UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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In the Matter of)
DTE ELECTRIC CO.) Docket No. 52-033-COL
(Fermi Nuclear Power Plant, Unit 3))
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ORDER

(Transmitting Pre-Hearing Questions)

On December 1, 2014, the Commission issued a notice that it would convene an evidentiary hearing at its Rockville, Maryland headquarters on February 4, 2015, pursuant to section 189a. of the Atomic Energy Act of 1954, as amended, to receive testimony and exhibits in the uncontested portion of the captioned proceeding.¹ In connection with that hearing, pursuant to my authority under 10 C.F.R. § 2.346(a) and (j), DTE Electric Company and the NRC Staff should file written responses to the questions provided in the table below.

¹ See In the Matter of DTE Electric Company, Combined License for Enrico Fermi Unit 3; Notice of Hearing, 79 Fed. Reg. 72,215 (Dec. 5, 2014).

² Today I am also issuing a separate order with an additional question for DTE and the Staff. This order is being filed on the non-public docket for this proceeding because it contains security-related sensitive unclassified non-safeguards information (SUNSI).

being taken for the Fermi Unit 3 combine How does this approach differ from that is and Summer COLs? Safety General Applicant and Staff Please provide a summary of any standa for the ESBWR design center that chang previous reference COL application (Nor Fermi Unit 3. Applicant and Staff Please summarize significant changes to that may have resulted from the recent is ESBWR design certification. Staff Staff's safety standard review plan was be What guidance is available for meeting s established after 2007? Safety General Staff In a letter dated September 22, 2014, the Committee on Reactor Safeguards (ACR safety review of the Staff's Advanced Sa Report (Advanced SER) for the Fermi Unit The ACRS letter concluded that there is assurance that Fermi Unit 3 can be built without undue risk to public health and si ACRS letter also identified three generic seismic reevaluations, mitigating strategi pool instrumentation. In addition, the AC	No.	<u>Category</u> <u>F</u>	Reference	Directed To	<u>Question</u>
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that may have resulted from the recent is ESBWR design certification. 4 Safety General Staff Staff's safety standard review plan was lead to what guidance is available for meeting sestablished after 2007? 5 Safety General Staff In a letter dated September 22, 2014, the Committee on Reactor Safeguards (ACF safety review of the Staff's Advanced Sa Report (Advanced SER) for the Fermi Un The ACRS letter concluded that there is assurance that Fermi Unit 3 can be built without undue risk to public health and staff's ACRS letter also identified three generic seismic reevaluations, mitigating strateging pool instrumentation. In addition, the ACRS letter addition addits addition addition addition addition addition addition addition	2 Sa	Safety Gene	neral App	pplicant and Staff	Please provide a summary of any standard COL information for the ESBWR design center that changed between the previous reference COL application (North Anna 3) and Fermi Unit 3.
What guidance is available for meeting sestablished after 2007? Staff General Staff In a letter dated September 22, 2014, the Committee on Reactor Safeguards (ACF safety review of the Staff's Advanced Sa Report (Advanced SER) for the Fermi Ur The ACRS letter concluded that there is assurance that Fermi Unit 3 can be built without undue risk to public health and sa ACRS letter also identified three generic seismic reevaluations, mitigating strateging pool instrumentation. In addition, the AC	3 Sa	Safety Gene	neral App	pplicant and Staff	Please summarize significant changes to the COL application that may have resulted from the recent issuance of the final ESBWR design certification.
Committee on Reactor Safeguards (ACR safety review of the Staff's Advanced Sa Report (Advanced SER) for the Fermi Ur The ACRS letter concluded that there is assurance that Fermi Unit 3 can be built without undue risk to public health and so ACRS letter also identified three generic seismic reevaluations, mitigating strategi pool instrumentation. In addition, the AC	4 Sa	Safety Gene	neral Stat	aff	Staff's safety standard review plan was last updated in 2007. What guidance is available for meeting safety requirements established after 2007?
generated missiles. (ADAMS accession in The Staff responded to the ACRS on No (ML14293A058). (a) Is the Staff expecting a response ACRS?	5 Sa	Safety Gene	neral Stat	aff	(a) Is the Staff expecting a response back from the

