



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

August 8, 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 BYRON 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 license for Byron Station, Units 1 and 2 (Byron), located in Byron, 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 Byron for an additional 20 years beyond the current licensing periods, which expires on October 31, 2024 (Unit 1), and November 6, 2026 (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 Byron 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

Byron lies in northern Illinois near the center of Ogle County approximately 90 miles west-northwest of Chicago. The 1,782-acre site is situated within the Rock River Hill Country physiographic province in a predominantly agricultural area. The Rock River lies approximately two miles west of the site boundary. The river location at this point is 115 river miles upstream of the Rock River's confluence with the Mississippi River.

Byron is a two-unit pressurized water reactor plant. The proposed Byron license renewal would include continued operation and maintenance of Byron's two nuclear-powered electrical generating units. The principle structures on the site include two reactor containment buildings and related structures; two natural draft cooling towers; two mechanical draft cooling towers; a 345-kilovolt switchyard; administrative buildings; warehouses; a circulating water pumphouse; and a river screen house and circulating water blowdown discharge structure on the Rock River. Exelon does not plan to construct any new buildings or transmission lines, undertake any other land-clearing or ground-disturbing activities, or otherwise alter current operating conditions during the license renewal term.

The facility's cooling system includes two natural draft cooling towers, which dissipate excess heat from condenser cooling water and nonessential service water, and two mechanical draft

cooling towers, which serve as the ultimate heat sink for the reactors by cooling essential service water and removing heat from safety-related equipment. The Rock River supplies makeup water to replace cooling tower evaporation and also serves as the receiving body of water for cooling tower blowdown. Water withdrawals and discharges travel to and from the site via pipelines, which run approximately two miles from the northwest boundary of the site west to the Rock River. The Illinois Environmental Protection Agency regulates station withdrawals from and discharges to the Rock River under National Pollutant Discharge Elimination System (NPDES) Permit No. IL0048313.

Enclosure 1 to this letter includes figures of the Byron site and surrounding six-mile vicinity (Figure 1), the site layout (Figure 2), and the plant buildings and structures (Figure 3). For a more detailed description of the Byron site and cooling system, see Chapter 3 of Exelon's Environmental Report (ER), 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 three Federally listed species that may occur in the vicinity of Byron (see Table 1 in Enclosure 2):

- the Indiana bat (*Myotis sodalis*),
- the prairie bush clover (*Lespedeza leptostachya*).
- the Eastern prairie fringed orchid (*Platanthera leucophaea*), and

This list is based on the FWS Endangered Species Program's online county search for Ogle County, Illinois, and the Illinois Department of Natural Resources' online Natural Heritage Database. Exelon considered each of these three species in Sections 2.5 and 4.10 of its ER. In Section 2.5 of the ER, Exelon notes that no Federally listed fish or mussel species have been recorded as occurring in the Rock River in the vicinity of the Byron site during baseline monitoring (1972-1974), construction and pre-operational monitoring (1975-1980), or in more recent surveys conducted in 1993 and 2011.

The staff also used the FWS's Critical Habitat Mapper to determine if any critical habitat occurs within the vicinity of the Byron site. The staff did not identify any critical habitat in the area.

NEPA Scoping

As indicated above, the NRC is performing a NEPA review for the proposed Byron license renewal. The NRC is currently seeking scoping comments on the proposed license renewal through September 28, 2013. During the scoping comment period, the NRC staff plans to hold two public environmental meetings at Byron Forest Preserve, 7993 N. River Rd., Byron, Illinois,

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61010, on August 20, 2013, at 2:00 p.m. and 7:00 p.m. I invite you and your staff to both attend the public meetings and to submit NEPA scoping comments. See *Federal Register* notice 78 FRN 47800, dated August 6, 2013, or go to <http://www.Regulations.gov> and search for documents filed under Docket ID NRC-2013-0126 for additional information on the NEPA process and on how to submit comments.

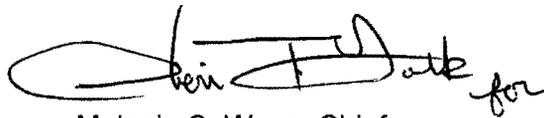
Conclusion

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 Briana Grange, biologist, by phone at 301-415-1042 or by e-mail at briana.grange@nrc.gov.

I have also sent a copy of this letter to Mr. Jon Duyvejonck, fish and wildlife biologist, FWS Rock Island Field Office. In 2012, prior to Exelon submitting its license renewal application to the NRC, Mr. Duyvejonck corresponded with Ms. Nancy Ranek, Exelon, regarding the proposed Byron license renewal.

