



Research Reactor Center

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June 10, 2002

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Mr. Alexander Adams, Jr.
U.S. Nuclear Regulatory Commission
Mail Stop O12-G13
Washington, DC 20555-0001

SUBJECT: Monthly Operations Summary

Enclosed is a copy of MURR's monthly operations summary for April 2002. If you have any questions, please contact me at (573) 882-5264.

Sincerely,

Paul S. Hobbs, PE
Reactor Manager

PSH/djr

Enclosure

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UNIVERSITY OF MISSOURI RESEARCH REACTOR

OPERATIONS MONTHLY SUMMARY

APRIL 2002

Prepared by:
Operations Staff

INTRODUCTION

The reactor operated continuously in April with the following exceptions: five shutdowns for scheduled maintenance and refueling; two unscheduled shutdowns. Received notification from the NRC that two new Reactor Operator licenses and one new Senior Reactor Operator license had been issued.

MAINTENANCE ACTIVITIES

- 4/1/02 Refueled - removed core 02-16, loaded core 02-17.
- Completed Pressurizer valve refurbishment in accordance with Work Authorization 02-13.
- 4/3/02 Replaced Secondary Float Make-up Valve.
- 4/4/02 Refueled - removed core 02-17, loaded core 02-18.
- 4/8/02 Refueled - removed core 02-18, loaded core 02-19.
- Commenced repair of the Dry Fire Main penetration through the Seal Trench in accordance with Work Authorization 143-01.
- Commenced installation of a 2000KVA transformer as part of the facility electrical distribution system upgrade..
- 4/15/02 Refueled - removed core 02-19, loaded core 02-20.
- Transferred eight spent fuel elements to the BMI cask in preparation for shipment to the Westinghouse Savannah River Site.
- Replaced the amphenol connector for the Bridge ALARA ARMS unit.

4/22/02 Refueled - removed core 02-20, loaded core 02-21.
 Replaced relay 1K9 for the Rod Run-In TAA.

4/29/02 Refueled - removed core 02-21, loaded core 02-22.
 Replaced meter for PT-943 (primary pressure).
 Repaired broken wire in Valve 509 (pool isolation) circuit.

UNSCHEDULED SHUTDOWNS

<u>Date</u>	<u>No.</u>	<u>Type</u>	<u>Cause</u>
4/4/02	1140	Scram	Pressurizer Recirculation Valve 528 left open after maintenance.

On April 4, a scram was initiated by a control room operator upon discovering there was no discernable rise in water level of the pressurizer when the charging pump was running. Investigation revealed that the Pressurizer Recirculation Valve 528 had been left open after maintenance allowing water to return to storage tank T-300 rather than flow to the pressurizer. While pressurizer level remained in the normal range, the open 528 valve placed the reactor makeup water system in a degraded lineup. The valve was repositioned to allow the charging system to makeup water normally to the pressurizer and a complete valve lineup of the pressurizer system was performed. The reactor was subsequently refueled and returned to normal operation.

Licensee Event Report No. 02-02, providing a description of these events and the corrective actions taken, was submitted within the technical specification thirty day time requirement.

<u>Date</u>	<u>No.</u>	<u>Type</u>	<u>Cause</u>
4/22/02	1141	RRI	Blade 'B' not in contact with magnet.

On April 22, a Rod Not In Contact With Magnet Rod Run In was automatically initiated when Blade 'B' anvil separated from its magnet during a normal reactor startup. The Blade 'B' Full In light was lit so the control room operator initiated a manual scram and the reactor was shutdown. The Rod 'B' Control Drive Mechanism, connectors, wiring, seating surfaces, magnet and anvil were inspected with no problems detected. Blade 'B' was withdrawn to 2 inches to verify proper magnet engagement. The Control Drive Mechanism was reassembled and Blade 'B' was withdrawn to 12 inches to verify proper operation. The reactor was subsequently started up to 10 MW and operated with no other problems.

Apr

OPERATION SUMMARY FOR MONTH OF	Apr-02
University of Missouri Research Reactor Center (MURR)	
HOURS OPERATED THIS PERIOD	603.92
TOTAL HOURS OPERATED, REACTOR	242,228.20
HOURS OPERATED AT FULL POWER, THIS PERIOD	601.04
TOTAL HOURS AT FULL POWER, REACTOR	238,984.89
INTEGRATED POWER THIS PERIOD	250.56 MWD
TOTAL INTEGRATED POWER, REACTOR	93,773.82 MWD

Submitted by: Das
MWD Custodian/Reactor Physicist

Date: 5/2/02