January 17, 2002

Ms. Bonnie Crosby
U.S. Fish and Wildlife Service
Pennsylvania Field Office
315 South Allen St., Suite 322
State College, PA 16801-4850

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3, LICENSE RENEWAL - "NO EFFECT" AND "NOT LIKELY TO ADVERSELY AFFECT" DETERMINATIONS FOR THREATENED AND ENDANGERED SPECIES

Dear Ms. Crosby:

This is a request for your concurrence with conclusions which have been developed during the preparation of an environmental impact statement. The conclusions pertain to threatened and endangered species in the project area for the proposed license renewal of the Peach Bottom Atomic Power Station (PBAPS).

The U.S. Nuclear Regulatory Commission (NRC) is preparing a Supplemental Environmental Impact Statement (SEIS) for the proposed license renewal of the operating licenses for (PBAPS) Units 2 and 3, located in Peach Bottom Township, southeastern York County, PA. The current PBAPS licenses will expire in 2013 and 2014 for Units 2 and 3, respectively. The proposed license renewal would extend these operating licenses to 2033 and 2034. One factor considered within this SEIS is the potential for adverse impacts to federally listed endangered or threatened species that may result from continued operation of the facility for up to 20 additional years.

The PBAPS facility includes two boiling water reactors, a control building, a turbine building, and several other structures and facilities, including cooling water intake and discharge structures. The facilities are located on the west bank of the Susquehanna River, approximately 2 miles north of the Maryland/Pennsylvania border. The site is located approximately 8 miles upstream from Conowingo Dam and 6 miles downstream from Holtwood Dam. One transmission corridor is included in the analysis for the PBAPS SEIS. This 54 km (34 mile), 500kV transmission line crosses the Susquehanna River at the PBAPS site, enters Maryland near the village of Rock Springs, then traverses Cecil County, MD, and ends at the Keeney substation in northern Delaware, approximately 5 miles south of Newark, DE.

The licensee for PBAPS, Exelon Generation Company (Exelon), formerly PECO Energy Company (PECO), contacted the USFWS Pennsylvania Field Office concerning threatened and endangered species through a letter dated October 11, 2000, (PECO 2000). The Pennsylvania Field Office provided a response to PECO on October 18, 2000, (USFWS 2000a). The NRC staff contacted the USFWS Chesapeake Bay Field Office on October 11, 2001(NRC 2001), and received a response dated November 19, 2001 (USFWS 2001). We have reviewed these letters, additional information provided by PECO, and information obtained through discussions with State wildlife biologists in Pennsylvania, Maryland and Delaware.

Federally listed species potentially affected by the PBAPS license renewal include the American bald eagle (Haliaeetus leucocephalus) and the bog turtle (*Clemmys muhlenbergii*). An additional species, the swamp pink (*Helonias bullata*) has also been reported from the vicinity of the project area. It is our understanding that one additional species, the Delmarva peninsula fox squirrel (*Sciurus niger cinereus*) may occur as experimental populations in Cecil County, MD and New Castle County, DE, but no natural populations are known from those counties (USFWS 1993) and it will therefore not be considered further.

The bald eagle is known to occur in York and Lancaster Counties, PA, Cecil County, MD, and New Castle County, DE. The Lower Susquehanna River is one of the most important areas for bald eagles in Pennsylvania. There are approximately 10 known nests on Conowingo Pond, 6 on the Maryland side of the border and 4 on the Pennsylvania side. The nests within Pennsylvania are all upstream of the PBAPS site, with the nearest located on Lower Bear Island, approximately 5 km (3 miles) upstream from the PBAPS site (Daniel Brauning, PA Department of Wildlife, personal communication, November 2001). The locations of the nests within Maryland were not precisely indicated, but the nearest nest would be at least 2 miles downstream from the PBAPS site (David Brinker, Maryland Department of Natural Resources, personal communication, November 2001).

The lower Susquehanna River is also a very important wintering area for bald eagles. In Maryland, there are usually between 25 and 30 eagles that winter in the vicinity of Conowingo Dam (David Brinker, personal communication), while in Pennsylvania there are usually between 10 and 20 wintering eagles on Conowingo pond (Brauning and Peebles 2001). In especially cold periods, as many as 15 to 20 eagles have been reported to congregate near the PBAPS discharge canal because it may be the only non-frozen portion of the river (Daniel Brauning, personal communication, corroborated by PECO Energy personnel).

The presence of the PBAPS does not appear to adversely affect the local bald eagle population, and there are indications that the nesting eagle population on the lower Susquehanna may be approaching saturation (PGC 2001). The PBAPS facility has been operating at this location since the early to mid 1970's. Since that time the eagle population has increased dramatically in the vicinity of Conowingo Pond, as it has throughout Pennsylvania. The NRC staff therefore concludes that continued operation of the PBAPS facility for an additional 20 years beyond the current license terms is not likely to adversely affect bald eagles. During especially cold periods, the operation of the plants may have a beneficial effect, because the warm discharge water may be the only available foraging area.