Sincerely,

A handwritten signature in black ink, appearing to read 'Melanie C. Wong for', with a large, stylized initial 'M'.

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

Docket Nos. 50-454 and 50-455

Enclosures:
As stated

T. Melius

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Sincerely,

/RA by Kevin T. Folk for/

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

Docket Nos. 50-454 and 50-455

Enclosures:
As stated

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DATE	7/11/13	8/1/13	8/8/13	8/8/13

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Figure 1. Byron and Surrounding 6-Mile Radius

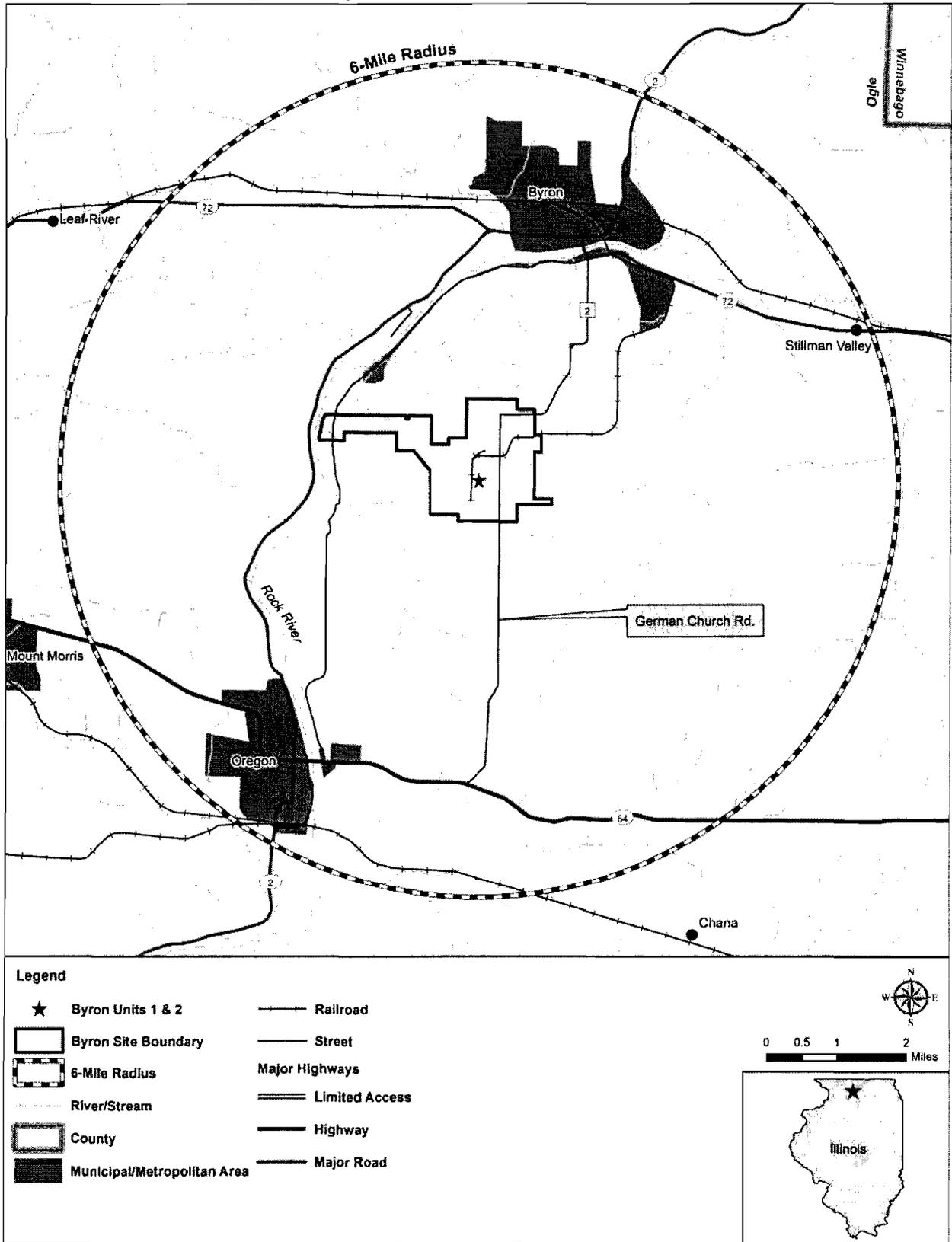


Figure 2. Byron Site Layout

