



VERMONT YANKEE NUCLEAR POWER CORPORATION

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March 27, 1992

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 92-006

Dear Sirs:

As defined by 10 CFR 50.73, we are reporting the attached Reportable Occurrence as LER 92-006.

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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NRC Form 366 U.S. NUCLEAR REGULATORY COMMISSION (6-89)										APPROVED OMS NO. 3150-0104 EXPIRES 4/30/92 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 (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20663.											
LICENSEE EVENT REPORT (LER)																					
FACILITY NAME (1)										DOCKET NO. (2)					PAGE (3)						
VERMONT YANKEE NUCLEAR POWER STATION										0 5 0 0 0 2 7 1					0 1 OF 43						
TITLE (4)																					
QUARTER SCRAM WHILE SHUTDOWN, AS A RESULT OF THE WRONG FUSES BEING REMOVED FOR MAINTENANCE																					
EVENT DATE (5)					LER NUMBER (6)					REPORT DATE (7)					OTHER FACILITIES INVOLVED (8)						
MONTH	DAY	YEAR	YEAR	SEQ #	REVS	MONTH	DAY	YEAR	FACILITY NAMES					DOCKET NO. (8)							
0 3	0 7	9 2	9 2	- 0 0 6	- 0 0	0 3	2 7	9 2						0 5 0 0 0							
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO REQ'TS OF 10 CFR 5: CHECK ONE OR MORE (11)																			
N		20.402(b)					20.405(c)					XX 50.73(a)(2)(iv)					73.71(b)				
POWER LEVEL (10)		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)					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)(ix)									
LICENSEE CONTACT FOR THIS LER (10)																					
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	COMPONENT	MFR	REPORTABLE TO NRC	...	CAUSE	SYST	COMPONENT	MFR	REPORTABLE TO NRC	...										
N/A				NO	N/A				NO										
N/A					N/A														
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)					MO DAY YR						
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO											

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

On 3/7/92 at approximately 1245, with the reactor shutdown, two fuses were being removed for a tagging order to support work on the turbine thrust bearing detector. The wrong two fuses were removed causing one rod group (20 rods) to receive a SCRAM signal from a loss of power to their corresponding Reactor Protection System (RPS) channel. (EIIIS=JE) All control rods were fully inserted prior to the RPS initiation, therefore no further rod movement occurred. Immediate corrective actions were to re-install the fuses and reset the scram. The length of time the scram signal was present was approximately 1.5 minutes.

The root cause of this event was personnel error in that the technician failed to understand the location of the correct fuses that should have been removed.

The immediate corrective actions were to replace the two fuses that were removed in error and to reset the SCRAM signal. The job was put on hold until verification of the proper fuse locations were made. In addition, departmental training was given to all I&C technicians within the next week to stress the importance of fuse location verification.

NRC Form 366A U.S. NUCLEAR REGULATORY COMMISSION (6-89)		APPROVED OMS NO. 3150-0104 EXPIRES 4/30/92 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 20603.	
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION			
FACILITY NAME (1)	DOCKET NO (2)	LER NUMBER (6)	PAGE (3)
VERMONT YANKEE NUCLEAR POWER STATION	0 3 0 0 0 2 7 1	YEAR 9 2 - 0 0 6 - 0 0	REV # 0 2 OF 0 3

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

On 3/7/92 at the time of the event the reactor was shutdown with the reactor mode switch in Refuel. At 1245, two fuses were being removed for a tagging order to support work on the turbine thrust bearing wear detector. The wrong fuses were removed which resulted in the scram valves for one group of control rods (20 Rods) being deenergized. The first fuse identified on the tagging request was 5A-F8C in panel 9-15. The I&C technician went to panel 9-15, found terminal block "C" and removed the 8th fuse. The proper location for this fuse is terminal BB-F9. The fuse actually pulled (5A-F18E) removed the RPS Channel A (EII=JE) power from Scram Solenoid Group 2. The second fuse which should have been removed was 5A-F8D in panel 9-17. Again the I&C technician went to panel 9-17 terminal block "DD" and removed the 8th fuse. The proper location for this fuse is terminal BB-F9. The fuse actually pulled (5A-F7B) deenergized the logic relay for Main Steam Line High Radiation in the B1 channel of the RPS. This resulted in a half scram being generated in the B channel of RPS. With the Channel A power removed from the Group 2 scram solenoids due to the first fuse being removed, the half scram generated from the B RPS Channel resulted in all solenoids for Scram Group 2 being deenergized which would have inserted the group 2 rods had they not already been fully inserted.

When the half scram occurred on the RPS B1 channel the technician immediately recognized that the wrong fuses had been removed as this was not the expected result of removing the correct fuses. The fuses were immediately replaced and, after verifying that all conditions were proper the scram was reset.

The total time that the fuses were removed and the scram signal present was 1.5 minutes.

CAUSE OF EVENT

The cause of this event was personnel error. The Switching and Tagging order correctly identified each fuse to be pulled by its circuit identification number and Control panel where the fuse was located. However, the circuit identification number and Control Panel number does not identify the physical location of the fuse within the panel. The I&C Technician responsible for generating the Tagging Order Request and pulling the fuses failed to identify the correct terminal block location within each panel. This verification/identification for the fuses should have been made by referencing the "Vermont Yankee Control Room & Misc Panels I&C Circuit Fuse Selection Verification" book. This Vermont Yankee controlled document provides a listing of each fuses proper current rating, and provides a cross reference for each fuse by its circuit identification number and its panel/terminal block location. If the technician had referenced the Fuse Selection Verification Document he would have identified the proper fuse location within the panels.

ANALYSIS OF EVENT

There were minimal safety implications as a result of this event. At the time of this event all rods were fully inserted and no further rod movement occurred. The purpose of the RPS is to initiate automatic actions to protect the reactor in the event of an abnormal condition. RPS initiates on loss of power to its protective circuits, and causes a reactor scram if the proper logic is met. The removal of these fuses caused one group of the RPS to deenergize and perform its intended function. In addition, the maintenance for which the tagout was being performed can only be performed with the reactor shutdown. Therefore, there would be no chance that this specific type of event could occur during power operation with multiple rods withdrawn. The possibility of the wrong fuses being removed during normal operations is felt to be remote since this was an isolated case of personnel error and not a generic problem.

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FACILITY NAME (1)	DOCKET NO (2)	LER NUMBER (6)	
VERMONT YANKEE NUCLEAR POWER STATION	05000271	YEAR	REV #
		92	00
		SEQ #	PAGE (3)
		006	03 OF 03

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

CORRECTIVE ACTIONS

IMMEDIATE CORRECTIVE ACTIONS

1. Immediately replace the two fuses that were incorrectly removed. This allowed the reactor scram signal to be reset and all systems returned to normal.
2. The job was put on hold pending verification the proper fuse location.
3. Departmental training was given to remind technicians of fuse verification requirements.

LONG TERM CORRECTIVE ACTIONS

1. Departmental training guidelines for initial technician training will be revised to include fuse location verification.
2. The requirements and importance of referencing the "Fuse Selection Verification" document prior to removing any fuses will be made part of continuing training for applicable departments.

ADDITIONAL INFORMATION

There have been no similar events of this type at Vermont Yankee reported to the Commission in the past five years.