Donald K. Cobb
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DTE Energy

10 CFR 50.54(f)

May 4, 2007
NRC-07-0017

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

References: 1) Fermi 2
NRC Docket No. 50-341
NRC License No. NPF-43

2) NRC Generic Letter 2007-01, "Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients," dated February 7, 2007

3) Letter dated March 26, 2007 from NEI to Chief, Regulatory Analysis, Policy, & Rulemaking, Office of Administration, U.S. Nuclear Regulatory Commission, Subject: "Interpretation of GL 2007-01, Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients"

4) NRC Letter dated April 13, 2007: "Response to Nuclear Energy Institute (NEI) Letter dated March 26, 2007 - Re: Interpretation of Generic Letter (GL) 2007-01, Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients"

Subject: Detroit Edison's 90-Day Response to Generic Letter 2007-01, "Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients"

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The purpose of this letter is to provide the written response required by NRC Generic Letter 2007-01 pursuant to the requirements of 10 CFR 50.54(f).

The NRC issued Generic Letter 2007-01 to:

(1) Inform licensees that the failure of certain power cables can affect the functionality of multiple accident mitigation systems or cause plant transients.

(2) Inform licensees that in the absence of adequate monitoring of cable insulation, equipment could fail abruptly during service, causing plant transients or disabling accident mitigation systems.

(3) Ask licensees to provide information on the monitoring of inaccessible or underground electrical cables.

The specific Information requested and the Fermi 2 response is as follows:

REQUESTED INFORMATION

1. *Provide a history of inaccessible or underground power cable failures for all cables that are within the scope of 10 CFR 50.65 (the Maintenance Rule) and for all voltage levels. Indicate the type, manufacturer, date of failure, type of service, voltage class, years of service, and the root causes for the failure.*

   Response: A review has been completed to identify the history of inaccessible or underground power cable failures that are within the scope of the Maintenance Rule (10 CFR 50.65) at Fermi 2. In accordance with the guidelines developed by the Nuclear Energy Institute (NEI) with the assistance of the NRC's Electrical Engineering Branch as documented in Reference 3, as clarified in Reference 4, failures of power cables at all voltage levels (AC and DC) are reported. This review examined the plant corrective action program, the Maintenance Rule database, maintenance records, plant base configuration documents, and the cable routing information management system (CRIMS). This represents our best effort in that data of this nature was not necessarily recorded in a means that was conducive to identifying cable failures. Three cable failures were identified that meet the reporting criteria. Enclosure 1 provides a tabulation of the information requested for these failures.

2. *Describe inspection, testing and monitoring programs to detect the degradation of inaccessible or underground power cables that support EDGs, offsite power, ESW, service water, component cooling water and other systems that are within the scope of 10 CFR 50.65 (the Maintenance Rule).*

Response: The health of inaccessible underground cables is assessed through functional testing of equipment during operations and surveillance testing. Fermi 2 does not currently have a program to visually examine or diagnostically test inaccessible and underground cables to identify degradation.

As a preventative measure, baseline inspections of the cable vaults are planned to determine the general material condition of underground cables. These baseline inspections will form the bases for a preventative maintenance program and the foundation of an inspection program.

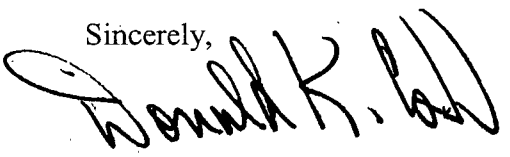
In addition to conducting the baseline inspections of the inaccessible and underground cable vaults, a cable monitoring program is planned to assess the health of important inaccessible and underground power cables. The program is to be developed through benchmarking and to be consistent with EPRI Cable Task Force recommendations. The program is expected to include the following:

- Formal implementation of a cable monitoring program.
- Establishment of preventative maintenance activities for periodic inspection / testing of cables and the cable vaults.
- The benchmarking of a wide range of plants is currently in progress. The cable team goal is to establish a comprehensive program by the end of March 2008.

No commitments are being made as a result of this letter.

Should you have any questions or require additional information, please contact Mr. Ronald W. Gaston of my staff at (734) 586-5197.

