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10 CFR 50.73

June 21, 2012
NRC-12-0040

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington D C 20555-0001

Reference: Fermi 2
NRC Docket No. 50-341
NRC License No. NPF-43

Subject: Licensee Event Report (LER) No. 2012-002

Pursuant to 10 CFR 50.73(a)(2)(iv)(A), Detroit Edison is submitting the enclosed LER No. 2012-002, Reactor Scram During Reactor Pressure Vessel Hydrostatic Test.

No commitments are being made in this LER.

Should you have any questions or require additional information, please contact Mr. Rodney W. Johnson of my staff at (734) 586-5076.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Plona", written over a horizontal line.

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

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Service Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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| 1. FACILITY NAME Fermi 2 | 2. DOCKET NUMBER 05000341 | 3. PAGE 1 OF 3 |
|------------------------------------|--|--------------------------|

4. TITLE
Reactor Scram During Reactor Pressure Vessel Hydrostatic Test

| 5. EVENT DATE | | | 6. LER NUMBER | | | 7. REPORT DATE | | | 8. OTHER FACILITIES INVOLVED | |
|---------------|-----|------|---------------|-------------------|---------|----------------|-----|------|------------------------------|---------------|
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REV NO. | MONTH | DAY | YEAR | FACILITY NAME | DOCKET NUMBER |
| 04 | 26 | 2012 | 2012 | - 002 | - 00 | 06 | 21 | 2012 | FACILITY NAME | 05000 |
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| 9. OPERATING MODE 4 | 11. THIS REPORT SUBMITTED PURSU ANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. POWER LEVEL 0 Percent | <table style="width:100%; border: none;"> <tr> <td><input type="checkbox"/> 20.2201(b)</td> <td><input type="checkbox"/> 20.2203(a)(3)(i)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(C)</td> <td><input type="checkbox"/> 50.73(a)(2)(vii)</td> </tr> <tr> <td><input type="checkbox"/> 20.2201(d)</td> <td><input type="checkbox"/> 20.2203(a)(3)(ii)</td> <td><input type="checkbox"/> 50.73(a)(2)(ii)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(viii)(A)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(1)</td> <td><input type="checkbox"/> 20.2203(a)(4)</td> <td><input type="checkbox"/> 50.73(a)(2)(ii)(B)</td> <td><input type="checkbox"/> 50.73(a)(2)(viii)(B)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(i)</td> <td><input type="checkbox"/> 50.36(c)(1)(i)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(iii)</td> <td><input type="checkbox"/> 50.73(a)(2)(ix)(A)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(ii)</td> <td><input type="checkbox"/> 50.36(c)(1)(ii)(A)</td> <td><input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(x)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(iii)</td> <td><input type="checkbox"/> 50.36(c)(2)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(A)</td> <td><input type="checkbox"/> 73.71(a)(4)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(iv)</td> <td><input type="checkbox"/> 50.46(a)(3)(ii)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(B)</td> <td><input type="checkbox"/> 73.71(a)(5)</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(v)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(A)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(C)</td> <td><input type="checkbox"/> OTHER</td> </tr> <tr> <td><input type="checkbox"/> 20.2203(a)(2)(vi)</td> <td><input type="checkbox"/> 50.73(a)(2)(i)(B)</td> <td><input type="checkbox"/> 50.73(a)(2)(v)(D)</td> <td style="text-align: right; font-size: small;">Specify in abstract below or in NRC Form 366A</td> </tr> </table> | <input type="checkbox"/> 20.2201(b) | <input type="checkbox"/> 20.2203(a)(3)(i) | <input type="checkbox"/> 50.73(a)(2)(i)(C) | <input type="checkbox"/> 50.73(a)(2)(vii) | <input type="checkbox"/> 20.2201(d) | <input type="checkbox"/> 20.2203(a)(3)(ii) | <input type="checkbox"/> 50.73(a)(2)(ii)(A) | <input type="checkbox"/> 50.73(a)(2)(viii)(A) | <input type="checkbox"/> 20.2203(a)(1) | <input type="checkbox"/> 20.2203(a)(4) | <input type="checkbox"/> 50.73(a)(2)(ii)(B) | <input type="checkbox"/> 50.73(a)(2)(viii)(B) | <input type="checkbox"/> 20.2203(a)(2)(i) | <input type="checkbox"/> 50.36(c)(1)(i)(A) | <input type="checkbox"/> 50.73(a)(2)(iii) | <input type="checkbox"/> 50.73(a)(2)(ix)(A) | <input type="checkbox"/> 20.2203(a)(2)(ii) | <input type="checkbox"/> 50.36(c)(1)(ii)(A) | <input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A) | <input type="checkbox"/> 50.73(a)(2)(x) | <input type="checkbox"/> 20.2203(a)(2)(iii) | <input type="checkbox"/> 50.36(c)(2) | <input type="checkbox"/> 50.73(a)(2)(v)(A) | <input type="checkbox"/> 73.71(a)(4) | <input type="checkbox"/> 20.2203(a)(2)(iv) | <input type="checkbox"/> 50.46(a)(3)(ii) | <input type="checkbox"/> 50.73(a)(2)(v)(B) | <input type="checkbox"/> 73.71(a)(5) | <input type="checkbox"/> 20.2203(a)(2)(v) | <input type="checkbox"/> 50.73(a)(2)(i)(A) | <input type="checkbox"/> 50.73(a)(2)(v)(C) | <input type="checkbox"/> OTHER | <input type="checkbox"/> 20.2203(a)(2)(vi) | <input type="checkbox"/> 50.73(a)(2)(i)(B) | <input type="checkbox"/> 50.73(a)(2)(v)(D) | Specify in abstract below or in NRC Form 366A |
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12. LICENSEE CONTACT FOR THS LER