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				closed out or addressed?
6	Safety	Exemption	Staff	Regarding the material control and accounting (MC&A) exemption, how does the exemption request and the Staff's evaluation of it compare to what was done in the previously issued COLs? Does the Staff have a plan to amend the regulations to obviate the need for MC&A exemptions for future Part 52 applicants?
7	Safety	Emergency Plan	Staff	NRC licensees are required to provide a protective action recommendation to State and local officials for members of the public within the plume exposure pathway emergency planning zone. 10 C.F.R. § 50.47(b)(10). Figure I-1 of the Fermi Emergency Plan shows the emergency planning zone being divided into five pre-designated protective action areas. All of these protective action areas are located on land areas within the United States. Figure I-1 does not pre-designate protective action areas over United States and Canadian portions of Lake Erie. Do NRC regulations require the applicant to make protective action recommendations to Canadian officials?
8	Safety	Emergency Plan	Applicant and Staff	One of the novel environmental issues raised in SECY-14-0132 is international interactions as a result of Fermi Unit 3 being within seven miles of the border with Canada. Because seven miles is less than the 10-mile Emergency Planning Zone, please describe in more detail how the proximity to Canada affected the emergency planning review in Section 13.3 of the Safety Evaluation Report (SER).
9	Safety	Emergency Plan	Applicant and Staff	Please explain how the applicant's Emergency Plan provides the means to make protective action recommendations to State, local, or provincial officials for members of the public (e.g., boaters) on Lake Ontario within the United States and Canadian portions of the plume exposure pathway emergency planning zone, should such response become

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				necessary.
10	Safety	Emergency Plan	Applicant and Staff	Planning Standard 10 C.F.R. § 50.47(b)(9) requires that the onsite and offsite plans provide adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency. The regulation does not explicitly include or exclude assessment and monitoring beyond the 10-mile emergency planning zone. The bases for selecting a 10-mile emergency planning zone are described in Section I.D of NUREG-0654. Included in these bases is the consideration that detailed planning within ten miles would provide a substantial base for expansion of response efforts in the event that this proved necessary. Please explain how the applicant's Emergency Plan provides the means to assess and monitor offsite doses beyond the 10-mile emergency planning zone and to use those results to make protective action recommendations to State, local, or provincial officials for members of public if the projected radiological doses exceed the Environmental Protection Agency's protection action guides.
11	Safety	Emergency Plan	Staff	The Fermi Unit 3 COL application is required to include emergency plans that comply with Appendix E to Part 50. See 10 C.F.R. § 52.79(a)(21). Part 50, Appendix E, provides, in IV.B "Assessment Actions," that initial Emergency Action Levels (EALs) shall be discussed and agreed on by the applicant and state and local governmental authorities, and approved by the NRC. Has the NRC approved the initial EALs? Or did the Staff review and approve a plan for developing EALs or impose a license condition?
12	Safety	Chapter 1	Staff	SECY-14-0132 says, in the table on page 12, that the evaluation for the exemption on MC&A is located in Section 1.5.4 of the Final Safety Evaluation Report (FSER). Yet,