Bog turtles are known to occur in York and Lancaster Counties, PA, Cecil County, MD, and in New Castle County, DE (USFWS 1997). There is no suitable habitat at the PBAPS site itself. However, the Peach Bottom-to-Keeney transmission corridor traverses several streams and wetlands. PECO commissioned a “Phase 1" bog turtle habitat survey (Tetra Tech 2000) along the entire length of the transmission corridor following procedures described in USFWS 2000b. Four of the five stream crossings identified during the survey were incised channels through upland habitats, with no adjacent wetlands present. These channels are rocky, with no muck substrate. Therefore, these areas lack the criteria (hydrology, substrate, and vegetation) identified by USFWS 2000b for suitable bog turtle habitat. The fifth site supports a small wetland (< 0.04 ha [0.1 acre]) with at least one low area of mucky soil and a few wetland plants such as jewelweed (*Impatiens* sp.), skunk cabbage (*Symplocarpus foeditus*), and rushes

(*Juncus* sp.). However, most of the area is covered by a dense stand of mile-a-minute weed (*Polygonum perfoliatum*). Additionally, the hydrology of the site does not meet bog turtle habitat criteria. The marsh does not appear to be spring fed, but is instead a depressional area with no evidence of shallow rivulets or other features described in USFWS 2000b. Therefore, it is concluded that there is no suitable bog turtle habitat within the Keeney transmission corridor. Based on the results of this survey, the NRC staff concludes that continued operation of PBAPS for an additional 20 years will have no effect on bog turtles.

The swamp pink is a perennial, rhizomatous member of the lily family (Liliaceae). New Jersey supports the greatest number of populations, but populations also are found in Delaware, Maryland, and further south in Virginia, North and South Carolina, and Georgia (USFWS 1991). In Maryland, all known populations appear to occur within freshwater seepage areas along streams (USFWS 1991). All the known populations within Cecil County occur along the fall line between the coastal plain and piedmont ecological regions (David Brinker, personal communication) which lie several miles south of the Peach Bottom-to-Keeney transmission line. All the transmission line corridors within Cecil County have been surveyed on several occasions by the Maryland Department of Natural Resources. These surveys identified two locations along the Keeney line with rare or unusual plant species (the Richardsmere and Rock Springs Natural Areas), but did not identify any occurrences of the swamp pink within the Keeney transmission corridor (MDNR 1998). In Delaware, the swamp pink is known from southwestern New Castle County, but not from the project area in the northwestern part of the county (Bill McAvoy, Delaware Natural Heritage Program, personal communication). Therefore, the NRC staff concludes that the continued operation of PBAPS for an additional 20 year license term will have no effect on the swamp pink.

Based on these considerations, the NRC staff has concluded that renewal of the PBAPS operating licenses for an additional 20 years beyond the current license terms will have either no effect (swamp pink and bog turtle) or is not likely to adversely affect (bald eagle) listed species in the vicinity of the PBAPS site or the associated transmission corridor. The NRC staff requests your written concurrence with these conclusions, if appropriate, for inclusion in the SEIS currently under preparation.

Thank you for your consideration of this request. If there are any questions, please contact me by telephone at (301) 415-1444 or by email at dxw@nrc.gov.

Sincerely,
**Original Signed By: LLWheeler**
Louis L. Wheeler, Sr. Environmental Project Mgr.
Environmental Section
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Enclosure: List of References

**References**


Brauning, D.W. and B. Peebles 2001. Bald Eagle Research and Management, Bald Eagle Breeding and Wintering Surveys. Project Annual Job Report. Pennsylvania Game Commission, March, 2001.

Maryland Department of Natural Resources, 1998. Ecologically significant areas in Cecil County. Sites newly identified or updated in 1998. Report to the Coastal Zone Management Division, Maryland, Department of Natural Resources, December 1998.

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Pennsylvania Game Commission. 2001. "Bald Eagles Continue Their Impressive Comeback." Pennsylvania Game Commission News Release #48-01, June 26, 2001.

Tetra Tech NUS, Inc. 2000. Bog Turtle Habitat Survey along the Keeney Transmission Corridor. Prepared for PECO Energy Company, Kennett Square, PA.

U.S. Fish and Wildlife Service, 1991. Swamp Pink (*Helonias bullata*) Recovery Plan. Newton Corner, MA, 56 pp.

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U.S. Fish and Wildlife Service, 1997. "Endangered and Threatened Wildlife and Plants; Final Rule" to list the northern population of the bog turtle as threatened and the southern population at threatened due to similarity of appearance. Federal Register Vol. 62, No. 213, November 4, 1997.

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NRC, 2001. Letter to Mr. John Wolflin, U.S. Fish and Wildlife Service requesting information on endangered or threatened spreies in the Peach Bottom license renewal project area, October 11, 2001.

U.S. Fish and Wildlife Service, 2001. Letter to Ms. Cynthia A. Carpenter, NRC, responding to October 11, 2001, request for information on the presence of endangered or threatened species in the Peach Bottom license renewal project area, November 19, 2001.

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Thank you for your consideration of this request. If there are any questions, please contact me by telephone at (301) 415-1444 or by email at dxw@nrc.gov.

Sincerely,
**Original Signed By: LLWheeler**
Louis L. Wheeler, Sr. Environmental Project Mgr.
Environmental Section
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Enclosure: List of References
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