

PRECURSOR DESCRIPTION AND DATA

NSIC Accession Number: 95040

Date:

Title: HPCI Injection Valves and RCIC Fail at Browns Ferry 2

The failure sequence was:

1. The HPCI injection valve failed to open during post-maintenance testing of this valve.
2. RCIC was then initiated, however, it failed to show any speed indication. The seat holding the valve operative was broken and a printed circuit board in the tachometer was damaged.

Corrective action:

1. The broken valve operator seats were replaced.
2. A new circuit board was installed in the RCIC tachometer.

Design purpose of failed system or component:

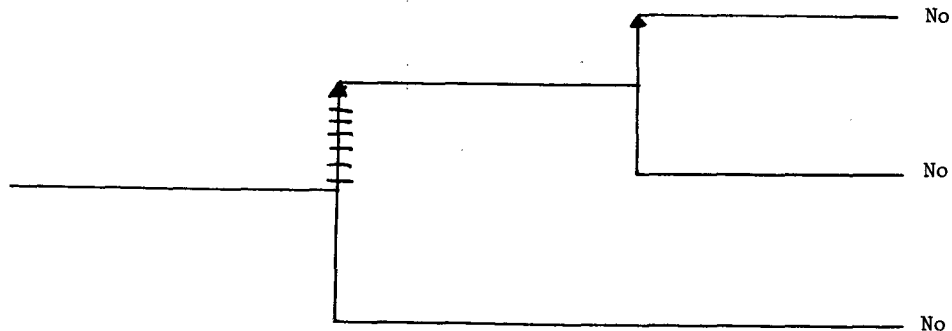
1. RCIC provides a source of water should the reactor become isolated.
2. HPCI is a source of high pressure cooling water given a small LOCA.

Unavailability of system per WASH 1400: * RCIC: $8.0 \times 10^{-2}/D$
HPCI: $8.8 \times 10^{-2}/D$

Unavailability of component per WASH 1400: * MOV *failure to operate: $1.0 \times 10^{-3}/D$

* Unavailabilities are in units of per demand D^{-1} . Failure rates are in units of per hour HR^{-1} .

HPCI Test Underway With The Reactor At 5% Power	HPCI Injection Valve Fails To Open	RCIC Initiates But Turbine Fails To Develop Speed	Potential Severe Core Damage
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NSIC 95040 — Actual Occurrence of HPCI Injection Valves and RCIC Fail at Browns Ferry 2

CATEGORIZATION OF ACCIDENT SEQUENCE PRECURSORS

NSIC ACCESSION NUMBER: 95040

DATE OF LER: August 23, 1974

DATE OF EVENT:

SYSTEM INVOLVED: RCFC, HPCI

COMPONENT INVOLVED: Valves, tachometer circuit boards.

CAUSE: Mechanical Failure

SEQUENCE OF INTEREST: Loss of Feedwater

ACTUAL OCCURRENCE: HPCI Injection Valves and RCIC Fail at Browns Ferry 2

REACTOR NAME: Browns Ferry 2

DOCKET NUMBER: 260

REACTOR TYPE: BWR

DESIGN ELECTRICAL RATING: 1065 MWe

REACTOR AGE: .09 yr

VENDOR: General Electric

ARCHITECT-ENGINEERS: TVA

OPERATORS: TVA

LOCATION: 10 miles NW of Decatur, AL

DURATION: 360(a) hours

PLANT OPERATING CONDITION: Operating at 5% power

SAFETY FEATURE TYPE OF FAILURE: (a) inadequate performance; (b) failed to start;
(c) made inoperable; (d) _____

DISCOVERY METHOD: Operational Event.

COMMENT: No LER