

**Request:**

Provide references to support the decisions made to exclude seven of the ten State-listed threatened or endangered birds from being categorized as important at the BBNPP site.

**Knowledgeable Expert:**

A knowledgeable expert was provided.

**Response:**

References are provided below to support the decisions made to exclude seven of the ten State-listed threatened or endangered birds from being categorized as important at the BBNPP site.

We initiated investigation of which species should be considered “important” from a rare, threatened, or endangered status based on the required Pennsylvania Natural Diversity Inventory process, specific to the BBNPP site, by consulting with the United States Fish & Wildlife Service (USFWS), Pennsylvania Game Commission (PGC), Pennsylvania Fish and Boat Commission (PFBC) and the Pennsylvania Department of Conservation and Natural Resources (PDCNR). We received written letters from each of these agencies indicating which species they were concerned with regarding the potential impacts of the BBNPP project and no bird species was listed (USFWS, 2008; PGC, 2008a; PFBC, 2008; PDCNR, 2008).

There is a rich history of research studies from which to glean an inventory and relative importance of avifauna for the general area of the proposed BBNPP site. Ecology III (1995) reported on a long-term bird study between 1977 and 1994 for areas adjacent to the proposed location for the BBNPP site. Gross (2004) reported on his long-term studies at the Pennsylvania Important Bird Area #50, of which the BBNPP site is a part. Pennsylvania breeding bird survey data is available for the BBNPP site area (sectors 52D12 and 52D14) for the periods 1984-1989 and 2004-2008 (CMNH, 2008). Normandeau conducted field surveys for birds on the BBNPP site from October 2007 through August 2008 (Normandeau, 2008). Results for all of these studies are presented in Table 2.4-3 of the Environmental Report entitled, “Birds Observed or Likely to Occur in the Vicinity of BBNPP OCA”.

A decision was made to exclude seven of the ten species observed or likely to occur on BBNPP OCA that are State-listed threatened or endangered bird species from being categorized as important at the BBNPP site based on results from the above listed studies and from range map distributions provided from Pennsylvania breeding bird surveys (Brauning, 1992, CMNH, 2008) and by the Pennsylvania Game Commission (PGC, 2008b). The seven excluded bird species are the short-eared owl, upland sandpiper, American bittern, least bittern, great egret, black tern, and the sedge wren. Though these species have been infrequently observed during migration near the BBNPP site during a 28-year study conducted by Ecology III, none of them are known to nest or have bred successfully at BBNPP OCA. Due to the low numbers of observations, lack of evidence for nest attempts or successful breeding, their status as widely ranging migrants a decision was made to exclude them from the list of important species at the BBNPP site. A short description of the history of observations near the BBNPP site for these seven species is provided below.

Ecology III (1995) listed the short-eared owl as a rare migrant (seen only once between 1985 and 1994) at Susquehanna SES with no history of nesting nearby. They have not been detected on any other studies listed above and, in Pennsylvania, are known to nest primarily on old reclaimed strip mines in Clarion and Jefferson Counties, about 150 miles west of the BBNPP site in Luzerne County.

The only record of an upland sandpiper in the BBNPP site area that we located was reported by Ecology III (1995) who cited only one in their 28-year study which was observed on April 7, 1993.

American bittern was described as a rare but regular migrant by Ecology III (1995) and they acknowledged that none have been known to nest in the BBNPP site area for at least the period between 1977 and 1994. Only one was observed in the final three years of their study (1992-1994). According to the PGC website there are no currently known nest sites in Luzerne County.

Least bittern was described as a rare but regular migrant by Ecology III (1995) with no known history of nesting for at least the period 1977 through 1994. It was seen only once between 1989 and 1994. None were observed on any of the other above mentioned studies. According to the PGC website confirmed least bittern nesting sites are currently restricted primarily to northwestern and southeastern Pennsylvania.

Great egret was described as an uncommon but fairly regular migrant by Ecology III (1995) and never known to nest in the BBNPP site area. Their nesting in Pennsylvania has been restricted to the lower Susquehanna River area and some other locations in southeastern Pennsylvania.

Black tern was described as a rare migrant in Luzerne County (Ecology III, 1995) with no history of nesting in the BBNPP site area. No black terns were observed on any other studies in the BBNPP site area described above. The nearest nesting populations are in northwestern Pennsylvania (Erie and Crawford Counties) and the Lake Ontario region of New York, over 150 miles away.

Sedge wren was observed only once during the 28-year study conducted by Ecology III (1995). It was not detected on any of the other studies near the BBNPP site listed above and it has never been known to nest in Luzerne County. Confirmed nesting in Pennsylvania has been restricted to western and southern Pennsylvania.

In addition to the seven bird species mentioned above, there are eight additional bird species listed then or added to the Pennsylvania threatened or endangered list more recently (PGC 2008b), some of which may occur at BBNPP OCA or have been observed: dickcissel, king rail, yellow-crowned night heron, black-crowned night heron, common tern, loggerhead shrike, yellow-bellied flycatcher and blackpoll warbler (all Pennsylvania Endangered). These birds are also excluded from consideration as "Important" for the following reasons:

Dickcissel, recently listed as endangered in Pennsylvania, was reported as observed within IBA #50 (Normandeau, 2008). It is a widespread migrant but limited to several breeding locations in southeastern and southwestern Pennsylvania and one record from Wyoming County in northeastern Pennsylvania (PGC, 2008b). It is not known or suspected to breed at the BBNPP OCA (CMNH, 2008) nor is it observed on a regular basis as a migrant.

