



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

July 1, 2014

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 ENRICO  
FERMI, UNIT 2, LICENSE RENEWAL**

Dear Mr. Melius:

The U.S. Nuclear Regulatory Commission (NRC) is reviewing an application to renew the operating license for Enrico Fermi, Unit 2 (Fermi 2), located in Monroe, Michigan. DTE Electric Company (DTE) submitted its application for renewal to the NRC in a letter dated April 24, 2014, 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 DTE to operate Fermi 2 for an additional 20 years beyond the current licensing period, which expires on March 20, 2025.

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 Fermi 2 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

Fermi 2 is located in Monroe County, Michigan, approximately 30 miles (mi) (48 kilometers [km]) southwest of Detroit, Michigan, and 7 mi (11 km) from the United States-Canada border. Lake Erie borders the Fermi 2 site to the east. The Fermi 2 site consists primarily of developed, woodlands, water, and wetland areas. The land surrounding the site is mostly rural (see Enclosure 1). The Fermi 2 site also encompasses 646 acres (261 hectares) of the Detroit River International Wildlife Refuge. In scope transmission lines associated with the Fermi 2 license renewal are located within the property boundary.

Fermi 2 is a one-unit boiling-water reactor plant. The proposed Fermi 2 license renewal would include continued operation and maintenance of the Fermi 2 nuclear-powered electrical generating unit. The principle structures on the site include the reactor building, turbine building, auxiliary building, radwaste building, 120-kV and 345-kV switchyards, residual heat removal complex, two natural draft hyperbolic cooling towers, general service water pump house, circulating water pump house, circulating water reservoir, meteorological tower, auxiliary boiler house, training center, and independent spent fuel storage installation (ISFSI) pad (see Enclosure 2). Enrico Fermi, Unit 1 (Fermi 1), which has been defueled and is in the process of

decommissioning, is located on the same site as Fermi 2. DTE has submitted an application to the NRC to construct and operate Enrico Fermi, Unit 3 (Fermi 3), on land that is adjacent to Fermi, Units 1 and 2. DTE does not plan to construct or demolish any existing facilities on the Fermi 2 site, undertake any other land-clearing or ground-disturbing activities in undisturbed areas of the Fermi 2 site, or otherwise alter current operating conditions associated with Fermi 2 during the license renewal term.

The facility's cooling system includes two natural draft hyperbolic cooling towers, which are part of the residual heat removal complex that serves as the ultimate heat sink for the reactor. Lake Erie supplies makeup water to replace cooling tower evaporation. Cooling tower blow down water is continuously discharged to Lake Erie from the Fermi 2 cooling-water reservoir to control the reservoir water level and the total dissolved solids concentration. The Michigan Department of Natural Resources and Environment regulates station withdrawals from and discharges to Lake Erie under National Pollutant Discharge Elimination System (NPDES) Permit No. MI0037028.

Enclosure 1 to this letter includes a map of the 6 mile vicinity surrounding Fermi 2 and Enclosure 2 includes a map of the site layout. For a more detailed description of the Fermi 2 site and cooling system, see Chapters 2 and 3 of DTE's Environmental Report (ER), which is available on the NRC's website at <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/fermi.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 seven Federally-listed species and two proposed species that may occur at or adjacent to the Fermi 2 site (see Table 1 in Enclosure 2):

- the eastern prairie fringed orchid (*Platanthera leucophaea*),
- the northern riffleshell (*Epioblasma torulosa rangiana*),
- the rayed bean (*Villosa fabalis*),
- the snuffbox mussel (*Epioblasma triquetra*),
- the Karner blue butterfly (*Lycaeides melissa samuelis*),
- the Indiana bat (*Myotis sodalis*),
- the northern long-eared bat (*Myotis septentrionalis*),
- the red knot (*Calidris canutus*), and
- the piping plover (*Charadrius melodus*).

This list is based on the FWS's online Information, Planning, and Conservation System for the Fermi 2 site (FWS 2014) and ecological surveys conducted by DTE and its contractor at the Fermi 2 site and surrounding area, as described in DTE's ER. DTE considered each of seven Federally-listed species in Sections 3.6.12 and 4.6.6 of its ER. In Section 3.6.12 of the ER, DTE notes that no Federally-listed species have been recorded on the Fermi 2 site, other than the piping plover. DTE and its contractors observed this migratory bird on the sandy beach south of the Fermi 2 intake in July of 2008. DTE concluded in its ER that the bird was transient. During 2013 onsite surveys, DTE and its contractors did not observe any piping plovers nor suitable habitat for nesting.

