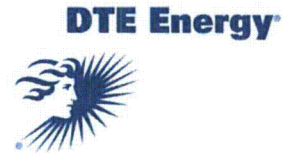


DTE Energy
One Energy Plaza, Detroit, MI 48226-1279



10 CFR 52.79

August 14, 2013
NRC3-13-0029

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

- References:
- 1) Fermi 3
Docket No. 52-033
 - 2) Letter from Michael Eudy (USNRC) to Peter W. Smith (DTE Electric),
"Request for Additional Information Letter No. 88 Related to Chapters 01 for
the Fermi 3 Combined License Application," dated July 17, 2013

Subject: DTE Electric Company Response to NRC Request for Additional Information
Letter No. 88

In Reference 2, the NRC requested additional information to support the review of certain portions of the Fermi 3 Combined License Application (COLA). The Requests for Additional Information (RAIs) in Reference 2 are related to physical protection requirements for new fuel receipt at Fermi 3. The responses to these requests are provided in Attachments 1 and 2 of this letter. Information contained in these responses will be incorporated into a future COLA submittal as described in the RAI responses..

If you have any questions, or need additional information, please contact me at (313) 235-3341.

DO95
MRO

I state under penalty of perjury that the foregoing is true and correct. Executed on the 14th day of August 2013.

Sincerely,



Peter W. Smith, Director
Nuclear Development – Licensing and Engineering
DTE Electric Company

Attachments: 1) Response to RAI Letter No. 88 (Question No. 01.05-08)
 2) Response to RAI Letter No. 88 (Question No. 01.05-09)

cc: Adrian Muniz, NRC Fermi 3 Project Manager
 Tekia Govan, NRC Fermi 3 Project Manager
 Bruce Olson, NRC Fermi 3 Environmental Project Manager (w/o attachments)
 Fermi 2 Resident Inspector (w/o attachments)
 NRC Region III Regional Administrator (w/o attachments)
 NRC Region II Regional Administrator (w/o attachments)
 Supervisor, Electric Operators, Michigan Public Service Commission (w/o attachments)
 Michigan Department of Natural Resources and Environment
 Radiological Protection Section (w/o attachments)
 Regina A. Borsh, Dominion Energy, Inc.
 Barry C. Bryant, Dominion Energy, Inc.

Attachment 1
NRC3-13-0029
(3 pages)

Response to RAI Letter No. 88
(eRAI Tracking No. 7180)

RAI Question No. 01.05-08

NRC RAI 01.05-08

In your February 1, 2012 supplemental RAI response to RAI 01-7, you specified that the Special Nuclear Material (SNM) in the form of reactor fuel for Fermi 3 is Category III, SNM of low strategic significance, as defined by 10 CFR 70.4 and will not exceed U-235 isotope enrichment of 10 percent as described in ESBWR DCD reference 4.3-10 that is incorporated by reference. In accordance with 10 CFR 70.22(k), the staff is requesting that the applicant provide the following additional information:

Per the requirements of 10 CFR 73.67(f), please describe and specify the details (e.g., descriptions of engineered controls, administrative controls and management systems) on how the fixed site physical protection requirements for strategic special nuclear material of low strategic significance (i.e., fresh low-enriched uranium fuel) will be met. Please provide the necessary revisions to your application accordingly.

Response

Item 15 of Table 13.4-201 of the Fermi 3 FSAR and 10 CFR 73.55(a)(4) require that the Physical Security Program be implemented before fuel is allowed onsite (within the protected area). This includes implementation of the Fermi Physical Security Plan (PSP), the Safeguards Contingency Plan (SCP) and the Training and Qualification Plan contained in Part 8 of the Fermi 3 COLA. The requirements for physical protection of Special Nuclear Material (SNM) of low strategic significance are contained in 10 CFR 73.67(f) and the requirements must be met by licensees who possess, store or use SNM of low strategic significance. The following discussion describes how the Physical Security Program meets the requirements of 10 CFR 73.67(f).

10 CFR 73.67(f)(1) requires that licensees must store or use SNM of low strategic significance only in a Controlled Access Area (CAA). Sections 1, 11, 13 and 14 of the Fermi PSP provide a description of the CAA (i.e., the Protected Area (PA)) and includes the following:

- A description of the area and its features relative to other facility features, showing the normal routes of ingress to the CAA/PA (Section 1.1 of the Fermi PSP).
- Descriptions of the physical barriers and access control points into the CAA/PA (Section 11.3 of the Fermi PSP).
- The means and criteria used for controlling access to the CAA/PA at the established access control points (Sections 13 and 14 of the Fermi PSP).

