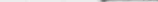


**LICENSEE EVENT REPORT**

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	
7	8	9	LICENSEE CODE					14	15	LICENSE NUMBER										25	26	LICENSE TYPE					30	57	CAT	58

CON'T

0 1 7 8

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

DOCKET NUMBER 61 62 63 64 65 66 67 68

EVENT DATE 69 70 71 72 73 74

REPORT DATE 75 76 77 78 79 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | On May 25, 1983, during routine shutdown operation, the No. 2C Vital Instrument Inverter

0 3 | was de-energized for planned maintenance, rendering the associated electrical bus train

0 4 | inoperable. Since No. 2A Diesel Generator was also inoperable at the time, Action State-

0 5 | ment 3.8.2.2 was entered. Unexpected problems were encountered during the work on the

0 6 | inverter, and containment integrity could not be established within 8 hours as required

0 7 | by the action statement. Due to operation less conservative than the least conservative

0 8 | aspect of a limiting condition for operation, the event is reportable in accordance with

Technical Specification 6.9. Cause

SYSTEM CODE		CAUSE CODE		SUBCODE		COMPONENT CODE						COMP. SUBCODE		VALVE SUBCODE					
0	9	E	B	11	D	12	Z	13	I	N	S	T	R	U	14	P	15	Z	16
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

LER RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.		
17		8	3		0	2	1		0	1		0
21	22	23	24	25	26	27	28	29	30	31	32	

ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS				ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER				
A	18	G	19	Z	20	Z	21	0	0	0	0	Y	23	Y	24	A	25	X	9	9	9	26
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Following maintenance the inverter was re-energized. The device failed during startup,

1 1 however. Insufficient time remained to establish containment integrity as required.

1 2 A review of applicable procedures and Technical Specifications will be performed to

1 3 identify improvements which will prevent recurrence. The inverter was repaired and the

1 4 action statement was terminated.

7	8	9											80					
FACILITY STATUS			% POWER			OTHER STATUS			(30)	METHOD OF DISCOVERY			DISCOVERY DESCRIPTION			(32)		
1	5	G	(28)	0	0	0	(29)	NA			(30)	A	(31)	Operator Observation			(32)	
7	8	9											44	45	46			80

ACTIVITY CONTENT  
RELEASED OF RELEASE

1 6 2 33 2 34 NA

7 8 9 10 11

AMOUNT OF ACTIVITY (35)

LOCATION OF RELEASE (36)

NA

45 80

PERSONNEL EXPOSURES			
NUMBER		TYPE	DESCRIPTION
1	7	0037	238 NA

PERSONNEL INJURIES		DESCRIPTION	
NUMBER			
1	40	NA	41

1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
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1		2		3		4		5															

7 8 9 10 68 69 80

PUBLICITY

ISSUED DESCRIPTION (45)

2 0 N (44) NA

NRC USE ONLY

NAME OF PREPARER R. Frahm

PHONE: (609) 339-4309



**PSEG**

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

Salem Generating Station

June 8, 1983

Mr. J. Allan  
Acting Regional Administrator  
USNRC  
Region 1  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Dear Mr. Allan

LICENSE NO. DPR-75  
DOCKET NO. 50-311  
REPORTABLE OCCURRENCE 83-021/01T

Pursuant to the requirements of Salem Generating Station Unit No. 2, Technical Specifications, Section 6.9.1.8.b, we are submitting Licensee Event Report for Reportable Occurrence 83-021/01T. This report is required within fourteen (14) days of the occurrence.

Sincerely yours,

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

RF:ks *258*

CC: Distribution

Report Number: 83-021/01T  
Report Date: 06-08-83  
Occurrence Date: 05-25-83  
Facility: Salem Generating Station Unit 2  
Public Service Electric & Gas Company  
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Electrical Power Systems - Nos. 2A and 2C A.C. Electrical Bus Trains - Inoperable.

This report was initiated by Incident Report 83-086.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 5 - Rx Power 0 % - Unit Load 0 MWe.

DESCRIPTION OF OCCURRENCE:

At 1225 hours, May 25, 1983, during routine shutdown operation, the No. 2C Vital Instrument Bus Inverter was taken out of service for planned maintenance, rendering the associated electrical bus train inoperable. Since No. 2A Emergency Diesel Generator and its associated bus train were inoperable at the time, Technical Specification Action Statement 3.8.2.2 was entered. Power was supplied to the vital instrument bus from the alternate supply (although the supply does not meet the requirements of the Technical Specifications) and all necessary 115V loads of the bus were maintained operable.

Unexpected problems were encountered with the maintenance on the inverter, however. Due to activities associated with the refueling shutdown, the containment airlocks could not be immediately closed, and containment integrity was not established within 8 hours as required by Action Statement 3.8.2.2. Prompt notification of the Resident NRC Inspector was performed on May 26, 1983, with written confirmation transmitted later that day.

The airlocks were subsequently closed and containment integrity was established at 2127 hours, May 25, 1983. No abnormal degradation of fuel cladding was involved; a redundant power source was available throughout the occurrence.

APPARENT CAUSE OF OCCURRENCE:

The inverter planned maintenance consisted of implementation of Design Change Request 2EC-1410, which relocated the power feed of the alternate vital instrument bus power supply to the same bus as the inverter. The work involved had been routinely accomplished on other inverters well within the 8 hour period required by the Technical Specifications. Following completion of the modifications, the inverter was re-energized. The inverter failed to energize, however,

APPARENT CAUSE OF OCCURRENCE: (cont'd)

and several components were damaged due to the transient involved. While work continued on the inverter, steps were immediately taken to comply with the action statement. Insufficient time remained to arm the door interlocks, remove obstructions associated with shutdown maintenance, and establish containment integrity.

ANALYSIS OF OCCURRENCE:

The operability of minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that the facility can be maintained in the shutdown or refueling condition for extended time periods, and sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

Action Statement 3.8.2.2 requires:

With less than the minimum specified A.C. busses and inverters operable and energized, establish containment integrity within 8 hours.

As noted, although the 8 hour period was exceeded, a redundant power supply was operable throughout the occurrence. Integrity of the fuel cladding was maintained providing a redundant fission product barrier, and the plant was maintained in a stable shutdown condition in accordance with the specification basis. The event constitutes operation of the unit with a system subject to a limiting condition for operation less conservative than the least conservative aspect of the limiting condition for operation. The occurrence is therefore reportable in accordance with Technical Specification 6.9.1.8b.

CORRECTIVE ACTION:

As noted, containment integrity was established at 2127 hours. May 25, 1983, in compliance with the limiting condition for operation. The inverter was repaired and satisfactorily tested; the associated bus train was declared operable at 0440 hours, May 26, 1983, and Action Statement 3.8.2.2 was terminated.

The vital instrument bus alternate supply modification will provide added assurance that the bus and its associated train will be maintained operable during both shutdown and power operation. The modification is scheduled to be completed during the current refueling. A review of the Technical Specifications will also be performed to determine possible revisions to instrument bus power supply and action time requirements.

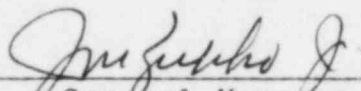
CORRECTIVE ACTION: (cont'd)

Finally, due to previous problems with re-energization of the vital inverters, a review of the applicable procedure will be performed. Appropriate improvements to the procedure will be made on the basis of the review.

FAILURE DATA:

Not Applicable

Prepared By R. Frahm

  
\_\_\_\_\_  
General Manager -  
Salem Operations

SORC Meeting No. 83-077