September 2, 2009

Mr. Jack M. Davis
Senior Vice President and Chief Nuclear Officer
Detroit Edison Company
Fermi 2 – 210 NOC
6400 North Dixie Highway
Newport, MI 48166

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 12 RELATED TO SRP SECTIONS 01, 9.5.4 AND 14.3 FOR THE FERMI 3 COMBINED LICENSE APPLICATION

Dear Mr. Davis:

By letter dated September 18, 2008, Detroit Edison Company (Detroit Edison) submitted for approval a combined license application pursuant to 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. To support the review schedule, you are requested to respond within 45 days of the date of this letter. 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 301-415-8148 or by e-mail at Jerry.Hale@nrc.gov.

Sincerely,

***/RA/***

Jerry R. Hale, Project Manager
ESBWR/ABWR Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 052-033

eRAI Tracking Nos. 3390, 3486, and 3523

Enclosure:
Request for Additional Information

September 2, 2009

Mr. Jack M. Davis
Senior Vice President and Chief Nuclear Officer
Detroit Edison Company
Fermi 2 – 210 NOC
6400 North Dixie Highway
Newport, MI 48166

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 12 RELATED TO SRP SECTIONS 01, 9.5.4 AND 14.3 FOR THE FERMI 3 COMBINED LICENSE APPLICATION

Dear Mr. Davis:

By letter dated September 18, 2008, Detroit Edison Company (Detroit Edison) submitted for approval a combined license application pursuant to 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. To support the review schedule, you are requested to respond within 45 days of the date of this letter. If changes are needed to the safety analysis report, the staff requests that the RAI response include the proposed wording changes.

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Docket Nos. 052-033
eRAI Tracking Nos. 3390, 3486, and 3523

Enclosure:
Request for Additional Information

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| NAME | JSegala | IJung | RCarlson | MCarpentier | MTonacci |
| DATE | 8/11/09 | 8/12/09 | 7/27/09 | 8/24/09 | 8/18/09 |

***Approval captured electronically in the electronic RAI system.**

**Request for Additional Information No. 3390 Revision 0**

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 14.03 - Inspections, Tests, Analyses, and Acceptance Criteria
Application Section: 14.3A.1

14.03-1

ESBWR DCD Revision 5, Section 14.3A.5 COL Information item 14.3A-1-1, requests the applicant establish a schedule for Design Acceptance Criteria (DAC) ITAAC Closure. DTE responded that this COL Item is addressed in Appendix 14.3A.1. In Section Appendix 14.3A.1 DTE committed that, "Fermi 3 is scheduled to be licensed subsequent to the reference ESBWR Plant, will use the standard approach, and the DAC ITAAC completion for the first standard plant will be used [COM 14.3A.1-001]. The first standard plant, North Anna Unit 3, R-COLA, Section 14.3A.1, stated a DAC ITAAC closure schedule would be provided within one year after ESBWR design certification. The staff review found that for the first standard plant for selected design acceptance criteria (DAC), a closure schedule provided within 1 year would not support the NRC's need to project staff resource and budget requirements to verify DAC/ITAAC closure.

In an ESBWR DCWG public meeting on September 4, 2008, the staff expressed DAC ITAAC closure schedule concerns to industry and stated that there were unique needs associated with closing out DAC for (1) piping design, (2) human factors engineering, and (3) digital instrumentation and controls. At subsequent ESBWR DCWG public meetings, the staff and industry discussed the resolution of this DAC closure schedule issue. At the public meeting on April 1, 2009, the industry proposed resolutions for the piping design and human factors engineering that the staff determined to be acceptable. For piping DAC, the NRC staff will be notified at least 6 months before (1) scheduled completion of all ASME Code design reports for risk-significant piping packages, and (2) scheduled completion of all the pipe-break hazard analyses. For human factors engineering DAC, the NRC will be notified at least 6 months before the scheduled completion of each results summary report. At the public meeting on May 14, 2009, the industry proposed a resolution for digital instrumentation and controls that the staff determined to be acceptable. For instrumentation and controls DAC, the NRC staff will be notified at least 6 months before the scheduled completion of each baseline review report and software plan designated as DAC. The R-COL applicant agreed to incorporate the acceptable resolutions for the DAC closure schedule to address COL 14.3A-1-1 in the next revision to the NAPS-3 COLA.

The NRC Staff request the commitment COM 14.3A.1-001 be revised to either incorporate the acceptable resolutions for the DAC closure schedule outline above OR provide an alternate resolution.

**Request for Additional Information No. 3486 Revision 0**

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 01 - Introduction and Interfaces
Application Section: Part 1, Section 2

01-3

Section 1.3.2.2 Combined Project Costs

The estimate of construction costs in the COLA does not follow the format presented in 10 CFR Part 50, Appendix C I.A.1. Please provide the overnight capital costs broken down as: (a) total nuclear production plant costs; (b) transmission, distribution, and general plant costs; (c) nuclear fuel inventory cost for first core; and (d) total estimated cost. Also, provide the cost estimates in terms of total costs instead of as costs per kilowatt electric.

**Request for Additional Information No. 3523 Revision 1**

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 09.05.04 - Emergency Diesel Engine Fuel Oil Storage and Transfer System
Application Section: 9.5.4

09.05.04-1

In response to COL Item EF3 COL 9.5.4-2-A (included twice - once for the standby diesel generators and once for the ancillary diesel generators), the Fermi 3 FSAR describes the corrosion protection provided for the underground fuel oil system piping. The description in the FSAR should also include the applicable codes and/or standards for the corrosion protection features. (Note that a similar supplemental RAI was submitted for the North Anna 3 RCOLA and Dominion submitted a response on August 3, 2009.)