

March 12, 2013

Mr. Peter W. Smith, Director
Nuclear Development
Licensing and Engineering
337 WCB
DTE Energy
One Energy Plaza
Detroit, MI 48226-1221

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 83 RELATED TO
CHAPTER 13 FOR THE FERMI 3 COMBINED LICENSE APPLICATION

Dear Mr. Davis:

By letter dated September 18, 2008, Detroit Edison Company (Detroit Edison¹) submitted for approval a combined license application pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52. The U.S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

By letter dated December 18, 2012, DTE Electric Company submitted plans for incorporating the Emergency Preparedness Rule Changes into the Fermi 3 COLA. The NRC staff has identified that additional information is needed to continue the review of this new documentation. The staff's request for additional information (RAI) is contained in the enclosure to this letter. In order to minimize delays to the current licensing schedule, we request that you respond within 30-days of receipt of this RAI.

If changes are needed to the safety analysis report, the staff requests that the RAI response include the proposed wording changes. If you have any questions or comments concerning this matter, I can be reached at 301-415-3104 or by e-mail at michael.eudy@nrc.gov.

Sincerely,

/RA/

Michael Eudy, Project Manager
Licensing Branch 3
Division of New Reactor Licensing
Office of New Reactors

Docket No.: 052-033

eRAI Tracking No.: 7030

Enclosure: Request for Additional Information

¹ On December 21, 2012, the Detroit Edison company sent the NRC a letter indicating that, effective January 1, 2013, the name of the company would be changed to "DTE Electric Company." The legal entity will remain the same (see ML12361A437).

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ADAMS Accession No.: ML13071A243

NRO-002

OFFICE	TR: DDEP/IRIB	PM: DDEP/NRLB	PM: DNRL/LB3	LPM: DNRL/LB3	LA: DNRL/LB3	PM DNRL/LB3
NAME	ESchrader	KWilliams	MEudy	AMuniz	SGreen	MEudy
DATE	2/14/13	2/14/13	2/27/13	2/27/13	3/12/13	3/12/13

*Approval captured electronically in the electronic RAI system.

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Letter to Mr. Peter W. Smith from Michael Eudy dated March 12, 2013.

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Request for Additional Information

Application Title: Fermi Unit 3 - Docket Number 52-033

Operating Company: Detroit Edison

Review Section: 13.03 - Emergency Planning

Application Section: Part 05

QUESTIONS

13.03-66

10 CFR 50 Appendix E.IV.A.9 requires a detailed On-Shift Staffing Analysis of on-shift staffing to be performed and the addition of staff as necessary to match the levels determined by staffing analysis. DTE proposed a licensee condition that states, in part, "The licensee shall submit a detailed analysis of on-shift staffing, in accordance with the NRC endorsed version of NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities." The staff requests for the applicant to provide and document what revision of NEI 10-05 will be used for the staffing analysis.

13.03-67

10 CFR 50 Appendix E.IV. B.1 "Assessment Actions" states in part "...The initial emergency action levels shall be discussed and agreed on by the applicant or licensee and state and local governmental authorities, and approved by the NRC. Thereafter, emergency action levels shall be reviewed with the State and local governmental authorities on an annual basis." The applicant proposed a licensee condition that states:

"The licensee shall submit a fully developed set of site-specific EALs to the NRC in accordance with the NRC-endorsed version of NEI 07-01, Revision 0, with no deviations. The fully developed site-specific EAL scheme shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load."

The staff finds that DTE's proposed licensee condition is not consistent with 10 CFR 50 Appendix E.IV. B.2. The staff requests for the applicant to revise the proposed license condition to be consistent with 10 CFR 50 Appendix E.IV.B.2 or, provide an acceptable justification for why the State and local governmental authorities review and approval is not needed in the proposed license condition.

13.03-68

10 CFR 50 Appendix E Section IV.E.8.d requires nuclear power reactor licensees to have an alternative facility (or facilities) that would be accessible under threat of or experiencing hostile action and function as a staging area for augmentation of emergency response staff. The current Fermi 2 Emergency Response Plan, Revision

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40 page H-4 states:

“An Alternate EOF is located at the Western Wayne Center, approximately 22 miles northwest of Fermi 2. The facility has adequate communications equipment and sufficient space to accommodate the additional personnel required for continuity of dose projection and decision making capability, including coordination of the offsite teams. Portable equipment is provided for the personnel to perform their assigned functions. Procedures are in place which describes the activation and support functions.”

A similar description is provided in the DTE Fermi 3 response. Since the Fermi 3 plan is a standalone plan, please specify if the space available in the Western Wayne Center been evaluated for an event that would activate both the Fermi 2 & 3 EROs, such as a security event, to ensure there is sufficient space to accommodate the additional personnel required by both EROs. The staff requests for the applicant to provide documentation of the Alternate EOF available space evaluation and revise emergency plan Alternate EOF description to include the capability to support both Fermi 2 & 3 ERO teams in the event of a site event activating both units EROs.