The NRC staff recently consulted with FWS staff regarding the proposed construction and operation of the Fermi 3 unit. During the scoping period for the proposed Fermi 3 reactor, FWS (2009) stated in a letter to the NRC that six Federally-listed species may occur in Monroe County: eastern prairie fringed orchid, Indiana bat, Karner blue butterfly, the northern riffleshell, the rayed bean, and the snuffbox mussel (FWS 2009, NRC 2013).

In its biological assessment for Fermi 3, the NRC concluded that the proposed construction and operation of Fermi 3 may affect, but is not likely to adversely affect the Indiana bat, eastern prairie fringed orchid, and the eastern massasauga rattlesnake, and that the proposed construction and operations would have no effect on the Karner blue and Mitchell's satyr butterflies, the American burying beetle, the northern riffleshell, and the rayed bean and snuffbox mussels (NRC 2013). In a letter dated June 8, 2012, FWS stated that it agreed with NRC's findings in the biological assessment (FWS 2012). Note that the eastern massasauga rattlesnake, Mitchell's satyr butterfly, and the American burying beetle were included in the biological assessment because the action area included new transmission lines, and extended beyond Monroe County and the Fermi 2 site.

No areas of the Fermi 2 site are Federally-designated as critical habitat for any ESA-listed species.

#### NEPA Scoping

The NRC plans to hold two public environmental scoping meetings on July 24, 2014, at the Monroe County Community College, La-Z-Boy Center, Meyer Theater, 1555 South Raisinville Road, Monroe, MI 48161. The first session will convene at 2:00 p.m. and will continue until 4:00 p.m., as necessary. The second session will convene at 7:00 p.m. with a repeat of the overview portions of the meeting and will continue until 9:00 p.m., as necessary. I invite you and your staff to both attend the public meetings and to submit NEPA scoping comments. See *Federal Register* notice 79 FRN 36837, dated June 30, 2014, or go to <http://www.Regulations.gov> and search for documents filed under Docket ID NRC-2014-0109 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 3) 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.

T. Melius

- 4 -

If you have any questions or require additional information regarding the project, please contact Michelle Moser, biologist, by phone at 301-415-6509 or by e-mail at [Michelle.Moser@nrc.gov](mailto:Michelle.Moser@nrc.gov).

I have also sent a copy of this letter to Scott Hicks, Field Office Supervisor, East Lansing Michigan Field Office. In 2013, prior to DTE submitting its license renewal application to the NRC, Mr. Hicks corresponded with Lynne Goodman, DTE, regarding the proposed Fermi license renewal.

Sincerely,

/RA/

David J. Wrona, Chief  
Environmental Review and  
Guidance Update Branch  
Division of License Renewal  
Office of Nuclear Reactor Regulation

References:

U.S. Fish and Wildlife Service (FWS). 2009. Letter from Craig Czarnecki (Field Supervisor, FWS East Lansing Field Office) to Gregory Hachett of the Nuclear Regulatory Commission providing information on endangered and threatened species within the project area for the proposed Fermi 3 Nuclear Power Plant. January 28, 2009. ADAMS Accession No. ML090750973.

U.S. Fish and Wildlife Service (FWS). 2012. Letter from Scott Hicks (Field Supervisor, FWS East Lansing Field Office) to Tony Hsia of the Nuclear Regulatory Commission regarding Endangered Species Act section 7 consultation for the proposed Fermi 3 Nuclear Power Plant. June 8, 2012. ADAMS Accession No. ML12178A137.

U.S. Fish and Wildlife Service (FWS). 2014. "IPaC - Information, Planning, and Conservation System." Available at: <<http://ecos.fws.gov/ipac/>> (accessed on 10 June 2014).

U.S. Nuclear Regulatory Commission (NRC). 2013. *Environmental Impact Statement for Combined License (COL) for Enrico Fermi Unit 3, Final Report*. NUREG-2105. Washington, D.C. January 2013.

Docket No. 50-341

Enclosures:

1. Map of the 6 Mile Radius Surrounding Fermi 2
2. Map of the Fermi 2 Site
3. Table of Federally-Listed Species that may occur on or near Fermi 2

cc w/encl: Listserv

T. Melius

- 4 -

If you have any questions or require additional information regarding the project, please contact Michelle Moser, biologist, by phone at 301-415-6509 or by e-mail at [Michelle.Moser@nrc.gov](mailto:Michelle.Moser@nrc.gov).

I have also sent a copy of this letter to Scott Hicks, Field Office Supervisor, East Lansing Michigan Field Office. In 2013, prior to DTE submitting its license renewal application to the NRC, Mr. Hicks corresponded with Lynne Goodman, DTE, regarding the proposed Fermi license renewal.

