



Research Reactor Center

University of Missouri-Columbia

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May 13, 2004

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

SUBJECT: University of Missouri Research Reactor Facility
Docket No. 50-186
Monthly Operations Summary

Dear Mr. Adams:

Enclosed is a copy of MURR's Monthly Operations Summary for April 2004. If you have any questions, please contact me at (573) 882-5276.

Sincerely,

Leslie Foyto
Reactor Manager

LM/sm
cc. Craig Bassett
Enclosure: April Operation Summary - 4 pages

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*UNIVERSITY OF MISSOURI
RESEARCH REACTOR*

OPERATIONS MONTHLY SUMMARY

April 2004

*Prepared by:
Operations Staff*

INTRODUCTION

The reactor operated continuously in April with the following exceptions: 3 shutdowns for scheduled maintenance and refueling; 1 unscheduled shutdown.

MAINTENANCE ACTIVITIES

- 4/5/04 Refueled - removed core 04-16, loaded core 04-17.
Repaired DCW cooling line to primary coolant system pumps.
Replaced Pneumatic Tube System windgate.
- 4/12/04 Refueled - removed core 04-17, loaded core 04-18.
Removed Secondary Coolant System Distribution Valve S-22 for refurbishment.
- 4/13/04 Secondary Coolant Monitor module was replaced.
- 4/19/04 Refueled - removed core 04-18, loaded core 04-19.
Completed Modification Record 04-01 (Replace PT-943 GE transmitter with a Rosemount transmitter).
Reinstalled refurbished Secondary Coolant System Distribution Valve S-21.
- 4/26/04 Refueled - removed core 04-19, loaded core 04-20.
Completed offset change out for control rod position "B".
Replaced NMC RAK Stack Monitor blower motor overloads.

UNSCHEDULED SHUTDOWNS

<u>Date</u>	<u>No.</u>	<u>Type</u>	<u>Cause</u>
4/12/04	1171	Scram	Rod Control Supply Power 2F4 Fuse Open

On April 12, a reactor scram was automatically initiated when Rod Control supply power fuse 2F4 opened during a demonstration of the Auto Shim Circuit. The circuit was intentionally activated for training purposes just prior to the normally scheduled weekly shutdown. The 10-amp fuse opened just as the Auto Shim Circuit engaged when the regulating blade had reached a height of 5.2-inches. During the maintenance day activities, the rod control system was inspected and tested with no apparent cause discovered. The fuse was replaced and the reactor was returned to 10 MW operation after conclusion of the maintenance day. After careful review of the system prints, it was determined that both rod insert and rod withdraw power can be applied to the control rod drive motor simultaneously, thereby creating a potential over current condition. In both instances of 2F4 opening, a control rod was being withdrawn when the auto shim circuit activated. The operators have been instructed to secure all shimming evolutions prior to initiating the auto shim circuit for training.

OPERATION SUMMARY FOR MONTH OF
University of Missouri Research Reactor Center (MURR)

Apr-04

HOURS OPERATED THIS PERIOD

650.22

TOTAL HOURS OPERATED, REACTOR

257,900.46

HOURS OPERATED AT FULL POWER, THIS PERIOD

646.22

TOTAL HOURS AT FULL POWER, REACTOR

254,579.73

INTEGRATED POWER THIS PERIOD

269.33

MWD

TOTAL INTEGRATED POWER, REACTOR

100,275.07

MWD

Submitted by: Das K
MWD Custodian/Reactor Physicist

Date: 5/3/04