

September 22, 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. 13 RELATED TO
THE SRP SECTIONS 2.3.4, 2.3.5, 9.5.1, 13.1.1, 13.1.2, 13.1.2-3, AND 13.2.1
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. 3364, 3452, 3612, 3613, 3615, 3693, 3694

Enclosure:
Request for Additional Information

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Senior Vice President and Chief Nuclear Officer
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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
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Enclosure:
Request for Additional Information

Distribution:

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DATE	9/2/09	8/24/09	8/3/09	9/10/09	9/22/09

*Approval captured electronically in the electronic RAI system.

Request for Additional Information No. 3364 Revision 0

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 09.05.01 - Fire Protection Program
Application Section: 09.05.01

09.05.01-2

RG 1. 206, Regulatory Position C.III.1, Section C.I.9.5.1.1 identifies that the COL applicant should provide information on the fire protection operational program. RG 1. 189, Section 1. 6.4. 1 states that the brigade leader should be competent to assess the potential safety consequences of a fire and advise control room personnel and such competence by the brigade leader may be evidenced by possession of an operator's license or equivalent knowledge of plant systems. The staff requests that the COL applicant provide clarification of the specific training, knowledge and competence of the fire brigade leader, as discussed in Section 13.1.2.1.5, to ensure that the fire brigade leaders qualifications are in conformance with RG 1.189, Section 1.6.4.1.

Request for Additional Information No. 3452 Revision 0

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 13.01.02-13.01.03 - Operating Organization
Application Section: 13.01.02

13.01.02-13.01.03-3

It is unclear from FSAR Section 13.1.2.1.5 whether or not the fire brigade for Fermi 3 is separate and distinct from the Fire Brigade for Fermi 2. Fermi 2 and Fermi 3 are meant to be separate units with no sharing of buildings or systems. If the intent is to provide one fire brigade for both units the applicant is asked to provide further information justifying the appropriateness of using one fire brigade shift to cover both units. Include justification on staff manning, organization, training on diverse units, which equipment will be shared and which will be co-located, and performance-criteria for responding to fires in each unit. If the fire brigade for Fermi 3 is intended to be separate and distinct from the fire brigade for Fermi 2, revise the FSAR to clarify this point.

13.01.02-13.01.03-4

Describe the educational and training requirements for the Functional Manager in Charge of Fire Protection as described in FSAR Section 13.1.2.1.1.14. RG 1.189 Section 1.6.1a states in part: "A fire protection engineer (or a consultant) who is a graduate of an engineering curriculum of accepted standing and satisfies the eligibility requirements as a Member grade (or Professional Member grade) in the Society of Fire Protection Engineers (SFPE), or is a graduate of an engineering curriculum of accepted standing and is a licensed professional fire protection engineer in the state in which the plant is located, should be a member of the organization responsible for the formulation and implementation of the FPP." If the Functional Manager in Charge of Fire Protection does not meet the above requirements, who within the organization responsible for the formulation and implementation of the FPP will?

Request for Additional Information No. 3612 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033

SRP Section: 13.01.01 - Management and Technical Support Organization
Application Section: 13.1.1

13.01.01-3

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," section I.1.B.iii states the applicant should describe the development of the plant maintenance programs. FSAR section 13.1 does not appear to include a description of the development of the plant maintenance programs.

Please identify the location of this information in the Enrico Fermi 3 COL application, or justify its exclusion.

NOTE: RAI #3344, issued earlier asks a similar question regarding organizational description, structure, functional responsibilities, levels of authority and interfaces, both onsite and offsite.

13.01.01-4

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," section I.1.B.viii states that the applicant should provide a description of the design and construction and preoperational responsibilities and how the applicant's management interfaces with the NSSS and AE organizations. FSAR section 13.1 does not appear to include a description of the interfaces with the NSSS and AE organizations.

Please identify the location of this information in the Enrico Fermi 3 COL application, or justify its exclusion.

NOTE: RAI #3344, issued earlier asks a similar question regarding organizational description, structure, functional responsibilities, levels of authority and interfaces, both onsite and offsite.

13.01.01-5

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," section I.1.B.xi states that the applicant should provide a description of the positions that have functional responsibilities in addition to the COL application and the expected proportion of time these personnel are assigned to the other activities. FSAR section 13.1 does not appear to include the expected proportion of time these personnel assigned to the other activities.

Please identify the location of this information in the Enrico Fermi 3 COL application, or justify its exclusion.

13.01.01-6

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," section I.2.A requests the applicant provide organizational charts of the applicant's corporate level management and technical support organizations. The statement is made in the Enrico Fermi 3 COL

application, Section 13.1.1.2, "Management and Technical Support Organization", that "Figures incorporated into Section 17.5 illustrate the management and technical organizations supporting operation of the plant." FSAR Section 17.5 does not appear to include these illustrations.

Please identify the location of this information in the Enrico Fermi 3 COL application, or justify its exclusion.

