



VERMONT YANKEE NUCLEAR POWER CORPORATION

P. O. BOX 157
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VERNON, VERMONT 05354

April 30, 1992

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

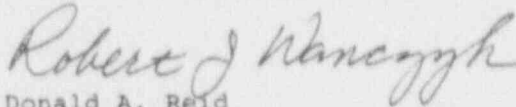
REFERENCE: Operating License DPR-28
Docket No. 50-271
Reportable Occurrence No. LER 92-011

Dear Sirs:

As defined by 10 CFR 50.73, we are reporting the attached Reportable Occurrence as LER 92-011.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION


for Donald A. Reid
Plant Manager

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

9205050195 920430
PDR ADOCK 05000271
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JE27

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)

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
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TITLE (4) INADVERTENT GROUP IV & V ISOLATION WHEN REPLACING PCIS COILS

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQ #	REV#	MONTH	DAY	YEAR	FACILITY NAMES		
0 3	3 1	9 2	9 2	- 0 1 1	- 0 0	0 4	3 0	9 2			
									DOCKET NO. (8)		
									0 5 0 0 0		

OPERATING MODE (9) N

THIS REPORT IS SUBMITTED PURSUANT TO REQ'MTS OF 10 CFR §: CHECK ONE OR MORE (11)

20.402(b)	20.405(c)	XX	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)		50.73(a)(2)(iv)	73.71(c)
20.405(a)(1)(iii)	50.73(c)(2)		50.73(a)(2)(v)	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 (12)

NAME DONALD A. REID, PLANT MANAGER	TELEPHONE NO. AREA CODE 8 0 2 2 5 7 - 7 7 1 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYST	COMPONENT	MFR	REPORTABLE TO NPRDS	...	CAUSE	SYST	COMPONENT	MFR	REPORTABLE TO NPRDS	...
N/A				N/A	N/A				N/A
N/A					N/A				

SUPPLEMENTAL REPORT EXPECTED (14)

YES (if yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MO	DAY	YR

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

On 3/31/92, with the reactor shutdown for routine refueling and maintenance, Group IV and V Primary Isolations occurred. At the time of the event Instrument and Control Department personnel were replacing relay coils in the Primary Containment Isolation System (PCIS) (EIIIS=JE). Group IV & V isolate the RHR Shutdown Cooling and Reactor Water Cleanup Systems respectively. These two isolations were not expected as a result of the maintenance being performed.

The cause of this event was personnel error as neither the Foreman nor the Technician identified the "daisy chain" of the neutral leads which energized other relay coils.

The immediate corrective action was to re-connect the lifted common lead such that the group IV & V isolation could be reset. A number of long term corrective actions were also developed including additional technician training, procedural review/revisions and a review of personnel error events for potential generic implications.

NRC Form 366A U.S. NUCLEAR REGULATORY COMMISSION (6-87)		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 20603.																					
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION		DOCKET NO (2)		LER NUMBER (6)			PAGE (3)																
FACILITY NAME (1)				YEAR	SEQ #	REV #																	
VERMONT YANKEE NUCLEAR POWER STATION		0	5	0	0	0	2	7	1	9	2	-	0	1	1	-	0	0	0	2	OF	0	3

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

DESCRIPTION OF EVENT

On 3/31/92 at 1730, with the reactor shutdown for routine refueling and maintenance, Group IV and V Primary Containment Isolations occurred. At the time of the event Instrument and Control Department personnel were performing maintenance replacement relay coils in the Primary Containment Isolation System (FCIS) (FLIS=JE). Group IV and V isolate the RHR Shutdown Cooling and Reactor Water Cleanup System respectively. These two isolations were not expected as a result of the maintenance being performed. All systems did respond as expected to the signals they received.

The neutral lead lifted from 16A-K41 was immediately reconnected and the isolation were reset at 1732.

The scope of work being performed was to change out the relay coils for a group of the PCIS relays. This was being done as part of our maintenance program for normally energized relays. Fuse 16A-F19 was removed in accordance with the tagging order, which removed power from relays 16A-K41, K42, K43, K52, K23 and K23D. This action was performed without incident. The next action in the process was to remove the "hot" lead from the 16A-K41 relay. This action was also performed without incident. The next action was to remove the neutral lead from 16A-K41. When this lead was lifted a daisy chain of neutral leads connected to other relays in the PCIS was broken and the Group IV & V isolation occurred.

The 120 volt AC feed to this system is broken up into several fused circuits grouped according to relay functions. The neutral circuit being common to all circuits is not separated between circuits but was installed in a manner convenient for the physical layout of the relays in the panel. Thus there is the potential for breaking the power to the relays in other isolation groups when disconnecting the neutral leads to any relay in the system.

CAUSE OF THE EVENT

The cause of this event was inadequate planning and personnel error as neither the Foreman nor the Technician identified the "daisy chain" of the neutral leads which energized other relay coils. The general requirement to maintain the neutral path in the daisy chain string was discussed during the pre-job briefing while developing the work plan. This review did not identify all the coils effected by the daisy chain. A more detailed review would have identified this potential problem such that additional jumpers could have been installed to prevent the isolation.

This failure to identify the "daisy chain" resulted in the circuit being opened for two other relays when the neutral wire was lifted. This resulted in the initiation of the groups IV & V PCIS signals.

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LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NO (2)	LER NUMBER (6)				PAGE (3)	
		YEAR	SEQ #	REV #			
VERMONT YANKEE NUCLEAR POWER STATION	0560-271	92	- 0 1 1	- 0 0	0 3	OF	0 3

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

ANALYSIS OF EVENT

The actuation of group IV & V isolations while the plant is shutdown had a minimal impact on safety. The group IV isolation secures the RHR Shutdown Cooling System. The reactor had been shutdown for approximately three weeks, and one third of the fuel had been replaced with new fuel. Given this and the short time that the system was isolated, there was no significant safety consequence. The group V isolation secures the Reactor Water Cleanup System which helps maintain water clarity. Water clarity was not affected during the short time (the isolation were reset within 2 minutes) the system was isolated.

CORRECTIVE ACTIONS

IMMEDIATE CORRECTIVE ACTIONS

- 1) Reconnect the lifted common lead such that the group IV & V isolation could be reset.

LONG TERM CORRECTIVE ACTIONS

- 1) A procedure review/revision will be initiated to determine if further instructions or guidance should be provided with respect to pre-job briefings and drawing reviews. The review will also consider the need to enhance the lifted leads and jumper process.
- 2) This LER will be forwarded to training to include within the continuing training for I&C personnel. The issue of daisy chained neutrals and the need to review connection diagram as well as CWD's will be emphasized.
- 3) An annual review of LER's and other corrective action process documents is performed to identify potential trends. This event will be included in this evaluation with any recommendations made to plant management.

ADDITIONAL INFORMATION

There have been several other similar personnel error events of this type reported to the Commission by Vermont Yankee during the past refueling outage. They were reported to the Commission as LER 92-006 and 92-008. As mentioned above, these events will be reviewed for their generic implications and further corrective actions will be completed as appropriate.