

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) VERMONT YANKEE NUCLEAR POWER CORP.	DUCKET NUMBER (2) 0 5 0 0 0 2 7 1	PAGE(S) 1 OF 0 2
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TITLE (4) ISOLATION, HALF SCRAM AND ECCS SYSTEM INITIATION DUE TO POTENTIAL RELAY COIL END OF LIFE

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
0 1	0 7	8 7	8 7	0 0 1	0 0 0	0 2	0 6	8 7			0 5 0 0 0

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) 1 0 0	20.402(b)	20.406(a)	X	60.73(a)(2)(iv)	73.71(b)					
	20.406(a)(1)(i)	60.38(a)(1)		60.73(a)(2)(v)	73.71(e)					
	20.406(a)(1)(ii)	60.38(a)(2)		60.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 355A)					
	20.406(a)(1)(iii)	60.73(a)(2)(i)		60.73(a)(2)(vii)(A)						
	20.406(a)(1)(iv)	60.73(a)(2)(ii)		60.73(a)(2)(vii)(B)						
	20.406(a)(1)(v)	60.73(a)(2)(iii)		60.73(a)(2)(ix)						

LICENSEE CONTACT FOR THIS LER (12)	
NAME JAMES P. PELLETIER, PLANT MANAGER	TELEPHONE NUMBER 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	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDs
X	J C R	L Y	G 0 8 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

At approximately 12:20 hours on 1/7/87 with the plant at full power, a Reactor Protection System (RPS) Motor Generator set (MG) tripped. The resulting loss of power to half of RPS caused a half SCRAM, a Group 3 primary containment isolation, shutdown of Reactor Building ventilation and start of the Standby Gas Treatment System.

The trip of the MG set was caused by a failed coil (open circuit) on a control relay in the MG set. The relay/coil operated for approximately 15 years and its failure may be attributed to end of life. The events of this report did not have adverse safety implications. The RPS and Primary Containment Isolation System (PCIS) operated as designed upon experiencing a power loss to half of RPS.

No specific actions beyond replacing the failed relay coil were determined to be necessary. We will continue to trend failures of this type and initiate additional corrective actions as necessary.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
VERMONT YANKEE NUCLEAR POWER CORP.	0 5 0 0 0 2 7 1	8 7	— 0 0 1	— 0 0	0 2	OF	0 2

TEXT (If more space is required, use additional NRC Form 308A's) (17)

DESCRIPTION OF EVENTS

At approximately 12:20 hours on 1/7/87 with the plant at full power the 'B' Reactor Protection System Motor Generator (RPS MG) set tripped. The resulting loss of power to half of RPS caused a half SCRAM, a Group 3 primary containment isolation, shutdown of Reactor Building ventilation and the start of the Standby Gas Treatment System. The event was reported to plant management by the Shift Engineer.

CAUSE OF EVENTS

The trip of the MG set was caused by a failed coil (open circuit) on a General Electric CR120 series control relay in the MG set. The Energy Industry Identification System (EIIS) component identifier for the failed relay is RLY. It is believed that the relay was original plant equipment and the coil failure is attributed to end of life (i.e., approximately 15 years operation).

ANALYSIS OF EVENTS

The events of this report did not have adverse safety implications. The RPS and Primary Containment Isolation Systems (PCIS) operated as designed. A half SCRAM is the expected response due to loss of power to half of RPS. The PCIS System is designed to shutdown Reactor Building ventilation, start Standby Gas Treatment and initiate a Group 3 isolation upon a single upscale trip of the Reactor Building or Refuel Floor radiation monitors. The de-energization of half of RPS simulated this condition by dropping out the associated logic relays.

Following the trip of the MG set, operator action restored power to the "B" side of RPS almost immediately by using the RPS alternate power source. The half SCRAM and the Group 3 isolation were reset, Reactor Building ventilation was restarted and the Standby Gas Treatment System was secured within ten minutes.

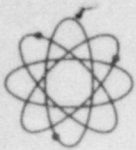
After replacement of the control relay coil, the MG set was returned to service in approximately 2 hours.

There have been no other similar failures of CR120 relays in the RPS system. A similar result occurred from failure of a CR205 contactor which caused a full SCRAM and a Group 3 isolation. This event was reported to the commission under LER 86-10.

CORRECTIVE ACTIONS

No specific actions beyond replacing the failed relay coil were determined to be necessary. We will continue to trend failures of this type and initiate additional corrective actions as necessary.

PC/gmv:LER8701.1/LER



VERMONT YANKEE NUCLEAR POWER CORPORATION

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

February 6, 1987

VV #87-022

U.S. Nuclear Regulatory Commission
Document No. 50-271
Washington, D.C. 20555

REFERENCE: Operating License DPR-28
Docket No. 50-271
Reportable Occurrence No. LER 87-01

Dear Sirs:

As defined by 10CFR50.73, we are reporting the attached Reportable Occurrence as LER 87-01.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

for Robert J. Wanezyk
James P. Pelletier
Plant Manager

PBC/mmh

cc: Regional Administrator
USNRC Office of Inspection and Enforcement
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

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