13.03.69

10 CFR 50 Appendix E Section IV.A.7 requires identification of, and a description of the assistance expected from, appropriate State, local, and Federal agencies with responsibilities for coping with emergencies, including hostile action at the site. The mark up to be inserted, at the bottom of page II-18 of the Emergency plan, states:

“Fermi 3 Emergency Plan implementing procedures or letters of agreement (LOAs) with ORO organizations identify ORO resource availability and their applicable integration into site activities during an emergency event, including HAB events, at the Fermi site. The procedures or LOAs identify ORO resources and coordination, for potential simultaneous on-site and off-site ORO support, including coordination between security and EP resources, which may be called upon during a radiological emergency scenario involving hostile action based events at the Fermi site.”

However, the staff finds that it does not describe the title of the EPIP to contain the described information or actions to be taken if shortfalls in ORO resources are found. The staff requests that the applicant provide the title of the ORO resources and coordination EPIP and procedural controls required to allow lower level procedural documents to contain emergency response plan information (i.e. 10 CFR 50.54(q) commitment for procedure changes) as well as actions to be taken should ORO resource shortfalls are found. Please also include this information in the Emergency Plan.

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13.03-70

10 CFR 50 Appendix E Section IV.I requires emergency plans to contain onsite protective actions during hostile action. The mark up to be inserted, at the bottom of page II-87 of the Emergency plan, states; "Emergency Plan implementing procedures describe Fermi 3 onsite protective actions for site personnel and onsite emergency responders from HAB and other events." The staff requests for the applicant to provide the title of the Protective Actions for Onsite Personnel EPIP and procedural controls required to allow lower level procedural documents to contain emergency response plan information (i.e. 10 CFR 50.54(q) commitments for procedure changes). Please include this information in the Emergency Plan.

13.03-71

10 CFR 50 Appendix E Section IV.F.2 requires each licensee to submit exercise scenarios under § 50.4 at least 60 days before use in an exercise. Element #6 "Challenging Drills and Exercises" insert #3 to be added to the Emergency plan, states:

"Scenarios for full participation or biennial exercises are submitted for NRC review and verification at least 60 days prior to the planned exercise. Emergency Plan implementing procedures describe submittal of exercise scenarios to the NRC as well as conformance with the eight year cycle and specific scenario requirements."

The staff request for the applicant to provide the title of the NRC exercise scenario submittal and eight year exercise cycle requirements conformance EPIP and procedural controls required to allow lower level procedural documents to contain emergency response plan information (i.e. 10 CFR 50.54(q) commitments for procedure changes). Please include this information in the Emergency Plan.

13.03-72

Appendix 7 "NUREG-0654 Cross-Reference" provides reference (Criteria H.2. page A7-21) for the Emergency Operations Facility as being established consistent with NUREG-0696, "Functional Criteria for Emergency Response Facilities." In addition, regulatory guidance provided in NUREG-0696, Subsection 4.3, "Staffing and Training," as enhanced by NSIR/DPR-ISG-01, states in part that prior to initial operation of a consolidated EOF and in at least one drill or exercise per exercise cycle thereafter, the EOF staff will demonstrate the ability to perform the additional consolidated EOF functions described in the emergency plan and revised guidance. The staff requests for the applicant to revise the emergency response plan to describe the EOF staff demonstration of its ability to perform their consolidated EOF functions established in the emergency plan and regulatory guidance in at least one drill or exercise per exercise cycle thereafter or, provide an acceptable justification for exclusion.

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13.03-73

10 CFR 50 Appendix E Section IV.D.3 requires alert and notification capability to include administrative and physical means for a backup method of public alerting and notification capable of being used in the event the primary method of alerting and notification is unavailable during an emergency to alert or notify all or portions of the plume exposure pathway EPZ population. Section II.E.5 "Instructions to the Public in the Plume Exposure EPZ" states in part the following:

"The capability exists for the prompt notification of the general public within the 10-mile Plume Exposure EPZ around the Fermi 3 site. This notification capability consists of two (2) principal elements: 1) the Alert and Notification System (ANS) and 2) the EAS radio and television stations."

The staff requests for the applicant to revise the emergency response plan description of the required ANS capabilities to be consistent with 10 CFR 50 Appendix E.IV. D.3 or, provide an acceptable justification for exclusion.

13.03-74

10 CFR 50 Appendix E Section IV. E. 8.c.3 requires the capability to support response to events occurring simultaneously at more than one nuclear power reactor site if the emergency operations facility serves more than one site. The DTE response to Element #9 "Emergency Operations Facility - Performance-Based Approach" includes, in part, the following:

"Additionally, in the unlikely event that emergencies are declared simultaneously at Fermi 2 and Fermi 3, a single Emergency Director is designated from onsite shift management, in accordance with emergency plan implementing procedures."