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				there is no Section 1.5.4; rather, the evaluation is in Section 1.4.5. Beyond this apparent transposition of numbers, there appears to be an omission in FSER Chapter 1 in that page 1-1 states that "Section 1.5 documents regulatory findings that are in addition to those directly related to the [S]taff's review of the [Final Safety Analysis Report (FSAR)]." There is no
				Section 1.5 in the FSER. Please resolve this discrepancy.
13	Safety	Chapter 1	Applicant and Staff	As part of this hearing, we must determine whether the applicant is technically qualified to "engage in the activities authorized", which includes both construction and operation of an Economic Simplified Boiling Water Reactor (ESBWR) at the Fermi site. 10 C.F.R. § 52.97(a)(1)(iv). In both the Vogtle and V.C. Summer COL reviews, the Staff found the applicants technically qualified, in part because those applicants had already signed engineering, procurement, and construction (EPC) contracts with established vendors. Here, the applicant has not selected a primary contractor for these tasks; instead, there is a commitment (COM1.4-001) in the FSAR that the "primary contractor for site engineering" will be "supplied in an FSAR update following selection." (FSER at 1-20). Please explain in more detail why you find the applicant technically qualified without an identified primary contractor and without an executed EPC contract. As part of your response, please address why COM1.4-001 is sufficient, when it states that the applicant will provide the name of the contractor in the FSAR, but provides no commitment regarding the quality or experience of the contractor.
14	Safety	Chapter 2	Applicant and Staff	For seismic hazard curves, uncertainty may vary significantly with vibration frequency. Describe the sufficiency of the standard seismic design requirements in the Design Control Document (DCD) to account for potential implications, if any, of this observation on the ground motion uncertainty for the

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				Fermi Unit 3 site. Please explain how the observations in calculated variations of uncertainty with ground motion frequency at Fermi are calculated in the seismic hazard analysis to assure that adequate seismic margin exists.
15	Safety	Chapter 2	Staff	Subsection 2.5.2.4 of the FSAR describes the applicant's Probabilistic Seismic Hazard Analysis (PSHA) calculations for the Fermi Unit 3 site, including the generation of seismic hazard curves. These hazard curves show the probability of exceeding a certain ground motion level. For any given vibration frequency the hazard is given by a family of curves that account for uncertainty in the calculations. A behavior that has been observed to be common in these hazard curves is that this uncertainty varies significantly per vibration frequency. Explain how the potential implications of this observation were accounted for in determining whether the Fermi Unit 3 site meets the standard seismic design requirements in the DCD.
16	Safety	Chapter 2	Staff	Section 2.4.3.4.1, Tables 2.4.3-3 and 2.4.3-4 of the FSER calculate the resulting flood elevations at the Fermi Site using the Hydrologic Engineering Centers River Analysis System (HEC-RAS) simulation software. The Staff found that the maximum water level resulting from flooding was 585.4 ft North American Vertical Datum (NAVD) 88 in the Alternative III scenario, which is 0.1 ft below the applicant's maximum water level calculated in a sensitivity due to Snowmelt Alternative. Please describe why the applicant's maximum water level sensitivity due to snowmelt of 585.5 ft NAVD 88 is acceptable, when the NRC Staff calculated sensitivity due to snowmelt in Table 2.4.3-4 was 0.8 ft above the applicant's maximum water level.
17	Safety	Chapters 2 and 3	Applicant and Staff	Section 3.8.4 of the FSER states that for seismic category NS and seismic category II buildings that house regulatory

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				treatment of non-safety systems (RTNSS) equipment a hurricane missile criterion is specified. Section 2.3.1.4 of the FSER describes a tornado at the Fermi Unit 2 site in June 2010 and also states that the NRC Staff found that the Fermi Unit 3 site is located well inland from areas impacted by hurricanes. Section 2.4.5.4 of the FSER states that the NRC Staff verified that the Fermi Unit 3 site is beyond the influence of the probable maximum hurricane. The NRC Staff response dated November 14, 2014, to the ACRS Report on the Safety Aspects of the DTE Electric Company Combined License Application for Fermi Unit 3, dated September 22, 2014, states that new guidance specifies that RTNSS equipment should be analyzed and designed to withstand the effects of high winds produced in hurricanes and tornadoes.
				 (a) Please describe how General Design Criteria 2 to 10 C.F.R. Part 50, which requires that structures, systems, and components that are important to safety shall be designed to withstand the effects of natural phenomena, such as tornadoes, is met, in accordance with Regulatory Guide 1.76, dated March 2007. (b) Please describe the technical justification for the seismic category NS and seismic category II buildings that house RTNSS equipment at Fermi Unit 3 being designed for hurricane missiles but not tornado missiles, when the site is located in Region I for tornadoes, as defined in Regulatory Guide 1.76.
18	Safety	Chapter 3	Applicant and Staff	FSER Section 3.8.4.4 discusses the Staff's evaluation of lateral seismic earth pressures on below grade external walls. The site-specific pressures for the Reactor/Fuel Building (RB/FB) and the Control Building (CB) exceed the

