

Douglas R. Gipson Vice President Nuclear Operations

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April 8, 1993 NRC-93-0043

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, D. C. 20555

References:

- 1) Fermi 2 NRC Docket No. 50-341 NRC License No. NPF-43
- Detroit Edison Letter to NRC, "Detroit Edison Response to NRC BUlletin 90-01", NRC-92-0091, dated July 23, 1992
- 3) Detroit Edison Letter to NRC, "Detroit Edison Response to NRC Bulletin 90-01, Supplement 1", NRC-92-0116, dated September 30, 1992
- 4) NRC Generic Letter 92-08, "Thermo-Lag 330-1 Fire Barriers", dated December 17, 1992

Subject: Detroit Edison Response to NRC Generic Letter 92-08

The purpose of this letter is to provide Detroit Edison's response to NRC Generic Letter 92-08 (Reference 4). This Generic Letter was issued to obtain additional information needed to verify that Thermo-Lag 330-1 fire barrier systems meet the NRC's requirements. A written response of this Generic Letter was required within 120 days of its issuance.

Accordingly, pursuant to the oath and affirmation requirements of 10 CFR 50.54(f), Detroit Edison has reviewed Generic Letter 92-08 and provides the information required under the "Reporting Requirements" section of GL 92-08 in the Enclosure of this letter. As requested, a copy is also being submitted to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III.

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If you have any questions, please contact Mr. Girija S. Shukla at (313) 586-4270.

Sincerely,

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cc: T. G. Colburn

A. B. Davis

M. P. Phillips

W. J. Kropp

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I, DOUGLAS R. GIPSON, 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.

DOUGLAS R. GIPSON Senior Vice President

On this Sth day of Aphil . 1993, before me personally appeared Douglas R. Gipson, being first duly sworn and says that he executed the foregoing as his free act and deed.

Losalie G. armetta Notary Public

ROSALIE A ARMETTA NOTARY PUBLIC STATE OF MICHIGAN MONROE COUNTY MY COMMISSION EXP. NOV. 20,1995

# DETROIT EDISON'S RESPONSE TO GENERIC LETTER 92-08 (Thermo-Lag 330-01 Fire Barriers)

Detroit Edison's detailed response to each item of the "Reporting Requirement" section of GL 92-08 is given below:

#### O NRC Item No. 1:

"State whether Thermo-Lag 330-1 barriers are relied upon (a) to meet 10 CFR 50.48, to achieve physical independence of electrical systems, (b) to meet a condition of a plant's operating license, or (c) to satisfy a licensing commitment. If applicable, state that Thermo-Lag 330-1 is not used at the facility. This generic letter applies to all 1-hour and 3-hour Thermo-Lag 330-1 materials and barrier systems assembled by any assembly method such as by assembling performed panels and conduit shapes, as well as spray, trowel and brush-on applications."

## Detroit Edison Response:

Detroit Edison's review identified eleven areas at Fermi 2 where Thermo-Lag fire barriers having a 3-hour rating are installed in accordance with the requirements of 10CFR50, Appendix R. These eleven areas were discussed in References 2 and 3.

#### O NRC Item No. 2:

"If Thermo-Lag 330-1 barriers are used at the facility.

- (a) State whether or not the licensee has qualified the Thermo-Lag 330-1 fire barriers by conducting fire endurance tests in accordance with the NRC's requirements and guidance or licensing commitments.
- (b) State (1) whether or not the fire barrier configurations installed in the plant represent the materials, workmanship, methods of assembly, dimensions, and configurations of the qualification test assembly configurations; and (2) whether or not the licensee has evaluated any deviations from the tested configurations.
- (c) State (1) whether or not the as-built Thermo-Lag 330-1 barrier configurations are consistent with the barrier configurations used during the ampacity derating tests relied upon by the licensee for the ampacity derating factors used for all raceways protected by Thermo-Lag 330-1

(for fire protection of safe shutdown capability or to achieve physical independence of electrical systems) and (2) whether or not the ampacity derating test results relied upon by the licensee are correct and applicable to the plant design."

## Detroit Edison Response:

- (a) Detroit Edison has not qualified the Thermo-Lag fire barriers by conducting fire endurance tests. Rather, it had relied in the past upon the test conducted by Thermal Science, Incorporated (TSI) as documented evidence of the qualification of fire barriers installed at Fermi 2.
- (b) (1) As certified by TSI, Thermo-Lag fire barriers are installed at Fermi 2 in accordance with the specifications and test report of TSI. Additionally, a recent examination by Detroit Edison has indicated that these fire barriers appear to be constructed as per TSI's installation specifications. (2) Detroit Edison has not attempted to evaluate Thermo-Lag installations at Fermi 2 for deviations against any tested configurations of TSI because these tests are now considered invalid.
- (c) Detroit Edison has not relied upon the ampacity derating factors provided by TSI. Fermi 2 has only two cable tray enclosures utilizing Thermo-Lag fire barrier material. These trays are enclosed in vaults and the vaults are capable of dissipating heat to ensure that no significant heat is built up inside the vault. In addition, Design Calculations performed by Detroit Edison have concluded that the use of Thermo-Lag around the trays does not prevent the trays from providing their required safety-related electrical loads. Therefore, this does not adversely affect Fermi 2's safe shutdown capability or safety-related equipment system operability.

#### O NRC Item No. 3:

"With respect to any answer to items 2(a), 2(b), or 2(c) above in the negative, (a) describe all corrective actions needed and include a schedule by which such actions shall be completed and (b) describe all compensatory measures taken in accordance with the Technical Specifications or administrative controls. When corrective actions have been completed, confirm in writing their completion."

# Detroit Edison Response:

- (a) Detroit Edison is monitoring various industry/NRC actions being taken to restore fire barrier integrity through programs coordinated by NUMARC. When completed, Detroit Edison will apply the results of these programs, if applicable, to the Thermo-Lag installations at Fermi 2.
- (b) Detroit Edison has established a roving hourly fire watch patrol for all of the eleven areas as a compensatory measure, as discussed in References 2 and 3.

In addition to the continuing fire watches, Detroit Edison has prepared an engineering evaluation of the the Thermo-Lag fire barrier material to determine that it does not adversely affect the plant's ability to achieve and maintain safe shutdown. The evaluation has concluded that the Thermo-Lag 330 fire barriers do not reduce the level of safety provided by the Fermi 2 Fire Protection Program and the safe shutdown capabilities are not adversely affected.

# O NRC Item No. 4:

"List all Thermo-Lag 330-1 barriers for which answers to item 2 cannot be provided in the response due within 120 days from the date of this generic letter, and include a schedule by which such answers shall be provided."

#### Detroit Edison Response:

The information contained in this response applies to all Thermo-Lag fire barrier installations at Fermi 2.