

United States Department of the Interior

FISH AND WILDLIFE SERVICE
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52-007

IN REPLY REFER TO: FWS/AES-CIFO/4-1200

April 12, 2004

Mr. / Ms. Pao-Tsin Kuo
United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Sir or Madame:

This responds to your letter dated March 17, 2004 requesting information on endangered and threatened species on or near two proposed alternate sites for one or more nuclear power plants by Exelon Generation Company, LLC. Both alternate sites are existing generating stations owned and operated by Exelon; Braidwood Nuclear Station in Will County, Illinois and Zion Nuclear Power Station in Lake County, Illinois.

The Zion Nuclear Power Station in Lake County, Illinois appears to lie directly adjacent to Illinois Beach State Park where we have three federal species of concern and one species with critical habitat designation.

The federally threatened eastern prairie white fringed orchid (*Plantanthera leucophaea*) is located at Illinois Beach State Park. Possible habitat of the Eastern prairie white fringed orchid includes but is not restricted to mesic prairie, sedge meadows, marsh edges and bogs. Soils of these habitats include glacial soils, lake plain deposits, muck, and peat. We request that a search for these types of habitat be conducted. If any of these aforementioned habitat remnants are found within any of the project areas, we request that searches for this species be conducted between June 28 and July 11, as this is when the orchid typically flowers and is most identifiable. If any eastern prairie white fringed orchids are found, this office should be notified immediately.

The federally endangered Karner blue butterfly (Lycaeides Melissa samuelis) is also believed to occur at Illinois Beach State Park. This butterfly was historically associated with native barrens and savanna ecosystems, but it is now associated with remnant barrens and savannas, highway and powerline right-of-ways, gaps within forest stands, young forest stands, forest roads and trails, airports, and military camps. These areas all have soils that are suitable for lupine growth, an open canopy, and management that causes soil disturbance or suppression of perennial shrub and herbaceous vegetation (such as by mowing, brush-hogging, logging, chemical control, or prescribed fire). These habitats can be very diverse vegetationally, and support herbaceous species that co-occur with lupine in the native remnant barrens and savanna habitats. Almost all

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of these contemporary habitats can be described as having a broken or scattered tree canopy that varies within habitats from 0 to between 50 and 80 percent canopy cover. The habitats have lupine, the sole larval food source, nectar plants for feeding adults, critical microhabitats, and attendant ants. Illinois Beach State Park provides each of these criteria.

The federally threatened Pitcher's thistle (Cirsium pitcheri) also occurs at Illinois Beach State Park. Pitcher's thistle is part of a dynamic dune ecosystem. It is found most frequently in the near-shore plant communities. Potential Cirsium pitcheri habitat includes beach, foredune, interdunal trough, and secondary dune areas. Pitcher's thistle colonizes patches of open, windblown areas of the landscape, and gradually declines locally as the density of vegetation and ground litter increases through plant succession. It is dependent on continually colonizing the mosaic of open habitats within the Great Lakes dunes. The species is patchily distributed with varying population sizes in all open zones of the dunes vegetation. Plant populations decline in stabilized, late successional secondary dune sites and in areas heavily used by people. We strongly caution you to avoid impacts to any of these ecosystems.

In addition, portions of Illinois Beach State Park are designated as critical habitat for the Great Lakes breeding population of the piping plover (*Charadrius melodus*). Piping plovers are listed as endangered under the Endangered Species Act of 1973, as amended. Critical habitat is a specific geographic area that is essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery. Please ensure that your proposed project actions will not destroy or adversely modify critical habitat. Exact boundaries of proposed construction showing no adverse effect to beach areas should be considered.

At this time there are no known federal occurrences of listed species in or near the Braidwood Nuclear Station, in Will County, Illinois.

This letter only addresses federally listed species; the Illinois Department of Natural Resources should be contacted for information on State-listed species. Any impacts to wetlands or waters of the United States may require a permit from the U.S. Army Corps of Engineers. This letter does not preclude separate evaluation and comment by the U.S. Fish and Wildlife Service on wetland impacts proposed for section 404, Clean Water Act authorization.

If you have any questions, please contact Ms. Cathy Pollack at 847/381-2253 ext. 239, or Ms. Karla Kramer at 847/381-2253 ext. 230.

Sincerely,

John D. Rogner Field Supervisor

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