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				corresponding pressures considered in the standard design. Describe the implications of such exceedance and the applicability of the standard design to the Fermi Unit 3 site in this regard. As part of your response please describe why it was unnecessary for the applicant to take a departure from the standard design for this analysis.
19	Safety	Chapter 3	Applicant and Staff	Discuss the site-specific conditions that required the performance of site-specific soil-structure interaction (SSI) analyses and how these conditions deviate from the ESBWR DCD.
20	Safety	Chapter 3	Applicant and Staff	The ESBWR DCD, Tier 2, Appendices 3A.5 and 3A.5.2, describes the SSI analysis method implemented in the standard design, which is based on the use of the SASSI2000 analysis program. These DCD sections, including the use of SASSI2000, are designated as Tier 2* information, therefore requiring prior NRC approval to change. Instead of using the SASSI2000 program, the applicant used the SASSI2010 program in its site-specific SSI analyses. Please describe the validation and acceptability of the SASSI2010 program over the SASSI2000 program for the Fermi Unit 3 site-specific SSI analyses.
21	Safety	Chapter 3	Staff	In performing its site-specific SSI analyses of embedded structures, the applicant used two methods of analysis, namely the Direct Method and the Modified Subtraction Method. Section 3.7-2 of the Standard Review Plan (SRP) provides that the Direct Method should be used to the extent practical. For the use of other methods, technical justifications should be provided to demonstrate their adequacy. Please describe the process that the Staff followed to verify the adequacy of the applicant's justification for the SSI analyses that used the Modified Subtraction Method.

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22	Safety	Chapter 3	Applicant and Staff	Describe how the results of the applicant's site-specific SSI
	•			analyses demonstrate the applicability of the standard
				ESBWR design to the site.
23	Safety	Chapter 3	Staff	Chapter 3 of the FSER for Fermi Unit 3 states:
				In RAI 03.09.06-1 for the Fermi [Unit] 3 COL
				application, the [S]taff requested [DTE] to
				describe its plans for addressing the
				surveillance of squib valves that will provide
				reasonable assurance of the operational
				readiness of those valves to perform their
				safety functions in support of the Fermi [Unit] 3
				COL application. In a letter dated November 9,
				2010 (ADAMS Accession No. ML103140611),
				[DTE] submitted a planned revision to Fermi
				[Unit] 3 COL FSAR Section 3.9.6 to specify
				that industry and regulatory guidance will be
				considered in the development of the [inservice testing (IST)] Program for squib
				valves. [DTE] indicated that the FSAR would
				also state that the IST Program for squib
				valves will incorporate lessons learned from
				the design and qualification process for these
				valves, such that surveillance activities provide
				reasonable assurance of the operational
				readiness of squib valves to perform their
				safety functions. The [S]taff found that the
				planned changes to the Fermi [Unit] 3 COL
				FSAR are sufficient to describe the IST
				Program for squib valves for incorporating the
				lessons learned from the design and
				qualification process in developing
				surveillance activities that will provide

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				reasonable assurance of the operational readiness for squib valves to perform their safety functions.
				Is there specific industry or regulatory guidance that the applicant has committed to use in developing their IST program in order to provide reasonable assurance of the operational readiness for squib valves to perform their safety functions?
24	Safety	Chapter 3	Applicant and Staff	Section 3.9.4 of the FSER includes the Staff's technical evaluation of COL Item 3.9.9-1-A related to the Steam Dryer Monitoring Plan. The FSER notes that the startup program includes providing data to the NRC at certain "hold points" during power ascension. FSER at 3-76.
				 (a) Please describe the use of the term "hold points" in this context. As part of your response, please discuss whether condition 2.D.(12)(b)8 of the draft COL includes a hold point when it restricts the licensee from raising power for 72 hours. (b) Will a license amendment be necessary to go beyond this hold point because it would grant the licensee greater operational authority? See, e.g., Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Unit 1), CLI-96-13, 44 NRC 315, 326 (1996).
25	Safety	Chapter 8	Applicant and Staff	Chapter 8 includes a description of the monitoring of transformers for open circuit conditions. Please explain the design vulnerabilities addressed in response to Bulletin 2012-01, "Design Vulnerability in Electric Power System."
26	Safety	Chapter 9	Applicant and Staff	Section 9.5.4 of the FSER notes that a 7-day fuel oil inventory is specified for the diesel generator fuel oil storage and transfer system. Section 9.5.7 does not discuss diesel

