

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE
37401



June 7, 1974

Mr. John F. O'Leary, Director
Directorate of Licensing
Office of Regulation
U.S. Atomic Energy Commission
Washington, DC 20545

Dear Mr. O'Leary:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 -
DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - ABNORMAL
OCCURRENCE REPORT BFAO-7436W

The enclosed report is to provide details concerning a spill of
approximately 12,000 gallons of potentially contaminated water to
an uncontrolled area, unit 3 condensate backwash receiver tank
room, 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 1 on May 28, 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, USAREC
230 Peachtree Street, NW., Suite 818
Atlanta, Georgia 30303



8305040662 740607
PDR ADOCK 05000259
S PDR

Handwritten: 50-259

5164

COPY SENT REGION *II*

ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-7436W
Report Date: June 7, 1974
Occurrence Date: May 28, 1974
Facility: Browns Ferry Nuclear Plant unit 1

Identification of Occurrence

Spill of approximately 12,000 gallons of potentially contaminated water to an uncontrolled area, unit 3 condensate backwash receiver tank room.

Conditions Prior to Occurrence

Valves 2-HCV-2-747 and 2-HCV-2-748 were removed and blanks were installed before startup of unit 1. This was part of interface between units 1 and 2 to prevent contaminated water from unit 1 getting to unit 2.

Work Plan 1634 RI had been issued to remove interface blanks and install above valves to connect units 1 and 2 condensate systems.

Description of Occurrence

When pipefitters loosened the flange on the blank for 2-HCV-2-747, water flowed out in a gush. The pipefitters left the pipe tunnel without retightening the flange bolts. This allowed approximately 85,000 gallons of water to be lost from unit 1 CST to pipe tunnel.

The pipe tunnel overflowed to the units 1 and 2 condensate backwash receiver tank room. Overflow from the pipe tunnel also flowed to unit 3 condensate backwash receiver tank room which is outside the controlled area.

Designation of Apparent Cause of Occurrence

The clearance for hold order 3454 did not specify to close 1-HCV-2-747. The flange was not partially loosened as was requested by the shift engineer.

Immediate Action

The pipefitter general foreman along with an assistant unit operator returned to the tunnel to (1) close valve 1-HCV-2-747 which had been inadvertently left open and (2) retighten the flange on blank 2-HCV-2-747.

Health physics employees and chemical laboratory employees were requested to start sampling the unit 3 sumps and the water in unit 3 condensate backwash receiver tank room.

Inspection was made of pipe sleeves from pipe tunnel to unit 3 reactor building. Inspection showed no leaks of contaminated water. Health physics employees roped off unit 3 condensate backwash receiver tank room until an analysis could be made of the spilled water.

Subsequent Action

Samples were taken of all the sumps in unit 3 reactor and turbine buildings as well as the water in unit 3 backwash receiver tank room. Isotopic analysis of above samples showed that all areas listed above were below the release limits on an MPC basis.

Irregardless of the above findings, water from unit 3 condensate backwash receiver pump room which contained most of the water leaking to the unit 3 area was pumped with a temporary pump to a floor drain in the unit 2 area. It then flowed to the floor drain collector tank in the radwaste building.

Corrective Action

A written procedure was prepared to implement removing interface blanks and installing valves 2-HCV-2-747 and 2-HCV-2-748. This procedure was followed and work was successfully completed on May 30, 1974. The Operations Supervisor held a discussion with all parties concerned on May 29, 1974. He stressed that greater care must be exercised in clearance for work to be done. Discussion was also held with the Shift Engineer by the Plant Superintendent.