The staff requests for the applicant to provide the title of the coordination with Fermi 2 and EOF simultaneous Fermi 2 & 3 event support capabilities EPIP and procedural controls required to allow lower level procedural documents to contain emergency response plan information (i.e. 10 CFR 50.54(q) commitment for procedure changes). Please include this information in the Emergency Plan.

13.03-75

10 CFR 50 Appendix E Section IV. E.8.c.3 requires the capability to support response to events occurring simultaneously at more than one nuclear power reactor site if the emergency operations facility serves more than one site. The DTE emergency plan section II.H.1.d. Emergency Operations Facility (EOF) contains a description of the EOF design and capabilities, two of which are:

- The EOF, which serves both Fermi 2 and 3, is the location where the Emergency Officer will direct a staff in overall company activities involved with an emergency.

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The EOF is located on the first floor of the Nuclear Operations Center (NOC) and is approximately 5,000 feet southwest of Fermi 3 on owner-controlled property. Supporting facilities at the NOC include the plant simulator, plant training offices, training classrooms, and space for news reporters; and

- It is of sufficient size to accommodate about 40 people, including 25 Detroit Edison personnel and nine (9) NRC representatives. The EOF contains available workspace for representatives from offsite governmental agencies (State of Michigan, Monroe and Wayne counties, and the Province of Ontario) who may dispatch representatives as they deem necessary to support emergency response activities.

The DTE emergency plan describes sharing the available EOF space with the Fermi 2 ERO. Please specify if the available EOF space has been evaluated for an event that would activate both the Fermi 2 & 3 EROs to ensure there is sufficient space to accommodate the additional personnel required by both EROs. The staff requests for the applicant to provide documentation of EOF available space evaluation and revise emergency plan EOF description to include the capability to support both Fermi 2 & 3 ERO teams in the event of a site event activating both units EROs.

13.03-76

10 CFR 50 Appendix E Section IV.E.8.c provides performance-based criteria applicable to EOFs. NUREG-0696, Section 4, "Emergency Operations Facility," provides criteria for EOF functions, location, structure, habitability, and instrumentation, along with other considerations for EOF capabilities. One of the described functions is staffing and activation of the facility within time frames and at emergency classification levels defined in the licensee emergency plan. Section II.B.1 "Onsite Emergency Organization" (page II-13) of the DTE emergency response plan contains the following description of ERF staffing efforts:

"Table II.B-1 reflects Detroit Edison's intent to achieve the 30-minute and 60-minute augmentation times indicated in Table B-1 of NUREG-0654/FEMA-REP-1, and in Supplement 1 to NUREG-0737 (Ref. 11) as a desirable goal for facility staffing."

The staff finds the description of establishing "a desirable goal for facility staffing" is not in accordance with the ERF staffing capability guidance in NUREG-0654/FEMA-REP-1, NUREG-0737Supplement 1 or NUREG-0696. The staff requests for the applicant to revise the emergency response plan description of ERF staffing capabilities to be consistent with guidance in NUREG-0654/FEMA-REP-1 NUREG-0737Supplement 1 and NUREG-0696, or provide an acceptable justification for difference.

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13.03-77

10CFR 50.47(b)(10) and Part 50 Appendix E Section IV states the following:

“Nuclear power reactor licensees shall use NRC approved evacuation time estimates (ETEs) and updates to the ETEs in the formulation of protective action recommendations and shall provide the ETEs and ETE updates to State and local governmental authorities for use in developing offsite protective action strategies.”

The DTE emergency plan section II.J.7 “Protective Action Recommendations and Bases” in part states the following, concerning basis for developing a PAR, “Public Protective Action Recommendations (PARs) are based on plant conditions, estimated offsite doses, or some combination of both.” The finds that this is not in accordance with 10 CFR 50.47(b)(10) or Appendix E Section IV.3. The staff requests for the applicant to revise the emergency response plan description of PAR development to be consistent with 10 CFR 50 Appendix E.IV.3 or, provide an acceptable justification for the difference.

13.03-78

The DTE Cross Reference of Fermi 3 Emergency Plan to Other Regulations and Regulatory Documents In Accordance with Regulatory Guide 1.206 Section C.I.13.3.1 change submittal beginning on page S03-2 the Part 1, 10 CFR 50, Appendix E – Cross-Reference table begins with IV A. The staff finds that this is not in accordance with 10 CFR 50, Appendix E.IV which begins with E.IV.1 thru 7. The staff requests for the applicant to revise the emergency response plan Appendix E - Cross-Reference table to be consistent with 10 CFR 50 Appendix E.IV. 1 - 7 or, provide an acceptable justification for exclusion.

Enclosure