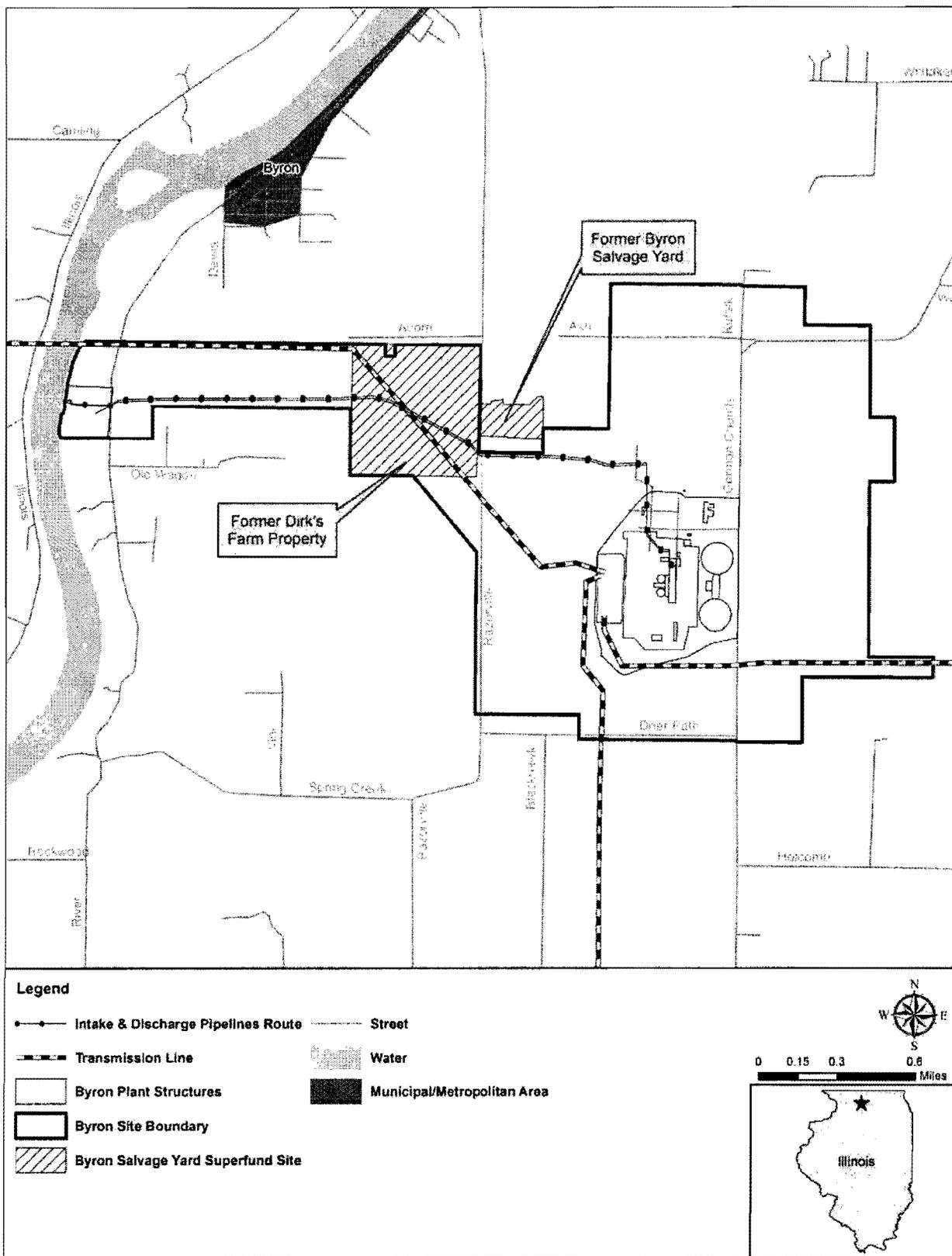


Figure 3. Byron Plant Buildings and Structures

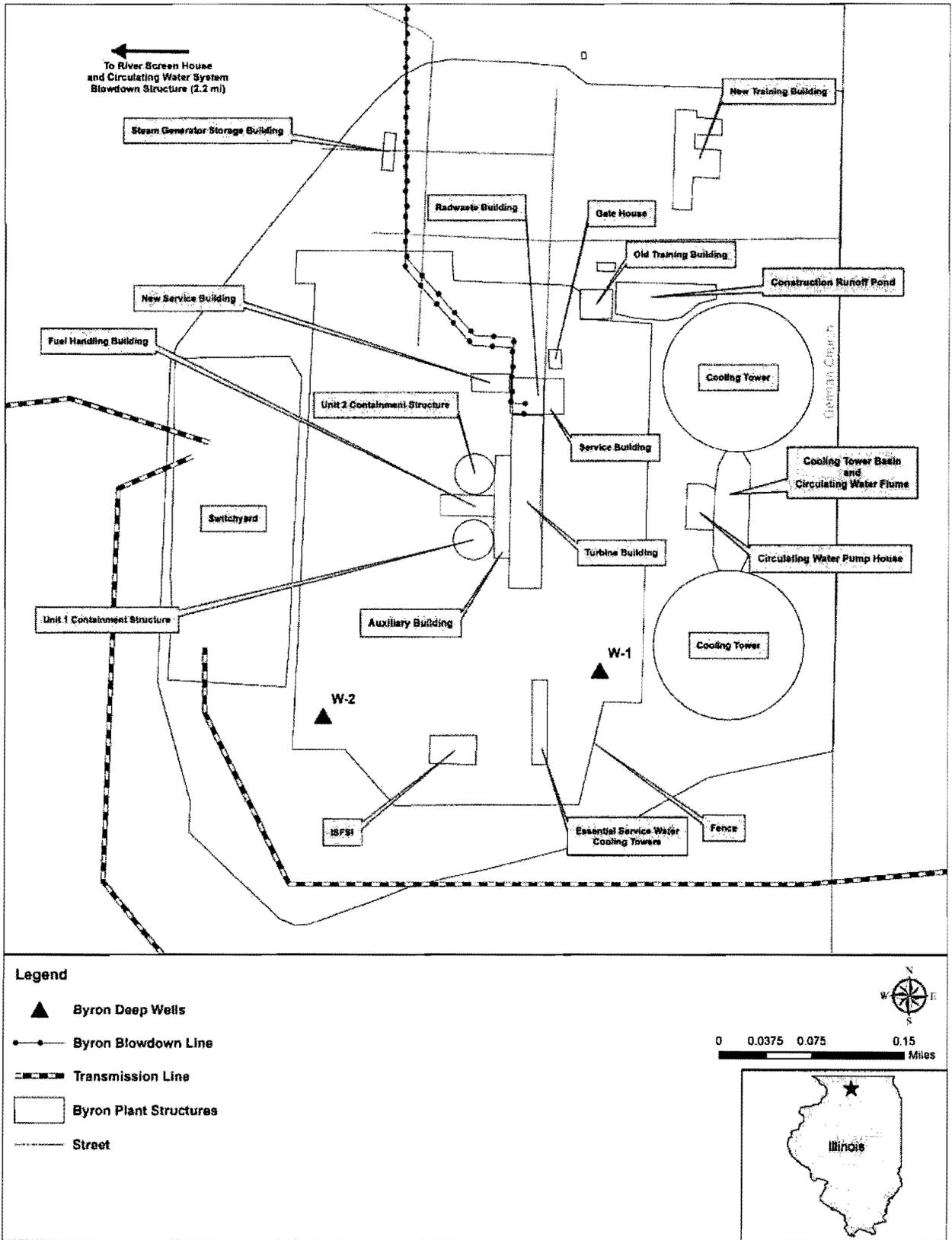


Table 1. Federally Listed Species in Ogle County, Illinois

Species	Common Name	Federal Status^(a)	Habitat
Federally Listed Species			
<i>Myotis sodalis</i>	Indiana bat	E	Hardwood forests and hardwoodpine forests; old-growth forest; agricultural lands and old fields.
<i>Lespedeza leptostachya</i>	prairie bush-clover	T	dry tallgrass prairie with gravelly soils
<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
Proposed Species			
None			
Candidate Species			
None			
Critical Habitat			
None			
^(a) E=endangered; T=threatened			

Table Sources:

[FWS] U.S. Fish and Wildlife Service. "U.S. Fish and Wildlife Service Species Reports." Species By County Report for Ogle, Illinois. Updated June 10, 2013. Available at <http://ecos.fws.gov/tess_public/countySearch!speciesByCountyReport.action?fips=17141> (accessed 10 June 2013).

[IDNR] Illinois Department of Natural Resources. "Natural Heritage Database: List of Endangered & Threatened Species in IL by County." <<http://dnr.state.il.us/conservation/naturalheritage/inhd.htm>> (accessed 10 June 2013).

Letter to T. Melius from M. Wong dated DATE

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HARD COPY:

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E-MAIL:

PUBLIC
EndangeredSpecies Resource
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