



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 11, 2013

Mr. Tom Melius
Midwest Regional Director
U.S. Fish and Wildlife Service
5600 American Blvd. West, Suite 990
Bloomington, MN 55437-1458

SUBJECT: REQUEST FOR CONCURRENCE WITH LIST OF FEDERALLY-LISTED
SPECIES AND HABITATS FOR THE PROPOSED BRAIDWOOD STATION,
UNITS 1 AND 2, LICENSE RENEWAL

Dear Mr. Melius:

The U.S. Nuclear Regulatory Commission (NRC) is reviewing an application to renew the operating licenses for Braidwood Station, Units 1 and 2 (Braidwood), located near Braidwood, Illinois. Exelon Generation Company, LLC (Exelon) submitted its application for renewal to the NRC in a letter dated May 29, 2013, pursuant to Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54). If approved, NRC's issuance of a renewed license would authorize Exelon to operate Braidwood for an additional 20 years beyond the current licensing periods, which expire on October 17, 2026 (Unit 1) and December 18, 2027 (Unit 2).

The purpose of this letter is to seek the U.S. Fish and Wildlife Service's (FWS's) concurrence with the NRC's enclosed list of Federally-listed species that may occur in the vicinity of Braidwood in accordance with 50 CFR 402.12(c). This letter also provides you and your staff with information on the NRC's National Environmental Policy Act of 1969, as amended (NEPA), process and opportunities for public comment and involvement.

Project Description

Braidwood Station (Braidwood) is owned and operated by Exelon Generation Company, LLC (Exelon Generation), the applicant and licensee. Exelon is wholly owned by Exelon Corporation. Exelon Corporation delivers energy in northern Illinois via its energy delivery subsidiary, Commonwealth Edison Company (ComEd). ComEd owns and operates the transmission lines that connect Braidwood to the regional electricity grid.

Braidwood is located in north-eastern Illinois in southwest Will County, approximately 80 - 97 kilometers (km) (50 - 60 miles [mi]) southwest of the Chicago metropolitan area and 32 - 40 km (20 - 25 mi) south-southwest of Joliet (Enclosure 1). The property is approximately 2 km (1 mi) from the town of Godley, 3 km (2 mi) from the town of Braidwood, and 10 km (6 mi) from the town of Wilmington and is adjacent to both Grundy and Kankakee Counties. The in-scope transmission line is located in both Will and Kankakee Counties. The Kankakee River is approximately 8 km (5 mi) east of the eastern site boundary, about 22 km (14 mi) upstream of the point where the Kankakee and Des Plaines Rivers join to form the Illinois River.

The Braidwood site occupies approximately 1,804 hectares (ha) (4,457 acres [ac]) of which approximately 1,030 ha (2,540 ac) comprise the cooling pond that formerly was a strip mine

(Enclosures 2 and 3). The nuclear generating facilities are sited in the northwest quadrant of the site and include the two reactor containment buildings and related structures, a switchyard, administration buildings, warehouses, and other features. A right-of-way (ROW) for the water intake and discharge pipes runs from the northeast site boundary approximately 8 km (5 mi) east to the Kankakee River. The river is the source of the cooling pond's makeup water and the receiving body for the cooling pond's blowdown discharge, which is subject to limitations established by National Pollutant Discharge Elimination System (NPDES) Permit IL0048321.

The cooling pond has an elevation of 181 meters (m; 595 feet [ft]) above mean sea level when filled to capacity. Much of the cooling pond is available for public access as a result of a 1981 long-term lease agreement between Exelon and the Illinois Department of Natural Resources (DNR). The cooling pond is part of the Mazonia-Braidwood State Fish and Wildlife Area and is managed jointly by Exelon and the Illinois DNR for fishing, waterfowl hunting (from designated blinds), and fossil collecting (by permit). The cooling pond is also a waterfowl refuge. In addition to the Braidwood cooling pond owned by Exelon, the Mazonia-Braidwood State Fish and Wildlife Area includes the Mazonia properties owned by the Illinois DNR, which are located in Grundy County to the south and southwest of the cooling pond.