Sincerely,  
**/RA/**  
David J. Wrona, Chief  
Environmental Review and  
Guidance Update Branch  
Division of License Renewal  
Office of Nuclear Reactor Regulation

References:

U.S. Fish and Wildlife Service (FWS). 2009. Letter from Craig Czarnecki (Field Supervisor, FWS East Lansing Field Office) to Gregory Hachett of the Nuclear Regulatory Commission providing information on endangered and threatened species within the project area for the proposed Fermi 3 Nuclear Power Plant. January 28, 2009. ADAMS Accession No. ML090750973.

U.S. Fish and Wildlife Service (FWS). 2012. Letter from Scott Hicks (Field Supervisor, FWS East Lansing Field Office) to Tony Hsia of the Nuclear Regulatory Commission regarding Endangered Species Act section 7 consultation for the proposed Fermi 3 Nuclear Power Plant. June 8, 2012. ADAMS Accession No. ML12178A137.

U.S. Fish and Wildlife Service (FWS). 2014. "IPaC - Information, Planning, and Conservation System." Available at: <<http://ecos.fws.gov/ipac/>> (accessed on 10 June 2014).

U.S. Nuclear Regulatory Commission (NRC). 2013. *Environmental Impact Statement for Combined License (COL) for Enrico Fermi Unit 3, Final Report*. NUREG-2105. Washington, D.C. January 2013.

Docket No. 50-341

Enclosures:

1. Map of the 6 Mile Radius Surrounding Fermi 2
2. Map of the Fermi 2 Site
3. Table of Federally-Listed Species that may occur on or near Fermi 2

cc w/encl: Listserv

**DISTRIBUTION:** See next page

ADAMS Accession No: ML14164A037

\*concurred via email

<b>OFFICE</b>	LA:DLR:RPB2*	PM:DLR:RPB2	RERB:Biologist	BC:DLR:RERB
<b>NAME</b>	IKing	LPerkins	MMoser	DWrona
<b>DATE</b>	6/17/14	6/27/14	6/27/14	7/1/14

**OFFICIAL RECORD COPY**

HARD COPY:

DLR RF

Mr. Scott Hicks, Field Office Supervisor  
U.S. Fish and Wildlife Service (USFWS)  
East Lansing Michigan Field Office  
2651 Coolidge Road -  
East Lansing, MI 48823-6316

E-MAIL:

PUBLIC

EndangeredSpecies Resource  
RidsNrrDlr Resource  
RidsNrrDlrRpb1 Resource  
RidsNrrDlrRpb2 Resource  
RidsNrrDlrRarb Resource  
RidsNrrDlrRapb Resource  
RidsNrrDlrRasb Resource  
RidsNrrDlrRerb Resource  
RidsNrrDlrRsrg Resource  
RidsNrrPMFermi2 Resource  
RidsOgcMailCenter Resource

-----  
M. Moser  
B. Grange  
D. Logan  
D. Wrona  
L. Perkins  
B. Wittick  
D. Melendez-Colon  
Y. Diaz-Sanabria  
M. Kunowski, RIII  
B. Kemker, RIII  
V. Mitlyng, RIII  
P. Chandrathil, RIII  
H. Logaras, RIII  
C. Kanatas, OGC  
D. Roth, OGC



