

## Fermi2LRANPEm Resource

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**From:** Perkins, Leslie  
**Sent:** Thursday, July 31, 2014 7:21 PM  
**To:** Lynne S Goodman (goodmanl@dteenergy.com)  
**Cc:** Randall D Westmoreland (westmorelandr@dteenergy.com)  
**Subject:** Draft Environmental Audit Needs  
**Attachments:** Draft Fermi Audit needs.docx

Hi Lynne,

Attached is the draft environmental needs list. A formal letter will be issued within the next couple of weeks. I will let you know immediately if anything changes to the lists prior to issuing the formal letter. Below are the names of the NRC staff members that will be attending the site audit.

Discipline	Team Members
Environmental Project Manager	Leslie Perkin
Alternatives	Robert Hoffman
Aquatic	Dennis Logan
Cumulative	Robert Hoffman
Historical and Cultural Resources	Emily Larson
Human Health	Russell Chazell Bill Rautzen
Land Use and Visual Resources	Briana Grange
Meteorology, Air Quality, and Noise	Nancy Martinez
Socioeconomic	Jeff Rikhoff
Special Status Species and Habitat	Michelle Moser
Terrestrial	Briana Grange
Waste Management and Pollution Prevention	Russell Chazell Bill Rautzen
Water Resources – Surface Water	Kevin Folk

I few things to keep in mind when developing the schedule for tours and breakout sessions:

- The reviewer assigned to special status species and habitat will need to attend both the aquatic and terrestrial breakout sessions and tours. Additionally the aquatic reviewer would like to participate in the terrestrial discussion and tour; and the terrestrial reviewer would like to attend the aquatic session and tour.
- The reviewer assigned to terrestrial is also assigned to land use
- There two reviewers assigned to human health and waste management; one is covering non-rad waste (Russ) and the other is covering rad waste and rad protection (Bill). I wanted to point this out because Russ will not need to go on the tours related to radiological issues.
- The audit will be for three days – Tuesday, Sep. 9th, Wednesday, Sep. 10, and Thursday Sep. 11<sup>th</sup>. (Monday and Friday are travel days for NRC staff members)

Also, for past audits the agenda for the morning on the first day has been as follows:

- Site Entrance Meeting
- General Plant Information and Safety Briefing
- Orientation of work areas and references
- General Site Tour

Please provide the schedule for audit once its developed. Please contact me if you have questions. I will be out of the office on Friday, Aug. 1<sup>st</sup> I will be in the office next week except for Tuesday, Aug. 5th.

Thanks,

Leslie Perkins  
Project Manager  
Division of License Renewal  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
301-415-2375

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"Randall D Westmoreland (westmorelandr@dteenergy.com)" <westmorelandr@dteenergy.com>

Tracking Status: None

"Lynne S Goodman (goodmanl@dteenergy.com)" <goodmanl@dteenergy.com>

Tracking Status: None

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**FERMI 2  
LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT NEEDS LIST**

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed Appendix E, the Environmental Report (ER), of the Fermi 2 license renewal application (LRA).

Please be prepared to discuss the following issues and make the following available during the environmental site audit.

**Alternatives (ALT)**

ALT-1            Provide a copy of the following ER reference for the NRC staff to review:

DTE. 2013n. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE2.2-025, Plant Annual Capacity Factor 2010–2012. November 20, 2013.

**Aquatic (AQ)**

AQ-1            Provide copies of the following ER references for the NRC staff to review:

- a. Kogge, S. (PWS) and J. Heslinga. 2013. *Threatened and Endangered Species Survey and Assessment Report*. Prepared for DTE Energy Fermi 2 by CardnoJFNew, West Olive, Michigan. CardoJFNew File No. 1308035.00. October 2013.
- b. Heitman, F. 2012. Field Notes from Tour of Fermi Site on May 20, 2012.
- c. Pittman, J. 2009. Aquatic Ecology Characterization Report, Detroit Edison Company Fermi 3 Project. Final Report. AECOM Environment, Prepared for Black and Veatch. November 2009.

**Meetings requested:**

- a. Please provide applicant's subject matter expert(s) and/or contractor(s) responsible for writing the surface water hydrology and quality portions of the ER and who can discuss the plant's intake and circulating water systems, effluent discharges, and affected water resources.
- b. Aquatic biologist would like to participate in the breakout session for terrestrial.

**Tours requested:**

- a. General tour of the site and vicinity including associated intake structures and conveyances (i.e., Lake Erie intake channel and canal area, General Service Water (GSW) system pump house area, Circulating Water Reservoir and Circulating Water

Pump House; and blowdown/intake pipeline routings); significant streams and other surface water/effluent management "features" (e.g., chemical waste pondbasin, sewage forwarding station); National Pollutant Discharge Elimination System (NPDES) outfall locations (e.g., blowdown Outfall 001) including the on-shore discharge structure; and Residual Heat Removal Complex.