One 345-kilovolt (kV) transmission ROW was constructed from Braidwood to a substation near Crete, Illinois to connect Braidwood to the electric grid at the time of initial plant construction. This is the only transmission line ROW considered to be in-scope for the Braidwood license renewal. Subsequent to initial plant construction, a new transmission substation (TSS) was constructed at Davis Creek, within the Braidwood-to-Crete ROW approximately 10 km (6 mi) northwest of Kankakee, Illinois. After construction of the Davis Creek TSS, the original Crete TSS was retired, the lines were extended northward to a new Crete TSS, and the transmission line ROW segment from Braidwood to the new Davis Creek TSS became known as the Braidwood-to-Davis-Creek transmission line ROW. This in-scope transmission line ROW, which is now owned and operated by ComEd, ranges from 96 to 139 m (315 to 55 ft) wide and contains the 345 kV Braidwood-to-Crete (retired) transmission lines on double-circuit towers. The Braidwood-to-Crete (retired) ROW extends a distance of approximately 89.3 km (55.5 mi) and occupies approximately 847 ha (2,093 ac) of land (i.e., 380 ha [940 ac] from Braidwood to Davis Creek and 467 ha [1,153 ac] from Davis Creek to Crete [retired]).

For a more detailed description of the Braidwood site and cooling system, see Chapter 3 of Exelon's Environmental Report, which is available on the NRC's website at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/byron-braidwood.html>.

Federally-Listed Species and Habitats

To ensure compliance with the Endangered Species Act of 1973, as amended, the NRC staff will consider effects of the proposed license renewal on Federally-listed species and their habitat during the staff's NEPA review, and the staff will document its analysis in an environmental impact statement.

During its preliminary review, the NRC staff has identified eight Federally-listed species that may occur near Braidwood (see Table 1):

Indiana bat (*Myotis sodalis*),

Hine's emerald dragonfly (*Somatochlora hineana*),
sheepnose mussel (*Plethobasus cyphus*),
snuffbox (*Epioblasma triquetra*),
Eastern prairie fringed orchid (*Platanthera leucophaea*),
lakeside daisy (*Hymenopsis herbacea*),
leafy prairie clover (*Dalea foliosa*), and
Mead's milkweed (*Asclepias meadii*).

One candidate species may also occur: Eastern massasauga (*Sistrurus catenatus*). This list is from the FWS Endangered Species Program's online endangered species web page for the Midwest. Exelon identified the same species and considered them in Sections 2.5 and 4.10 of its Environmental Report. The staff also used the FWS's Critical Habitat Mapper to determine if any critical habitat occurs near the Braidwood site and identified none.

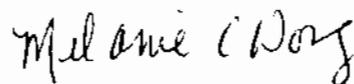
The NRC expects to publish the draft SEIS in 2014. A copy of the document will be sent to you for your review and comment. After consideration of public comments received, the NRC will prepare a final SEIS, which is scheduled to be issued in 2015.

Conclusion

The NRC requests your concurrence with its table of Federally-listed species (Table 1 in Enclosure 2) per 50 CFR 402.12(d). The NRC also requests any additional information that you may have on Federally-listed species, proposed species, or critical habitats that might aid the staff in its review.

If you have any questions or require additional information regarding the project, please contact Dennis Logan, biologist, by phone at 301-415-0490 or by e-mail at dennis.logan@nrc.gov.

Sincerely,



Melanie C. Wong, Chief
Environmental Review and
Guidance Update Branch
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-456 and 50-457

Enclosures:
As stated

Indiana bat (*Myotis sodalis*),
 Hine's emerald dragonfly (*Somatochlora hineana*),
 sheepsnose mussel (*Plethobasus cyphus*),
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Sincerely,

/RA/

Melanie C. Wong, Chief
 Environmental Review and
 Guidance Update Branch
 Division of License Renewal
 Office of Nuclear Reactor Regulation

Docket Nos. 50-456 and 50-457

Enclosures:

As stated

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See next page

ADAMS Accession No.: **ML13226A549**

OFFICE	DLR:RPB2:LA	DLR:RERB	BC:DLR:RPB2	BC:DLR:RERB
NAME	IKing	DLogan	DWrona (<i>DDrucker for</i>)	MWong
DATE	8/30/13	9/10/13	9/10/13	9/11/13

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Letter to T. Melius from M. Wong dated September 11, 2013

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Figure 1. Braidwood 50-Mile Radius Map

