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Document Control Room U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

RE: Report on Reactor Operations University of Michigan Ford Nuclear Reactor / Docket 50-2 / License R-28

Document Control Room:

Please find enclosed a copy of the 2012 Report on Reactor Operations for the University of Michigan - Ford Nuclear Reactor (Docket No. 50-2 / License No. R-28) located in Ann Arbor, Michigan.

Please do not hesitate to contact me at Radiation Safety Service / OSEH [(734) 647-2251] should you have any questions or comments regarding the attached report.

Sincerely,

Mary h. Drevoll

Mark L. Driscoll Director / Radiation Safety Officer Radiation Safety Service / OSEH

MLD/mld NRCFNR AnnualOperatingReport2012HQ.doc

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FORD NUCLEAR REACTOR

Docket No. 50-2 / License No. R-28

REPORT ON REACTOR OPERATIONS

This report summarizes the operation of the University of Michigan – Ford Nuclear Reactor for the period January 1 to December 31, 2012. This report is to meet the requirement of Technical Specifications for the Ford Nuclear Reactor. The format for the sections that follow conforms to Section 6.7.1 of Technical Specifications.

1.0 **OPERATIONS SUMMARY**

On January 29, 2004, the license for the Ford Nuclear Reactor (FNR) was modified with the following condition: 'Maximum Power Level: The licensee shall not operate the reactor nor place fuel elements in the reactor grid', and the condition allowing for the possession of reactor fuel under 10 CFR 70 was removed.

1.1 Facility Design Changes

None

1.2 Equipment and Fuel Performance Characteristics

The FNR was shut down permanently and ceased operation on July 3, 2003. The reactor pool and all reactor components were dismantled and disposed of in 2006 / 2007; therefore, no fuel assemblies were received in 2012.

1.3 Safety-Related Procedure Changes

None

1.4 Maintenance, Surveillance Tests, and Inspection Results as Required by Technical Specifications

Systems required by the Limiting Conditions of Operations of the Technical Specifications were maintained as required by Technical Specifications.

1.5 Summary of Changes, Tests, and Experiments for Which NRC Authorization was Required.

None

1.6 **Operating Staff and Safety Review Committee Changes**

Nuclear Reactor (Facility Decommissioning) Manager - No changes Health Physicist / Radiation Safety Officer - No changes Decommissioning Review Committee - No changes

2.0 **POWER GENERATING SUMMARY**

Final reactor shutdown occurred July 3, 2003.

3.0 UNSCHEDULED RECATOR SHUTDOWN SUMMARY

Final reactor shutdown occurred July 3, 2003.

4.0 CORRECTIVE MAINTENACE ON SAFETY RELATED SYSTEMS AND COMPONENTS

N/A

5.0 CHANGES, TESTS, AND EXPERIMENTS CARRIED OUT WITH PRIOR NRC APPROVAL PURSUANT TO 10 CFR 50.59(a)

None

6.0 **RADIOACTIVE EFFLUENT RELEASE**

Quantities and types of radioactive effluent releases, environmental monitoring locations and data, and occupational personnel radiation exposures are provided in this section.

- 6.1 Gaseous Effluent there were no gaseous effluent releases from the empty / gutted FNR facility as a result of decommissioning / Final Status Survey (FSS) activities.
- 6.2 Radiohalogen Releases there were no releases of airborne radiohalogens from the empty / gutted FNR facility as a result of decommissioning / FSS activities.
- 6.3 Particulate Releases there were no releases of airborne radioactive particulate matter from the empty / gutted FNR facility as a result of decommissioning / FSS activities.
- 6.4 Liquid Effluents there were no liquid effluents released from the FNR as a result of decommissioning / FSS activities.

7.0 ENVIRONMENTAL MONITORING

Historically, and as noted in previous Report of Reactor Operations, the accident evaluation monitoring program for the Ford Nuclear Reactor (FNR) facility consisted of direct radiation monitors (TLD) and air sampling stations located around the facility, and selected water and sewer sampling stations. Those accident evaluation monitoring systems are no longer in place around the empty / gutted FNR facility.

7.1 Maximum Cumulative Radiation Dose

The maximum cumulative radiation dose, which could have been received by an individual continuously present in an unrestricted area during reactor decommissioning operations from direct radiation exposure, exposure to gaseous effluents, and exposure to liquid effluents:

- Direct radiation exposure to such an individual would be negligible.
- Radiation exposure to an individual from airborne effluents would be negligible because there were no effluent releases from the FNR facility.
- Radiation exposure to an individual from liquid effluents would be negligible because there were no liquid effluents released from the FNR facility.

8.0 OCCUPATIONAL PERSONNEL RADIATION EXPOSURE

Individual for whom the annual whole body radiation exposure exceeded 500 millirem (50 millirem for an individual under 18 years of age) during the 2012 reporting period:

The final dosimetry reports for calendar year 2012 revealed that no individual received an annual whole body dose greater than 500 millirems.

MLD/mld FNRAnnualOpertingReport2012.doc (January 2013)

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