

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE
37401



September 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 1 -
DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - ABNORMAL
OCCURRENCE REPORT BFAO-50-259/7447W

The enclosed report is to provide details concerning HPCI failure to start 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 September 18, 1974.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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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ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-50-259/7447W
Report Date: September 27, 1974
Occurrence Date: September 18, 1974
Facility: Browns Ferry Nuclear Plant unit 1

Identification of Occurrence

HPCI failure to start.

Conditions Prior to Occurrence

The reactor was at approximately 95-percent power.

Description of Occurrence

During routine surveillance testing, HPCI failed to start on the first attempt. The run light for the auxiliary oil pump was on, but the stop valve failed to open. The turbine low bearing oil pressure alarm was received and would not clear until the system was shut down. An operator was dispatched to the HPCI room to inspect the system. After inspecting the system and finding nothing abnormal, he started the auxiliary oil pump locally; and the stop and control valves opened satisfactorily. The surveillance test was again initiated and HPCI performed satisfactorily.

Designation of Apparent Cause of Occurrence

The movable contact of the auxiliary oil pump motor contactor was found to be dragging against the inside of the arc chute. It is believed this caused the contact to hang preventing the auxiliary oil pump motor from starting.

Analysis of Occurrence

The failure of the auxiliary oil pump to start on automatic initiation caused HPCI to be inoperable. There was no damage to systems, components, or structures as a result of HPCI failure to start. There was no jeopardy to reactor safety as other engineered safeguard systems were operable during the period HPCI was inoperable. There were no adverse effects on the health or safety of the public as a result of this failure.

Corrective Action

The movable and stationary contacts were cleaned and realigned. The contactor was operated several times to ensure proper clearance between the movable contact and the arc chute. The auxiliary oil pump was started several times, and the contactor operation was normal. Operation of the stop and control valves and the oil system was observed to ensure proper operation. The oil pressure was normal and the stop and control valves operated satisfactorily. The unit 1 HPCI auxiliary oil pump motor contactor was inspected and found to be functioning satisfactorily.

Failure Data

The contactor is a General Electric Company contactor, catalog No. 1C2800-1617B2H. The coil is for 230/250V d-c operation.