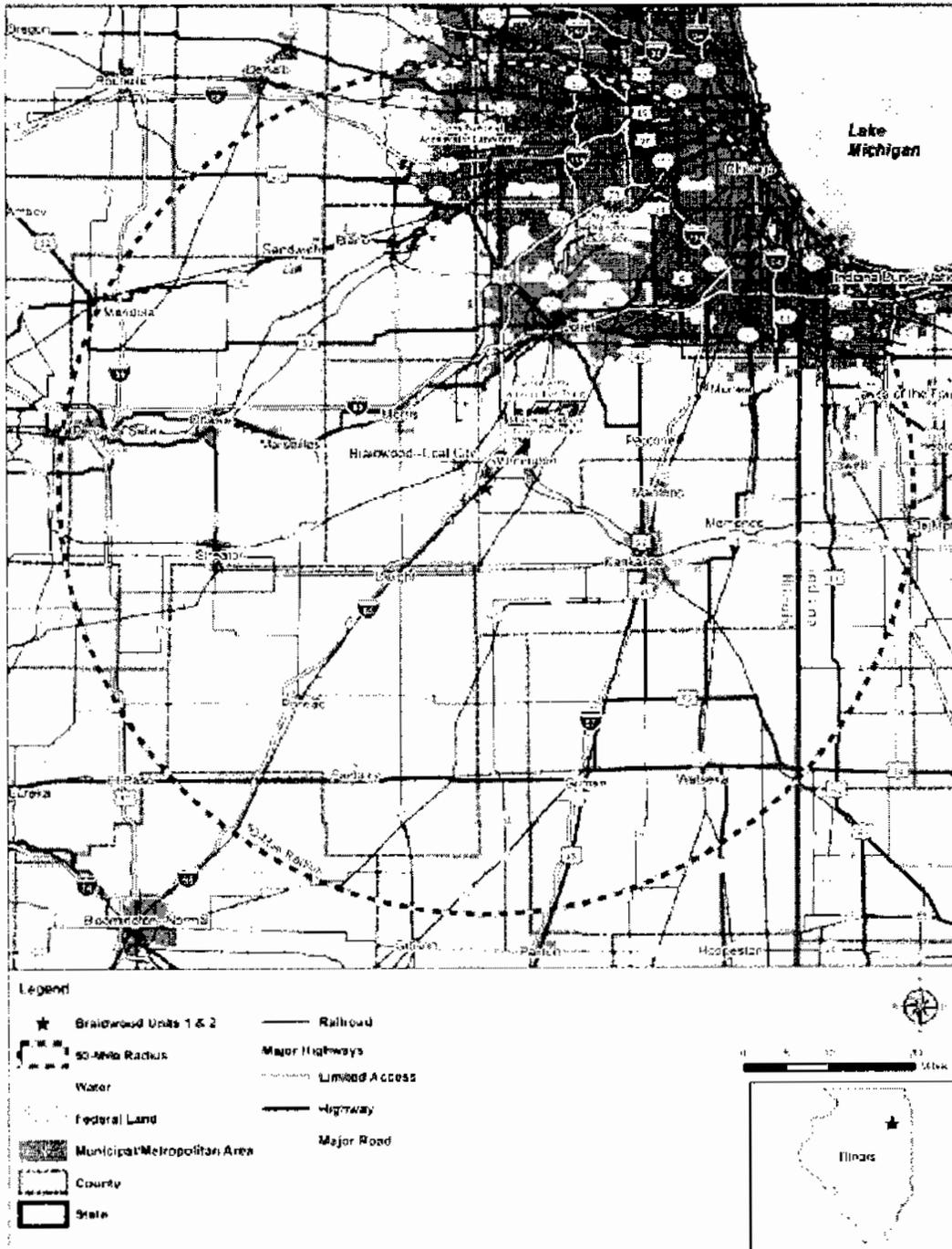


Figure 2. Braidwood Six Mile Radius Map

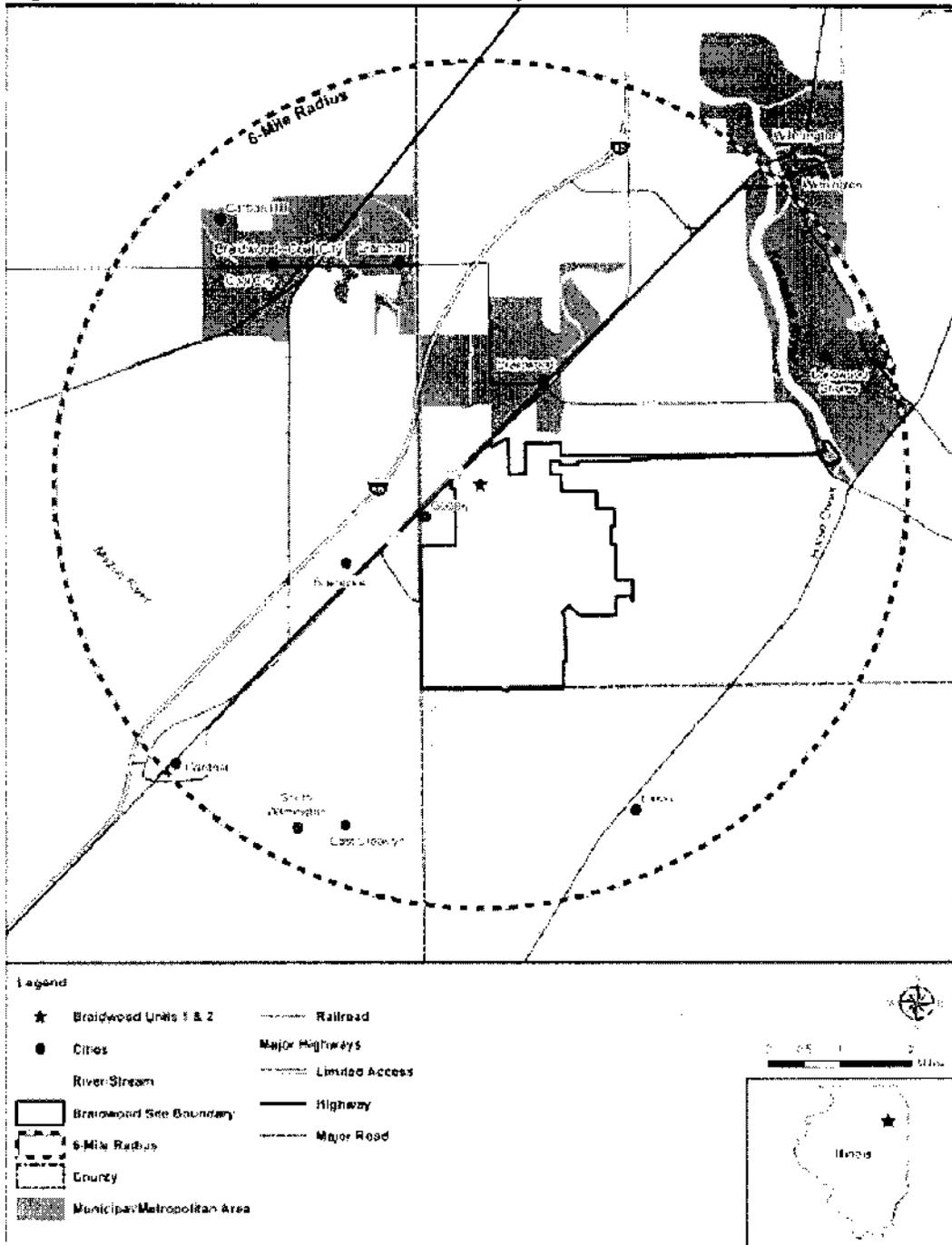


Figure 3. Braidwood Site Map

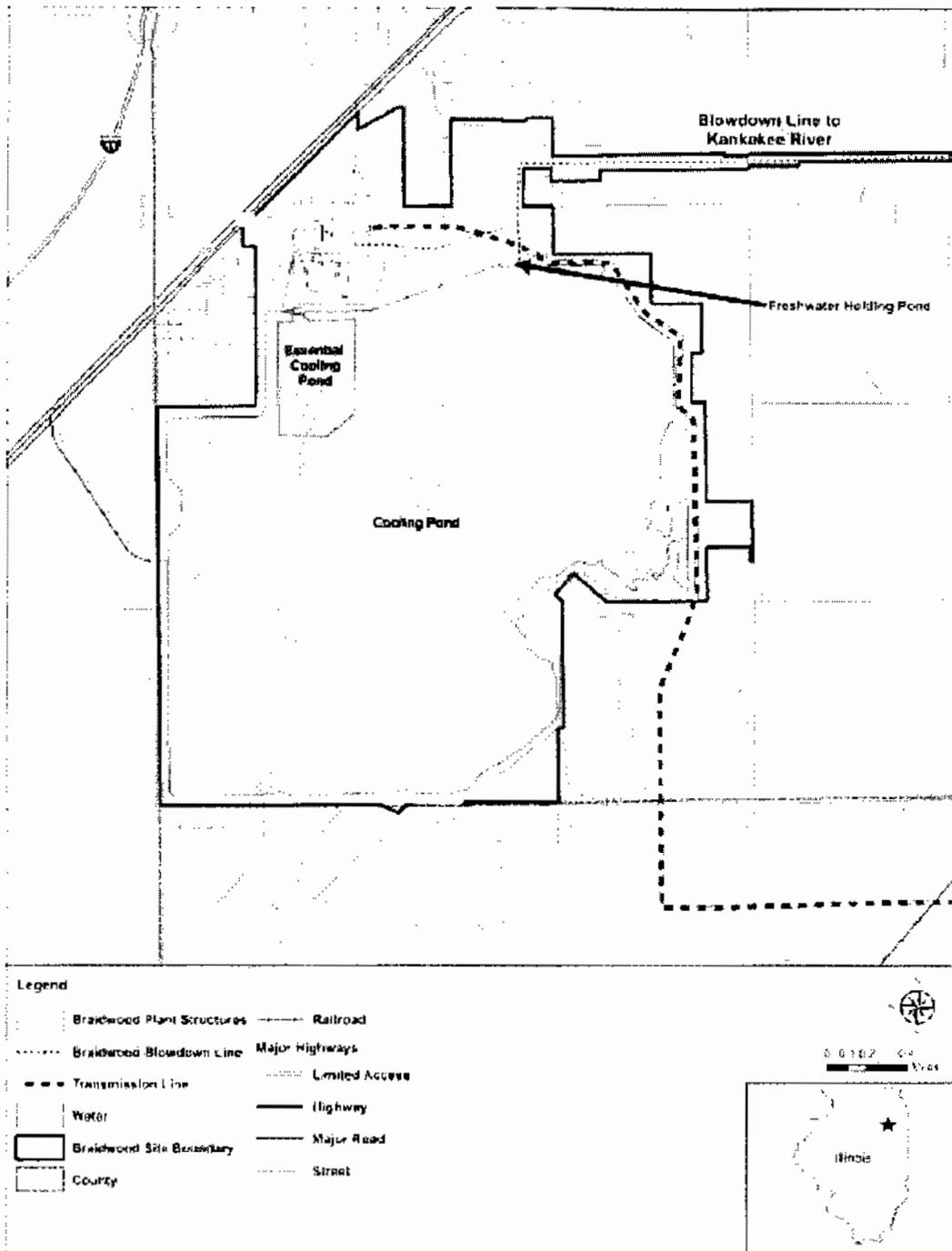


Table 1. Federally-Listed Species in Kankakee and Will Counties, Illinois

Species	Common Name	Federal Status ^(a)	Habitat
Federally Listed Species			
<i>Myotis sodalis</i>	Indiana bat	E	Hardwood forests and hardwood pine forests; old-growth forest; agricultural lands and old fields.
<i>Somatochlora hineana</i>	Hine's emerald dragonfly	E	Spring-fed wetlands, wet meadows, and marshes
