# **PMFermiCOLPEm Resource**

From: Misenhimer, David

**Sent:** Thursday, June 12, 2014 4:08 PM

To: Michael Brandon (DTE)

Cc: FermiCOL Resource; Muniz, Adrian; Govan, Tekia; Misenhimer, David

**Subject:** RAI Letter 90 - Related to Chapter 13.06.01 for the Fermi 3 Combined License Application

(Public)

Attachments: Final RAI.pdf

Resending

Mr. Brandon,

Attached is a courtesy copy of the RAI related to Chapter 13.06.01 for the Fermi 3 Combined License Application.

Thank you.

David Misenhimer, P.E.

Project Manager

Office of New Reactors (NRO)

Division of New Reactor Licensing (DNRL) Projects Branch (LB3) U.S. Nuclear Regulatory

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Email Number: 1409

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Subject: RAI Letter 90 - Related to Chapter 13.06.01 for the Fermi 3 Combined License

Application (Public)

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 From:
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Created By: David.Misenhimer@nrc.gov

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Tracking Status: None

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**Options** 

Priority:StandardReturn Notification:NoReply Requested:NoSensitivity:Normal

Expiration Date: Recipients Received:

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 90 RELATED TO

CHAPTER 13.06.01 FOR THE FERMI 3 COMBINED LICENSE APPLICATION

Dear Mr. Smith:

By letter dated September 18, 2008, Detroit Edison Company (Detroit Edison) 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 301-415-6590 or by e-mail at <a href="mailto:david.misenhimer@nrc.gov">david.misenhimer@nrc.gov</a>.

Sincerely,

/RA/

David Misenhimer, Project Manager Licensing Branch 3 Division of New Reactor Licensing Office of New Reactors

Docket No.: 052-033

eRAI Tracking No. 7548

Enclosure: Request for Additional Information

<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).

Mr. Peter W. Smith, Director Nuclear Development Licensing and Engineering 337 WCB DTE Electric Company<sup>2</sup> One Energy Plaza Detroit, MI 48226-1221

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Sincerely, /RA/ David Misenhimer, Project Manager Licensing Branch 3 Division of New Reactor Licensing Office of New Reactors

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Enclosure: Request for Additional Information

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<sup>\*</sup>Approval captured electronically in the electronic RAI system.

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# Request for Additional Information 90

Issue Date: 06/10/2014
Application Title: Fermi Unit 3
Operating Company: Detroit Edison
Docket No. 52-033

Review Section: 13.06.01 - Physical Security Combined License Application Section: 13.6

QUESTIONS

13.06.01-57

## **Background Data:**

In Section 13.6, Final Safety Analysis Report (FSAR), the applicant incorporated by reference the ESBWR Design Control Document (DCD).

## **ESBWR Design Control Document, Section 13.6 Security states:**

"The Security Plan consists of the Physical Security Plan, Training and Qualification Plan, and the Safeguards Contingency Plan. The Security Plan is submitted to the Nuclear Regulatory Commission as a separate licensing document in order to fulfill the requirements of 10 CFR 52.79. The Security Plan meets the requirements contained in 10 CFR 26 and 10 CFR 73 and will be maintained in accordance with the requirements of 10 CFR 52.98. The Security Plan is categorized as Security Safeguards Information and is withheld from public disclosure pursuant to 10 CFR 73.21."

In a letter dated September 23, 2011, Detroit Edison submitted their Security Plans revision 5 to the Nuclear Regulatory Commission as a separate licensing document in order to fulfill the requirements for 10 CFR 52.79(a)(35) and 10 CFR 52.79(a)(36).

Section 7 of the Safeguards Contingency Plan, provides a description that the Fermi 3 methodology used by GEH to develop the target sets for Fermi 3 is described in NEDE-33391, Revision 3, "The ESBWR Safeguards Assessment Report" (GEH Licensing Topical Report).

