



THE

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
631 PARK AVENUE  
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket Nos. 50-443  
50-444

March 31, 1980

Public Service Company of New Hampshire  
ATTN: Mr. W. C. Tallman  
President  
1000 Elm Street  
Manchester, New Hampshire 03105

Gentlemen:

The enclosed IE Information Notice No. 80-12, "Instrument Failure Causes Opening of PORV and Block Valve," is forwarded to you for information. No written response is required. If you desire additional information regarding this matter, please contact this office.

Sincerely,

*Boyce H. Grier*  
Boyce H. Grier  
Director

Enclosures:

1. IE Information No. 80-12
2. List of Recently Issued IE Information Notices

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cc w/encls:  
John DeVincentis, Project Manager

8004150302

ENCLOSURE 1

SSINS No.: 6870  
Accession No.:  
8002280654

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
WASHINGTON, D.C. 20555

IE Information Notice No.: 80-12  
Date: March 31, 1980  
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INSTRUMENT FAILURE CAUSES OPENING OF PORV AND BLOCK VALVE

Description of Circumstances:

On August 13, 1979, during full, steady-state power operation at the Connecticut Yankee Haddam Neck Plant, the pressurizer power operated relief valve (PORV) and its isolation (block) valve opened as a result of failure of a light source in the sigma bistable of the pressurizer pressure controller. The failure of the light source was equivalent in control system response to an overpressure condition in the pressurizer. By system design both PORV and block valves are closed during normal operation and therefore both valves are required to open in response to an overpressure condition. The opening of the PORV and block valve allowed the pressurizer pressure to drop from its normal value of 2000 psig to 1950 psig before the PORV and block valves could be closed. The operator immediately overrode the open signal to the valves and closed the valves to stop depressurization. The pressurizer pressure then immediately returned to normal.

The light source was subsequently replaced in the bistable and the pressure control system was returned to normal.

The licensee reported that failures of light sources in the bistable of this pressure controller and in other similar plant bistables had been experienced previously. Also, subsequently on February 4, 1980, a spurious signal from the pressure controller caused both PORV and block valve to open. In both events, the operator responded immediately and effectively to limit the consequences of the event to a relatively mild pressure transient on the reactor coolant system. The licensee also indicated that it had changed out the type of bistable with a solid state design which does not depend on a light source and which is expected to be more reliable.

This information is provided as notification of a possibly significant matter. It is expected that recipients will review the information for possible applicability to their facilities. No specific action or response is requested at this time. If you have questions regarding this matter, please contact the Director of the appropriate NRC Regional Office.

ENCLOSURE 2

IE Information Notice No. 80-12  
Date: March 31, 1980  
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RECENTLY ISSUED IE INFORMATION NOTICES

Information Notice No.	Subject	Date Issued	Issued to
79-37	Cracking in Low Pressure Turbine Discs	12/31/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
80-01	Fuel Handling Events	1/4/80	All Power Reactor Facilities with an OL or CP
80-02	8X8R Water Rod Lower End Plug Wear	1/25/80	All BWR Facilities with an OL or CP
80-03	Main Turbine Electro-hydraulic Control System	1/31/80	All Power Reactor Facilities with an OL or CP
80-04	BWR Fuel Exposure in Excess of Limits	2/4/80	All BWR Facilities with an OL or CP
80-05	Chloride Contamination of Safety Related Piping and Components	2/8/80	All Power Reactor Facilities with an OL or CP and applicants for a CP
80-06	Notification of Significant Events	2/27/80	All Power Reactor Facilities with an OL and applicant for OL
80-07	Pump Fatigue Cracking	2/29/80	All Power Reactor Facilities with an OL or CP
80-08	The States Company Sliding Link Electrical Terminal Block	3/7/80	All Power Reactor Facilities with an OL or CP
80-09	Possible Occupational Health Hazard Associated with Closed Cooling Systems for Operating Power Plants	3/7/80	All Power Reactor Facilities with an OL or CP
80-10	Partial Loss of Non-Nuclear Instrument System Power Supply During Operation	3/7/80	All Power Reactor Facilities with an OL or CP
80-11	Generic Problems With ASCO Valves in Nuclear Applications including Fire Protection Systems	3/14/80	All Power Reactor Facilities with an OL or CP, Fuel Fabrication and Processing Facilities