



831 Power Building
TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

September 11, 1976
February

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

Dear Dr. Knuth:

BROWNS FERRY NUCLEAR PLANT UNITS 2 AND 3 - REPORTABLE DEFICIENCY -
USE OF IMPROPER SCHEDULE PIPE IN STANDBY LIQUID CONTROL SYSTEM

Initial report of the subject reportable deficiency was made to
G. R. Klingler, NRC-IE, Region II, on January 12, 1976. 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
J. E. Gilleland
Assistant Manager of Power

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COMMISSION
INSPECTION & ENFORCEMENT

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ENCLOSURE

BROWNS FERRY NUCLEAR PLANT UNITS 2 AND 3

USE OF IMPROPER SCHEDULE PIPE IN STANDBY LIQUID CONTROL SYSTEM

DDR 225 - FINAL REPORT

Description of Occurrence

While examining documents associated with a change in the Standby Liquid Control System (SLCS), an engineer discovered that an incorrect schedule of pipe had been called for on a work drawing which had been revised by an earlier change. This led to installation of an incorrect schedule of piping in the SLCS in units 2 and 3.

Cause of the Deficiency

The SLCS pump discharge relief valve piping for units 2 and 3 had been modified by raising the relief valves approximately eight feet. A revised work drawing issued for this modification inadvertently referenced schedule 40 pipe instead of the required schedule 80.

Section 3.8 of the Browns Ferry Nuclear Plant FSAR states that the design pressure of the SLCS is 1500 psig. In the temperature range experienced by the SLCS, schedule 40 pipe has a maximum working pressure below this requirement. Schedule 80 has a maximum working pressure above the design pressure.

Safety Implications

The SLCS is a safety-related system. Since the schedule 40 pipe has a maximum working pressure lower than the design pressure, it is conceivable that the schedule 40 pipe could have ruptured at some time during the plant's operating history. Such a rupture would incapacitate the SLCS since the rupture would have occurred downstream of the SLCS pumps. The pumps would then feed the break.

The SLCS valving arrangement keeps it isolated from the primary reactor coolant pressure boundary. Thus a rupture in the SLCS would not lead to a loss of coolant accident.

Description of Corrective Action

The schedule 40 pipe will be replaced with schedule 80 pipe.

Means Taken to Prevent a Recurrence

The documentation for the earlier modification has been reviewed to ensure that the correct schedule pipe is referenced.