



831 Power Building
TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

Files

May 9, 1975

Mr. Donald F. Knuth, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Knuth:

BROWNS FERRY NUCLEAR PLANT UNIT 3 - REPORTABLE DEFICIENCY -
AUXILIARY SWITCHES IN BREAKER COMPARTMENTS OPERATING
IMPROPERLY - IE CONTROL NO. H00479F2

Initial report of the subject deficiency was made on January 15, 1975, and followed by our February 14, 1975, letter, J. E. Gilleland to Donald F. Knuth. In compliance with paragraph 50.55(e) of 10 CFR Part 50, we submit the enclosed final report of the deficiency.

Very truly yours,

J. E. Gilleland
Assistant Manager of Power

Enclosure
CC (Enclosure):

Mr. Norman C. Moseley, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
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ENCLOSURE
BROWNS FERRY NUCLEAR PLANT UNIT 3
IE CONTROL NO. H00479F2
4-kV SHUTDOWN BOARDS - AUXILIARY SWITCHES IN BREAKER
COMPARTMENTS OPERATING IMPROPERLY
FINAL REPORT

Description of Occurrence

On November 19, 1974, the MH switches located on the left-hand side of the unit 3 4-kV shutdown breaker compartments were found to be overtraveling past the closing point and opening the switch contacts. The malfunction was discovered during a functional test of the shutdown breakers. The breakers had not gone through pre-operational testing at that time.

Cause of Deficiency

After investigation, General Electric found that the problem of overtraveling was caused by the movement arm connected to the MH switch. The arms on the unit 3 MH switches had not been consistently keyed at the proper 45° angle and therefore overtraveled causing the switch contact to open.

Safety Implications

The MH switches are a part of the circuit device providing power to the unit 3 core spray pumps, RHR pumps, and the RHR service water pumps. Failure of the subject breakers would cause the above equipment to be inoperable.

The deficiency was caused by improper installation. It was discovered during an equipment functional check. The deficiency could not have gone undetected through the series of functional tests and the preop testing of the unit.

Corrective Action

The movement arms on the subject switches are only used on the unit 3 shutdown boards. The units 1 and 2 shutdown boards use arms of a different make which do not allow overtravel. New arms have been installed on all unit 3 4-kV shutdown boards; they have been tested, and now function properly.