

# ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-50-260/7434W  
Report Date: December 18, 1974  
Occurrence Date: December 8, 1974  
Facility: Browns Ferry Nuclear Plant unit 2

## Identification of Occurrence

Main steam relief valve bellows leak indication on 2-PCV-1-41 following similar leak indication on 2-PCV-1-5.

## Conditions Prior to Occurrence

The unit was operating at approximately 594 MWe. Safety relief valve 2-PCV-1-5 had already been declared inoperable for pressure actuation due to an indication of bellows leakage as noted in BFAO-50-260/7433T. This written report covers BFAO-50-260/7433T and BFAO-50-260/7434T.

## Description of Occurrence

At 2240 the control room received annunciation "Auto Blowdown Relief Valves Bellows Leak" on valve 2-PCV-1-41. With 2-PCV-1-5 already inoperable, an orderly shutdown was initiated.

## Designation of Apparent Cause of Occurrence

Upon inspection of valve 2-PCV-1-41, it was found that the indication of bellows leakage was caused by a shorted cable going to the bellows leakage pressure switch. Slack in the cable during installation of pipe insulation had become pinched between the Mirror insulation and the steam pipe. The heat from the pipe was transmitted to the cable causing the cable insulation to melt. This allowed the two conductors of the cable to short together, bringing in the alarm. A similar condition was found on valve 2-PCV-1-5.

## Analysis of Occurrence

Both valves were still capable of performing their ADS functions. Indications were that neither would respond to pressure actuation. This occurrence caused no damage to any other systems, structures, or components. There were no adverse effects to the health and safety of the public, and there were no personnel injuries or exposures due to this occurrence.

## Corrective Action

The faulty cables were repaired for both valves. Care was taken to keep the cable from coming in contact with the steam pipes. The other nine valves were inspected to make sure that this condition did not exist. Furthermore, a discussion was held with personnel involved in the insulation of steamlines to relate to them the importance of not allowing electrical cables to come into contact with the steamlines.

## Failure Data

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8308290086 741218  
PDR ADOCK 05000260  
PDR

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

December 18, 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-50-260/7434W

The enclosed report is to provide details concerning main steam relief valve bellows leak indication on 2-PCV-1-41 following similar leak indication on 2-PCV-1-5 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 8, 1974.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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 813  
Atlanta, Georgia 30303

*50-260  
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