts to birds. By this letter, the Service respectfully requests that the Siting Council consider asking Nextel to fund these studies in Falls Village and the Berkshires.

Should you need additional information, please contact Mr. Vernon Lang (Vernon.Lang@fws.gov; 603/223-2541) of my staff; Alex Hoar (Alex.Hoar@fws.gov; 413/253-8631) of our Regional Office staff in Hadley, Massachusetts; or Dr. Al Manville (Albert.Manville@fws.gov; 703/358-1963) of the Division of Migratory Bird Management, Arlington, Virginia. Thank you for your consideration of this request.

Sincerely yours,



Michael J. Bartlett
Supervisor
New England Field Office