Figure 1. Map of the Six Mile Radius Surrounding Fermi 2

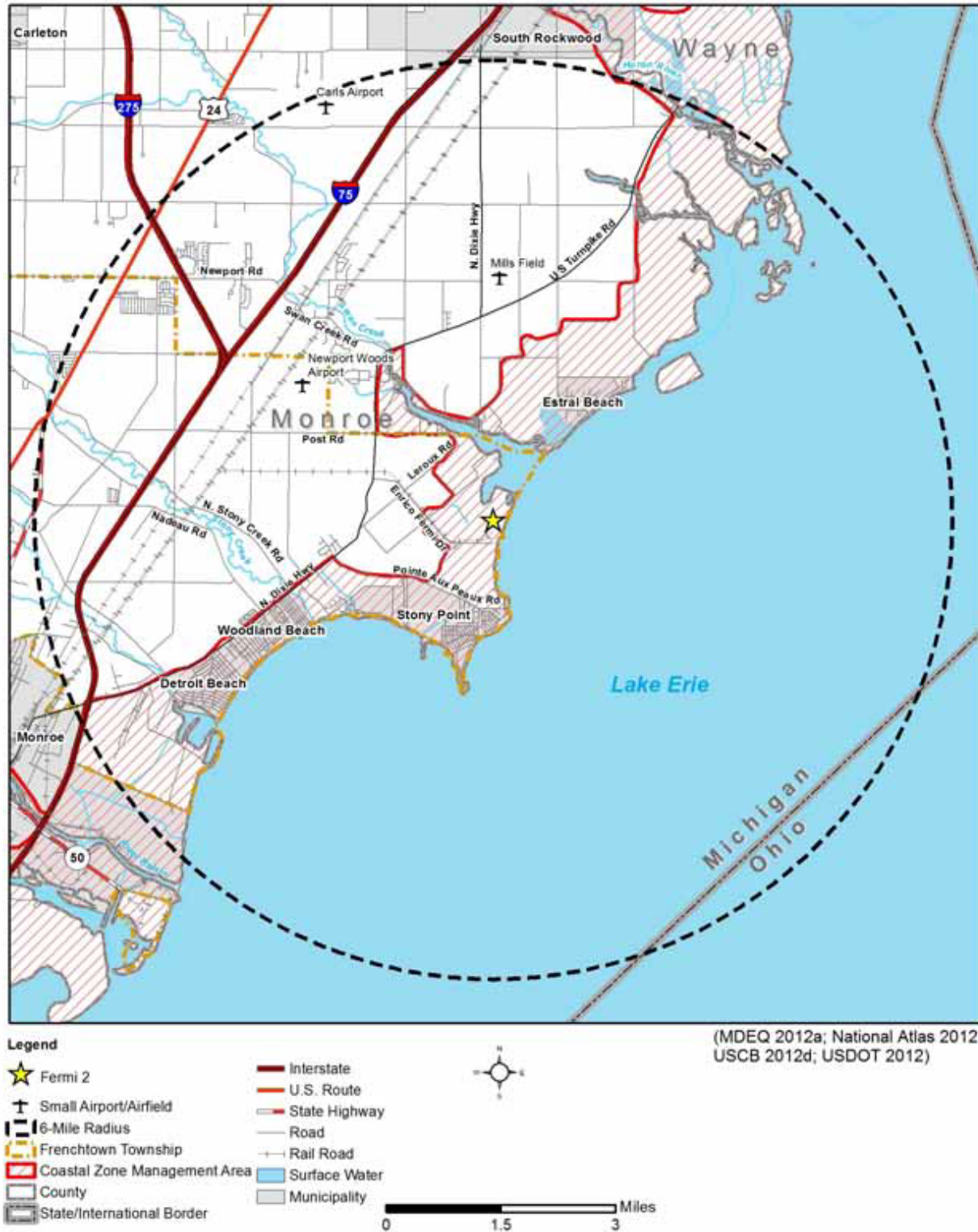


Figure 2. Map of the Fermi 2 Site





**Table 1. Federally-Listed Species that may occur on or near Fermi 2**

Species	Common Name	Federal Status	Habitat
<b>Federally Listed Species</b>			
<b>Mammals</b>			
<i>Calidris canutus</i>	red knot	P	Lake Erie shoreline is part of the migratory route, and potential resting grounds, when migrating to and from the Canadian Arctic and Argentina
<i>Charadrius melodus</i>	piping plover	E	When inhabiting the Great Lakes during spring and summer, nest sites include open, sparsely vegetated sandy areas along the Great Lakes
<i>Myotis septentrionalis</i>	northern long-eared bat	P	During late spring and summer, roosts and forages in upland forests; Caves and mines as hibernacula in autumn
<i>Myotis sodalis</i>	Indiana bat	E	Hardwood forests, hardwood pine forests, and old-growth forest, especially near stream and river corridors; agricultural lands and old fields; Caves and mines as hibernacula
<b>Insects</b>			
<i>Lycaeides melissa samuelis</i>	Karner blue butterfly	E	Pine barrens and oak savannas that contain wild lupines ( <i>Lupinus perennis</i> ), the only known food plant of larvae
<b>Plants</b>			
<i>Platanthera leucophaea</i>	eastern prairie fringed orchid	T	Mesic to wet prairies and meadows
<b>Mussels</b>			
<i>Epioblasma torulosa rangiana</i>	northern riffleshell	E	Lake Erie and large streams and small rivers in areas of firm sand and where riffles occur
<i>Epioblasma triquetra</i>	snuffbox mussel	E	Lake Erie and small to medium-sized creeks and some larger rivers in areas with a swift current
<i>Villosa fabalis</i>	rayed bean	E	Lake Erie and smaller, headwater creeks or sometimes in large rivers

Source: U.S. Fish and Wildlife Service (FWS). 2013. Endangered, Threatened, Proposed, and Candidate Species, U.S. Fish and Wildlife Service, Region 3 (Illinois, Indiana, Iowa, Michigan, Missouri, Minnesota, Ohio, Wisconsin). Available at <http://www.fws.gov/midwest/endangered/lists/pdf/r3telist.pdf> (accessed on 11 June 2014).