- b. Site tour for terrestrial

### **Cumulative (CUM)**

CUM-1 Please provide name, description, location, and status of any additional past, present, or reasonably foreseeable projects or actions that have been identified since the ER was prepared.

### **Environmental Justice (EJ)**

No specific audit needs

### **Geological Environment (GEO)**

No specific audit needs

### **Historical and Cultural Resources (HCR)**

- HCR-1 Provide map detailing the level of previous and existing ground disturbance at the plant site, including documentation on how this level of disturbance was determined.
- HCR-2 Provide U.S Geological Survey (USGS) 7.5 minute topographic quadrangle maps at 1:24,000 scale that show the boundaries of the Fermi property, the plant site, and existing transmission lines up to the first substation. (I will need to take these hard copy maps with me for the file search at the Tennessee Historical Commission (THC); I am not referring to GIS maps with underlying topographic data – the actual USGS-named quad sheets are needed at 1:24,000 scale.)
- HCR-3 Provide vegetation/land-use maps of the Fermi property, the plant site, and associated transmission lines. What percentage of land within the Fermi property has been formally surveyed?
- HCR-4 Provide a breakdown of the percentage of types of land use (i.e. farm land, industrial, forested, water, etc) within Fermi property. What percentage of land within the Fermi property is undisturbed?
- HCR-5 Provide map of site locations and previously surveyed areas within the entire Fermi property (plant site and plant property) and along existing transmission lines, up to the first substation, will be needed during the site visit. These maps will not be docketed, as they are considered sensitive information. NRC will be independently collecting and verifying the location data as available at the Michigan SHPO, but that will likely be after the site visit is completed.

- HCR-6 Provide a copy of the applicant's administrative controls in place to protect cultural resources, as referenced in Section 9.1.4 of the ER, and any other environmental review procedures for land-disturbing activities (e.g., trenching, clearing, digging) on or associated with Fermi property as described in the ER.
- HCR-7 Provide copies of any archaeological surveys performed on Fermi property and referenced in the ER. These surveys will not be docketed, as they are considered sensitive information.
- HCR-8 Please provide any updated information on ongoing preservation or mitigation activities associated with Fermi 1. Provide the mitigation plan referenced in Section 3.7.5.2.
- HCR-9 Please provide an update on any consultations that have occurred with the Michigan State Historic Preservation Office (SHPO) or other consulting parties related to the construction of Fermi 3 since publication of the ER.
- HCR-10 Verify if geomorphological work was conducted for the archaeological surveys to determine the depth of deposits and how deep archaeological remains may be present.
- HCR-11 Provide any information on cultural resource training required for Fermi staff.
- HCR-12 Provide copies of all letters and communications to and from the Michigan SHPO specific to determining the National Register of Historic Places (NRHP)-eligibility of all cultural resources identified to date within the Fermi property, including the plant site and along existing transmission lines, up to the first substation. Please include information related to the status of the 8 cultural resources with undetermined eligibility referenced in Section 3.7.3.2.
- HCR-13 Provide consultation letters and other communication documents indicating correspondence to and from the Michigan SHPO and to and from Federally recognized Indian tribes that have ancestral or historical ties to the project area and surrounding lands that you have received or sent since submittal of the ER or not included in the ER. Additionally, has any contact been made with local historical societies or other local organizations with an interest in historic preservation?

Meetings requested:

- a. Provide knowledgeable applicant staff familiar with the cultural resources within the Fermi property to review cultural resource management procedures to determine how they manage resources, avoid impacting historic and cultural resources, and deal with inadvertent discovery of historic and cultural resources and human remains. Is any cultural resource training required for staff? Additionally, I would like to discuss the status of ongoing mitigation within the Fermi property related to Fermi 1 and 3.
- b. Provide knowledgeable applicant staff and transmission line maintenance staff to discuss right-of-way maintenance and monitoring and any procedures in place regarding protection of historic and cultural resources along existing transmission line corridors.

Tours requested:

- a. General site tour
- b. Tour of archaeological sites and architectural resources within Fermi property, preferably led by an archaeologist or staff familiar with location of cultural resources within the Fermi property.

**Human Health (HH)**

- HH-1 Provide NPDES monthly discharge monitoring reports for the past 5 years.
- HH-2 Provide an overview of the radiation protection program with emphasis on the as low as reasonably achievable (ALARA) program to control worker radiation exposure (annual dose goals and status). Are there any proposed changes or upgrades to the program being considered during the license renewal term?
- HH-3 Radioactive gaseous and liquids effluents: review how the plant processes radioactive effluents to maintain radiation doses to the public to levels that are ALARA. Are there any proposed changes or upgrades to the program being considered during the license renewal term?

Meeting Requested: Discussion with knowledgeable DTE staff or contractors on the various site audit needs requests for Human Health.