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				generator lubricating system inventories. Does the Fermi Unit 3 COL FSAR specify a 7-day lubricating oil inventory with sufficient margin for the diesel generators? If not, what is the basis for not also requiring a 7-day lubricating oil inventory for the diesel generators?
27	Safety	Chapter 11	Staff	The Fermi Unit 3 COL application identified one departure from the ESBWR design (EF3 DEP 11.4-1 Long-Term, Temporary Storage of Class B and C Low-Level Radioactive Waste), which is described in Section 11.4 of the FSER. The departure involves a redesign of the Radwaste Building that affects the arrangement of systems and components within the building volume, but does not affect offsite dose rates or the integrity of waste containers in storage. Is prior NRC approval needed for the proposed storage plan? If not, why not?
28	Safety	Chapter 14	Staff	Section 14.3.1 of the FSER states that "Section 14.3 of the FSAR discusses the criteria and methodology for selecting the [systems, structures, and components (SSCs)] to be included in the ITAAC." Please describe the bases for the criteria and methodology and discuss any material differences between these criteria and methodology and those for previously issued COLs.
29	Safety	Chapter 20	Staff	To address Near Term Task Force (NTTF) Recommendation 2.1, the Staff requested the applicant to evaluate the potential impacts of the NUREG-2115 seismic source model on the Fermi Unit 3 seismic hazard and to modify the site-specific ground motion response spectra (GMRS) and foundation input response spectra (FIRS) as necessary. In response, the applicant updated its PSHA and respective GMRS and FIRS reflecting the use of the NUREG-2115 seismic source model. In this update, the applicant used the Electric Power Research Institute (EPRI) 2004/2006 ground motion model

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				(GMM). In 2013, EPRI published an update to the 2004/2006 ground motion model called the EPRI 2013 GMM. The EPRI 2013 GMM is currently being used by licensees in their assessments related to NTTF Recommendation 2.1. Describe how the Staff verified the adequacy of the use of the 2004/2006 EPRI GMM instead of the 2013 EPRI GMM to address NTTF Recommendation 2.1 for Fermi Unit 3.
30	Safety	Chapter 20	Applicant and Staff	Section 20.2 of the FSER states that the ESBWR design includes installed ancillary equipment (RTNSS equipment) that could potentially extend the time period for transition from initial phase mitigation to final phase mitigation. The NRC Staff also states in Section 20.2 that the ESBWR RTNSS program includes an evaluation of the augmented design standards for RTNSS equipment to withstand external events such as earthquakes, hurricanes, tornadoes, and floods. As described in Section 3.8.4.4 of the FSER, certain RTNSS equipment for Fermi Unit 3 is installed in seismic category NS and seismic category II buildings that are not tornado missile protected as described in SER Section 3.8.4.4. (a) Please describe if the RTNSS equipment referred to in Section 20.2 will be contained in buildings that are protected from tornado missiles, the reevaluated
				seismic hazard, and the calculated flood hazard for Fermi Unit 3. If not, please provide further technical justification for why NTTF Recommendation 4.2 is met. (b) Is the onsite equipment for 10 C.F.R. § 50.54(hh)(2) stored in structures designed to withstand external events such as earthquakes, tornadoes, and floods for Fermi Unit 3? If not, please explain the use of this

