



10 CFR 52.79

February 16, 2012
NRC3-12-0003

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

References: 1) Fermi 3
Docket No. 52-033
2) Letter from Jerry Hale (USNRC) to Jack M. Davis (Detroit Edison), "Request for Additional Information Letter No. 70 Related to Chapters 2.0 and 3.0 for the Fermi 3 Combined License Application," dated January 18, 2012

Subject: Detroit Edison Company Response to NRC Request for Additional Information Letter No. 70

In Reference 2, the NRC requested additional information to support the review of certain portions of the Fermi 3 Combined License Application (COLA). The response to the Request for Additional Information (RAI) associated with Reference 2 is provided as attachments to this letter. Information contained in this response will be incorporated into a future COLA submission as described in the attachments.

As discussed with NRC Staff at the July 21, 2011 public meeting, site specific SSI analyses were performed to address requirements, introduced in DCD Revision 7, for backfill adjacent to seismic Category I structures. The approach presented for the site-specific SSI analyses adhered to the methodology and modeling used for the ESBWR standard plant analyses, as presented in DCD Appendix 3A, that were previously reviewed by the NRC Staff. The Fermi 3 site features hard rock at depths that allow the Reactor Building/Fuel Building (RB/FB) and Control Building (CB) to be founded on and partially embedded in the bedrock. As a result of this configuration, and the Fermi 3 site seismic characteristics being significantly lower than that assumed for the ESBWR standard plant, these analyses demonstrated there was significant margin to the DCD ESBWR seismic analyses without reliance on side backfill. The analyses being refined by Detroit Edison in response to these RAI's continue to demonstrate that the Fermi 3 site is bounded by the DCD seismic analyses with significant margin.

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Detroit Edison is pleased to provide the attached responses and schedule for the remaining actions needed to support the completion of the NRC's Staff review of the Fermi 3 site-specific Soil Structure Interface (SSI). The primary issues addressed in the attached responses are:

- 1) Recently identified technical issues with the subtraction method of the SASSI code,
- 2) Refinements of the Fermi 3 SSI analysis seismic inputs, and
- 3) Effects of conventional granular backfill that will be placed next to the Fermi 3 Seismic Class I structures.

This submittal provides complete responses to eight RAIs and partial responses to three RAIs. Responses or partial responses to eight additional RAIs will be provided no later than February 29, 2012. The remainder of the RAI responses will be provided no later than April 30, 2012. Attachment 1 contains a table that outlines all 18 of RAIs which were broken down into 40 parts and specifies submittal dates for each. Attachments 2 through 19 contain the responses to the 18 RAIs in Reference 2. For the RAIs involving additional analyses that are not being fully responded to at this time, the approach being taken to respond is outlined in the RAI response.

The complete and final RAI responses are pending Detroit Edison's completion of additional SSI analyses currently being performed as described in the attached responses. These analyses will be completed in early April. The revised SSI analyses will be available for NRC audit in April 2012.

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 16th day of February 2012.

Sincerely,



Peter W. Smith, Director
Nuclear Development – Licensing and Engineering
Detroit Edison Company

- Attachments:
- 1) Table of RAI Response Dates
 - 2) Response to RAI Letter No. 70 (Question No. 02.05.02-17)
 - 3) Response to RAI Letter No. 70 (Question No. 02.05.02-18)
 - 4) Response to RAI Letter No. 70 (Question No. 02.05.04-39)
 - 5) Response to RAI Letter No. 70 (Question No. 03.07.01-3)
 - 6) Response to RAI Letter No. 70 (Question No. 03.07.01-4)
 - 7) Response to RAI Letter No. 70 (Question No. 03.07.01-5)
 - 8) Response to RAI Letter No. 70 (Question No. 03.07.01-6)
 - 9) Response to RAI Letter No. 70 (Question No. 03.07.01-7)
 - 10) Response to RAI Letter No. 70 (Question No. 03.07.01-8)
 - 11) Response to RAI Letter No. 70 (Question No. 03.07.02-5)
 - 12) Response to RAI Letter No. 70 (Question No. 03.07.02-6)
 - 13) Response to RAI Letter No. 70 (Question No. 03.07.02-7)
 - 14) Response to RAI Letter No. 70 (Question No. 03.07.02-8)
 - 15) Response to RAI Letter No. 70 (Question No. 03.08.05-1)
 - 16) Response to RAI Letter No. 70 (Question No. 03.08.05-2)
 - 17) Response to RAI Letter No. 70 (Question No. 03.08.05-3)
 - 18) Response to RAI Letter No. 70 (Question No. 03.08.05-4)
 - 19) Response to RAI Letter No. 70 (Question No. 03.08.05-5)

cc: Adrian Muniz, NRC Fermi 3 Project Manager
Jerry Hale, NRC Fermi 3 Project Manager
Michael Eudy, NRC Fermi 3 Project Manager (w/o attachments)
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)