Tours Requested:

- a. General tour of plant site and buildings
- b. Radiation protection/access control areas.
- c. Radiological environmental monitoring program (REMP) – a small sample of monitoring stations (e.g., air monitors stations, TLD stations, drink water, milk, vegetation, including monitoring stations co-located with state monitoring stations).

**Land Use and Visual Resources (LUV)**

- LUV-1 The Environmental Report ER (Section 3.0.1, p. 3-1 and others) states that the Fermi site is 1,260 acres. The Final Environmental Statement (FES) for Operation of Fermi 2 (ML12209A107; Section 2.5.1, p. 2-14) states that the site is 1,120 acres in size. Explain this discrepancy and clarify which number the NRC staff should use in preparing its supplemental environmental impact statement (SEIS).

- LUV-2      The ER (Section 3.1.1, p. 3-21) states that 221 acres of the Fermi site “are developed areas that include existing Fermi 2 facilities, the decommissioned Fermi 1 plant, and associated support facilities.”
- a. How much of this land is attributable to Fermi 2?
  - b. How much of this developed land is attributable to the decommissioned Fermi 1?
  - c. Does the 221 acres include any developed land associated with Fermi 3 site preparation activities or other Fermi 3-related uses? If not, provide revised site land use acreages that include developed land associated with Fermi 3.
- LUV-3      Provide the following information regarding the cooperative agreement with the FWS for management of the Detroit River International Wildlife Refuge (DRIWR):
- a. Confirm that the agreement dated September 25, 2003 (ML112650015) remains the most current and valid agreement.
  - b. Does DTE plan to maintain the agreement “as is” for the duration of the proposed license renewal term?
  - c. If not, what changes to the agreement does DTE foresee during the proposed license renewal term? Include any changes that would result from Fermi 1 decommissioning activities or Fermi 3 construction and operation.
- LUV-4      The ER (Section 3.4.3.3, p.3-52) indicates that a portion of the Fermi site is used for growing crops. The ER for the Fermi 3 combined license (COL) application (ML110600498; Section 2.4.1.1.1, p.2-323) indicates that this cropland covers an area of 64 acres.
- a. Does DTE lease this land to private individuals? If so, when do the applicable leases expire?
  - b. Describe DTE’s plans for the cropland during the proposed license renewal term (i.e., will DTE continue to lease this land for agricultural use, let it lay fallow, develop it, etc.). Include any temporary or permanent changes in land use that may result from Fermi 1 decommissioning activities or Fermi 3 construction and operation.
- LUV-5      The ER (Section 9.1.3.20, p. 9-12) indicates that DTE planned to submit a request to the Michigan Department of Environmental Quality (MDEQ) for a



consistency determination in accordance with the Coastal Zone Management Act following DTE's submittal of the license renewal application to the NRC.

- a. Provide an updated summary of DTE's progress in obtaining a consistency determination.
- b. Provide copies of any applicable correspondence pursuant to obtaining a consistency determination.

LUV-6 The NRC's SEIS for Fermi 2 license renewal will include brief descriptions of the utility and transportation infrastructure on the Fermi 2 site that mirror Section 3.1.6.1 in the NRC's 2013 GEIS (ML13107A023). To facilitate the staff's preparation of this section, provide a brief summary of any non-nuclear fuel storage on the Fermi 2 site, if any. The underground gasoline and diesel storage tanks described in Section 9.1.3.8.3 of the ER need not be included in the summary.

LUV-7 Provide a copy of the following ER reference for NRC staff review:

DTE. 2013aa. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE9.1.3-002, Water Quality (401) Certification and Coastal Zone Management Act. February 1, 2013.

Meeting Requested: Discussion with knowledgeable DTE staff or contractors on the various site audit needs requests for Land Use.

Tour Requested: General tour of the site features, including developed and natural areas.

#### **Meteorology, Air Quality, and Noise (MET)**

MET-1 Have field tests concerning ozone and nitrogen oxides emissions generated by high voltage transmission lines been conducted near Fermi's transmission lines? If so, please provide this information.

MET-2 Section 3.2.2.2 of the ER provides temperature data collected at the Fermi meteorological tower from 2001-2007. Please provide the following meteorological information from the data recorded at Fermi's meteorological facility for the most recent 5 years:

- a. mean monthly and annual temperatures
- b. mean monthly precipitation and annual precipitation

MET-3 Are there expected upgrade/replacement activities for equipment/operation that could increase or decrease air emissions over the license renewal period?

MET-4 Please describe the notification system that is mentioned in Section 4.3.4 of the Environmental Report regarding nighttime firing range training activities to the

communities of Frenchtown Township, Village of Estral Beach, and Berlin Township.

MET-5 Please identify noise sources at Fermi.