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				equipment in the context of NTTF Recommendation 4.2.	
31	Safety	License	Applicant and Staff	Please explain the relationship between conditions 2.B.(1)(a) and (b) in the draft COL. Condition (a) appears to grant DTE Electric Company authority to operate the facility, while condition (b) appears to remove that same authority. When the owner and operator of the facility are the same company – as is the case here – is it necessary to include condition (b) in the COL?	
32	Safety	License	Applicant and Staff	Please describe in more detail the timeline for implementing the fire protection program elements listed in condition 2.D.(10)(e) in the draft COL. It is unclear to what information the parenthetical in condition 2(D)(10)(e) refers. As part of the description, please explain whether it is clearly understood what elements of the fire protection program are "necessary to support the receipt and storage of fuel?"	
33	Safety	License	Applicant and Staff	The Commission has long held that license conditions must be "precisely drawn so that the verification of compliance becomes a largely ministerial act." <i>Private Fuel Storage, LLC</i> (Independent Spent Fuel Storage Installation), CLI-00-12, 52 NRC 23, 34 (2000). License condition 2.D.(12)(g)2 regarding Mitigation Strategies for Beyond-Design-Basis External Events, states that the overall integrated plan must include provisions to ensure that all accident mitigation procedures and guidelines are "coherent and comprehensive." Please explain how this condition meets the Commission's requirements regarding license conditions and what acceptance criteria the Staff will use to determine whether the plans are "coherent and comprehensive."	
34	Safety	License	Applicant and Staff	Section 103c. of the Atomic Energy Act states that the NRC may issue a license for up to 40 years from the "authorization to commence operations." Currently, the applicant has not	

35	Environmental			made a final decision about whether to build Fermi Unit 3. Therefore, the date of a decision on whether to authorize the commencement of operations could be long-delayed. Please explain how the Staff and the applicant will ensure that the information in the FSAR and the COL remains current should
35	Environmental			there be an extended time between license issuance and potential construction and operation.
		General	Staff	Did the applicant propose any novel environmental approaches in the environmental portion of its application? How did the Staff address these approaches?
36	Environmental	General	Staff	The Staff's environmental standard review plan was last updated in 2007. What guidance is available for meeting environmental requirements established after 2007?
37	Environmental	General	Staff	Please highlight major themes from the comments on the Draft Environmental Impact Statement (DEIS), and generally describe the Staff's responses to those comments.
38	Environmental	General	Staff	SECY-14-0132 includes a draft Record of Decision. This Record of Decision is more comprehensive than the Records of Decision issued in previous COL proceedings. Please describe the reasons for the Staff's change in approach on Records of Decision including the relationship between the draft Record of Decision and 10 C.F.R. § 51.102(c).
39	Environmental	General	Staff	The Northern Long-Eared Bat is currently a species that has been proposed to be listed as an endangered species by the U.S. Fish and Wildlife Service (USFWS) and it potentially occurs in areas affected by building and operating Fermi Unit 3. (a) Please provide an update on when the Staff expects the USFWS to make a decision on whether to list this species on the endangered species list. (b) Should the Northern Long-Eared Bat be listed prior to

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				a Commission decision on this application, what process would the Staff use to ensure compliance with the Endangered Species Act? Given the NRC's continuing responsibilities under Section 7 of the Endangered Species Act following the issuance of the combined license, describe any current (or planned) interactions or consultations with the USFWS in anticipation of the probable listing of the Northern Long-Eared Bat as an endangered species. (Final Environmental Impact Statement (FEIS) Chapters 1, 2, and Appendix F).
40	Environmental	General	Staff	On December 11, 2014, the USFWS added the rufa red knot to the list of threatened and endangered species. Describe any ongoing activities or plans to reinitiate consultation with the service on this species pursuant to 50 C.F.R. § 402.16.
41	Environmental	General	Staff	Given that Fermi Unit 3 is to be co-located with Fermi Unit 2 and Fermi Unit 1, information regarding any outreach to Indian Tribes during any NRC, United States Army Corps of Engineers (USACE), or other Federal agencies' National Historic Preservation Act (NHPA) Section 106 reviews related to these facilities and resulting information provided by Indian Tribes during these consultations would be useful to help the public understand the Indian Tribes' concerns and potential level of interest.
				Please explain the Staff's efforts to consult with federally- recognized Indian Tribes and to include Indian Tribes in surveys of the Area of Potential Effects, as well as the Staff's efforts to obtain and use information gathered during previous NRC or USACE Section 106 consultations for the Fermi plant to inform the Staff's National Environmental Policy Act of 1969 (NEPA)/NHPA Section 106 analyses.