The ESBWR Safeguards Assessment Report, Revision 3, (GEH Licensing Topical Report) (NEDE-33391) describes the ESBWR physical protection system and analyzes the ability of the ESBWR security design to provide protection against malevolent attempts to commit radiological sabotage using elements of the Design Basis Threat (DBT) as contained in 10 CFR 73.1(a)(1). The NEDE-33391 report is intended to support the licensing of the portion of the ESBWR security system that is within the scope of the Design Certification (DC). NEDE-33391, Section 3.0, describes how the process of the target set identification for the ESBWR was established by using the standard methodology to determine those structures, systems and components (SSC) that require protection in order to meet the performance objectives of the ESBWR physical protection system.

#### **eRAI** Question

The NRC staff requests clarification pertaining to how the applicant, once licensed, will analyze and identify changes in the site-specific conditions related to the ESBWR's structures, systems, and components (SSCs) (described in certain technical reports), resulting from changes made to the Fermi 3 COL between issuance of the COL and the security program implementation milestones provided in FSAR Table 13.4-201 to ensure that the security plan continues to meet 10 CFR 73.55(b)(4). Also, clarify how the applicant, once licensed, will ensure that the as-built plant continues to meet all physical protection program design and performance criteria in 10 CFR 73.55 at the time the physical protection program is implemented.

The applicant's response should:

- a. Describe how all changes of SSCs and related design information are reviewed for any impact on the physical protection program.
- b. Describe how the physical protection program, to include the security plans (consisting of the physical security plan, training and qualification plan, safeguards contingency plan, and cyber security plan), will be revised to address changes that affect (both beneficial and adverse) the protective strategy with the as-built configuration.

### **Regulatory Basis:**

The provisions of 10 CFR 73.55(b)(4), require, in part, that, "(1) The licensee shall establish and maintain a physical protection program, to 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.

- (2) To satisfy the general performance objective of paragraph (b)(1) of this section, the physical protection program must protect against the design basis threat of radiological sabotage as stated in § 73.1.
- (3) The physical protection program must be designed to prevent significant core damage and spent fuel sabotage. Specifically, the program must:
- (i) Ensure that the capabilities to detect, assess, interdict, and neutralize threats up to and including the design basis threat of radiological sabotage as stated in § 73.1, are maintained at all times.
- (ii) Provide defense-in-depth through the integration of systems, technologies, programs, equipment, supporting processes, and implementing procedures as needed to ensure the effectiveness of the physical protection program.
- (4) The licensee shall analyze and identify site-specific conditions, including target sets, that may affect the specific measures needed to implement the requirements of this section and shall account for these conditions in the design of the physical protection program.

The provisions of 10 CFR 50.54(p)(1) require, in part, that, "The licensee shall prepare and maintain safeguards contingency plan procedures in accordance with appendix C of part 73 of this chapter for affecting the actions and decisions contained in the Responsibility Matrix of the safeguards contingency plan. The licensee may not make a change which would decrease the effectiveness of a physical security plan, or guard training and qualification plan, or cyber

security plan prepared under § 50.34(c) or § 52.79(a), or part 73 of this chapter, or of the first four categories of information (Background, Generic Planning Base, Licensee Planning Base, Responsibility Matrix) contained in a licensee safeguards contingency plan prepared under § 50.34(d) or § 52.79(a), or part 73 of this chapter, as applicable, without prior approval of the Commission. A licensee desiring to make such a change shall submit an application for amendment to the licensee's license under § 50.90.

- (2) The licensee may make changes to the plans referenced in paragraph (p)(1) of this section, without prior Commission approval if the changes do not decrease the safeguards effectiveness of the plan. The licensee shall maintain records of changes to the plans made without prior Commission approval for a period of 3 years from the date of the change, and shall submit, as specified in § 50.4 or § 52.3 of this chapter, a report containing a description of each change within 2 months after the change is made. Prior to the safeguards contingency plan being put into effect, the licensee shall have:
- (i) All safeguards capabilities specified in the safeguards contingency plan available and functional;
- (ii) Detailed procedures developed according to appendix C to part 73 of this chapter available at the licensee's site; and
- (iii) All appropriate personnel trained to respond to safeguards incidents as outlined in the plan and specified in the detailed procedures.