

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) VERMONT YANKEE NUCLEAR POWER STATION	DOCKET NUMBER (2) 0 5 0 0 0 2 7 1	PAGE (3) 1 OF 0 2
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TITLE (4)
REACTOR SCRAM ON LOSS OF RPS "B" AND NEUTRON MONITORING SYSTEM A TRIP

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)																																								
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<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">OPERATING MODE (9) N</td> <td colspan="10">THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)</td> </tr> <tr> <td rowspan="5">POWER LEVEL (10) 0 0 0</td> <td>20.402(b)</td> <td>20.408(e)</td> <td><input checked="" type="checkbox"/></td> <td>80.73(a)(2)(iv)</td> <td>73.71(b)</td> </tr> <tr> <td>20.408(a)(1)(i)</td> <td>80.38(a)(1)</td> <td></td> <td>80.73(a)(2)(v)</td> <td>73.71(e)</td> </tr> <tr> <td>20.408(a)(1)(ii)</td> <td>80.38(a)(2)</td> <td></td> <td>80.73(a)(2)(vi)</td> <td rowspan="3">OTHER (Specify in Abstract below and in Text, NRC Form 365A)</td> </tr> <tr> <td>20.408(a)(1)(iii)</td> <td>80.73(a)(2)(i)</td> <td></td> <td>80.73(a)(2)(vii)(A)</td> </tr> <tr> <td>20.408(a)(1)(iv)</td> <td>80.73(a)(2)(ii)</td> <td></td> <td>80.73(a)(2)(vii)(B)</td> </tr> <tr> <td>20.408(a)(1)(v)</td> <td>80.73(a)(2)(iii)</td> <td></td> <td>80.73(a)(2)(viii)</td> <td></td> </tr> </table>												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) 0 0 0	20.402(b)	20.408(e)	<input checked="" type="checkbox"/>	80.73(a)(2)(iv)	73.71(b)	20.408(a)(1)(i)	80.38(a)(1)		80.73(a)(2)(v)	73.71(e)	20.408(a)(1)(ii)	80.38(a)(2)		80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)	20.408(a)(1)(iii)	80.73(a)(2)(i)		80.73(a)(2)(vii)(A)	20.408(a)(1)(iv)	80.73(a)(2)(ii)		80.73(a)(2)(vii)(B)	20.408(a)(1)(v)	80.73(a)(2)(iii)		80.73(a)(2)(viii)	
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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
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
NA				N					

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO
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EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

On 6-10-86 at 2041 hours while the plant was shutdown and performing Recirculation Pump testing the Reactor Protective System (RPS) alternate power supply tripped causing a half SCRAM on the "B" channel. Concurrent with this an auto SCRAM signal was received on the "A" channel as a result of a neutron monitoring system A-1 trip. The A-1 trip is attributed to an IRM going "hi-hi" due to noise in the circuit. This additional half SCRAM resulted in a full SCRAM signal being received.

There were no adverse safety consequences as a result of this event and all systems were returned to their normal conditions. Alternate RPS supply voltage stability has been determined to be the root cause of this event.

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		YEAR 8 6	SEQUENTIAL NUMBER 0 1 1	REVISION NUMBER 0 0		
					0 2	OF 0 2

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

Description of Event

On 6-10-86 at 2041 hours, plant maintenance personnel were performing maintenance on the normal "B" Reactor Protection System (RPS) supply when plant operators began recirculation pump testing. The "B" RPS alternate supply then tripped because of a voltage dip on the alternate supply due to the pump motor starting. The tripping of the alternate supply gave a half SCRAM while at the same time an additional half SCRAM was received from a neutron monitoring system A-1 trip. This trip is attributed to an Intermediate Range Monitor (IRM) going "hi-hi" due to noise in the circuit.

Cause of Event

The root cause of this event is attributed to the "B" RPS alternate supply tripping when the recirculation pump motor was started. The starting of this motor dropped the line voltage below the under voltage protection trip point on the RPS alternate supply. There have been instances where the unregulated characteristics of the alternate power feed in conjunction with the under-voltage, overvoltage, and underfrequency protection provided by the RPS power supply protection panels have caused loss of the alternate power supply. This has happened during routine system voltage reductions or during transient conditions resulting from starting large loads or transferring loads between the startup and auxiliary transformers. The cause of the A-1 neutron monitoring system trip is attributed to noise in the IRM circuitry causing the IRM to go "hi-hi".

Analyses of Event

No adverse safety consequences resulted from this event since the Reactor was in a shutdown condition at the time of this event. All safety systems functioned as designed and would have performed their intended function had the plant been operating. There were no adverse affects to public health or safety as a result of this event.

Corrective Actions

The alternate supply and the SCRAM signal were reset and the RPS loads were shifted back to the normal RPS supply.

Engineering is presently evaluating the stability of the voltage regulation of the alternate feed to the RPS power supply and will be implementing a design modification to reduce the possibility of this type of an event re-occurring.



VERMONT YANKEE NUCLEAR POWER CORPORATION

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

July 9, 1986

VYV 86-211

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 86-11

Dear Sirs:

As defined by 10CFR50.73, we are reporting the attached Reportable Occurrence as LER 86-11.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

James P. Pelletier
Plant Manager

HMM/gmv

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

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11