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				Also, please indicate whether the Staff has guidance on conducting Section 106 consultations, conducting NEPA analyses in lieu of Section 106, or delegating Section 106/NEPA consultation activities to a licensee, and please explain how this guidance was followed by the Staff. (FEIS Chapter 2 and Appendices E and F).
42	Environmental	General	Staff	Because the NRC and the USACE have different agency missions, describe the regulatory challenges that arose during the joint review of DTE's application and the preparation of the Environmental Impact Statement (EIS).
43	Environmental	General	Staff	Page J-2 of the FEIS states that "the USACE has not verified the adequacy of [DTE's] proposed 'Least Environmentally Damaging Practicable Alternative' (LEPDA) at this time." In the FEIS it is unclear when the USACE will make its determination. When is a decision expected? What would the implications be if the USACE were to determine that the Greenwood Energy Center Site is the LEDPA?
44	Environmental	General	Staff	The NRC's change to the definition of construction and the resulting change to the way construction impacts are addressed in the NRC's NEPA documents is a controversial issue. The FEIS states (page 4-3) that "For most resource areas, the majority of the impacts would occur as a result of preconstruction activities." However, Table 4-23 (page 4-128) seems to indicate that there is no difference between the magnitude of the impacts from construction activities alone compared with construction impacts and preconstruction impacts combined. Please explain the methodology for addressing construction impacts in the FEIS, including the added complexity of having a cooperating agency that treats all construction impacts as direct impacts.
45	Environmental	General	Staff	Please explain the methodology for determining which activities to include/exclude as construction activities and the

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				decision not to provide explicit information within the discussion of impacts for each resource area to help the public understand which activities in particular are included in the definition of construction and which are not included.
46	Environmental	General	Staff	Please describe how public feedback affected or informed the Staff's approach to addressing construction impacts and how construction impacts would have been addressed if the USACE were not a cooperating agency. (FEIS Chapters 1, 3, and 4)
47	Environmental	General	Staff	Please explain the usefulness of separating preconstruction and construction impacts in the FEIS given that Table 4-23 (page 4-128) seems to indicate that there is no difference between the magnitude of the impacts from construction activities alone compared with the magnitude of those from construction activities and preconstruction activities combined.
48	Environmental	Chapter 4	Staff	Describe when the NRC will perform a Clean Air Act (CAA) section 176 air conformity applicability analysis pursuant to 40 C.F.R. Part 93, Subpart B and what, if any, actions the analysis may result in. (FEIS page 4-104)
49	Environmental	Chapter 5	Staff	The Staff concludes that the "risks associated with severe accidents if an ESBWR were to be located at the Fermi site would be small when compared with the risks associated with operation of the current generation reactors at other site." In other EISs, how has the Staff characterized the environmental impacts of severe accident risk at those sites, e.g. license renewal EISs? (FEIS page 5-140)
50	Environmental	Chapter 7	Staff	Please explain the Staff's decision not to address the cumulative impacts of Fermi Unit 3 operation with concurrent decommissioning of Fermi Unit 2 in the FEIS.
51	Environmental	Chapter 9	Staff	Why did the Staff compare the cumulative impacts of the alternatives with the cumulative impacts of Fermi Unit 3, as

