United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

January 27, 2010

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ER 09/1164

Ms. Elaine Keegan
U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Mail Stop O-11F1
Washington, DC 20555-0001

Subject: Issuance of renewed operating licenses DPR-42 and DPR-60 for Prairie Island Nuclear Generating Plant, Units 1 and 2, Dakota County, Minnesota.

Dear Ms. Keegan:

The Department of the Interior (Department) has reviewed the October 2009 Draft Generic Environmental Impact Statement (DEIS) for License Renewal of Nuclear Plants – Supplement 39 Regarding Prairie Island Nuclear Generating Plant, Units I and 2 (PINGP 1 and 2). We offer the following comments and recommendations for your consideration concerning resources or issues for which the Department has jurisdiction or special expertise,

General Comments

In general, the DEIS adequately identifies resources that fall under the jurisdiction of the Department and the potential impacts to those resources, with one possible exception. The DEIS goes into some detail to discuss the potential impacts to birds of transmission lines (pp. 4-13 and 4-14), but does not address the potential impacts of bird strikes due to a 360-foot transmission tower that is maintained at PINGP 1 and 2. We briefly address the potential impacts regarding this tower in the Detailed Comments below. We also offer comments concerning a federally listed species.

Detailed Comments

Endangered Species - Higgins Eye (Lampsilis higginsii)

Attached to the DEIS and pursuant to consultation under section 7(a)(2) of the Endangered Species Act of 1973, as amended (Act), is a biological assessment (BA) of the effects of the proposed license renewal on Higgins eye (*Lampsilis higginsii*), a freshwater mussel that is listed

as endangered under the Act. This BA is contained in the draft supplemental EIS. The comments below address information regarding Higgins eye that is contained within both the DEIS and the BA.

The DEIS states on p. 2-37 that adult Higgins eye were relocated to a site 0.8 km upstream of the facility's water intake. These Higgins eye were released at this site in 2000 after being removed from downstream sites that had been heavily infested with zebra mussels; the final EIS should note that adult Higgins eye were still present when this site was checked in 2008 (Davis 2009), indicating that this area is suitable for survival of the species. The DEIS also refers to an area in the Sturgeon Lake section of Pool 3 where sub-adult Higgins eye were released. This area extends to within approximately 0.4 km of the plant's intake. Releases of sub-adults at this and other locations are intended to establish new Higgins eye populations to offset adverse impacts of zebra mussels to Higgins eye populations elsewhere in the Mississippi and St. Croix Rivers.

Each Higgins eye reintroduction area will be monitored over the next several years to determine whether or not reproducing populations of Higgins eye become established. On p. 4-16 of the DEIS, the NRC states that "(I)f the Higgins eye relocation project is successful in establishing a reproducing population during the renewal term of the licenses and if impingement and entrainment at PINGP 1 and 2 of suitable fish hosts would appear to adversely affect that mussel population, NRC might have to re-assess the potential for adverse effects in the future." We recommend that the NRC assume that a population of Higgins eye *will* become established in this reintroduction area during the renewal term of the licenses (i.e., before 2034). This is a reasonable expectation. Over 5100 sub-adult Higgins eye were released at this location during the years 2003-2008, and habitat conditions are amenable to survival and reproduction of the species in this area. We also recommend that the NRC identify levels of impingement for each of the seven Higgins eye suitable fish host species (U.S. Fish and Wildlife Service 2004:81), and note any levels that individually or collectively would adversely affect Higgins eye populations.

The DEIS states on p. 2-35 that there are ten Higgins eye Essential Habitat Areas – there are now fourteen (EHA, U.S. Fish and Wildlife Service 2008). The DEIS is correct that the nearest Higgins eye EHA is located upstream of the Prairie Island facility, at the junction of the Mississippi and St. Croix Rivers near Prescott, Wisconsin. EHAs include only areas where Higgins eye is well established. The reintroduction area mentioned above is not designated as an EHA because the species is not yet well established, but that area is still important due to the need to reestablish populations of Higgins eye to offset the extensive impacts of zebra mussels to the species.