<i>Plethobasus cyphus</i>	sheepnose mussel	E	Shallow areas in larger rivers and streams
<i>Epioblasma triquetra</i>	snuffbox	E	Small to medium-sized creeks and some larger rivers, in areas with a swift current
<i>Platanthera leucophaea</i>	Eastern prairie fringed orchid	T	mesic prairie, wetlands, sedge meadows, marsh edges, and bogs with full sun and little to no woody encroachment
<i>Hymenopsis herbacea</i>	lakeside daisy	T	Dry, rocky prairies
<i>Dalea foliosa</i>	leafy prairie clover	E	Prairie remnants on thin soil over limestone
<i>Asclepias meadii</i>	Mead's milkweed	T	Late successional tallgrass prairie, tallgrass prairie converted to hay meadow, and glades or barrens with thin soil
Proposed Species			
None			
Candidate Species			
<i>Sistrurus cateratus</i>	Eastern massasauga		Graminoid dominated plant communities (fens, sedge meadows, peatlands, wet prairies, open woodlands, and shrublands)
Critical Habitat			
None			
^(a) E=endangered; T=threatened			

Source: U.S. Fish and Wildlife Service. 2013. Endangered Species, Illinois, County Distribution of Federally Threatened, Endangered, and Candidate Species.

<<http://www.fws.gov/midwest/endangered/lists/illinois-spp.html>>

Updated July 2, 2013. Accessed August 13th, 2013.