10 CFR 73.67(f)(2) requires that licensees must monitor, with an intrusion alarm or other device or procedures, the CAA to detect unauthorized penetrations or activities. Sections 14 and 15 of the Fermi PSP provide a description of the CAA /PA monitoring and surveillance equipment, and includes the following:

- A description of the intrusion detection and surveillance devices employed, their installed locations, the type and location of monitoring and annunciation, the intended coverage, and the tamper resistant features of the devices (Sections 14 and 15 of the Fermi PSP).
- A description of the procedures employed to monitor the CAA/PA, the personnel who will execute the procedures, the frequency of inspections or patrols, and the response to unauthorized activities (Sections 14 and 15 of the Fermi PSP).

10 CFR 73.67(f)(3) requires that licensees must assure that a watchman or offsite response force will respond to all unauthorized penetrations or activities. Sections 4, 15, and 18 of the Fermi PSP provide a description of the response to unauthorized activities and includes the following:

- A description of the security organization (Section 4 of the Fermi PSP).
- A description of the responsibilities for assessing and responding to unauthorized activities (Sections 15 and 18 of the Fermi PSP).

10 CFR 73.67(f)(4) requires that licensees must establish and maintain response procedures for dealing with threats or thefts of SNM of low strategic significance. Sections 8, 16, and 18 of the Fermi PSP and the SCP provide descriptions of the response procedures and include the following:

- A description of the events for which response procedures will be developed (Section 18 of the Fermi PSP and the SCP).
- A description of the duties and responsibilities of the security organization and management involved in the response (Section 18 of the Fermi PSP and the SCP).
- Requirements for NRC notification of events (Section 16 of the Fermi PSP and the SCP).
- A description of local law enforcement assistance available, their response capabilities, and any agreements made with them to respond to an event (Section 8 of the Fermi PSP and the SCP).

Therefore, implementation of the Fermi Physical Security Program required by 10 CFR 73.55 will also meet the physical protection requirements for SNM of low strategic significance given in 10 CFR 73.67(f).

Proposed COLA Revision

None.

Attachment 2
NRC3-13-0029
(6 pages)

Response to RAI Letter No. 88
(eRAI Tracking No. 7180)

RAI Question No. 01.05-09

NRC RAI 01.05-09

With respect to Revision 5 of the Fermi COL application, the staff notes that item 15 in Table 13.4-201 of the FSAR contains the following Security Program entry, "(portions applicable to radioactive material)". The information provided for this entry appears to infer that 10 CFR 73.55 requirements will be implemented and subsequently those for 10 CFR 73.1(a) prior to on-site receipt of strategic SNM of low strategic significance (i.e., fresh low-enriched uranium fuel.) In accordance with 10 CFR 70.22(k), the staff is requesting that the applicant provide the following additional information before a determination can be made on the approval request:

Please clarify how the fixed site physical protection requirements for fresh fuel will be addressed through the implementation of 10 CFR 73.55 requirements and which of the 10 CFR 73.55 requirements will be implemented prior to receipt of fresh fuel within the Fermi 3 protected area. In addition, with respect to the entry "(portions applicable to radioactive material)" please clarify the reference to FSAR Section 13.6 and describe the meaning of the milestone you have listed for this entry. Please provide the necessary revisions to your application accordingly.

Response

The response to RAI 01.05-08 provides clarification as to how the fixed site physical protection requirements for fresh fuel will be addressed through the implementation of 10 CFR 73.55 requirements. As described in Fermi 3 FSAR Table 13.4-201, Item 15, the Physical Security Program, the Safeguards Contingency Program, the Training and Qualification Program and the Cyber Security Plan will be implemented prior to fuel being allowed onsite, as required by 10 CFR 73.55(a)(4).

Regarding the "(portions applicable to radioactive material)" entry and the reference to FSAR Section 13.6 in FSAR Table 13.4-201, Item 15, these items were intended to impose applicable security requirements for non-fuel radioactive materials and Special Nuclear Material (SNM). Section 13.6.2 of the Fermi 3 FSAR will be revised to state that the requirements of 10 CFR 73.67(f) for SNM of low strategic significance will be met by implementing the Physical Security Program required by 10 CFR 73.55(a)(4). FSAR Table 13.4-201, Item 15 will be revised to apply to SNM (both fuel and non-fuel), reference 10 CFR 73.1(a) and 10 CFR 73.67(f), and the implementation milestone will be changed to "Prior to receipt of SNM." This implementation milestone is the same as that for the SNM Material Control and Accounting Program described in Item 23 of FSAR Table 13.4-201.

