

January 16, 2014

Mr. Peter W. Smith, Director  
Nuclear Development  
Licensing and Engineering  
337 WCB  
DTE Electric Company<sup>1</sup>  
One Energy Plaza  
Detroit, MI 48226-1221

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NUMBER 89 RELATED TO  
CHAPTER 13 FOR THE FERMI 3 COMBINED LICENSE APPLICATION

Dear Mr. Smith:

By letter dated September 18, 2008, DTE Electric Company (Detroit Edison<sup>1</sup>) 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.

The NRC staff has identified that additional information is needed to continue portions of the review. 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 301-415-5136 or by e-mail at [john.klos@nrc.gov](mailto:john.klos@nrc.gov).

Sincerely,

/RA/

John Klos, Project Manager  
Licensing Branch 3  
Division of New Reactor Licensing  
Office of New Reactors

Docket No.: 052-033

eRAI Tracking No.: 7360

Enclosure: Request for Additional Information

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<sup>1</sup> 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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## **Request for Additional Information 89**

Application Title: Fermi Unit 3

Operating Company: Detroit Edison

Docket No. 52-033

Review Section: 13.06.01 - Physical Security - Combined License

### **QUESTIONS**

13.06.01-56

#### **Introduction:**

On March 19, 2013, 10 CFR Part 37 rule was published in the Federal Register. The U.S. Nuclear Regulatory Commission (NRC) amended its regulations to establish security requirements for the use and transport of category 1 and category 2 quantities of radioactive material. The NRC considers these quantities to be risk significant and, therefore, to warrant additional protection. Category 1 and category 2 thresholds are based on the quantities established by the International Atomic Energy Agency (IAEA) in its Code of Conduct on the Safety and Security of Radioactive Sources, which the NRC endorses. The objective of the 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material," rule is to provide reasonable assurance of preventing the theft or diversion of category 1 and category 2 quantities of radioactive material. The regulations also include security requirements for the transportation of irradiated reactor fuel that weighs 100 grams or less in net weight of irradiated fuel. The 10 CFR Part 37 rule affects any licensee that possesses an aggregated category 1 or category 2 quantity of radioactive material, any licensee that transports these materials using ground transportation, and any licensee that transports small quantities of irradiated reactor fuel. The 10 CFR Part 37 rule compliance date is March 19, 2014.

#### **Regulatory Basis:**

(1) Subpart C of Title 10 CFR (10 CFR) Part 52, § 52.79(a)(35)(i) and (ii) requires that information submitted for combined license (COL) applications include how the applicant will meet the requirements of 10 CFR 73. Title 10 CFR 52.6, Completeness and accuracy of information, requires information provided "shall be complete and accurate in all material respects."

(2) 10 CFR 37.3 Scope (a) Subparts B and C of this part apply to any person who, under the regulations in this chapter, possesses or uses at any site, an aggregated category 1 or category 2 quantity of radioactive material. (b) Subpart D of this part applies to any person who, under 10 CFR Part 37: (1) Transports or delivers to a carrier for transport in a single shipment, a category 1 or category 2 quantity of radioactive material; or (2) Imports or exports a category 1 or category 2 quantity of radioactive material; the provisions only apply to the domestic portion of the transport.

(3) 10 CFR Part 37, Subpart C, "Physical Protection Requirements During Use" Section 10 CFR 37.41 contains the following requirements: (a)(1) Each licensee that possesses an aggregated category 1 or category 2 quantity of radioactive material shall establish, implement, and maintain a security program, (a)(2) An applicant for a new license and each licensee that

would become newly subject to the requirements of this subpart upon application for modification of its license shall implement the requirements of this subpart, as appropriate, before taking possession of an aggregated category 1 or category 2 quantity of radioactive material, (a)(3) Any licensee that has not previously implemented the Security Orders or been subject to the provisions of subpart C shall provide written notification to the NRC regional office specified in § 30.6 of this chapter at least 90 days before aggregating radioactive material to a quantity that equals or exceeds the category 2 threshold. (b) General Performance Objective. Each licensee shall establish, implement, and maintain a security program that is designed to monitor and, without delay, detect, assess, and respond to an actual or attempted unauthorized access to category 1 or category 2 quantities of radioactive material. (c) Program features. Each licensee's security program must include the program features, as appropriate, described in §§ 37.43, 37.45, 37.47, 37.49, 37.51, 37.53, and 37.55.

NRC has provided guidance for material licensees on how to comply with 10 CFR Part 37 in the form of NUREG-2155, *Implementation guidance for 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material."*

Fermi 3 COL application, Part 8, Security Plan, revision 5, dated September 23, 2011, ML11270A014, describes how the applicant will establish and maintain a physical protection program that satisfies the general performance objective and requirements in 10 CFR 73.55(b). As required, this program will include a security organization, which will have as its objective to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety. As discussed above, 10 CFR 37, Subpart C requires a security program for the protection of aggregated quantities of category 1 or category 2 radioactive materials. Section 37.11(b) provides a specific exemption which states that any licensee's NRC-Licensed activities are exempt from the requirements of subpart B and C of Part 37 to the extent that its activities are included in a security plan required by Part 73. Since the applicant will be licensed to possess aggregated quantities of category 2 or greater radioactive material, it will be required to establish and maintain a security plan which meets the requirements of Part 37. This may be done either by modifying the Part 73 security plans or by developing a Part 37 security plan. In either case, the applicant may take credit for security measures already provided under the Part 73 plan. However, the Fermi 3 COL application does not describe how the requirements of 10 CFR Part 37 will be met. In addition, the applicant's Security Plan, revision 5, which consist of the Physical Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan do not describe how the requirements of 10 CFR Part 37 will be met.

- (1) Provide descriptions in the Final Safety Analysis Report (FSAR), (e.g. Chapter 13), to address how the applicant, prior to taking possession of an aggregated category 1 or category 2 quantity of radioactive material will implement the requirements of 10 CFR Part 37, by establishing, implementing, and maintaining a security program for Fermi 3. The applicant should describe what procedures are in place (or to be developed) to evaluate the aggregated category 1 or category 2 quantities of radioactive materials, prior to the applicant's receiving Part 30 By Product Material sources on site, against the pertinent quantities described in 10 CFR Part 37. The applicant should describe who will be responsible for evaluating these aggregated sources and should verify that this evaluation of aggregated sources includes both licensee owned and contractor owned sources.