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| FACILITY NAME Fermi 2 / Archana Manoharan – Engineer, Nuclear Licensing | TELEPHONE NUMBER (Include Area Code) (734) 586 - 5204 |
|--|--|

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

| CAUSE | SYSTEM | COMPONENT | MANU-FACTURER | REPORTABLE TO EPIX | CAUSE | SYSTEM | COMPONENT | MANU-FACTURER | REPORTABLE TO EPIX |
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| 14. SUPPLEMENTAL REPORT EXPECTED <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO | 15. EXPECTED SUBMISSION DATE MONTH: DAY: YEAR: |
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On April 26, 2012, at 10:12 am EDT, during Refueling Outage 15 with the Reactor Pressure Vessel Hydrostatic Pressure Test, in progress, a high pressure reactor scram occurred. The control room operator was monitoring reactor pressure using an indication that was invalid due to excess flow check valve testing that was in progress. This resulted in a lowering of indicated reactor pressure while actual pressure was rising. All control rods were already fully inserted in the reactor core at the time of the scram. The Reactor Protection System and other plant equipment responded as expected to the high pressure condition and reactor pressure was lowered to 600 psig. The operating staff identified all control room instruments affected by the excess flow check valve testing, ensured they were monitoring valid signals prior to restarting the hydrostatic test, provided a dedicated operator for monitoring pressure, and communicated reactor pressure conditions to the staff. Long term corrective actions include revisions to procedural requirements and inclusion of the event in operator requalification training as part of refuel outage preparation.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

| 1. FACILITY NAME | 2. DOCKET | 6. LER NUMBER | | | 3. PAGE |
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| Fermi 2 | 05000341 | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | 2 of 3 |
| | | 2012 | -- 002 | -- 00 | |

NARRATIVE

Initial Plant Conditions:

Mode 4
Reactor Power 0 percent

Description of the Event

On April 26, 2012, at 10:12 am EDT, during Refueling Outage 15 (RF15) with the Reactor Pressure Vessel (RPV) Hydrostatic Pressure Test, in progress, a high pressure reactor scram occurred. The test was being conducted in accordance with Infrequently Performed Test and Evolution (IPTE) 12-03, RPV Hydrostatic Test. Operators were monitoring RPV pressure using an Integrated Plant Computer System (IPCS) [CPU] average pressure point. However, one input of the average pressure point was valved out for scheduled excess flow check valve (EFCV) testing. This resulted in a lowering of indicated pressure while actual pressure was rising. When actual pressure reached the scram setpoint, a valid scram occurred. The Reactor Protection System (RPS) RPV high pressure signals for trip system A, channel 1 and trip system B, channel 1 came in on a RPV high pressure. All control rods were already fully inserted in the reactor core at the time of the scram. The RPS and other plant equipment responded as expected to the RPV high pressure condition.

The IPCS pressure indication selected by the Licensed Control Room Staff became inaccurate because of the EFCV testing. The inaccuracy was not recognized prior to RPV pressure reaching the high pressure setpoint. RPV pressure lowered to 600 psig as expected following the scram. The plant was stable and the scram was reset at 10:13 am.

Significant Safety Consequences and Implications

The plant was in Mode 4 "Cold Shutdown," at the time of the Reactor Scram. All Control Rods were already fully inserted in the Reactor Core. The RPS and other plant equipment responded as expected to the RPV high pressure condition.

RPV Steam Dome Pressure Transmitters [PIT] B21N078A and B21N078B remained in service during the pressure transient. Both transmitters detected the increase in RPV pressure accurately. When the pressure reached the trip setpoint of 1093 psig, a valid scram signal was initiated. Transmitter B21N078A provides input to the RPS trip system A and transmitter B21N078B provides input to the RPS trip system B. With a half scram signal in both RPS A and B trip systems, a full scram occurred as expected.

The plant responded as expected to the RPV high pressure condition and no safety limits were exceeded. Therefore, there were no safety consequences and no effect on public health and safety as a result of this event.

This event was reported as an 8-hour non-emergency notification for a valid RPS system actuation per 10CFR50.72(b)(3)(iv)(A) as documented in event notification number 47868. This report is provided in accordance with 10 CFR 50.73(a)(2)(iv)(A), "Any event or condition that resulted in manual or automatic actuation of any of the systems listed in paragraph (a)(2)(iv)(B)."

**LICENSEE EVENT REPORT (LER)
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Cause of the Event

When the EFCV testing was released, the control room operators failed to recognize that one of the IPCS points being monitored would become invalid as part of the EFCV test. Inadequate impact evaluation for EFCV testing led to a failure to properly monitor a critical parameter. The IPCS point being monitored indicated a lowering pressure while actual RPV pressure was rising. The Control Room staff allowed the pressure to increase based on an IPCS computer point that averaged RPV pressure inputs where one of the inputs did not reflect the actual RPV pressure. The Licensed Operator did not use the indications specified in the RPV system leakage test procedure to validate reactor pressure.

Corrective Actions

This event was entered into the Fermi 2 Corrective Actions Program. The scram was reset and prior to resumption of the RPV hydrostatic pressure test (1) All instruments affected by EFCV testing were identified on the main control room panels, (2) A dedicated operator monitored reactor pressure on a wide range pressure recorder unaffected by EFCV testing and communicate pressure changes with shift personnel, and (3) IPCS screens were updated to display redundant RPV Pressure instruments not affected by EFCV testing.

Long term corrective actions include revisions to procedural requirements and inclusion of the event in operator qualification training as part of refuel outage preparation.

Additional Information

A. Failed Component:

None identified.

B. Previous Licensee Event Reports (LERs) on Similar Problems:

No similar events were identified.