

NORMAL OCCURRENCE REPORT

Report No.: BFAO-50-260/7435W
Report Date: December 27, 1974
Occurrence Date: December 18, 1974
Facility: Browns Ferry Nuclear Plant unit 2

Identification of Occurrence

Failure of flow control valve 2-FCV-74-66 on RHR system loop II to open.

Conditions Prior to Occurrence

Reactor power was 3,117 MWt and routine surveillance testing was being conducted.

Description of Occurrence

During the performance of routine surveillance tests, flow control valve 2-FCV-74-66 on the RHR system was closed and could not be opened. Visual inspection revealed that the thrust bearing assembly was damaged.

Designation of Apparent Cause of Occurrence

Set screws missing from the yoke nut's upper bearing locknut allowed the locknut to become loose and unscrew. This allowed the yoke nut to move downward while the valve was attempting to open. The yoke nut moving downward locked the operator and damaged the locknut, the upper bearings, the yoke nut key, and the yoke nut.

Analysis of Occurrence

Both core spray loops and RHR loop I were available and could have provided emergency core cooling if required. There were no adverse effects to the public health or safety; and there was no damage to other systems, components, or structures as a result of this occurrence.

Corrective Action

The valve motor operator and thrust bearing assembly were removed. A spare motor operator and bearing assembly were installed. Post-maintenance and functional tests were performed satisfactorily. The yoke nut position on the valve in a similar position in loop I was visually inspected and found satisfactory.

Failure Data

Manufacturer--Walworth
Size--24"
Body--WCB
Stem--CR-13
Code--65509572400QA
Number--PSB5509WE
USAS--600 @ 850° F.
WOG--1,440 @ 100° F.

See Abnormal Occurrence Report No. BFAO-50-260/7432W for valve disc failure.

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

December 27, 1974



Mr. Edson G. Case
Acting Director of Licensing
Office of Regulation
U.S. Atomic Energy Commission
Washington, DC 20545

Dear Mr. Case:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 2 -
DOCKET NO. 50-260 - FACILITY OPERATING LICENSE DPR-52 - ABNORMAL
OCCURRENCE REPORT BFAO-50-260/7435W

The enclosed report is to provide details concerning failure of flow control valve 2-FCV-74-66 on RHR system loop II to open and is submitted in accordance with Appendix A to Regulatory Guide 1.16, Revision 1, October 1973. This event occurred on Browns Ferry Nuclear Plant unit 2 on December 18, 1974.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

E. F. Thomas
for E. F. Thomas
Director of Power Production

Enclosure
CC (Enclosure):

Mr. Norman C. Moseley, Director
Region II Regulatory Operations Office, USAEC
230 Peachtree Street, NW., Suite 818
Atlanta, Georgia 30303

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incident 13135

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