



United States Department of the Interior



FISH AND WILDLIFE SERVICE
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IN REPLY REFER
TO:

FWS/RIFO

June 6, 2003

United States Nuclear Regulatory Commission
Attn: Pao-Tsin Kuo, Program Director
License Renewal and Environmental Impacts
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation
Washington, D.C. 20555-0001

Dear Pao-Tsin Kuo:

This is in response to your letter of March 12, 2003, requesting our comments regarding federally listed threatened and endangered species for the proposed Quad Cities nuclear power plant station application for operating license renewal for the Quad Cities Station in Rock Island County, Illinois.

The following federally listed species are known to occur in Rock Island and Whiteside Counties, Illinois and Scott and Clinton Counties, Iowa.

<u>Classification</u>	<u>Common Name (Scientific Name)</u>	<u>Habitat</u>
Rock Island County		
Threatened	Bald eagle <i>Haliaeetus leucocephalus</i>	wintering
Endangered	Higgins' eye pearly mussel <i>Lampsilis higginsii</i>	sand/gravel substrates swift flowing current
Whiteside County		
Threatened	Bald eagle <i>Haliaeetus leucocephalus</i>	wintering
Scott County		
Threatened	Bald eagle <i>Haliaeetus leucocephalus</i>	wintering

Endangered	Higgins' eye pearly mussel <i>Lampsilis higginsii</i>	sand/gravel substrates swift flowing current
Clinton County Threatened	Bald eagle <i>Haliaeetus leucocephalus</i>	wintering/Breeding
Endangered	Higgins' eye pearly mussel <i>Lampsilis higginsii</i>	sand/gravel substrates swift flowing current
Endangered	Iowa Pleistocene snail (<i>Discus macclintocki</i>)	algific talus slopes
Statewide Threatened	Prairie bush-clover <i>Lespedeza leptostachya</i>	dry to mesic prairies
Threatened	Eastern prairie fringed orchid <i>Discus macclintocki</i>	wet grassland habitats
Endangered	Indiana bat	caves, mines; small stream corridors with well- developed riparian woods; upland and bottomland forests

The threatened bald eagle is listed as breeding in Clinton and Scott Counties, Iowa. Bald eagles build their nests in large trees near rivers or lakes. A typical nest is around 5 feet in diameter. Eagles often use the same nest year after year.

During the winter, this species feeds on fish in the open water areas created by dam tailwaters, the warm water effluents of power plants and municipal and industrial discharges, or in power plant cooling ponds. The more severe the winter, the greater the ice coverage and the more concentrated the eagles become. They roost at night in groups in large trees adjacent to the river in areas that are protected from the harsh winter elements. They perch in large shoreline trees to rest or feed on fish. There is no critical habitat designated for this species. The eagle may not be harassed, harmed, or disturbed when present nor may nest trees be cleared.

The endangered Higgins' eye pearly mussel is known to occur in the Mississippi River north of Lock and Dam 20 which includes the above listed counties. This species prefers sand/gravel substrates with a swift current and is most often found in the main channel border or an open, flowing side channel.

You should refer to the following document, "2001 Monitoring Report – Unionid Relocation from the Cordova Energy Effluent Site at Mississippi River Mile 504," (Ecological Specialists, Inc., 2002). Freshwater mussels being affected by the effluent plume of the power plant were relocated in 1999. The Fish and Wildlife Service issued a Biological Opinion stating that the

project was "not likely to jeopardize the continued existence of *L. higginsi*" and allowed an incidental take of 33 *L. higginsi* over the life of the project (USFWS, 1999). Conditions of the Biological Opinion included relocating unionids from the discharge area and establishing a monitoring program for relocated unionids and unionids that might recolonize the discharge area.

One of the largest populations of *Higgins' eye pearl mussel* known to occur is in the Mississippi River near Cordova. The Biological Opinion and 2001 Monitoring Report should be reviewed and the conditions stated in these documents should be included in your environmental impact statement. If any other projects are located near a known Higgins' eye mussel bed, it may be necessary to conduct a survey to determine the presence of the species.

The endangered **Iowa pleistocene snail** is known to occur on north-facing slopes of the driftless area in Clinton County, Iowa. It occupies algific (cold producing) talus slopes at the outlet of underground ice caves along limestone bluffs within a narrow regime of soil moisture and temperature. There is no critical habitat designated. It must not be harmed, harassed or disturbed.

The **prairie bush clover** occupies dry to mesic prairies with gravelly soil. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever prairie remnants are encountered.

The **eastern prairie fringed orchid** occupies wet grassland habitats. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever wet prairie remnants are encountered.

The **Indiana bat** potentially may occur in all counties in Illinois and Iowa south of Interstate 80.

During the summer, the Indiana bat frequents the corridors of small streams with well developed riparian woods as well as mature upland forests. It forages for insects along the stream corridor, within the canopy of floodplain and upland forests, over clearings with early successional vegetation (old fields), along the borders of croplands, along wooded fencerows, and over farm ponds and in pastures. It has been shown that the foraging range for the bats varies by season, age, and sex and ranges up to 81 acres (33ha). It roosts and rears its young in cavities and beneath the loose bark some live species of trees and those of large dead or dying trees. It winters in caves and abandoned mines.

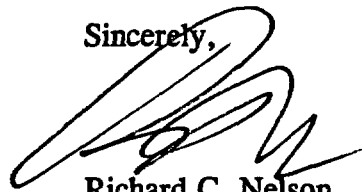
An Indiana bat maternity colony typically consists of a primary roost tree and several alternate roost trees. The use of a particular tree appears to be influenced by weather conditions (temperature and precipitation). For example, dead trees found in more open situations were used more often during cooler or drier days while interior live and dead trees were selected during periods of high temperature and/or precipitation. It has been shown that pregnant and neonatal bats do not thermoregulate well and the selection of the roost tree with the appropriate microclimate may be a matter of their survival. The primary roost tree, however, appears to be

used on all days and during all weather conditions by at least some bats. Indiana bats tend to be philopatric, i.e. they return to the same roosting area year after year.

These comments provide technical assistance only and do not constitute a report of the Secretary of the Interior on a project within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act, do not fulfill the requirements under Section 7 of the Endangered Species Act, nor do they represent the review comments of the U.S. Department of the Interior on any forthcoming environmental statement.

If you have any questions concerning our comments, please contact Kraig McPeck of my staff at (309) 793-5800 ext. 210.

Sincerely,

A handwritten signature in black ink, appearing to be 'R. Nelson', written over a horizontal line.

Richard C. Nelson
Supervisor