King rail was not reported as observed in any previous or current studies at or near BBNPP

(Normandeau, 2008); it is likely extirpated as a breeding bird in Pennsylvania. If it occurs as a breeding bird it would be in extreme southeastern or northwestern corners of the state in extensive freshwater marshes (CMNH, 2008).

Yellow-crowned night heron and black-crowned night heron (a recent addition to the Pennsylvania endangered list) were not observed in the current or any of the previous bird studies at BBNPP OCA (Normandeau, 2008). Both are associated with water and wetlands, are fairly commonly observed throughout the state as migrants but have very limited breeding distributions in Pennsylvania (CMNH, 2008).

Common tern was reported as observed on IBA #50 (Normandeau, 2008). Common tern is associated with large water bodies and oceans; it is not a breeding bird in Pennsylvania. It is a wide-ranging migrant and could be observed almost anywhere in the eastern United States during migration.

Loggerhead shrike was reported as observed on IBA #50 in Normandeau (2008). Although the report may be correct, it may be misidentified or a typographical error for northern shrike, which species is a frequently observed winter bird in northern Pennsylvania while loggerhead shrike is virtually extirpated as a breeder and very rare as a migrant. Loggerhead shrike formerly nested in south-central Pennsylvania but was not reported as a breeding bird in the Second Breeding Bird Atlas which ended in 2008 (CMNH, 2008).

Yellow-bellied flycatcher and blackpoll warbler were reported as observed on IBA #50 (Normandeau, 2008). Both are listed as endangered in Pennsylvania (PGC 2008b). Both species are observed as neotropical migrants throughout Pennsylvania but have core breeding ranges far north of Pennsylvania or BBNPP. However, yellow-bellied flycatcher is known to breed in one or two remote, high elevation spruce bogs on State Game Lands in northern Luzerne County and adjacent Wyoming County, Pennsylvania (CMNH 2008). Blackpoll warbler is suspected very recently of having a breeding population in the same area (Block 52A11 of the 2<sup>nd</sup> Pennsylvania Breeding Bird Atlas) and was therefore listed as endangered in Pennsylvania (CMNH 2008). The spruce bog habitat required for breeding by yellow-bellied flycatcher and blackpoll warbler does not occur at BBNPP OCA.

## **References:**

### **Public**

1. BBNPP COLA ER Sections 2.4.1 and 4.3.1.
2. BBNPP COLA ER - Field Survey of Terrestrial Fauna at the Proposed Bell Bend Nuclear Power Plant Site, Luzerne County, Pennsylvania. Final. Normandeau Associates, September 2008, Accession Number ML082890761.
3. Ecology III. 1995. Environmental Studies in the Vicinity of the Susquehanna Steam Electric Station: 1994 Annual Report. Prepared by Ecology III, Inc., Berwick, Pennsylvania, for PPL Susquehanna, LLC. June 1995.
4. Gross, 2004. Pennsylvania Important Bird Area #50, Susquehanna Riverlands Phase I Conservation Plan. Pennsylvania Audubon, 9pp. May 2004, D. Gross.
5. Brauning, 1992. Atlas of Breeding Birds in Pennsylvania. Univ. of Pittsburgh Press. 1992. D. Brauning.
6. CMNH, 2008. Carnegie Museum of Natural History, 2nd Pennsylvania Breeding Bird Atlas 2004-2008. Website: Date accessed: April 15, 2008.

7. PDCNR, 2008. Pennsylvania Department of Conservation and Natural Resources, Letter from Rebecca H. Bowden to George Wrobel (CEG GNA Engineering), Re: Environmental Review of Bell Bend Nuclear Power Plant Site, Berwick, Luzerne County, Pennsylvania, Dated: March 24, 2008.
8. PFBC, 2008. Pennsylvania Fish and Boat Commission, Letter from Christopher A. Urban to George Wrobel (Unistar Nuclear), Re: Species Impact Review (SIR) - Rare, Candidate, Threatened, Endangered Species, Berwick, Luzerne County, PA NPP-1. Letter dated April 14, 2008.
9. PGC, 2008a. Pennsylvania Game Commission, Letter from James R. Leigey to Rod Krich (UniStar Nuclear), Re: PNDI Database Search, Berwick, PA NPP-1 Project, Salem Township, Luzerne County, PA. April 10, 2008.
10. PGC, 2008b. Pennsylvania Game Commission, Endangered Species, Website: [www.pgc.state.pa.us/pgc/cwp/view.asp?a=458&q=150321](http://www.pgc.state.pa.us/pgc/cwp/view.asp?a=458&q=150321). Date Accessed: April 2, 2008.
11. BBNPP ER Section 2.4.1.2.2
12. BBNPP ER Section 2.4.1.2.2.1
13. BBNPP ER Table 2.4-3

**Internal**

1. AREVA, Document Identifier 38-9091893-000, "A Field Survey of Terrestrial Fauna at the Proposed Bell Bend Nuclear Power Plant Site, Luzerne County, Pennsylvania" Final report, Normandeau Associates Inc., September 2008.