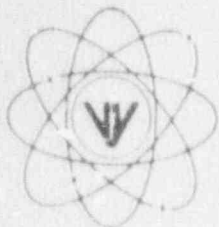


VERMONT YANKEE NUCLEAR POWER CORPORATION



P.O. Box 157, Governor Hunt Road
Vernon, Vermont 05354-0157
(802) 257-7711

May 1, 1991
VYV # 91-119

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

REFERENCE: Operating License DPR-28
Docket No. 50-271
Reportable Occurrence No. LER #91-08

Dear Sirs:

As defined by 10 CFR 50.73, we are reporting the attached Reportable Occurrence as LER #91-08.

This report was originally scheduled for submittal on 04/24/91, however, due to a plant SCRAM which occurred on that date, a one week extension was requested and approved in a telecon between Mr. J.P. Pelletier of Vermont Yankee and Mr. J. Rogge of NRC Region I on 04/24/91.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Donald A. Reid
Plant Manager

cc: Regional Administrator
USNRC
Region I
475 Allendale Road
King of Prussia, PA 19406

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PDR ADOCK 05000271
S PDR

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EXPIRES 4/30/92

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY
WITH THIS INFORMATION COLLECTION REQUEST:
50.0 HRS. FORWARD COMMENTS REGARDING
BURDEN ESTIMATE TO THE RECORDS AND REPORTS
MANAGEMENT BRANCH (P-530), U.S. NUCLEAR
REGULATORY COMMISSION, WASHINGTON, DC
20555, AND TO THE PAPERWORK REDUCTION
PROJECT (3160-0104), OFFICE OF MANAGEMENT
AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NO. (2)

0 5 0 0 0 2 7 1 0 1 OF 0 4

PAGE (3)

TITLE (4)

Potential Environmental Conditions Not Previously Evaluated as a Result of Omission From
Original Line Break Analyses

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)																
MONTH	DAY	YEAR	YEAR	SEQ. #	REV#	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NO.(S)															
0	3	2	5	9	1	9	1	-	0	0	8	-	0	0	0	5	0	1	9	1	0	5	0	0	0
OPERATING MODE (9)										THIS REPORT IS SUBMITTED PURSUANT TO REQ'MTS OF 10CFR 5: <input checked="" type="checkbox"/> ONE OR MORE (11)															
POWER LEVEL (10) 1 0 0										20.402(b) 20.405(c) 50.73(a)(2)(iv) 73.71(b)															
										20.405(a)(1)(i) 50.36(c)(1) 50.73(a)(2)(v) 73.71(c)															
										20.405(a)(1)(ii) 50.36(c)(2) 50.73(a)(2)(vii) OTHER:															
										20.405(a)(1)(iii) 50.73(a)(2)(i) 50.73(a)(2)(viii)(A)															
										20.405(a)(1)(iv) X 50.73(a)(2)(ii) 50.73(a)(2)(viii)(B)															
										20.405(a)(1)(v) 50.73(a)(2)(iii) 50.73(a)(2)(x)															

LICENSEE CONTACT FOR THIS LER (12)

NAME

TELEPHONE NO.

DONALD A. REID, PLANT MANAGER

AREA
CODE

8 0 2 2 5 7 - 7 7 1 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYST	COMPNT	MFR	REPORTABLE TO NPRDS	CAUSE	SYST	COMPNT	MFR	REPORTABLE TO NPRDS
N/A					N/A				
N/A					N/A				

SUPPLEMENTAL REPORT EXPECTED (14)

EXPECTED

MO DA YR

SUBMISSION

DATE (15)

☐ YES (If yes, complete EXPECTED SUBMISSION DATE) ☒ NO

ABSTRACT (Limit to 1400 spaces, i.e., approx. fifteen single-space typewritten lines) (16)

On 03/25/91, at approximately 1805 hours with the plant at 100% power, it was determined that failure of house heating steam lines had not been addressed in previous High Energy Line Break (HELB) analyses. This could create environmental conditions outside those previously evaluated. This was identified as a result of an investigation relative to USNRC Info. Notice 90-053 that notified Licensees of similar conditions at other facilities.

A Justification for Continued Operation (JCO) was prepared and approved on 04/01/91, allowing continued operation of the Heating system for the remainder of the heating season.

The House Heating System was erroneously omitted from HELB analyses performed in 1973 and 1974

A corrective action plan will be developed, evaluated and implemented; and a review will be performed of other systems to determine if there were any other similar omissions from the HELB analyses.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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PROJECT (3160-0104), OFFICE OF MANAGEMENT
AND BUDGET, WASHINGTON, DC 20603.