MET-6 Section 3.3 of the ER states the following “Some intermittent gunshot noise from the Fermi firing range and noise from the Fermi 2 cooling towers were faintly audible at five of the seven NMLs, including the closest residence, located 0.72 miles west-northwest of the Fermi 2 reactor (DECo 2011, Table 2.5-69; NRC 2013c, Section 2.10.2).” In reviewing the cited reference, DECO 2011, the following statement is provided: “The approximate distance from each NML to Fermi 2 equipment is provided in Table 2.5-69,” but which equipment is not identified. Furthermore, Deco 2011 identifies that the noise monitoring locations were selected based on the location of the nearest-sensitive receptors (i.e., the nearest residences). According to Table 2.5-69 and Figure 2.5-32 provided in Deco 2011, NML-2 (approximately 180 meters southeast of a nearby residence) is located 0.5 miles away from Fermi Unit 2 (which would result in this noise sensitive receptor/residence being approximately 0.61 miles from Fermi Unit 2) and NML-7 (near the Swan boat club) is located near a residence approximately 0.72 miles away from Fermi Unit 2. Please clarify:

- a. the reference point at Fermi Unit 2 used to obtain the distance between the noise monitoring location (NML) and Fermi Unit 2
- b. the nearest residence distance and closest NML to the residence

MET-7 Provide copies of the following ER references for NRC staff review:

- a. DECo. 2004. Detroit Edison—Fermi New Source Review Permit to Install 462-99B. September 16, 2004.
- b. DTE. 2012g. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE 9.1.3-001, Notice of Violation 2008–2012 Annual Reports. December 5, 2012.
- c. DTE. 2013h. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE2.2-024, Greenhouse Gas Emissions, 2012. June 12, 2013.
- d. DTE. 2013g. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE2.2-023, Air Emissions. October 10, 2013.
- e. Fermi. 2013a. Fermi Energy Center Renewable Operating Permit MI-ROP-B4321-2013. November 1, 2013.
- f. DTE. 2013x. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE4.3-001, Noise. May 8, 2013.

- g. DTE. 2013cc. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE9.1.3-006, Federal, State, Local Regulatory Standards: Discussion of Compliance—Fermi 2 Annual Air Permit Reports Submitted to MDEQ. April 19, 2013.
- h. Fermi. 2008g. Michigan Air Emissions Reporting System (MAERS), 2008 Source Summary Report—AQD Source ID (SRN) B4321.2008.
- i. Fermi. 2009g. Michigan Air Emissions Reporting System (MAERS), 2009 Source Summary Report—AQD Source ID (SRN) B4321.2008.
- j. Fermi. 2010j. Michigan Air Emissions Reporting System (MAERS), 2010 Source Summary Report—AQD Source ID (SRN) B4321.2010.
- k. Fermi. 2011h. Michigan Air Emissions Reporting System (MAERS), 2011 Source Summary Report—AQD Source ID (SRN) B4321.2011.
- l. Fermi. 2012j. Michigan Air Emissions Reporting System (MAERS), 2012 Source Summary Report—AQD Source ID (SRN) B4321.2012.

**Meeting Requested:** Provide a knowledgeable individual to discuss the following aspects of facility operations; (1) sources of air pollutants operating at Fermi, (2) air permits and emission inventories, (3) meteorological towers and data, and (4) noise issues and ambient sound level survey conducted

**Tours Requested:**

- a. General site tour
- b. Major air emissions and noise resources
- c. Nearest noise sensitive receptors

**Socioeconomics (S)**

- S-1 Provide updated property tax information, similar to the data provided in Table 3.8-2 of the ER. Include data for the years 2012 and 2013, if available.
- S-2 Table 3.8-3, 2011 Frenchtown Charter Township Millage Spread, indicates that non-homestead millage rates apply to Fermi 2 and the homestead rates do not. Do all of the other millage rates shown in the table apply to the Fermi 2 property tax payment? Is the entire 2011 Fermi 2 property tax payment (\$19,788,576) distributed based on these millage rates?
- S-3 Table 3.8-4 presents millage totals by school and resort district. It's not clear from the table and discussion in Section 3.8.5 how the Fermi 2 property tax payment is allocated to these districts when compared to the millage rates in Table 3.8-3. Is all of the information presented in this table relevant to describing how the Fermi 2 property tax payment is distributed?

- S-4 The last paragraph states that Fermi 2 is located in the Jefferson Resort School District. How much of the 2011 total \$19,788,576 Fermi 2 property tax payment is allocated to this school district?
- S-5 A table showing the dollar distribution (or percentage) of the Fermi 2 property tax payment and each entity's total revenue (or percent of total revenue) would be helpful. It's important to understand how dependent some of these entities are on the revenue received from the Fermi 2 property tax payment via Frenchtown Township.
- S-6 In addition to tax payments and tax payment information presented in Section 3.8.5 of the ER, describe any other major annual support payments, one-time payments, and other forms of non-tax compensation (if any) provided to local organizations, communities, and jurisdictions (e.g., county, municipality, townships, villages, incorporated places, and school districts) on behalf of Fermi 2.
- S-7 Provide information about any anticipated changes in state and local tax laws, rates, and assessed property value or any other recent or anticipated tax payment adjustments that could result in notable future increases or decreases in property taxes or other tax payments.
- S-8 Provide the following ER reference for NRC staff review:
- DTE. 2012f. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE3.8.5-001 Revision 1, Follow-Up on 8-27-12 Local Government Revenues. November 8, 2012.

