

## ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-50-260/7432W  
Report Date: December 13, 1974  
Occurrence Date: December 4, 1974  
Facility: Browns Ferry Nuclear Plant unit 2

### Identification of Occurrence

Failure of shutdown cooling flow control valve FCV-74-66 to allow waterflow passage.

### Conditions Prior to Occurrence

The unit was shut down and shutdown cooling loop 2 was being placed in service.

### Description of Occurrence

With the FCV-74-66 valve stem in the open position, flow could not be established through the valve.

### Designation of Apparent Cause of Occurrence

The valve disc had become loose and was stuck in the valve seat. Small tack welds between the valve disc and the stem guide ring, which are intended to prevent rotation, had broken. This allowed the disc to unscrew from the stem guide ring and become wedged in the seat opening.

### Analysis of Occurrence

Both core spray loops and FHR loop 1 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 systems, components, or structures as a result of this occurrence.

### Corrective Action

The valve was disassembled and the disc found separated from the stem. The disc was removed from the valve body; the valve body and seating surfaces were visually inspected; the mating threads on the disc and disc guide were cleaned, inspected, and found satisfactory. The tack welds preventing rotation of the disc on the disc guide were found broken, and all parts were cleaned and inspected. Repair was made by cutting a weld bevel on the disc guide, reassembling the disc and guide, and applying a larger, stronger retaining weld to prevent separation of the parts.

The valve was reassembled and functionally tested satisfactorily.

Valves in similar positions on both units 1 and 2 will be disassembled and inspected, and an additional weld will be added to the disc and guide during unit outages when conditions permit.

8308290266 750425  
PDR ADOCK 05000260  
S PDR

Failure Data

Manufacturer--Walworth

Size--24"

Body--WCB

Stem--CR-13

Code--655095724000A

Number--PSB5509WE

USAS--600 @ 850° F.

WOG--1,440 @ 100° F.

TENNESSEE VALLEY AUTHORITY  
CHATTANOOGA, TENNESSEE 37401



December 13, 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 DFR-52 - ABNORMAL  
OCCURRENCE REPORT BFAO-50-260/7432W

The enclosed report is to provide details concerning failure of  
shutdown cooling flow control valve FCV-74-66 to allow waterflow  
passage 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 4, 1974.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*E. F. Thomas*  
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

12668

COPY SENT REGION *II*

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*Dupe of*  
*8304290266*

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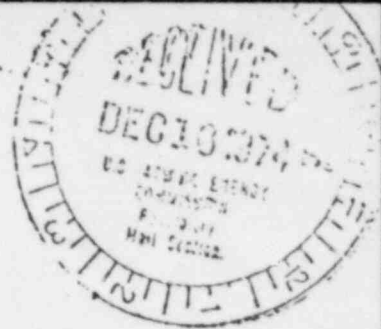
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