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

Docket No. 50-271

NOV 16 1979

Vermont Yankee Nuclear Power Corporation
ATTN: Mr. Robert H. Groce
Licensing Engineer
20 Turnpike Road
Westborough, Massachusetts 01581

Gentlemen:

The enclosed IE Circular No. 79-22, "Stroke Times for Power Operated Relief Valves," is forwarded to you for information. No written response is required. Should you have any questions related to your understanding of this matter, please contact this office.

Sincerely,

for Boyce H. Grier
Director

Enclosures:
1. IE Circular No. 79-22
2. List of Recently Issued Circulars

CONTACT: D. L. Caphton
(215-337-5263)

cc w/encls:
W. F. Conway, Plant Superintendent
Ms. J. Abbey, Technical Secretary

1500 322

7912050065

ENCLOSURE 1

SSINS: 6830
Accession No.:
7908220142

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

DUPLICATE

IE Circular No. 79-22
Date: November 16, 1979

STROKE TIMES FOR POWER OPERATED RELIEF VALVES

Description of Circumstances:

Most PWRs utilize power-operated relief valves (PORVs) to prevent overpressurization of the reactor coolant system when the reactor is at low temperature. On April 13, during a pressure transient at Robinson 2, the PORVs did not function as rapidly as intended. The estimated stroke time for the PORVs was three to five seconds whereas the intended stroke time is two seconds. As a result, the pressure transient did approach a pressure limit which is based on nil ductility considerations. Prior to April 13, the PORVs had not been used or exercised since February, 1978, when they had been repacked and stroked. Although the valve stems were scored at that time, stroke times were satisfactory. The licensee and the valve manufacturer believe that the scored stems and the 14-month interval without exercise resulted in poor performance of the PORVs.

Recommended Actions for Licensees' Consideration:

All holders of PWR operating licenses or construction permits should be aware of the potential problem of the type discussed above. Because of the generic implications in this matter, it is recommended that both licensees of operating facilities and holders of construction permits conduct a review to determine if periodic serveillance of PORVs is necessary to assure that the PORVs will perform as intended.

No written response to this Circular is required. If you require additional information regarding these matters, contact the Director of the appropriate NRC Regional Office.

1500 323

ENCLOSURE 2

IE Circular No. 79-22
Date: November 16, 1979
Page 1 of 1

RECENTLY ISSUED CIRCULARS

Circular No.	Subject	First Date of Issue	Issued To
79-15	Bursting of High Pressure Hose and Malfunction of Relief Valve "O" Ring in Certain Self-Contained Breathing Apparatus	8/8/79	All Materials Priority I, Fuel Cycle and Operating Power Reactor Licensees
79-16	Excessive Radiation Exposures to Members Of The General Public And A Radiographer	8/16/79	All Radiography Licensees
79-17	Contact Problem in SB-12 Switches on General Electric Metalclad Circuit Breakers	8/14/79	All Power Reactor Licensees with an OL or CP
79-18	Proper Installation of Target Rock Safety-Relief Valves	9/10/79	All Power Reactor Licensees with an OL or CP
79-19	Loose Locking Devices on Ingersoll-Rand Pumps	9/13/79	All Power Reactor Licensees with an OL or CP
79-20	Failure of GTE Sylvania Relay, Type PM Bulletin 7305, Catalog 5U12-11-AC with a 120V AC Coil	9/24/79	All Power Reactor Licensees with an OL or CP
79-21	Prevention of Unplanned Releases of Radioactivity	10/19/79	All Power Reactor Licensees with an OL or CP