Meeting Requested: Discussion with knowledgeable DTE staff or contractors on the various site audit needs requests for socioeconomics resource area.

#### **Special Status Species and Habitats (SSSH)**

- SSSH-1 Section 3.6 of the ER describes species listed under the Endangered Species Act, as amended, that may occur on or within the vicinity of Fermi 2. Two species, the northern long-eared bat (*Myotis septentrionalis*) and the red knot (*Calidris canutus*), are currently proposed for listing under the Endangered Species Act and may occur on or within the vicinity of Fermi 2. Describe any known occurrences of these species on or within the vicinity of Fermi 2. Similarly, describe any ecological studies conducted on or within the vicinity of Fermi 2 that surveyed for these species.
- SSSH-2 Provide a copy of the following ER reference for NRC staff review:
- Kogge, S. (PWS) and J. Heslinga. 2013. Threatened and Endangered Species Survey and Assessment Report. Prepared for DTE Energy Fermi 2 by CardnoJFNew, West Olive, Michigan. CardoJFNew File No. 1308035.00. October 2013.

Meetings Requested: Request to participate in the breakout sessions for aquatic and terrestrial resources.

Tours Requested: Site tours for aquatic and terrestrial resources

### **Terrestrial Ecology (TE)**

- TE-1            The ER (Section 3.6.2, p.3-105) states, “A 1974 study described nearly all of the habitats on site as being in relatively early stages of succession.” The COL ER is provided as the reference. For the same information, the COL ER (Section 2.4.1.1.1, p. 2-323) references the following NUS Corporation study. Provide a copy of this study.
- Ecological Sciences Department, Cyrus Wm. Rice Division, 1973-74 Annual Report of the Terrestrial Ecological Studies at the Fermi Site, NUS Corporation, 1974.
- TE-2            The ER (Section 3.6.8, p.3-121) mentions a 2000 Wildlife Management Plan associated with the Wildlife Habitat Council certification for the Fermi site.
- a. Provide a copy of the 2000 Wildlife Management Plan.
  - b. If DTE has updated the 2000 plan, provide a copy of the most recent update to the plan.
  - c. Provide a copy of the most recent Wildlife Habitat Council certification.
  - d. If a recertification application has been submitted for which a certification has not yet been obtained, provide a copy of the recertification application.
  - e. When did DTE first obtain Wildlife Habitat Council certification for the Fermi 2 site?
  - f. Does DTE intend to maintain Wildlife Habitat Council certification during the proposed license renewal term?
- TE-3            The ER (Section 3.6.11, p.3-128) indicates that plant surveys were performed on the DTE/North American Wetlands Conservation Act transmission ROW prairie planting in 2005, 2007, and 2011.
- a. Provide copies of the 2005 and 2007 surveys.
  - b. Provide the following ER reference associated with the 2011 survey:  
  
Fermi.2011c. Fermi 2 ROW Prairie Planting Survey. July 20, 2011.
- TE-4            The ER (Section 3.6.8, p.3-122) indicates that annual Christmas Bird Counts are conducted on the Fermi site. The COL ER (Section 2.4.1.1.2, p.2-328) states that the closest Christmas Bird Count is the Monroe, Michigan bird count, which covers a 14-miles area, the northeast edge of which lies less than 3.5 miles from

the Fermi site. These statements seems to conflict. Clarify whether the Monroe Christmas Bird Count includes the Fermi site.

TE-5 The ER (Section 3.6.11, p.3-128) states that ongoing terrestrial monitoring on the Fermi site includes “wildlife habitat annual monitoring.”

- a. Describe this monitoring in more detail to include who conducts the monitoring, what terrestrial wildlife or vegetation is monitored, monitoring methods, and the periodicity with which monitoring takes place.
- b. Provide copies of associated monitoring reports, if applicable.

TE-6 The ER (Section 3.6.6.1, p.3-109) indicates that in 2011, Ducks Unlimited updated its July 2008 Wetland Investigation Report (ML102000560 and ML102000564).

- a. Provide a copy of the updated report.
- b. Did the updated report affect the U.S. Army Corps of Engineers’ (USACE) previous Jurisdictional Wetland Determination for the site dated November 9, 2010 (ML103570148).
- c. If so, provide a copy of the USACE’s updated Jurisdictional Wetland Determination.