Sincerely,



Enclosure

cc: NRC Project Manager
NRC Resident Office
Reactor Projects Chief, Branch 4, Region III
Regional Administrator, Region III
Supervisor, Electric Operators,
Michigan Public Service Commission

I, DONALD K. COBB, do hereby affirm that the foregoing statements are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

DONALD K. COBB
Assistant Vice President, Nuclear Generation

On this 4th day of May, 2007 before me personally appeared Donald K. Cobb, being first duly sworn and says that he executed the foregoing as his free act and deed.

Notary Public

ROSALIE ARMETTA
NOTARY PUBLIC MONROE CO., MI
MY COMMISSION EXPIRES Oct 11, 2007

ENCLOSURE
to NRC-07-0017

FERMI 2 NUCLEAR POWER PLANT

HISTORY OF INACCESSIBLE OR UNDERGROUND POWER CABLE FAILURES

Fermi 2 Power Cable Failure #1

Cable Number: 16-21D

Size & Rating (Voltage Class): 3-conductor #8, 600 Volt (unshielded)

Cable Type: EPR jacket, filled cross-linked polyethylene insulation (GE Vulkene)

Manufacturer: General Electric

Type of Service: 480 VAC, normally energized

Cable Function: This cable provides a backup power source to the Station Blackout Combustion Turbine Generator Transformer (R1100S073) Coolers through an automatic transfer switch (R1100S066). The failure did not result in a Maintenance Rule functional failure because the primary power feed was still functional.

Installation (Pulled) date: 1965

Failure Date: August 25, 2004

Years of service: Approximately 39

Failure Type: In-service failure

Root Cause: A Root Cause evaluation was not performed. The probable cause of failure was identified as a degraded conduit or degraded cable insulation.

References: CARD 04-23862, WR 000Z042473, Drawings SD-F-0104, SD-F-0024, SD-F-0111, E-0218, SD-2500-01

Fermi 2 Power Cable Failure #2

Cable Number: 204617B-0P

Size & Rating (Voltage Class): 1/C #1/0 600V

Cable Type: Neoprene (Okonite-Okoprene) jacket, Okonite-Ethylene Propylene Insulation (EPR)

Manufacturer: Okonite

Type of Service: 260 VDC, normally energized

Cable Function: This cable provides power to 130 VDC distribution cabinet 2PC3-13 located in the Circulating Water Pumphouse. Panel 2PC3-13 provides 130 VDC to various transformer and bus devices. The failure of this circuit was determined not to be a Maintenance Rule functional failure because troubleshooting revealed a soft ground on the neutral line and there was no loss of equipment controls or indication.

Installation (Pulled) date: May 5, 1978

Failure Date: November 14, 2004

Years of service: Approximately 26

Failure Type: In-service failure

Root Cause: A Root Cause evaluation was not performed. The probable cause was determined to be cable/duct damage under the turbine building.

References: DECO file I.D. E5-254, SD-2530-12, CARDs 04-01842, 05-22956, WR 000Z043483

Fermi 2 Power Cable Failure #3

Cable Number: 204618A-0P

Size & Rating (Voltage Class): 1/C #1/0 600V

Cable Type: Neoprene (Okonite-Okoprene) jacket, Okonite-Ethylene Propylene Insulation (EPR)

Manufacturer: Okonite

Type of Service: 260 VDC, normally energized

Cable Function: This cable provides power to 130 VDC distribution cabinet 2PC3-14 located in the General Service Water Pumphouse. Panel 2PC3-14 provides 130 VDC to various 68K and 69K bus devices. The failure of this circuit was identified as a Maintenance Rule functional failure.

Installation (Pulled) date: May 5, 1978

Failure Date: May 15, 1998

Years of service: Approximately 20

Failure Type: In-service failure

Root Cause: A Root Cause evaluation was not performed. Probable cause determined to be cable/duct damage under turbine building.

References: DECO file I.D. E5-254, SD-2530-12, CARD 98-13970, Temporary Modification 98-0006, TSR-29963, WR 000Z981898, 000Z981899, 000Z984763