



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Pennsylvania Field Office  
315 South Allen Street, Suite 322  
State College, Pennsylvania 16801-4850

November 22, 2011

David J. Wrona  
Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation  
Washington, D.C. 20555-0001

RE: USFWS Project #2011-0365

Dear Mr. Wrona:

This responds to your letter of September 8, 2011, requesting information on fish and wildlife resources within the area affected by the existing Limerick Nuclear Generating Facility located in Limerick Township, Montgomery County, Pennsylvania. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species, the Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703-712; Ch. 128; July 13, 1918; 40 Stat. 755, as amended) and the Bald and Golden Eagle Protection Act (Eagle Act; 54 Stat. 250, as amended; 16 U.S.C. 668-668d).

### Federally Listed and Proposed Species

The proposed project is within the known range of the bog turtle (*Clemmys muhlenbergii*), a species that is federally listed as threatened. However, it appears that there have been no changes in the project or on-site biological information. Therefore, the Service's comments, as detailed in our letter of March 3, 2011, remain unchanged. Based on our review, we conclude that implementation of the proposed project will not affect the bog turtle.

This determination is valid for two years from the date of this letter. If the proposed project has not been fully implemented prior to this, an additional review by this office is recommended. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered.

### Assessment of Risks to Migratory Birds including Bald and Golden Eagles

The Fish and Wildlife Service is the principal Federal agency charged with protecting and enhancing populations and habitat of migratory bird species. The Migratory Bird Treaty Act 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 MBTA has no provision for authorizing incidental take, the Service recognizes that some birds may be killed even if all reasonable measures to avoid take are implemented. Unless the take is authorized, it is not possible to absolve individuals, companies or agencies from liability (even if they implement avian mortality avoidance or similar conservation measures). However, the Office of Law Enforcement focuses on those individuals, companies, or agencies that take migratory birds with disregard for their actions and the law, especially when conservation measures have been developed but are not properly implemented.

In addition to the MBTA, bald and golden eagles are protected under the Bald and Golden Eagle Protection Act which prohibits killing, selling or otherwise harming eagles, their nests or eggs. The Eagle Act also includes provisions not included in the MBTA, such as the protection of unoccupied nests and the definition of take that includes the prohibition of disturbing eagles. The Service recommends that the applicant carefully evaluate the proposed project in light of the *National Bald Eagle Management Guidelines* to determine whether or not eagles might be disturbed as a direct or indirect result of this project.

The potential exists for avian mortality from electrocutions or collisions with power lines as well as direct habitat loss for wintering, migrating, and breeding migratory birds and indirect impacts from fragmentation, site avoidance and disturbance of birds within the project boundaries. Electrocutions from power lines are of particular concern to raptors as their size, hunting strategy, and nesting preferences make them particularly vulnerable. Other species, such as corvids (crows and ravens) and cormorants have also shown an affinity for nesting on power lines. Collisions are of greatest concern to migratory birds under low visibility conditions and to landbirds during night migration because they either cannot see the utility lines or they lack the ability to negotiate obstacles quickly enough to avoid them. Site-specific factors that should be considered to avoid and minimize the risk to birds include avian abundance; the quality, quantity and type of habitat; geographic location; type and extent of bird use (*e.g.* breeding, foraging, migrating, etc.); and landscape features.

We offer the following recommendations to avoid and minimize impacts to migratory birds within and around the project area.

1. Follow the recommendations and suggested practices in the power line guidelines published by the Avian Power Line Interaction Committee (APLIC; [www.aplic.org](http://www.aplic.org)) and the Service (<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/BirdHazards.html>) to minimize impacts from existing facilities and in the construction of new utility and energy systems and associated infrastructure (APLIC 1994, 1996, and 2006; APLIC and Service 2005).
2. Develop an Avian Protection Plan that minimizes the risk of electrocution, collision, and nest disturbance for migratory birds (APLIC and Service 2005).
3. Minimize the risk of bird electrocutions by using horizontal and vertical separation between energized and/or grounded parts that allows sufficient clearance for wrist-to-wrist (flesh-to-flesh) and head-to-foot (flesh-to-flesh) clearance for the largest migratory

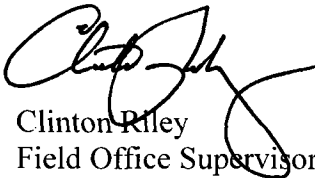
birds in the project area (standard is 60 inches of horizontal separation and 40-48 inches of vertical separation for eagles) and apply insulating conductors on corner and transformer poles.. Apply covers on phases or grounds where adequate separation is not feasible (e.g., insulator/conductor covers, bushing covers, arrester covers, cutout covers, jumper wire covers).

4. Minimize the risk of collisions by marking the wires to increase visibility to flying birds (e.g., hanging markers, bird flight diverters, aviation marker balls).
5. Clear natural or semi-natural habitats (e.g., forests, woodlots, reverting fields, shrubby areas) and perform maintenance activities (e.g., mowing) between September 1 and March 31, which is outside the nesting season for most native bird species. Without undertaking specific analysis of breeding species and their respective nesting seasons on the project site, implementation of this seasonal restriction will avoid take of most breeding birds, their nests, and their young (i.e., eggs, hatchlings, fledglings).
6. Develop a habitat restoration plan for the proposed site that avoids or minimizes negative impacts on vulnerable wildlife. Use only plant species that are native to the local area for revegetation of the project area.

*To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.*

Thank you for the opportunity to comment on this project. Please contact Bonnie Dershem of my staff at 814-234-4090 if you have any questions or require further assistance regarding this matter.

Sincerely,



Clinton Riley  
Field Office Supervisor