

PMFermiCOLPEm Resource

From: Govan, Tekia
Sent: Tuesday, March 04, 2014 8:28 AM
To: FermiCOL Resource
Subject: FW: Fermi 3 Letters (NRC3-14-0001 - Proposed License Condition and NRC3-14-0005 - Cyclic Component Loading)
Attachments: NRC3-14-0005.pdf; NRC3-14-0001.pdf

From: Norman K Peterson [<mailto:peteronn@dteenergy.com>]
Sent: Friday, February 28, 2014 3:07 PM
To: Govan, Tekia; Muniz, Adrian; Klos, John
Cc: Michael K Brandon; latzyn@dteenergy.com
Subject: Fermi 3 Letters (NRC3-14-0001 - Proposed License Condition and NRC3-14-0005 - Cyclic Component Loading)

Please see attached letters. Hard copies are being sent via UPS. Tracking numbers are as follows:

Document Control Desk: 1Z642A3R0195028533
Tekia Govan: 1Z642A3R0195286344
Adrian Muniz: 1Z642A3R0193758650
John Klos: 1Z642A3R0198482420

Hearing Identifier: Fermi_COL_Public
Email Number: 1356

Mail Envelope Properties (F5A4366DF596BF458646C9D433EA37D70167DC96DBDC)

Subject: FW: Fermi 3 Letters (NRC3-14-0001 - Proposed License Condition and
NRC3-14-0005 - Cyclic Component Loading)
Sent Date: 3/4/2014 8:27:45 AM
Received Date: 3/4/2014 8:27:47 AM
From: Govan, Tekia

Created By: Tekia.Govan@nrc.gov

Recipients:
"FermiCOL Resource" <FermiCOL.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	586	3/4/2014 8:27:47 AM
NRC3-14-0005.pdf	678141	
NRC3-14-0001.pdf	1971569	

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Recipients Received:

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



10 CFR 52.79

February 28, 2014
NRC3-14-0005

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

References: 1) Fermi 3
Docket No. 52-033

Subject: DTE Electric Company Submittal of Information Related to ASME Boiler and Pressure Vessel Code Component Loading Combinations, Design Transients and Stress Limits

During a public teleconference on February 20, 2014, the NRC staff provided feedback to DTE Electric Company (DTE) related to information on ASME Boiler and Pressure Vessel (B&PV) Code component cyclic loadings. Specifically, the NRC staff noted that Revision 10 of the ESBWR Design Control Document (DCD) contained the following Tier 2* information in Subsection 3.9.3.1, "Loading Combinations, Design Transients and Stress Limits:"

"In the event any non-Class 1 component is subjected to cyclic loadings of a magnitude and/or duration so severe that the 60-year design life cannot be assured by required ASME B&PV Code calculations, applicants referencing the ESBWR design shall identify these components and either provide an appropriate analysis to demonstrate the required design life, or provide designs to mitigate the magnitude or duration of the cyclic loads. For example, thermal sleeves may be required to protect the pressure boundary from severe cyclic thermal stress, at points where mixing of hot and cold fluids occur. For ESBWR, these locations include the SRV discharge line going to the quencher and the feedwater pipe within the steam tunnel at the reactor water cleanup (RWCU) junction."

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The NRC staff further noted that the Fermi 3 FSAR does not contain information that identifies components subject to this provision and requested that DTE confirm no such components have been identified.

During the February 20, 2014 teleconference, the DTE staff confirmed that no components have been identified by DTE or General Electric-Hitachi (GEH) that would be subjected to the cyclic loadings described in DCD Subsection 3.9.3.1, and thus, additional analyses or design changes are not necessary.

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

I state under penalty of perjury that the foregoing is true and correct. Executed on the 28th day of February 2014.

