

PRECURSOR DESCRIPTION AND DATA

NSIC Accession Number: 154451

Date: February 12, 1980

Title: Inadvertent Opening of PORV at Haddam Neck

The failure sequence was:

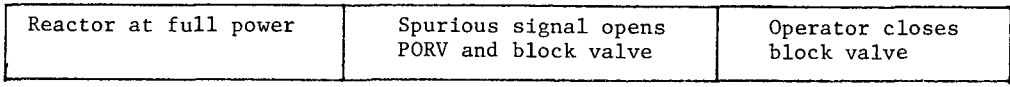
1. With the reactor at full power, spurious signal to the PORV and its isolation block valve was initiated in Pressurizer Pressure Control Channel 1.
2. Both valves opened and the RCS depressurized to 1992 psig.
3. The PORV and its associated block valve were remote-manually closed within approximately 10 seconds of the start of the transient. RCS pressure was restored to greater than 2000 psig within 2 minutes, terminating the transient.

Corrective action:

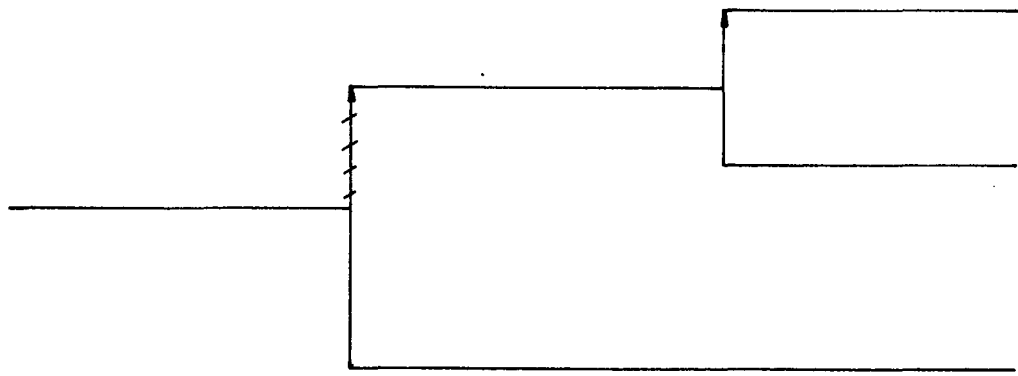
Investigation and testing did not reveal the source of the problem. The channel and valve controls were placed in the normal operating mode.

Design purpose of failed system or component:

PORVs are designed to prevent challenges to the main safety valves and to assist in control of RCS pressure.



Potential  
Severe  
Core  
Damage



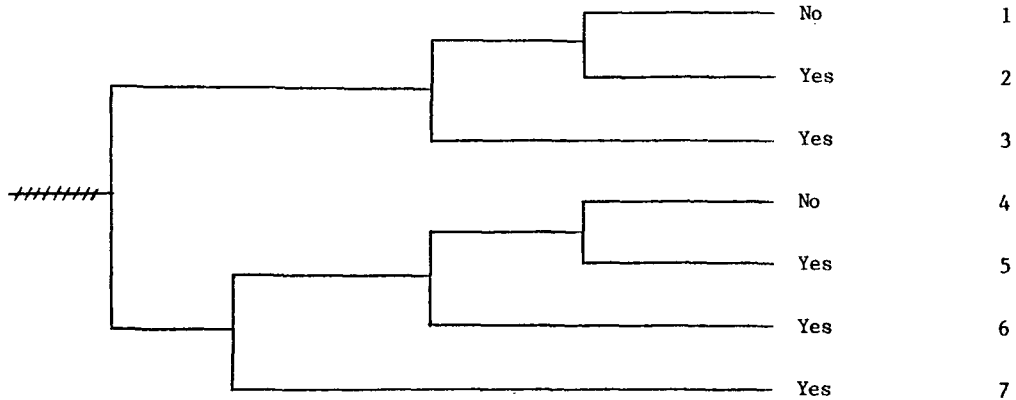
No

No - small-break LOCA  
mitigation capability  
prevents core damage

No

NSIC 154451 - Actual Occurrence for Inadvertent Opening of PORV at Haddam Neck

Small LOCA	Reactor Trip	Auxiliary Feedwater and Secondary Heat Removal	High Pressure Injection	Low Pressure Recirculation and LPR/HPI Cross-Connect	Potential Severe Core Damage	Sequence No.
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NSIC 154451 - Sequence of Interest for Inadvertent Opening of PORV at Haddam Neck

CATEGORIZATION OF ACCIDENT SEQUENCE PRECURSORS

NSIC ACCESSION NUMBER: 154451

LER NO.: 80-04/3L

DATE OF LER: February 12, 1980

DATE OF EVENT: February 4, 1980

SYSTEM INVOLVED: Pressurizer relief system

COMPONENT INVOLVED: PORV and block valve

CAUSE: Spurious actuation signal

SEQUENCE OF INTEREST: Small break LOCA

ACTUAL OCCURRENCE: Inadvertent opening of a PORV and block valve

REACTOR NAME: Haddam Neck

DOCKET NUMBER: 50-213

REACTOR TYPE: PWR

DESIGN ELECTRICAL RATING: 580 MWe

REACTOR AGE: 12.5 years

VENDOR: Westinghouse

ARCHITECT-ENGINEERS: Stone and Webster

OPERATORS: Connecticut Yankee Atomic Power Co.

LOCATION: 13 miles east of Meriden, Connecticut

DURATION: N/A

PLANT OPERATING CONDITION: Full power

TYPE OF FAILURE: Inadequate performance;  
inadvertent operation

DISCOVERY METHOD: Operational event

COMMENT: Actuation logic for the PORV and block valve has been modified from a one channel pressure signal to a 2 out of 3 channels to prevent spurious actuations.