The DEIS states on p. 2-36 that larval mussels (glochidia) typically detach (excyst) from their fish host in three weeks. In fact, Higgins eye glochidia may take 6-7 weeks to excyst. At Genoa National Fish Hatchery in 2007, for example, juvenile Higgins eye excysted over a period of 22-45 days after infestation (Brady & Aloisi 2007).

Black crappie (*Pomoxis nigromaculatus*) should also be listed on p. 2-36 as a suitable reproductive host for Higgins eye.

Thermal Discharges

Xcel Energy has taken various measures at Prairie Island to reduce the adverse impacts of thermal discharges to physical and biological features of the Mississippi River in lower Pool 3 and in Pool 4. We recommend that NRC and Xcel Energy use cooling towers to the maximum

extent practicable to further minimize thermal impacts to the river ecosystem and to reduce fish entrainment and impingement.

Mississippi River Water Level Management

The U.S. Fish and Wildlife Service coordinates with U.S. Army Corps of Engineers, National Park Service, and the Minnesota and Wisconsin Departments of Natural Resources to implement drawdowns in the Mississippi River via the Water Level Management Task Force (Task Force). Implementation of a drawdown in Pool 3 is a high priority of the Task Force to improve habitat for fish and wildlife. In the DEIS, NRC states that "the implementation of this project is unlikely to hinder water intake operations at the Prairie Island facility (p. 4-48 of the DEIS)." We recommend that NRC condition its license to Xcel Energy to ensure that the necessary planning and coordination between the Company and the Task Force is completed in a timely manner to facilitate the implementation of a Pool 3 drawdown.

Migratory Bird Impacts – Existing Communications Tower

In the DEIS, the NRC acknowledges the importance of the Mississippi River corridor as one of North America's major flyways for migratory birds, but does not mention the hazard posed to birds by the facility's communications tower. This tower stands 109.7 meters (360 feet) above the ground. We recommend that the NRC evaluate the potential impacts of this tower on migratory and resident birds in the final EIS and evaluate the feasibility of implementing any technological alternatives that would allow for the removal of this tower while maintaining any important communications.

Transmission Line on Minnesota Valley National Wildlife Refuge

On p. 2-35, there is a brief reference to a transmission line that crosses the Black Dog Unit of the Minnesota Valley National Wildlife Refuge (Refuge). We recommend that Xcel Energy coordinate with Gerry Shimek at the Refuge to mark any lines that cross the Refuge in a manner to minimize the hazard that they may pose to migratory birds. Mr. Shimek may be reached at (952) 854-5900.

We appreciate the opportunity to review the document and provide comments. For further coordination concerning these comments, please contact the U.S Fish and Wildlife Service's Phil Delphey at telephone 612-725-3548.

Sincerely,

Michael T. Chezik

Michael T. Chezik
Regional Environmental Officer

cc:
Phil Delphey, Bloomington, MN
Anna Miller, USEPA, Chicago, IL
Stuart Arkley, MNDNR, St. Paul, MN

Literature Cited

Brady, T., and D. Aloisi. 2007. *Lampsilis higginsii* and *Quadrula fragosa* recovery project Genoa National Fish Hatchery. U.S. Fish and Wildlife Service, Genoa, WI. 10 p.

Davis, M. 2009. Draft Clam Chronicles - 2009. Minnesota Department of Natural Resources, Lake City, MN. 11 p.

U.S. Fish and Wildlife Service. 2004. Higgins eye pearlymussel (*Lampsilis higginsii*) recovery plan: First revision, Ft. Snelling, MN. 126 p.

U.S. Fish and Wildlife Service. 2008. Higgins eye (*Lampsilis higginsii*) Essential Habitat Areas 2008 Review and Addition of New EHAs. U. S. Fish and Wildlife Service - Twin Cities Ecological Services Field Office, Bloomington, MN. 9 p.