TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

April 25, 1975

Mr. Benard C. Rusche
Director of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Rusche:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 - DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - ABNORMAL OCCURRENCE REPORT BFAO-50-259/757W

The enclosed report is to provide details concerning LPCI injection valve FCV-74-32 which became inoperable electrically 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.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

for E. F. Thomas
Director of Power Production

Enclosure
CC (Enclosure):
Mr. Norman C. Moseley, Director
U.S. Nuclear Regulatory Commission
Regional Office
230 Peachtree Street, NW., Suite 818
Atlanta, Georgia 30303

4089

ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-50-259/757W
Report Date: April 25, 1975
Occurrence Date: April 16, 1975
Facility: Browns Ferry Nuclear Plant unit 1

Identification of Occurrence

On April 16, 1975, LPCI injection valve FCV-74- 2 became inoperable electrically.

Conditions Prior to Occurrence

Unit 1 was in a cold shutdown condition following the cable tray fire of March 22, 1975.

Description of Occurrence

During the performance of a valve operability surveillance test, the drive motor became separated from the valve operator of FCV-74-52 making the valve inoperable electrically.

Designation of Apparent Cause of Occurrence

Four bolts securing the drive motor to valve FCV-74-52 became loose permitting the motor to vibrate. This vibration caused fatigue failure of the bolts.

Analysis of Occurrence

When the motor failed, the valve was positioned for, and remained at, the desired flow setting for normal shutdown cooling. The valve was operable in the manual mode if valve movement had been required. Loop 2 was operable and could have provided emergency core cooling had it been required. There were no adverse effects to the public health or safety or damage to the systems, components, or structures as a result of this occurrence.

Corrective Action

A spare motor was installed and functionally tested. A visual inspection for loose fasteners and motors has been made on both units 1 and 2 of all RHR motor-operated valves that are required for LPCI mode.

Failure Data

Manufacturer - Walworth
Size - 24"
Type - Angle Valve
Operator - Limitorque SMB
USAS - 600 at 850°F.
WOG - 1,440 at 100°F.

Previous failures are reported on the following abnormal occurrence reports:

BFAO-50-260/7435W - Unit 2 FCV-74-66
BFAO-50-260/7432W - Unit 2 FCV-74-66