Wayne H. Jens Vice President Nuclear Operations

Detroit Edison

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February 14, 1985 EF2-70387

Mr. James G. Keppler
Regional Administrator
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

Reference: Fermi 2

NRC Docket No. 50-341

Subject: Final Report of 10CFR50.55 (e) Item 145 "Tubing

Configuration and Connection Hook-Up

Discrepancy".

On January 15, 1985, Detroit Edison's Mr. L. P. Bregni, Engineer - Licensing telephoned Mr. E. Greenman of NRC Region IJT to report the incorrect installation of 16 solenoid valves used to actuate air operated containment isolation valves for the Nitrogen Inert 'Purge/Makeup Systems. This deficiency is reportable and is being tracked as Item 145.

## Description of Deficiency

Sixteen ASCO solenoid valves were installed improperly when the valves that had been installed previously were replaced with valves having a different porting arrangement. These solenoid valves are used to actuate air operated primary containment isolation valves for the Nitrogen Inerting/Purge/Makeup Systems. These solenoid valves, as they were installed, could have prevented the closure of the associated containment isolation valve when an isolation signal is generated and would prevent the remote manual operation of the isolation valves while an isolation signal is present.

The incorrect installation of these solenoid valves was discovered when the design engineer examined the solenoid valves after the work was completed. The improper installation had not been discovered during quality control

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inspections or by the post-installation checkout. However, this discrepancy would have been detected during preoperational testing when the response of the isolation valves to an isolation signal was to be verified.

Cause: This discrepancy occurred when the ASCO-8321 solenoid valves were being replaced with ASCO-8320 solenoid valves which have different porting arrangements and markings. The ASCO-8321 solenoid valves had been installed under earlier revisions of the same Design Change Request (DCR I-2291) and Field Modification Request (FMR-6989) used to install the ASCO-8320 valves. The personnel doing the installation and the QC inspectors overlooked the fact that replacing the valve without reconfiguring the tubing would not connect the air supply and the discharge line as required by the design documents.

## Analysis of Safety Implications

The Nitrogen Inerting/Purge/Makeup system primary containment isolation valves are normally closed during plant operation. However, if these valves were open for purging or inerting they would not close on a containment isolation signal if the solenoid valves in the air supply line were installed improperly.

## Corrective Action

The solenoid valves are being re-installed. Following the re-installation, proper operation of the solenoid valves will be verified by checking the response of the associated isolation valves to an isolation signal and remote manual operation.

Detroit Edison's actions to prevent the recurrence will be described in Detroit Edison's response to Inspection Report 50-341/84-65.

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Sincerely,

cc: P. M. Byron R. C. DeYoung R. C. Knop

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