The proposed FSAR changes will preclude DTE Electric from receiving, storing or using SNM of low strategic significance (both fuel and non-fuel) until implementation of the Physical Security Program required by 10 CFR 73.55(a)(4).

Proposed COLA Revision

See attached markup of the Fermi 3 FSAR, Table 13.4-201 and Subsection 13.6.2.

Markup of Fermi 3 COLA
(following 3 pages)

The following markup represents how DTE Electric intends to reflect this RAI response in the next submittal of the Fermi 3 COLA. However, the same COLA content may be impacted by responses to other COLA RAIs, other COLA changes, plant design changes, editorial or typographical corrections, etc. As a result, the final COLA content that appears in a future submittal may be different than presented here.

Table 13.4-201 Operational Programs Required by NRC Regulations (Sheet 6 of 9)

[STD COL 13.4-1-A] [STD COL 13.4-2-A]

Item	Program Title	Program Source (Required by)	Section	Implementation	
				Milestone	Requirement
	Safeguards Contingency Program	10 CFR 52.79(a)(36) 10 CFR 73.55 10 CFR 73, Appendix C	13.6	Prior to fuel onsite (Protected Area)	10 CFR 73.55(a)(4) [COM 13.4-017]
	Training and Qualification Program	10 CFR 73, Appendix B	13.6	Prior to fuel onsite (Protected Area)	10 CFR 73.55(a)(4) [COM 13.4-017]
	Cyber Security Plan	10 CFR 73.54 10 CFR 73.55 10 CFR 52.79(a)(36)	13.6	Prior to fuel onsite (Protected Area)	10 CFR 73.55(a)(4) [COM 13.4-032]
	(portions applicable to radioactive material)	10 CFR 30.32 10 CFR 40.31 10 CFR 73.1	13.6	Prior to initial receipt of byproduct source, or special nuclear materials (excluding Exempt Quantities as described in 10 CFR 30.18)	10 CFR 30.32(a) 10 CFR 40.31(a) 10 CFR 73.1(a) [COM 13.4-030]
	FFD Program for Construction (Workers and First Line Supervisors)	10 CFR 26.4(f)	13.7	Prior to initiating 10 CFR 26 construction activities	10 CFR 26, Subpart K [COM 13.4-018]
	FFD Program for Construction (Management and Oversight Personnel)	10 CFR 26.4(e)	13.7	Prior to initiating 10 CFR 26 construction activities	10 CFR 26, Subparts A through H, N and O [COM 13.4-018]

Insert 1



13.6.1.1.8 **Testing**

Replace the last sentence in the first paragraph with the following.

STD COL 13.6-10-A

The establishment of these surveillance test procedures and frequencies will be completed in accordance with the milestone for Physical Security Plan implementation (Table 13.4-201).

Replace the last sentence in the second paragraph with the following.

STD COL 13.6-11-A

The establishment of these testing and maintenance milestones will be completed in accordance with the milestone for Physical Security Plan implementation (Table 13.4-201).

13.6.2 **Security Plan**

Replace this section with the following:

STD SUP 13.6-1

The Security Plans consist of the Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Cyber Security Plan. The Security Plans are submitted to the Nuclear Regulatory Commission as separate licensing documents in order to fulfill the requirements of 10 CFR 52.79(a)(35) and (36). The Security Plans meet 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 Plans, except for the Cyber Security Plan, are categorized as Security Safeguards Information and are withheld from public disclosure pursuant to 10 CFR 73.21. The Cyber Security Plan is categorized as Security-Related Information and is withheld from public disclosure pursuant to 10 CFR 2.390.

↑
Insert 2

The Mitigative Strategies Description and Plans are submitted to the Nuclear Regulatory Commission as a separate licensing document in order to fulfill the requirements of 10 CFR 52.80(d). The Mitigative Strategies Description and Plans meet the requirements contained in 10 CFR 50.54(hh)(2) and will be maintained in accordance with the requirements of 10 CFR 52.98. The Mitigative Strategies Description and

Insert 1

Physical Security Program (applicable to SNM)	10 CFR 73.1 10 CFR 73.67	13.6	Prior to receipt of SNM	10 CFR 73.1(a) 10 CFR 73.67(f) [COM13.4-030]
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Insert 2

Implementation of the Security Program required by 10 CFR 73.55(a)(4) meets the requirements for physical protection of Special Nuclear Material of low strategic significance as required by 10 CFR 73.67(f).