The Detroit Edison Company
One Energy Plaza, Detroit, MI 48226-1279

DTE Energy

Detroit Edison

10 CFR 52.79

August 4, 2010
NRC3-10-0038

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 (Detroit Edison) to USNRC, "Detroit Edison Company Confirmatory and Supplemental Responses to NRC Requests for Additional Information (RAIs) 08.03.02-1; 08.02-17; 09.02.01-1; 09.02.01-3; and 09.02.01-4; and Response to RAI Letter No. 34," dated July 9, 2010

Subject: Detroit Edison Company Supplemental Response to NRC Request for Additional Information (RAI) 08.02-17

In Reference 2, Detroit Edison submitted a response to NRC Request for Additional Information (RAI) No. 08.02-17. In a teleconference with the NRC staff on July 28, 2010, the staff and Detroit Edison discussed an inconsistency with the description of the cable monitoring program contained in the proposed Final Safety Analysis Report (FSAR) revision. Subsequently, Detroit Edison agreed to provide a revision to the FSAR to resolve this inconsistency.

Attachment 1 of this letter contains the proposed FSAR revision. Information contained in this revision will be incorporated into a future COLA submission.

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 4th day of August 2010.

Sincerely,

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

D095
NRO

Attachments: 1) Proposed FSAR mark-up for NRC RAI.08.02-17

cc: Adrian Muniz, NRC Fermi 3 Project Manager
Jerry Hale, 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 Environmental Quality
Radiological Protection and Medical Waste Section

Attachment 1
NRC3-10-0038

Proposed FSAR Revision to NRC RAI 08.02-17
(eRAI Tracking No. 3868 Revision 1)

Proposed Markup of Detroit Edison COLA
(following 1 page)

The following markup represents how Detroit Edison intends to reflect this RAI response in the next appropriate update of the Fermi 3 COLA. However, the same COLA content may be impacted by revisions to the ESBWR DCD, responses to other COLA RAI's, 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.

Delete Text

Delete the following text and replace with the following new text.

New Text:

This program is described in Section 17.6.4.

Periodic monitoring of cable insulation for underground ~~medium voltage cable will~~ be conducted to detect potential cable degradation from moisture intrusion. ~~This program is based upon the recommendations of the EPRI Cable Task Force and establishes preventive maintenance activities for periodic inspection and testing of cables and cable vaults associated with systems within the scope of 10 CFR 50.65.~~

Fermi 3 switchyard lightning protection system is designed in accordance with IEEE Standard 998-1996 (R2002), "IEEE Guide for Direct Lightning Stroke Shielding of Substations," using the Rolling Sphere Method. Periodic monitoring, maintenance and testing of the switchyard lightning protection system includes the following activities:

- Lightning surge arresters are thermally scanned using infrared technology annually
- Lightning surge arresters are power factor tested during bus inspections and/or relay control scheme testing on a 10 year cycle

The 345 kV switchyard for Fermi 3 does not require any transformers for Fermi 3. Therefore, Fermi 3 switchyard transformer protection is not required.

The anticipated capacity and electrical characteristics for switchyard equipment are as follows:

Breakers	Max Design (kV)	Rated Current (A)	Interrupting Current at Max kV
345 kV	379.5	3250	63 kA

Transmission Lines	Rated Current at 86°F
345 kV	2940 A

Bus Work	Rated Current
345 kV	3660 A

EF3 COL 8.2.4-5-A

8.2.1.2.2 Protective Relaying

The 345 kV transmission lines are protected with redundant high-speed communications-assisted relay schemes and include automatic breaker reclosing. The 345 kV switchyard buses have redundant differential protection using separate and independent current and control circuits. Normal and alternate preferred power conductors located between the Fermi 3 UATs and RATs and the 345 kV switchyard buses are protected by dual high-speed current differential schemes.