

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE
37401



October 5, 1973

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-7318W

The purpose of this report is to provide details of the HPCI inverter
power supply fuse failure which occurred on September 29, 1973, at
Browns Ferry Nuclear Plant.

Description of the Incident

At 10:20 a.m. on September 29 during startup testing with the reactor
at 600 psig, a fuse failed in the HPCI inverter power supply. The
fuse was replaced and the HPCI was operable within one minute. The
HPCI was not in operation at the time of the failure nor is there any
known plant operation or action which contributed to this failure.

Investigation and Corrective Action

This occurrence is similar to a previous failure reported to you on
September 18 as BFAO-739W. Following that occurrence, General Electric
Company and Topsz Electronics, the inverter manufacturer, modified the
inverter by replacing the ZN689 500V breakover voltage SCR's with
ZN690 600V breakover voltage SCR's and adding a GE MOV-V 250 LA40
filtering network to the input to protect against voltage spikes. On
September 18 the modified inverter was installed and had been operating
satisfactorily until this fuse failure. No increased surveillance is
considered necessary since failure is annunciated in the main control
room. The power supply has been operating satisfactorily since the

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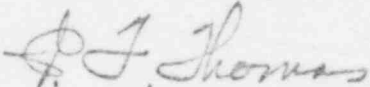
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fuse was replaced on September 29. The cause of the failure and possible corrective action is under continuing investigation. When a resolution is reached, you will be advised.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



E. F. Thomas
Director of Power Production

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