TE-7 The FES for Operation of Fermi 2 (Section 4.4.1.1, p.4-10) states that in September 1973, 50 dead birds were found that were attributable to collisions with the cooling towers. The ER (Section 3.6.8, p.3-123) says that 15 dead birds were found in September 1973. Explain this discrepancy and clarify which number the NRC staff should use in preparing its SEIS.

TE-8 The ER (Section 3.6.8, p.3-123) indicates that in October 2007, 45 dead birds were found at the Fermi 2 south cooling tower during a 1-week period.

- a. Provide any applicable site reports of this event.
- b. Although Appendix B, Section 4.1, of the Fermi 2 operating license (ML053060228) indicates that unusual or important environmental events, including “excessive bird impaction events” should be reported to the NRC, the 2007 Annual Non-Radiological Environmental Operating Report (ML081230244) does not mention the October 2007 event. Please explain why this event was not included in this report as an unusual or important environmental event.

TE-9 The ER (Section 3.6.8, p.3-123) indicates that “occasional individuals or small numbers of birds have been found” around the cooling towers.

- a. How does DTE record such occurrences?

- b. Provide records, if applicable, of these occurrences for the past 10 years of Fermi 2 operation.

- TE-10 The NRC's Final Environmental Impact Statement (FEIS) for the Fermi 3 COL (ML12307A172; Section 5.3.1.1, p.5-20) includes several measures that DTE determined during consultations with the U.S. Fish and Wildlife Service (FWS) and the Federal Aviation Administration would reduce bird collision hazards. The FEIS indicates that DTE plans to implement these for Fermi 3. What of these measures does DTE currently implement for Fermi 2?
- TE-11 The ER (Section 3.6.12.4, p.3-139) indicates that DTE remains in contact with the FWS to keep abreast of future changes in the regulatory environment regarding compliance with the Migratory Bird Treaty Act (MBTA). Provide a brief summary of the frequency and ways in which DTE coordinates with FWS concerning MTBA-protected birds.
- TE-12 The ER (Section 3.6.8, p.3-123) summarizes information on bald eagle nests on the Fermi 2 site that were observed between 2007 and 2013.
- a. Who made the observations described in this section?
  - b. Does DTE regularly survey for bald eagle nests?
  - c. How does DTE evaluate whether site activities could affect bald eagles or nesting behavior?
  - d. Provide updated information on any bald eagle nests that have been observed since the last observation mentioned in the ER (early spring 2013).
- TE-13 On July 31, 2009, DTE provided the NRC staff with a map of bald eagle nest locations on the Fermi site (ML092290704, p. 201) in response to the NRC staff's RAI TE2.4.1-7 for the COL environmental review. Provide an updated version of this map.
- TE-14 On February 15, 2010, DTE provided the NRC staff with a map of eastern fox snake sightings on the Fermi site (ML100541329, p. 58) in response to the NRC staff's RAI TE2.4.1-12 for the COL environmental review. Provide an updated version of this map that includes the all additional sightings of the snake that have occurred since this time.
- TE-15 Table 3.6-6 of the ER (p. 3-154) includes Federally and State-listed species in Monroe and Wayne Counties. Explain DTE's rationale for including Wayne County when considering Federally and State-listed species that could be affected by the proposed license renewal.
- TE-16 The NRC staff's FEIS for the Fermi 3 COL (p.4-37) states, "Increased traffic associated with operation of Fermi 3 has the potential to increase wildlife mortality, including mortality of eastern fox snakes, resulting from vehicle-wildlife interactions." Provide an assessment of how increased traffic and site activities

associated with Fermi 2 refueling outages as well as regular grounds maintenance and infrastructure repairs that would occur during the proposed license renewal term would affect the eastern fox snake.

TE-17 Section 5 of DTE's 2012 Fermi 3 Habitat and Species Conservation Plan (ML12163A577) provides measures to minimize or mitigate impacts to the eastern fox snake. Such measures include educating employees through use of a fox snake manual; adding the eastern fox snake to pre-job brief checklists so that the issue is reinforced prior to work beginning each day; and having a biologist capture and release snakes observed in developed areas prior to the commencement of work in those areas. Does DTE maintain similar measures regarding the eastern fox snake for work performed to support ongoing operations of Fermi 2? If so, please summarize such measures.

TE-18 Section 5.4 of DTE's 2012 Fermi 3 Habitat and Species Conservation Plan (ML12163A577) indicates that DTE will maintain logs of eastern fox snake monitoring and that, in cases where snakes are observed, DTE will create a report noting the number of snakes located and removed and the relocation site. The plan also indicates that DTE will create a yearly report to summarize the results of its mitigation efforts and that all snakes killed in the construction process will be reported to the MDNR as required by applicable take permits.

- a. Does DTE maintain such records for ongoing operations of Fermi 2?
- b. Does DTE foresee the need to obtain an MDNR take permit for activities such as increased traffic and site activities associated with refueling outages or regular grounds maintenance and infrastructure repairs associated with Fermi 2?

