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November 20, 2001

Mr. Alexander Adams, Jr.  
U.S. Nuclear Regulatory Commission  
Mail Stop O12-D3  
Washington, DC 20555-0001

SUBJECT: Monthly Operations Summary

Enclosed is a copy of MURR's monthly operations summary for October 2001.

Sincerely,

Paul S. Hobbs, PE  
Reactor Manager

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UNIVERSITY OF MISSOURI RESEARCH REACTOR

OPERATIONS MONTHLY SUMMARY

October 2001

Prepared by:  
Operations Staff

October 2001

The reactor operated continuously in October with the following exceptions: six shutdowns for scheduled maintenance and refueling; one unscheduled shutdown.

On October 11, a manual scram was initiated by a control room operator upon discovery that control blade "A" would not drive "out" during a routine shimming operation. The operators visually verified that blade "A" was fully inserted upon the scram. Electronics technicians discovered one broken and one frayed drive motor connecting wire. These wires were replaced and the drive mechanism was satisfactorily tested throughout its full range of travel. The connecting wires to the remaining drive mechanism motors were thoroughly inspected and found to be satisfactory. The reactor was subsequently refueled and returned to normal operation.

Major maintenance items for the month included: repairing a pin-hole leak on the fission product monitor return line; replacing two connecting wires to control blade "A" drive mechanism motor; replacing solenoid valves 529A and 529C with new style solenoid valves in accordance with modification package 01-6; completing modification package 99-4 which involved replacement of the pool and primary conductivity cells, amplifiers, and indications; replacing the pump case and bearing covers on the pressurizer charging pump.

#### UNSCHEDULED SHUTDOWNS

<u>Date</u>	<u>#</u>	<u>Type</u>	<u>Cause</u>
10/11/010	1131	Manual Scram	Drive mechanism motor defect

## MAINTENANCE ACTIVITIES

Date

10/01/01 Refueled - removed core 01-45, loaded core 01-46.

10/08/01 Refueled – removed core 01-46, loaded core 01-47.  
Repaired the fission product return line.

10/11/01 Refueled – removed core 01-47, loaded core 01-48.  
Replaced defective connecting wires to control blade “A” drive mechanism motor.

10/15/01 Refueled – removed core 01-48, loaded core 01-49.

10/22/01 Refueled – removed core 01-49, loaded core 01-50.  
Replaced solenoid valves 529A and 529C with new style solenoid valves 1.A.W.  
modification package 01-6.  
Replaced the pump case and bearing covers on the pressurizer charging pump.

10/29/01 Refueled – removed core 01-50, loaded core 01-51.  
Completed modification package 99-4, replacement of the pool and primary  
conductivity cells, amplifiers and indicators.

## OPERATIONS SUMMARY

HOURS OPERATED THIS PERIOD	650	
TOTAL HOURS OPERATED	238,442	
HOURS AT FULL POWER THIS PERIOD	647	
TOTAL HOURS AT FULL POWER	235,218	
INTEGRATED POWER THIS PERIOD	270	MWD
TOTAL INTEGRATED POWER	92,203	MWD