

**LICENSEE EVENT REPORT**

CONTROL BLOCK: 

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	N	J	S	G	S	2	2	0	0	-	0	0	0	0	0	-	0	0	3	4	1	1	1	1	4			5	
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
		LICENSEE CODE								LICENSE NUMBER											LICENSE TYPE						CAT			

CON'T

REPORT SOURCE 0 1 2 8

DOCKET NUMBER 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

EVENT DATE 1 1 2 8 8 3 8 1 2 2 3 8 3 9

REPORT DATE

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

On November 28, 1983, during a maintenance shutdown, 2A Vital Instrument Bus was transferred to its alternate power supply to perform routine meter calibrations on 2A Inverter. A voltage transient caused 2RH2 to shut resulting in a loss of RHR flow. The valve was immediately reopened, and RHR flow was re-established. Because the event constituted operation in a degraded mode permitted by a limiting condition for operation, the occurrence is reportable in accordance with technical specification 6.9.1.9b.

SYSTEM CODE C F 11		CAUSE CODE B 12		CAUSE SUBCODE A 13		COMPONENT CODE V A L V E X 14		COMP. SUBCODE E 15		VALVE SUBCODE D 16	
EVENT YEAR 8 3 21 22		SEQUENTIAL REPORT NO. 0 6 2 24 26		OCCURRENCE CODE 0 3 28 29		REPORT TYPE I 30		REVISION NO. 0 32			
ACTION TAKEN X 18		FUTURE ACTION G 19		EFFECT ON PLANT Z 20		SHUTDOWN METHOD 21		HOURS 0 0 0 0 22		ATTACHMENT SUBMITTED Y 23	
NPRD-4 FORM SUB. N 24		PRIME COMP. SUPPLIER A 25		COMPONENT MANUFACTURER C 6 3 5 26							

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1		0	Because this evolution causes a voltage transient which effects certain equipment,
1	1		this equipment will be identified and procedures will be revised to reflect
1	2		equipment to be monitored and appropriate actions to be taken.

7 8 9  
FACILITY STATUS 1 5 G 28  
% POWER 0 0 0 29  
OTHER STATUS 30 NA  
METHOD OF DISCOVERY 31 B  
DISCOVERY DESCRIPTION 32 Operator Observation

ACTIVITY CONTENT  
RELEASED OF RELEASE

1 6 2 33 10 34 NA

AMOUNT OF ACTIVITY (35)

LOCATION OF RELEASE (36)

NA

PERSONNEL EXPOSURES		NUMBER		TYPE	DESCRIPTION
1	7	0	0	0	NA

PERSONNEL INJURIES	
NUMBER	DESCRIPTION
1 8 1 0 0 40	NA

- 022

7 8 9 11 12  
LOSS OF OR DAMAGE TO FACILITY (43)  
TYPE DESCRIPTION  
1 9 Z (42) NA  
B401240002 B31223  
PDR ADDCK 05000214

7 8 9 10  
PUBLICITY  
ISSUED DESCRIPTION (45)  
2 0 N (44) NA  
PDR  
NRC USE ONLY

NAME OF PREPARER.

J. L. Rupp

PHONE: (609) 935-6000 Ext. 4309

NRC USE ONLY

01 Y-928



Public Service Electric and Gas Company P.O. Box E Hancocks Bridge, New Jersey 08038

Salem Generating Station

December 23, 1983

Dr. Thomas E. Murley  
Regional Administrator  
USNRC  
Region 1  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Dear Dr. Murley:

LICENSE NO. DPR-75  
DOCKET NO. 50-311  
REPORTABLE OCCURRENCE 83-062/03L

Pursuant to the requirements of Salem Generating Station Unit No. 2, Technical Specifications, Section 6.9.1.9.b, we are submitting Licensee Event Report for Reportable Occurrence 83-062/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "J. M. Zupko, Jr.", is written above the typed name.

J. M. Zupko, Jr.  
General Manager -  
Salem Operations

JR:k11 *def*

CC: Distribution

*11*  
*IE22*

Report Number: 83-062/03L  
Report Date: 12-23-83  
Occurrence Date: 11-28-83  
Facility: Salem Generating Station Unit 2  
Public Service Electric & Gas Company  
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Reactor Coolant System - Residual Heat Removal System - Loss of Flow

This report was initiated by Incident Report 83-217

CONDITIONS PRIOR TO OCCURRENCE:

Mode 5 - Rx Power 000 % - Unit Load 0000 MWe

DESCRIPTION OF OCCURRENCE:

At 1307 hours, November 28, 1983, during a maintenance shutdown, 2A Vital Instrument Bus was transferred to the Solatron (alternate power supply) and 2A Instrument Inverter was removed from service to perform routine meter calibrations. During the transfer, Residual Heat Removal (RHR) common suction valve (2RH2) closed. This resulted in a loss of RHR flow through the Reactor Coolant System (RCS). 2RH2 was immediately opened, and RHR flow was reestablished.

APPARENT CAUSE OF OCCURRENCE:

Transfer of a vital instrument inverter to its alternate power supply is an infrequent event occurring only as a controlled evolution or, during a loss of its normal power supply and its backup DC power supply. Line voltage transients on the instrument bus during this evolution can be expected. Experience has shown that this transient can affect certain equipment. This particular event caused the RHR suction Pressure Transmitter (PT-405) to momentarily spike high. This, in turn, caused the RHR common suction valve (2RH2) to close on interlock.

ANALYSIS OF OCCURRENCE:

The operability of the RHR loops is required to provide the capability for the removal of decay heat. A single loop provides sufficient heat removal capability; single failure considerations require that two loops be operable. A single RHR pump will also provide adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during RCS boron concentration reductions. Technical Specification 3.4.1.4a requires two (2) RHR loops to be operable and at least one (1) RHR loop to be in operation while the unit is in mode 5.

ANALYSIS OF OCCURRENCE: (cont'd)

Action Requirement 3.4.1.4b states:

With no RHR loop in operation, suspend all operations involving a reduction in boron concentration of the RCS and immediately initiate corrective action to return the required RHR loop to operation.

No operations involving the reduction of RCS boron concentration were in progress at the time of the occurrence. As previously stated, this was a controlled evolution. The transient, along with possible effects on equipment, was expected. The closure of 2RH2 was observed and the valve was immediately opened. There was no undue risk to the health or safety of the public due to this occurrence. Because the event constituted operation in a degraded mode permitted by a limiting condition for operation, the event is reportable in accordance with Technical Specification 6.9.1.9b.

CORRECTIVE ACTION:

The voltage transient was expected, the valve closure was observed, the valve was immediately reopened and RHR flow was restored in a timely fashion.

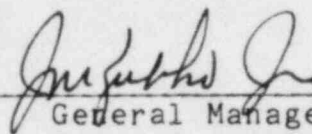
Although possible effects on equipment are expected by operating personnel during these transients, a list of this equipment is not available. This equipment will be identified; the appropriate operating procedures will be revised to ensure these instruments and/or equipment are monitored during planned evolutions involving transfer of vital instrument inverters to their alternate power supplies. Precautions will be added to reflect the corrective actions required, should this equipment be affected.

FAILURE DATA:

Not Applicable

Prepared By J. Rupp

SORC Meeting No. 83-152



General Manager -  
Salem Operations