13.01.01-7

Standard Review Plan Section 13.1.1, "Management and Technical Support Organization," section I.2 requests the applicant describe the provisions for technical support for operations, give the approximate numbers of and describe educational and experience requirements for, each identified position or class of positions providing technical support for plant operations, and include specific educational and experience requirements for individuals holding the management and supervisory positions in organizational units providing support in the areas identified as items I.2.E – I.2.P.

Please identify the location of information related to the personnel listed in SRP Sections I.2.H and I.2.P in the Enrico Fermi 3 COL application, or justify its exclusion.

Request for Additional Information No. 3613 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033

SRP Section: 13.02.01 - Reactor Operator Regualification Program; Reactor Operator Training
Application Section: 13.2

13.02.01-1

FSAR, Section 13.2, Training, Appendix 13BB, Training Program, incorporates by reference NEI 06-13A, "Technical Report on a Template for an Industry Training Program Description," revision unspecified.

NEI 06-13A, Revision 0, does not address a cold license training program. NEI 06-13A, Revision 1, which addresses a cold license training program, has now been endorsed by the NRC.

DTE Energy letter to USNRC, "Detroit Edison Company Evaluation of North Anna Unit 3 (R-COLA) Responses to NRC Requests for Additional Information," dated February 16, 2009, states that Detroit Edison does not adopt the R-COLA RAI response that incorporated NEI 06-13A, Revision 1. Thus, Appendix 13BB does not address provisions for a cold license training plan.

Explain how Fermi operators will be trained and licensed without a cold license training program.

Request for Additional Information No. 3615 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033
SRP Section: 13.01.02-13.01.03 - Operating Organization
Application Section: 13.1.2

13.01.02-13.01.03-1

Standard Review Plan Section 13.1.2 – 13.1.3, “Operating Organization,” section I.2.A states that the applicant should provide an organization chart of the operating organization. In addition, the organization chart should show changes, additions, and what is shared with other units. FSAR section 13.1 does not appear to include an organization chart for the operating organization nor what is shared with other units.

Please identify the location of this information in the Enrico Fermi 3 application or justify its exclusion.

NOTE: RAI #3344, issued earlier asks a similar question regarding organizational description, structure, functional responsibilities, levels of authority and interfaces, both onsite and offsite.

13.01.02-13.01.03-2

Standard Review Plan Section 13.1.2 – 13.1.3, “Operating Organization,” section I.2.F asks that, if the stations contain, or there are plans that it contain power generating facilities other than those specified in the application and including fossil-fueled units, the applicant should describe interfaces with the organizations operating the other facilities. The description should include any proposed sharing of personnel between the units, a description of their duties, and the proportion of their time they will routinely be assigned to nonnuclear units. Figure 13.1-201 illustrates the construction organization.

Show where an illustration depicting this information for the operating organization be found in the Enrico Fermi 3 application, or justify its exclusion.

NOTE: RAI #3344, issued earlier asks a similar question regarding organizational description, structure, functional responsibilities, levels of authority and interfaces, both onsite and offsite.

Request for Additional Information No. 3693 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033

SRP Section: 02.03.04 - Short Term Atmospheric Dispersion Estimates for Accident Releases
Application Section: FSAR Section 2.3.4

02.03.04-1

The response to Environmental RAI AQ2.7-5 provided a new set of 50% design-basis accident X/Q values for the EAB and LPZ. This new set of X/Q values is the result of defining a circular “power block envelope” centered on the Reactor Building that encompasses all the potential design-basis accident release pathways. The resulting distances to the EAB and LPZ have been reduced, which should result in higher (more conservative) EAB and LPZ X/Q values.

Please revise FSAR Table 2.0-201 and FSAR Section 2.3.4 to present the higher of either the 0.5% maximum sector or 5% overall site X/Q values (pursuant to RG 1.145) resulting from the revised EAB and LPZ distances presented in the response to Environmental RAI AQ2.7-5.

Request for Additional Information No. 3694 Revision 1

Fermi Unit 3
Detroit Edison
Docket No. 52-033

SRP Section: 02.03.05 - Long-Term Atmospheric Dispersion Estimates for Routine Releases
Application Section: FSAR Section 2.3.5

02.03.05-1

The response to Environmental RAI AQ2.7-5 provided a new set of design-basis accident X/Q values for the EAB and LPZ which was the result of defining a circular “power block envelope” centered on the Reactor Building that encompasses all the potential design-basis accident release pathways. The resulting distances to the EAB and LPZ were reduced, which can result in higher (more conservative) EAB and LPZ X/Q values.

Although the ESBWR standard design has three normal operation release pathways to the atmosphere (i.e., the reactor/fuel building, turbine building, and radwaste building ventilation stacks), one set of distances to the site boundary and special receptors of interest was used to model releases from all three pathways. Please revise FSAR Section 2.3.5.1 to explain the methodology used to derive this set of distances to each receptor location. If applicable, justify not using a “power block envelope” concept that encompasses all the normal operation release pathways for determining the distance to each receptor location.