



United States Department of the Interior



FISH AND WILDLIFE SERVICE

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July 18, 2007

Mr. Dave Tripp
Project Manager
Bonneville Power Administration
P.O. Box 3621
Portland, OR. 97208-3621

Subject: Communication Tower at BPA's LaPine Substation, Deschutes County,
Oregon (BPA ID: TECT-CSB-1)

Dear Mr. Tripp:

The Bonneville Power Administration (BPA), has proposed to construct a 140 foot communications tower to be installed at the BPA LaPine Substation located near Finley Butte in Deschutes County. The U.S. Fish and Wildlife Service (Service) received BPA's May 30, 2007, request for comment on June 1, 2007.

The Service has legal mandate and trust responsibility to maintain healthy, migratory bird populations for the benefit of the American public. We work collaboratively with our partners under conventions, treaties, laws and voluntary programs to ensure the conservation of more than 800 species of migratory birds and their habitats.

The Service's primary concern with the proposed project is the potential for avian mortality and injury resulting from collision. We place a high priority on proactively working with agencies to avoid and reduce impacts such as line strikes to migratory birds. We appreciate the opportunity to provide comments, and we look forward to working with you on this important project and future projects being planned within the region.

Construction of communications towers (including radio, television, cellular, and microwave) in the United States has been growing at an exponential rate. Due to the recent proliferation of cellular phones and the advent of digital television approximately 5,000 to 10,000 new towers are being added each year (6 to 8 percent annually). Some have estimated there will be a total of 600,000 towers in the United States within the next

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10 years (Erickson et al. 2005). The construction of new towers creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. Communications towers are estimated to kill 4-5 million birds per year (Manville, 2005), which violates the spirit and the intent of the Migratory Bird Treaty Act (MBTA) and the Code of Federal Regulations at Part 50 designed to implement the MBTA. Some of the species affected are also protected under the Endangered Species Act and Bald and Golden Eagle Act.

The Migratory Bird Treaty Act (16 U.S.C. 703-712) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the Act has no provision for allowing unauthorized take, it must be recognized that some birds may be killed at structures such as communications towers even if all reasonable measures to avoid it are implemented. The Service's Division of Law Enforcement carries out its mission to protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that proactively seek to eliminate their impacts on migratory birds. While it is not possible under the Act to absolve individuals or companies from liability if they follow these recommended guidelines, the Division of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.

The Service recommends that BPA develop an Avian Protection Plan (APP) for existing and planned communication towers to reduce migratory bird impacts from your installations. An APP can benefit BPA and wildlife resources through avian protection, legal compliance, and positive relations between agencies and customers. We would like to work together with BPA to develop an APP that would apply to your scheduled regional upgrade to your communication network, and scheduled maintenance of existing facilities in the region.

In an effort to minimize the proposed tower's impact to migratory birds, we have developed recommendations based on the best information available at this time, and are the most prudent and effective measures for avoiding bird strikes at towers. These recommendations are based on a September 14, 2000 memo regarding "Service Guidance on the Siting, Construction, Operation, and Decommissioning of Communications Towers" (<http://migratorybirds.fws.gov/issues/towers/comtow.html>). We believe that they will provide significant protection for migratory birds.

Communication Tower Recommendations

Construct the proposed 140 foot tower using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc.). Such towers should be unlighted if Federal Aviation Administration (FAA) regulations permit. Unless otherwise required by the FAA, only white or red strobe lights should be used at night (Evans et al. 2007), and these should be the minimum number, minimum intensity, and minimum number of flashes per minute (longest duration between flashes) allowable by the FAA. The use of solid red or pulsating red warning lights at night should be avoided.

Current research indicates that solid or pulsating (beacon) red lights attract night-migrating birds at a much higher rate than white strobe lights. Red strobe lights have not yet been studied.

1. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.
2. Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint". However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.
3. In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee's antennas and comparable antennas for at least two additional users (minimum of three users for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.
4. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.
5. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

In order to obtain information on the usefulness of these guidelines in preventing bird strikes, and to identify any recurring problems with their implementation which may necessitate modifications, please advise us of the final location and specifications of the proposed tower, and which of the measures recommended for the protection of migratory birds were implemented. If any of the recommended measures can not be implemented, please explain why they were not feasible.

The Service appreciates the opportunity to provide comment on the proposed facility. We would like to work with you to further protect fish and wildlife resources within the project area. If you have any questions regarding the Service's comments, please contact Jerry Cordova or me at the Bend Fish and Wildlife Office at 541-383-7146.

Sincerely,



Nancy Gilbert
Field Supervisor

cc:

Mike Green, USFWS Region 1, Portland, OR.
Estyn Mead, USFWS Region 1, Portland, OR.
Jim Kehoe, BPA, Portland, OR.
Gene Lynard, BPA, Portland, OR

References

Avian Power Line Interaction Committee (APLIC). 2006. Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA. 207 pp.

Avian Protection Plan (APP) Guidelines. April 2005. Edison Electric Institute's Avian Power Line Interaction Committee and U.S. Fish and Wildlife Service. 84 pp.

Manville, A.M., 2005. Bird Strikes and Electrocutions at Power Lines, Communication Towers, and Wind Turbines: State of the Art and State of the Science – Next Steps Towards Mitigation. USDA Forest Service Gen. Tech. Rep. PSW-GTR-191: 1051-1063.

Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Fish and Wildlife Service Regarding Implementation of Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds" 2006. 12pp.

Evans, W.R., Y. Akashi, N.S. Altman, and A.M. Manville. 2007. Response of night-migrating songbirds in cloud to colored and flashing light. North American Birds. Vol. 60: 476-488,