TE-19 The ER (Section 3.6.8, p.3-123) indicates that the eastern fox snake was observed during a 2009 study. However, the referenced study (Black and Veatch 2009; ML093380365; Section 4.4.4, p.4-12) states that the eastern fox snake was not observed during the study. Explain this discrepancy.

TE-20 Appendix B, Section 4.1, of the Fermi 2 operating license (ML053060228) requires DTE to report unusual or important environmental events including "excessive bird impaction events, onsite plant or animal disease outbreaks, mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973, fish kills, and an increase in nuisance organisms or conditions." The available annual reports in ADAMS (1999-2013) indicate that DTE has made no such reports for Fermi 2.

- a. How does DTE determine if an event is reportable under Appendix B, Section 4.1?
- b. Provide copies of applicable site guidance or procedures related to documenting and reporting unusual environmental events for NRC staff review.



- TE-21 The 2013 Annual Non-Radiological Environmental Report (ML14118A275; p.4) indicates that DTE performs “routine monitoring for evidence of unusual or important environmental events.” What does this monitoring entail?
- TE-22 The 2013 Annual Non-Radiological Environmental Report (ML14118A275; p.6) indicates that a “final terrestrial monitoring report summarizing all collected data was completed in April 1995.” Provide a copy of this report.
- TE-23 Provide copies of the following ER references for NRC staff review:
- a. DTE. 2012d. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE3.6-001, Bird Strikes and Deaths. October 29, 2012.
  - b. DTE. 2013ff. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE9.1.3-011, Federal, State, Local Regulatory Standards: Discussion of Compliance—Eagle Protection. February 1, 2013.
  - c. DTE. 2013o. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE3.6-005, Detroit River International Wildlife Refuge. November 20, 2013.
  - d. DTE. 2013u. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE3.6-006, Updated Bird Counts. May 24, 2013.
  - e. DTE. 2013v. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE3.6-008, Eagle Sighting on Fermi Site. October 3, 2013.
  - f. DTE. 2013gg. EM&R Standard Work Instruction, Procedure 12-02-03-0198, Version 13.0, Completing Environmental Change Checklists. October 24, 2013.
  - g. Ducks Unlimited. 2011. Detroit Edison Fermi Site, Monroe County Wetland Investigation Report. Ducks Unlimited, Great Lakes Atlantic Region: Ann Arbor, Michigan.
  - h. Fermi. 2002. Wildlife Habitat Program Re-Certification for Fermi 2 Power Plant, The Detroit Edison Company. Prepared by Fermi 2 Power Plant Wildlife Habitat Team. July 2002.
  - i. Heitman, F. 2012. Field Notes from Tour of Fermi Site on May 20, 2012.
  - j. Kogge, S. (PWS) and J. Heslinga. 2013. Threatened and Endangered Species Survey and Assessment Report. Prepared for DTE Energy Fermi 2 by CardnoJFNew, West Olive, Michigan. CardoJFNew File No. 1308035.00. October 2013.

Meetings Requested:

- a. Discussion with knowledgeable DTE staff or contractors on the various site audit needs requests for Terrestrial resources.
- b. Request to participate in the breakout session for aquatic resources.

Tours Requested:

- a. Tour of the various terrestrial habitats on the site, including the Lagoona Beach Unit of the Detroit River International Wildlife Refuge and the onsite portion of the transmission line corridor native prairie planting.
- b. Site tour for aquatic and surface water

**Waste Management and Pollution Preventions-Non-Radioactive Waste (WM-NR)**

- |         |  |
|---------|--|
| WM-NR-1 | Provide list of offsite treatment, storage, and disposal facilities used for liquid and solid mixed waste  |
| WM-NR-2 | Provide information discussing provisions for managing mixed and standard Toxic Substances Control Act wastes.   |
| WM-NR-3 | Provide copy of Fermi 2's conditional exemption for low-level mixed waste storage and disposal per Michigan Administrative Code R299.9822.   |
| WM-NR-4 | Provide a map showing the location of all of the Resource Conservation and Recovery Act (RCRA) 90-day collection points and copies of MDEQ RCRA audits for the last five years.  |
| WM-NR-5 | Provide a list of all the offsite facilities where RCRA waste is shipped and managed.  |
| WM-NR-6 | Provide copies of the following ER references for the NRC staff Review: <ul style="list-style-type: none"><li>a. Fermi. 2009a. Fermi 2 Chemistry and Environmental Monitoring Conduct Manual MCE02, Chemical Controls, Revision 14. July 7, 2009.</li><li>b. Fermi. 2010c. Fermi 2 Chemistry and Environmental Monitoring conduct Manual MCE07, Revision 15, Hazardous and Mixed Waste Management. December 13, 2010.</li><li>c. Fermi. 2012d. Radiation Protection Conduct Manual MRP27, Management of Low Level Mixed Waste at Fermi 2, Revision 4, January 19, 2012.</li><li>d. DTE Energy. 2013. DTE energy Environment Program Series, Environmental Program 05. Waste Management and Material Disposal, Revision 6. May 23, 2-13</li></ul> |

- e. DTE. 2013e. DTE Response to Fermi 2 License Renewal Request for Information. Response to RFI DTE2.2-004, General Plant Information-ER Table 2.2-3 Nonradioactive Waste Generation. April 19, 2013.
- f. DTE. 2013f. DTE Response to Fermi 2 License Renewal Request for Information. Response to RFI DTE2.2-0219, General Plant Information-ER Table 2.2-3 Nonradioactive Waste Generation. April 24, 2013.

