Research Reactor Center
University of Missouri-Columbia

Research Park
Columbia, MO 65211
PHONE (573) 882-4211
FAX (573) 882-6360

June 11, 2003

50-186

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 May 2003. If you have any questions, please contact me at (573) 882-5276.

Sincerely,

Leslie Foyto
Interim Reactor Manager

LM/lmcg
cc. Craig Bassett
Enclosure

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UNIVERSITY OF MISSOURI RESEARCH REACTOR

OPERATIONS MONTHLY SUMMARY

May, 2003

Prepared by:
Operations Staff

INTRODUCTION

The reactor operated continuously in May with the following exceptions: 3 shutdowns for scheduled maintenance and refueling; 2 unscheduled shutdowns. One Licensee Event Report, No. 03-01, was submitted within the Technical Specification required thirty-day time requirement.

MAINTENANCE ACTIVITIES

5/5/03	Refueled - removed core 03-19, loaded core 03-20.
5/8/03	Installed new Drain Tile Sump Pump with associated valves and piping.
5/12/03	Refueled - removed core 03-20, loaded core 03-21.
5/17/03	Refueled - removed core 03-21, loaded core 03-22. Replaced P501A (primary system pump) coupling flex element and DCW (domestic cold water) cooling lines.
5/19/03	Refueled - removed core 03-22, loaded core 03-23.
5/21/03	Completed CP-26, Containment Building Compliance Test.
5/26/03	Refueled - removed core 03-23, loaded core 03-24.

UNSCHEDULED SHUTDOWNS

Date	No.	Type	Cause
5/17/03	1161	Scram	P501A flexible coupling failure.

On May 17, a Reactor Scram was automatically initiated when the flexible coupling on primary coolant system pump P501A failed resulting in a reduction in primary coolant system flow. The pump and motor were inspected and it was determined the failure was due to a defective coupling. The coupling was replaced and P501A was tested satisfactorily. Damaged DCW cooling lines were also replaced and leak checked. The reactor was subsequently refueled and returned to operation.

Date	No.	Type	Cause
5/18/03	1162	Scram	TE-980A indication failed downscale.

On May 18, a Manual Reactor Scram was initiated when the duty Operator discovered that Primary Coolant Heat Exchanger 503A Temperature Instrument, TE-980A, indication had failed downscale. The RTD/transmitter unit for 980A was replaced and CP-8B was performed to verify operability and calibration. The reactor was subsequently refueled and returned to operation after the regularly scheduled maintenance day. Licensee Event Report No. 03-01, providing a description of this event and the corrective actions taken, was submitted within the Technical Specification required thirty-day time requirement.

LICENSEE EVENT REPORT

Date	No.
5/18/03	03-01

On May 18, a deviation from Technical Specification 3.3.a occurred when Primary Coolant Heat Exchanger 503A Temperature Instrument TE-980A indication failed downscale resulting in less than the required number (N) of instrument channels in the reactor safety system. The Technical Specifications require two (2) Reactor Inlet Temperature instruments for operation. The reactor was immediately shutdown by Manual Scram. Troubleshooting and testing failed to yield the direct cause of the downscale failure and the malfunction could not be reproduced. This failure is similar to a failure from January 26, 2002 of TE-980B (MURR LER No. 02-01). The RTD/transmitter unit was replaced and CP-8B was successfully performed to demonstrate operability of the instrument. The reactor was subsequently refueled and returned to operation after a regularly scheduled maintenance day. Rosemount, Inc. has been contacted regarding the apparent repeat failure of the RTD/Transmitter unit. We are currently awaiting a failure analysis report and, if needed, any additional corrective action guidance.

May

OPERATION SUMMARY FOR MONTH OF University of Missour Research Reactor Center (MURR)	May-03	
HOURS OPERATED THIS PERIOD	676.12	
TOTAL HOURS OPERATED, REACTOR	250,627.08	
HOURS OPERATED AT FULL POWER, THIS PERIOD	674.18	
TOTAL HOURS AT FULL POWER, REACTOR	247,340.96	
INTEGRATED POWER THIS PERIOD	281.00	MWD
TOTAL INTEGRATED POWER, REACTOR	97,257.57	MWD

Submitted by: Das K

MWD Custodian/Reactor Physicist

Date: 6/2/03