



Docket No. 50-271

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

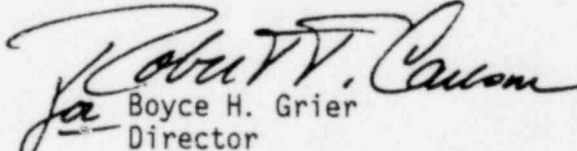
JAN 31 1980

Vermont Yankee Nuclear Power Corporation
ATTN: Mr. Robert L. Smith
Licensing Engineer
25 Research Drive
Westborough, Massachusetts 01581

Gentlemen:

This Information Notice is provided as an early 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 further NRC evaluations so indicate, an IE Circular or Bulletin will be issued to recommend or request specific licensee actions. If you have questions regarding this matter, please contact this office.

Sincerely,


Robert V. Cannon
Boyce H. Grier
Director

Enclosures:

1. IE Information Notice No. 80-03
2. List of Recently Issued IE Information Notices

CONTACT: D. L. Capton
(215-337-5339)

cc w/encls:

W. F. Conway, Plant Superintendent
Ms. J. Abbey, Technical Secretary
Mr. J. E. Griffin, President

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ENCLOSURE 1

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

SSINS No.: 6870
Accession No.:
7912190666

IE Information Notice No. 80-03
Date: January 31, 1980
Page 1 of 1

MAIN TURBINE ELECTROHYDRAULIC CONTROL SYSTEM

Description of Circumstances:

On September 6, 1979, while performing a routine startup of the Trojan Nuclear Plant, a speed control problem was encountered during warmup of the General Electric turbine and increase of turbine speed to normal operating speed (1800 RPM). Technicians were notified and trouble shooting in accordance with the technical manual was commenced to resolve the apparent oscillation between the primary and backup speed control circuits which was hindering normal turbine startup operations. The technical manual indicates that it is permissible to remove either the primary or backup low value gate circuits which contain speed and acceleration error amplifiers. Upon removal of the primary low value gate circuit card, the backup card amplifiers, coming from a saturated condition, became the controlling circuit. During the shift in control circuits (primary to backup), the speed/acceleration error signal went to maximum which resulted in a full open signal to the turbine control valves. Under existing plant conditions this appeared to the safety injection system as a major steam break downstream of the main steam isolation valves which resulted in a safety injection system actuation and reactor trip.

The Electrohydraulic Control System (EHC) technical manual indicated that slight load changes are likely when a low value gate card is removed. The effect on an unloaded turbine appears to be much more significant and tests conducted by Trojan personnel indicate that the transient is initiated whether the turbine is at a set speed or in an acceleration mode to a set speed. Discussions with General Electric personnel by the licensee have been initiated in an attempt to verify the phenomenon observed and, if applicable, alert other facilities which operate a turbine with a MK 1 EHC System regarding the potential operation of the control valves when trouble shooting the speed control unit in accordance with existing instructions.

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*GEK Instruction Book 11381-D, "Speed Control Unit", Maintenance Section, Page 4.

ENCLOSURE 2

IE Information Notice No. 80-03
Date: January 31, 1980
Page 1 of 1

RECENTLY ISSUED IE INFORMATION NOTICES

Information Notice No.	Subject	Date Issued	Issued to
79-28	Overloading of Structural Elements Due to Pipe Support Loads	11/16/79	All Power Reactor Facilities with an Operating License (OL) or Construction Permit (CP)
79-29	Loss of Nonsafety Related Reactor Coolant System Instrumentation During Operation	11/19/79	All Power Reactor Facilities with an OL or CP
79-30	Reporting of Defects and Noncompliances, 10 CFR Part 21	12/6/79	All Power Reactor Facilities with an OL or CP
79-31	Use of Incorrect Amplified Response Spectra (ARS)	12/13/79	All Power Reactor Facilities with an OL or CP
79-32	Separation of Electrical Cables for HPCI and ADS	12/21/79	All Power Reactor Facilities with an OL or CP
79-33	Improper Closure of Primary Containment Access Hatches	12/21/79	All Power Reactor Facilities with an OL or CP
79-34	Inadequate Design of Safety-Related Heat Exchangers	12/31/79	All Power Reactor Facilities with an OL or CP
79-35	Control of Maintenance and Essential Equipment	12/31/79	All Power Reactor Facilities with an OL or CP
79-36	Computer Code Defect in Stress Analysis of Piping Elbow	12/31/79	All Power Reactor Facilities with an OL or CP
79-37	Cracking in Low Pressure Turbine Discs	12/31/79	All Power Reactor Facilities with an OL or 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