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				opposed to the direct impacts, as was done with Vogtle and most license renewals? Would a comparison of the direct impacts have resulted in a different balancing result?
52	Environmental	Chapter 10	Staff	Clarify what role energy diversity and price stability played in the Staff's final, qualitative balancing of the costs and benefits of Fermi Unit 3.
53	Environmental	Chapter 10	Staff	The Summary of Benefits and Costs in section 10.6.3 of the FEIS states that Fermi Unit 3 would help meet increasing baseload demand in the region by supplying annual electricity generation of about 12,000,000 megawatt-hours (MWh). If this baseload need were to be supplanted by a proliferation of new gas generating facilities, would the Staff's benefit-cost conclusions still be supported?
54	Environmental	Continued Storage	Staff	The FEIS was published before the Commission issued its revised continued storage rule. To account for the impacts of continued storage, the Staff considered whether the impacts in NUREG-2157 were significant enough to warrant the publication of a supplement to the FEIS. The Staff concluded that the information in NUREG-2157 does not present a seriously different picture of the environmental impacts of the proposed action when compared to the impacts that were described in the FEIS for Fermi Unit 3. (a) Given that by rule, NUREG-2157 was deemed incorporated into the Fermi FEIS (i.e., in effect supplementing the FEIS, see CLI-12-5), why was the focus of the Staff's analysis whether NUREG-2157 or the revised rule were new and significant information? Please provide more detail on the Staff's conclusion that the revised continued storage rule and NUREG-2157 do not alter the Staff's recommendation that the COL be issued.

No.	Category	Reference	Directed To	<u>Question</u>
				 (b) Please explain how, if at all, the Staff's balancing and/or cost-benefit analysis and the comparison among alternatives under 10 C.F.R. § 51.107(a)(ii)-(iii) was impacted by the incorporation of the impacts of continued storage. (c) The Staff's analysis accounting for the impacts of continued storage is in an internal note to file. Why did the Staff choose to do a note to file instead of in the Record of Decision, as the Staff did in the Limerick license renewal proceeding? Will the Staff's note to file be widely-distributed to inform the public and enhance transparency? Does the Record of Decision reflect a consideration of the impacts of continued storage? How could the Record of Decision be modified to account for the impacts of continued storage?
55	Environmental	New and Significant Information	Staff	Describe the Staff's process for considering new and significant information with respect to the Fermi Unit 3 FEIS.
56	Environmental	New and Significant Information	Staff	The Staff notes that it has a generic process to address circumstances in which there is an extended delay between the issuance of the FEIS for a particular license application review and the start of that proceeding's mandatory hearing phase. What is considered an extended delay? If there is no extended delay, what process is used to address any new and significant information?
57	Environmental	New and Significant Information	Staff	Has the Staff prepared any documents addressing new and significant information for Fermi Unit 3 beyond the note to file providing the consideration of the impacts of continued storage referenced in SECY-14-0132?
58	Environmental	License	Staff	Section 2.1 of Appendix B of the License, the Environmental Protection Plan (EPP), requires the licensee to "inform the

No.	<u>Category</u>	<u>Reference</u>	Directed To	<u>Question</u>
				NRC of events or situations concerning aquatic resources pursuant to 10 C.F.R. § 50.72(b)(2)(xi), and this EPP does not expand any reporting requirement by that regulation." Section 2.2 imposes a similar condition with respect to terrestrial resources. Explain how 10 C.F.R. § 50.72(b)(2)(xi) currently requires licensees to report on "events or situations concerning aquatic resources." Specifically, to which other government agencies must licensees report such events?

IT IS SO ORDERED.

For the Commission

NRC SEAL

/RA/

Annette L. Vietti-Cook Secretary of the Commission

Dated at Rockville, Maryland, this 30th day of December, 2014.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of)	
DTE ELECTRIC COMPANY)	Docket No. 52-033-COL
(Fermi Nuclear Power Plant, Unit 3) Mandatory Hearing)))	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **ORDER** (**Transmitting Pre-Hearing Questions**) have been served upon the following persons by Electronic Information Exchange.

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Fermi Nuclear Power Plant, Unit 3, Docket No. 52-033-COL (Mandatory Hearing) ORDER (Transmitting Pre-Hearing Questions)

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[Original signed by Clara Sola]
Office of the Secretary of the Commission

Dated at Rockville, Maryland this 30th day of December, 2014