UTILITY NAME (1)	DOCKET NO. (2)	LER NUMBER (4)			PAGE (3)		
		YEAR	SEQ. #	REV#			
VERMONT YANKEE NUCLEAR POWER STATION	0500027191	91	008	00	02	OF	04

TEXT (If more space is required, use additional NRC Form 366A) (17)

DESCRIPTION OF EVENT

On 03/25/91, at approximately 1805 hours with the plant at 100% power, it was determined that failure of non-seismic piping in the house heating steam lines had not been addressed in previous High Energy Line Break (HELB) analyses. Failure of house heating steam lines could have the potential to expose safety related electrical equipment to environmental conditions outside those evaluated in the Environmental Qualification (EQ) Program. This could involve existing EQ equipment and may also have the potential to make some plant areas, which were previously only considered mild EQ environments, become harsh environments.

This could potentially result in safety related equipment in the following areas being adversely affected:

Diesel Generator Rooms
Control Room, Computer Room and Cable Vault
Turbine Building HVAC Room
Condensate Storage Tank Room

This was identified as a result of an investigation relative to USNRC Info. Notice 90-053 that notified Licensees of similar conditions at other facilities.

In addition, there is some heating steam piping in the Reactor Building. HELB analyses have been performed for the Reactor Building and equipment qualified for the resulting environments, however, a heating steam HELB was not included. Although reactor building equipment has been qualified for various HELB's, it cannot be readily determined without additional analysis that a heating steam HELB is bounded by these breaks.

The condition was addressed in accordance with the Vermont Yankee EQ Plan which requires processing a Nonconformance report (NCR) with disposition to be provided within seven (7) days of identification of the discrepancy. For situations involving a lack of assurance of qualification, The Plan does not require immediately declaring the equipment or components inoperable.

An NCR was initiated on 03/27/91 which included a Justification For Continued Operation (JCO) allowing continued operation of the heating system for the remainder of the heating season. It was concluded that the probability of failure of the system under normal conditions is low. The NCR was reviewed by the Plant Operations Review Committee and Plant Management and was approved on 04/01/91.

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		YEAR	SEQ. #	REV#			
VERMONT YANKEE NUCLEAR POWER STATION	05000271	91	-008	-00	03	OF	04

TEXT (If more space is required, use additional NRC Form 366A) (17)

DESCRIPTION OF EVENT (cont.)

In conjunction with the evaluation of this event, it was also determined that the recognition of the applicability of USNRC Info. Notice 90-053 to Vermont Yankee did not occur in a timely manner. Although no specific action or response was required by the Notice, the Vermont Yankee Operating Experience Review and Assessment/Commitment Tracking process normally provides for timely review and assessment of information pertinent to plant operation or safety. The Notice was received on 08/27/90 and specific actions were not initiated to address the reportability and safety implications until 03/25/91. Significant efforts had taken place to review and evaluate the condition, however, the process did not result in the potential significance being raised to the appropriate level of plant management in a timely manner.

CAUSE OF EVENTS

HELB Event

The root cause of the HELB event is personnel error in that the House Heating System was omitted from HELB analyses performed in 1973 and 1974. The omission may have taken place because it was felt to be bounded by larger HELBs.

Lack of Timely Assessment

The root cause of the failure to provide a timely assessment of USNRC Info. Notice 90-053 is attributed to an incomplete procedure. Procedure AP 0028, "Operating Experience Review and Assessment/Commitment Tracking" which governs review of similar documents for potential impact on plant operation and safety, does not provide adequate guidance as to what actions should be taken if the item does potentially impact plant operations or safety. In this case, the reviewing individuals concluded that the condition was potentially applicable on 09/27/90, but the subsequent actions resulted in additional engineering evaluation without the condition being raised to appropriate levels of plant management.

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		YEAR	SEQ. #	REV#		
VERMONT YANKEE NUCLEAR POWER STATION	05000271	91	-	008	-	00

TEXT (If more space is required, use additional NRC Form 356A) (17)

ANALYSIS OF EVENT

Detailed engineering evaluation of the House Heating System was performed and it was concluded that due to the nature of the materials, the welded construction and the relatively low system pressures that there is reasonable assurance that the heating steam piping and associated equipment will continue to operate under normal operating conditions as originally designed without gross failure. It is also concluded that the plant and the heating system can operate for the remainder of the heating season with no significant impact on safety. Since the House Heating System was not specifically analyzed for seismic loading, plant procedures have been revised in the interim to require shutdown of the house heating system following a seismic event.

CORRECTIVE ACTIONS

1. Engineering evaluation of the House Heating system will continue and an appropriate corrective action plan will be developed, evaluated and implemented. The corrective action plan is forecast for completion by 06/21/91.
2. By 06/01/91, an engineering review will be performed of other systems to determine if there were any other similar omissions from the HELB analyses.
3. Procedure AP 0028, "Operating Experience Review and Assessment/Commitment Tracking" will be revised by 06/14/91 to include specific guidance as to what notifications and/or actions should be taken if a document under review is determined to potentially impact plant operations or safety.
4. A sample of other similar documents evaluated under the commitment tracking system will be reviewed by 06/14/91 to determine if appropriate actions were taken upon identification that plant operations or safety was affected.

ADDITIONAL INFORMATION

There have been no similar events reported in the last five years.