Sincerely,



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

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

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One Energy Plaza, Detroit, MI 48226-1279



10 CFR 52.79

February 28, 2014
NRC3-14-0001

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

- References:
- 1) Fermi 3
Docket No. 52-033
 - 2) Letter from Peter W. Smith (DTE Electric) to USNRC, "DTE Electric Company Supplemental Response to NRC Request for Additional Information Letter No. 78," NRC3-13-0008, dated February 19, 2013
 - 3) Letter from Peter W. Smith (DTE Electric) to USNRC, "DTE Electric Company Supplemental Response to NRC Request for Additional Information Letter No. 84," NRC3-13-0022, dated July 9, 2013

Subject: DTE Electric Company Supplemental Response to NRC Request for Additional Information Letter No. 84

During a public teleconference on February 20, 2014, the NRC staff provided feedback to DTE Electric on Proposed License Condition 3.8.2 in Part 10 of the Fermi 3 COLA. Proposed License Condition 3.8.2 deals with the development and implementation of mitigation strategies for beyond design-basis external events resulting from the Fukushima Near-Term Task Force Recommendations. Mitigation strategies for beyond design-basis external events were previously addressed by DTE Electric in References 2 and 3, and Proposed License Condition 3.8.2 was last revised in Reference 2. Based on the discussions conducted during the February 20, 2014 teleconference, DTE Electric is providing another revision to Fermi 3 Proposed License Condition 3.8.2.

The revision to Fermi 3 Proposed License Condition 3.8.2 is contained in the attachment to this letter. The proposed changes will be included in the next revision of the Fermi 3 COLA.

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

I state under penalty of perjury that the foregoing is true and correct. Executed on the 28th day of February 2014.

Sincerely,



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

Attachment: Markup of the Fermi 3 COLA

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

**Attachment to
NRC3-14-0001**
(following 2 pages)

Markup of the Fermi 3 COLA

The following markup represents how DTE Electric intends to reflect this 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.

3.8.2 Mitigation Strategies for Beyond-Design-Basis External Events

~~Prior to initial fuel load, DTE Electric Company shall address the following requirements using the guidance contained in JLD ISG 2012 01, "Compliance with Order EA 12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond Design Basis External Events," Revision 0:~~

- ~~A. Develop, implement, and maintain guidance and strategies to maintain or restore core, containment, and spent fuel pool cooling capabilities following a beyond design basis external event. These strategies must:
 - ~~• Be capable of mitigating a simultaneous loss of all AC power and loss of normal access to the normal heat sink, and~~
 - ~~• Have adequate capacity to address challenges for core, containment, and spent fuel pool cooling capabilities at Fermi 3, and~~
 - ~~• Have the capability to be implemented in all modes.~~~~
- ~~B. Provide reasonable protection for the associated equipment from external events. Such protection must demonstrate that there is adequate capacity to address challenges to core, containment, and spent fuel pool cooling capabilities at Fermi 3.~~
- ~~C. Full compliance shall include procedures, guidance, training, and acquisition, staging, or installing of equipment needed for the strategies.~~

~~Within one (1) year after issuance of the Fermi 3 COL, an overall integrated plan shall be submitted to the NRC, including a description of how compliance with the requirements described in this license condition will be achieved.~~

~~Initial status reports shall be provided to the NRC sixty (60) days following issuance of the Fermi 3 COL and at six (6) month intervals following submittal of the overall integrated plan described above which delineates progress made in implementing the requirements of this license condition.~~

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Insert 1

Insert 1:

At least 180 days before the date scheduled for initial fuel load as set forth in the notification submitted in accordance with 10 CFR § 52.103(a), DTE Electric Company shall use the guidance contained in JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," Revision 0 and the information presented in Fermi FSAR section 01.05 to complete the development of strategies and guidance for maintaining and, if necessary, restoring core cooling, containment, and spent fuel pool cooling capabilities beginning 72 hours after loss of all normal and emergency ac power sources, including any alternate ac source under 10 CFR 50.63. These strategies must be capable of:

- Mitigating a simultaneous loss of all ac power sources, both from the onsite and offsite power systems, and loss of normal access to the normal heat sink,
- Maintaining core cooling, containment, and spent fuel pool cooling capabilities for Fermi Unit 3 during and after such an event affecting both Fermi Units 2 and 3, and
- Being implemented in all plant modes.

Before initial fuel load, DTE Electric Company shall fully implement the strategies and guidance required in this license condition, including procedures, training, and acquisition, staging or installing of equipment and consumables relied upon in the strategies.