

Wayne H. Jens  
Vice President  
Nuclear Operations

**Detroit  
Edison**

Fermi-2  
6400 North Dixie Highway  
Newport, Michigan 48166  
(313) 586-4150

February 19, 1985  
EF2-70388

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

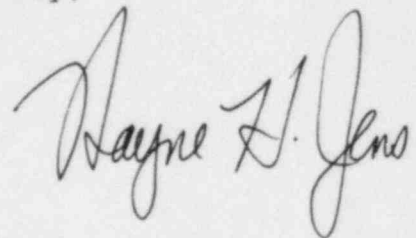
Subject: Detroit Edison Response  
Inspection Report 50-341/84-65

This letter responds to the item of noncompliance described in your Inspection Report No. 50-431/84-65. This inspection was conducted by Messrs. S. G. DuPont and D. E. Hills of NRC Region III between December 10, 1984 and January 11, 1985.

The item of noncompliance is discussed in this reply as required by Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. The appropriate criterion and the number identifying the item are referenced. As requested, the response to this item of noncompliance also describes the actions taken to ensure that QA level 1 modifications are being correctly implemented.

We trust this letter satisfactorily responds to the non-compliance cited in the inspection report. If you have questions regarding this matter, please contact Mr. Lewis Bregni, (313) 586-5083.

Sincerely,



cc: P. M. Byron  
S. G. DuPont  
R. C. Knop  
USNRC, Document Control Desk  
Washington, D.C. 20555

8503010402 850219  
PDR ADOCK 05000341  
G PDR

FEB 25 1985

IEO1

THE DETROIT EDISON COMPANY

FERMI 2

NUCLEAR OPERATIONS ORGANIZATION

RESPONSE TO NRC REPORT NO. 50-341/84-65

DOCKET NO. 50-341      LICENSE NO. CPPR-87

INSPECTION AT: FERMII 2, NEWPORT, MICHIGAN

INSPECTION CONDUCTED: December 10, 1984 through  
January 11, 1985

Statement of Noncompliance 84-65-01

10 CFR 50, Appendix B, Criterion X, as implemented by DECo Quality Assurance Manual, Section 11.0.1 requires that a program for inspection of activities affecting quality shall be executed to verify conformance to documented instructions, procedures, and drawings prescribing a given activity.

Contrary to the above, quality assurance inspectors failed to execute an adequate inspection of activities affecting the quality of installation of modifications to primary containment solenoid-actuated isolation valves by not verifying conformance to documented instructions, procedures, and drawings prescribed by work requests PN-21 Nos. 970703 and 970704 and Field Modification Request FMR 6989.

Corrective Action Taken and Results Achieved

Detroit Edison has addressed the installation of the solenoid valves in the Report of 10CFR50.55(e) Item 145, "Tubing Configurations and Connection Hook-Up Discrepancy." To correct this installation discrepancy, the solenoid valves are being reworked. Following the rework and inspection, 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.

Corrective Action Taken to Avoid Further Noncompliance

To ensure there was not a generic problem with the installation of ASCO solenoid valves, proper execution of a similar modification which involved relocation of solenoid valves and rerouting of tubing was verified. 65 additional solenoid valves were also examined and verified to be properly installed.

In order to determine how each of the 16 solenoid valves could have been similarly misinstalled and to determine why the installation inspection did not identify this fact, Detroit Edison has investigated the circumstances involved in implementing this design change. The error occurred in implementing Revision D of FMR-6989. This revision was issued in order to replace the existing QA level 1 solenoid valves with a different model QA level 1

Corrective Action Taken to Avoid Further Noncompliance  
(Cont'd)

solenoid valve. Previous revisions of this FMR had required the installation of the stainless steel tubing, copper tubing, and the solenoid valves which were to be replaced by Revision D. When the step requiring reconnection of the copper and stainless steel tubing was reached, each solenoid valve had been physically installed (correctly) in such a way that ports appeared to be in close proximity to their respective tubing. (The appearance was deceptive; the existing tubing was aligned to the opposite port on the new solenoid valves.) The connection step, which specified, "New 3/8 inch stainless steel tubing will be installed from the solenoids to the valves per dwg 6WI-T48-8232-1. Note: See sheets 18 through 28 for changes." was misunderstood by the installation crew. Accordingly, minor tubing changes were made to fit-up the connections using the "new tubing" installed by an earlier revision of the FMR, instead of installing new tubing to the opposite side of each solenoid, as was intended. It was assumed that the valve which was being installed was not significantly different from the valve being removed, requiring only fit-up corrections. This mistake was continued during the inspection because the inspection checklist (MIC) only required "QA to verify new valves are installed per FMR-6989 and step 5.0 of Attachment A [to PN-21 #970704]"; this did not specifically require verification that the tubing was connected to the correct port. Hence, the inspector repeated the mistake of the installers.

We have concluded that a fairly unique set of circumstances contributed to the propagation of the installation error. However, it is also believed that, in this case, more detailed inspection planning could have identified the required reorientation of the tubing and that fact could have been reflected in the MIC.

To improve the effectiveness of the QC inspections, an instruction has been implemented which adds a continuation sheet to the MIC to allow the QC inspector to document interpretations, questions or concerns regarding the inspection requirements in the MIC. This instruction also provides planning guidelines to minimize the need for inspector interpretation of the requirements in the field. This continuation sheet is reviewed by QA reviewers after completion of the work package inspection. In addition, during the initial implementation phase, MIC continuation sheets are receiving a special review to ensure their use is properly understood.

Corrective Action Taken to Avoid Further Noncompliance  
(Cont'd)

Based on the review of the installation of similar solenoid valves, evaluation of the circumstances involved in this case, and the fact that scheduled preoperational testing would detect this type of error, Detroit Edison has concluded that design changes are being properly implemented. In addition, the use of the continuation sheet and inspection planning guidelines will further enhance the effectiveness of QC inspections.

Date When Full Compliance Will Be Achieved

Full Compliance has been achieved.