WM-NR-7 Provide information explaining the process for managing chemical products to avoid excess volume of expired chemicals.

Meetings Requested: Please arrange a breakout session with waste management personnel to discuss processes and procedures.

Tours Requested: Site tour of storage areas and RCRA 90-day collection points.

#### **Waste Management and Pollution Preventions- Radioactive Waste (WMPP-R)**

WMPP-R-1 Provide overview of how the plant plans to handle low-level radioactive waste (Class A, B, and C, mixed waste, and spent nuclear fuel) during the license renewal term (onsite storage, potential expansion of storage facilities, and disposal options). Are there any proposed changes or upgrades to the program being considered during the license renewal term?

Meetings Requested: Discussion with knowledgeable DTE staff or contractors to discuss site audit needs for radioactive waste.

Tours Requested: Tour of the low-level radioactive waste storage and processing areas, including mixed waste and radioactive effluent monitoring equipment and release points. Note: Access to the radiation restricted area is required.

#### **Water Resources-Groundwater (WR-GW)**

No specific audit needs

#### **Water Resources-Surface Water (WR-SW)**

WR-SW-1 Provide copies of the Water Use Reports for the period 2009-2013, submitted in accordance with the Michigan Water Use Law.

WR-SW-2 Provide a copy of the NPDES permit renewal application for Permit No. MI0037028.

WR-SW-3 Provide a copy of the Stormwater Pollution Prevention Plan.

WR-SW-4 Provide a copy of Industrial/Non-Domestic User Discharge Permit No. 1020

- WR-SW-5 Please provide copies of NPDES Discharge Monitoring Reports for the last 2 years, inclusive of 2014 year to date.
- WR-SW-6 Please provide copies of any Notices of Violation (NOVs), nonconformance notifications, or related infractions received from regulatory agencies associated with NPDES permitted discharges, sanitary sewage systems, groundwater or soil contamination, including spills, leaks, and other inadvertent releases of fuel solvents, chemicals, or radionuclides received to date (covering past 5 years inclusive of 2014). Include correspondence of self-reported violations to responsible agencies.
- WR-SW-7 Provide copy of the following ER reference for NRC staff review:
- DTE.2013aa. DTE Response to Fermi 2 License Renewal Project Request for Information. Response to RFI DTE9.1.3-002, Water Quality (401) Certification and Coastal Zone Management Act. February 1, 2013.
- WR-SW-8 Please provide a summary of any available data, or report that tracks lake water temperatures over time (e.g., last 30 years) or provides a projection of future conditions.
- WR-SW-9 Please provide for review copies of CWA Section 404 permits, and state equivalent permits, including the following: MDEQ Permit No. 11-58-0055-P and After-the-Fact Permit, USACE Permit No. 88-001-040-8, and Army Permit LRE-1988-10408-L13.
- WR-SW-10 Please provide a copy of the following ER Reference for NRC staff review:
- MDEQ. 2013a. Correspondence from Katherine David, MDEQ, to Valerie Byrd, DTE Energy, Michigan Department of Environmental Quality (MDEQ) Permit Number 11-58-0055-P, T6S, R1 OE, Section 21, Frenchtown Township, Monroe County. April 24, 2013.
- WR-SW-11 Please provide a description of any planned operational and maintenance activities (or projects) anticipated to be undertaken during the license renewal term (as possible, identify expected timeframe, location(s) affected, acres disturbed, and activity/project duration).

Meeting Requested: Provide applicant's subject matter expert(s) and/or the contractor(s) responsible for writing the surface water hydrology and quality portions of the ER and who can discuss the plant's intake and circulating water systems, effluent discharges, and affected water resources.

Tour requested: The hydrology/aquatic ecology team would like a general tour of the site and vicinity including associated intake structures and conveyances (i.e., Lake Erie intake channel and canal area, GSW pump house area, Circulating Water Reservoir and Circulating Water Pump House; and blowdown/intake pipeline routings); significant streams and other surface water/effluent management "features" (e.g., chemical waste pondbasin, sewage forwarding station); NPDES outfall locations (e.g., blowdown Outfall 001) including the on-shore discharge structure; and Residual Heat Removal Complex.