



VERMONT YANKEE NUCLEAR POWER CORPORATION

P. O. BOX 157
GOVERNOR HUNT ROAD
VERNON, VERMONT 05354

April 18, 1990
VYV# 90-090

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 90-005

Dear Sirs:

As defined by 10CFR50.73, we are reporting the attached Reportable Occurrence as LER 90-005.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

James P. Pelletier
Plant Manager

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

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PDR ADUCK 05000271
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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

PAGE (3)

0 1 OF 0 3

TITLE (4) INCOMPLETE EVALUATION OF CONTAINMENT SAMPLE DUE TO FAILURE TO FOLLOW PROCEDURES

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	8	9	0	9	0	-	0	0	5	-	0	0	0	4	1	8	9	0	N/A	0 5 0 0 0
THIS REPORT IS SUBMITTED PURSUANT TO REQ'MTS OF 10CFR §: <input checked="" type="checkbox"/> ONE OR MORE (11)																						
OPERATING MODE (9)		N		20.402(b)			20.405(c)			50.73(a)(2)(iv)			73.71(b)									
POWER LEVEL (10)		1 0 0		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)			X 50.73(a)(2)(I)			50.73(a)(2)(viii)(A)												
				20.405(a)(1)(iv)			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

JAMES P. PELLETIER, PLANT MANAGER

TELEPHONE NO.

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
SUBMISSION
DATE (15)

MO DA YR

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

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

On 03-15-90, while preparing for a scheduled maintenance outage, with the plant at 100% power, a containment air sample was obtained to determine if the containment could be vented directly to the stack. The sample was evaluated and venting to the stack was permitted.

On 03-28-90, Vermont Yankee discovered that an incomplete evaluation of the containment air sample was performed. A subsequent review of the results revealed that the criteria established in Technical Specifications Sect. 3.8.L.1 were not satisfied. A review of stack samples taken on 03-16-90 revealed that the stack effluent satisfied applicable criteria.

The root cause of this event was failure to follow procedures. The procedure required an evaluation be performed to ensure that applicable limits were met. The individual relied on a computer program (not referenced in the procedure) that they believed performed all the necessary calculations. The program did not perform all of the necessary calculations.

The individuals involved were instructed on the need to follow procedures. The computer program will also be revised to ensure that all of the necessary calculations are performed.

No similar events have been reported to the NRC in the last five years.

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

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

UTILITY NAME (1)	DOCKET NO. (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQ. #	REV#			
VERMONT YANKEE NUCLEAR POWER STATION	0500271	90	-005	-00	02	OF	03

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

DESCRIPTION OF EVENT

On 03-15-90, while preparing for a scheduled maintenance outage, with the plant at 100% power, a containment air sample was obtained to determine if the containment could be vented directly to the stack. The sample was evaluated and venting to the stack was permitted. Venting directly to the stack occurred on 03-16-90 from 1230 hrs. to 2135 hrs. and on 03-16-90 at 2232 hrs. to 03-22-90 at 0115 hrs.

On 03-28-90, while investigating an unrelated issue, Vermont Yankee discovered that an incomplete evaluation of the containment air sample was performed prior to venting the containment directly to the stack. A subsequent review of the results revealed that the criteria established in Technical Specifications Section 3.8.L.1. were not satisfied.

Technical Specifications Section 3.8.L.1 requires the criteria established in 10CFR20 Appendix B, Table 1 be satisfied. Table 1 limits the concentration of Xe-135 to $4.0E-6$ uci/ml and the concentration in the sample was $4.19E-6$ uci/ml. Additionally, the combined MPC requirements which limit the sum of the actual/allowables to less than or equal to 1.0, were not satisfied.

CAUSE OF EVENT

The root cause of this event was failure to follow procedures. The procedure required an evaluation be performed to ensure that applicable limits were met. The individual relied on a computer program (not referenced in the procedure) that they believed performed all the necessary calculations. Although the computer program indicated that venting to the stack was acceptable, the program did not perform all of the necessary calculations.

A secondary cause was inadequate review of the computer program. The program was reviewed in accordance with an existing procedure for the validation and verification of computer software. This review did not identify that all of the intended calculations were not performed. Vermont Yankee believes that this is an isolated incident and is confident that the process for preparing and reviewing computer software is adequate.

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

ANALYSIS OF EVENT

To evaluate the significance of the event, Vermont Yankee performed an evaluation of stack grab samples taken while venting was being performed directly to the stack. This evaluation revealed that the stack effluent satisfied applicable release criteria. This evaluation was performed using the applicable Off-site Dose Calculation Manual (ODCM) methodology.

Additionally, compliance with dose rate limits was continuously demonstrated since the plant stack activity monitor's setpoint is based on a value that corresponds to the off-site dose limits specified in the Technical Specifications.

Based on this, there were no potential adverse consequences to the public health and safety as a result of this event.

CORRECTIVE ACTIONS

The individuals involved were instructed on the need to follow procedures.

The individuals who performed the review of the computer program were instructed on the importance of performing a comprehensive review of the final computer program.

The computer program will be revised to ensure that all of the necessary calculations are performed, and the procedure changed accordingly. Other computer programs used for similar calculations were reviewed and no discrepancies were noted.

ADDITIONAL INFORMATION

No similar events have been reported to the NRC in the last five years.