

LICENSEE EVENT REPORT

CONTROL BLOCK: [] [] [] [] [] [] [] (1)

(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

REPORT SOURCE 01 60 61 05 01 00 03 11 68 69 04 30 83 74 80 75 05 20 83 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On April 30, 1983, during routine shutdown operations, the No. 2D Vital Instrument Bus
0 3 was de-energized and tagged out for maintenance. De-energization of the bus resulted
0 4 in a loss of the No. N-44 Power Range Channel. The No. N-42 Channel was already de-
0 5 energized for a channel calibration. Loss of two power range channels in turn de-
0 6 energized the source range channels (due to Permissive P-10). A shutdown margin was
0 7 immediately performed and was satisfactory. The event constituted operation in a
0 8 degraded mode in accordance with Technical Specification 6.9.1.9b.

SYSTEM CODE I A 11		CAUSE CODE D 12		CAUSE SUBCODE Z 13		COMPONENT CODE I N S T R U 14		COMP. SUBCODE P 15		VALVE SUBCODE Z 16	
EVENT YEAR 8 3		SEQUENTIAL REPORT NO. 0 1 9		OCCURRENCE CODE 0 3		REPORT TYPE L		REVISION NO. 0			
ACTION TAKEN H 18		FUTURE ACTION Z 19		EFFECT ON PLANT Z 20		SHUTDOWN METHOD Z 21		HOURS 0 0 0 0 22		ATTACHMENT SUBMITTED Y 23	
NPRD-4 FORM SUB. N 24		PRIME COMP. SUPPLIER A 25		COMPONENT MANUFACTURER W 1 2 0 26							

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Investigation revealed that in accordance with accepted practice it was possible for a Senior Shift Supervisor to be unaware of the de-energization of a Nuclear Instrument System (NIS) channel for calibration. A new method of tracking NIS status was initiated and operating shifts were informed of the incident.

1 4 7 8 9 80

FACILITY STATUS (28) 1 5 G 7 8 9
 % POWER 10 12 13 0 0 0 29
 OTHER STATUS (30) NA 44
 METHOD OF DISCOVERY (31) A 45 46
 DISCOVERY DESCRIPTION (32) Operator Observation 80
 ACTIVITY CONTENT RELEASED OF RELEASE (33) 1 6 Z 7 8 9
 AMOUNT OF ACTIVITY (35) 10 11 Z NA 44
 LOCATION OF RELEASE (36) NA 45 46 80

PERSONNEL EXPOSURES			
NUMBER	TYPE	DESCRIPTION	
17	37	38	NA

PERSONNEL INJURIES		DESCRIPTION	
NUMBER			
1	8	40	NA

8		9		11		12	
LOSS OF OR DAMAGE TO FACILITY (43)							
TYPE		DESCRIPTION					
1	9	2	(42)	NA			

7 8 9 10
PUBLICATION
ISSUED DESCRIPTION (45) 8306030188 830520
2 0 N (44) NA PDR ADOCK 05000311
7 8 9 10 S PDR
NRC USE ONLY
68 69 70

NAME OF PREPARER R. Frahm

PHONE: (609) 935-6000 Ext. 3078



PSEG

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

Salem Generating Station

May 20, 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 83-019/03L

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 83-019/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

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

RF:kls *244*

CC: Distribution

IE22

Report Number: 83-019/03L
Report Date: 05-20-83
Occurrence Date: 04-30-83
Facility: Salem Generating Station Unit 2
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Nuclear Instrumentation - Nos. N-31 and N-32 Source Range Channels - Inoperable.

This report was initiated by Incident Report 83-078.

CONDITIONS PRIOR TO OCCURRENCE:

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

DESCRIPTION OF OCCURRENCE:

At 1000 hours, April 30, 1983, during routine shutdown operation, No. 2D Vital Instrument Bus was de-energized and tagged out for maintenance associated with the first refueling outage. De-energization of the bus resulted in a loss of power to the No. N-44 Power Range Channel. No. N-42 Power Range Channel was already de-energized for a channel calibration. Loss of both channels resulted in actuation of Permissive P-10, which automatically de-energized the high voltage to Nos. N-31 and N-32 Source Range Channels. With the loss of both source range channels. Technical Specification Limiting Condition for Operation 3.3.1 Action 5 was entered. A shutdown margin calculation was immediately performed and demonstrated a satisfactory shutdown margin existed.

APPARENT CAUSE OF OCCURRENCE:

Investigation of the incident revealed that, although it was evident at the time of the occurrence that power would be lost to the No. N-44 Channel, the fact that the No. N-42 Channel was also de-energized was overlooked. The fuses had been removed from the No. N-42 Power Range Channel in accordance with the channel calibration procedure; the calibration had been commenced on an earlier shift. Normal practice dictated that the removed fuses would be retained in the Senior Shift Supervisor's office if entry into a Technical Specification action statement was required.

Since the power range channels are not required to be operable in Mode 5, the fuses were accordingly not left with the Senior Shift Supervisor. Lacking knowledge of the ongoing calibration, since no fuses were in his possession and the job had been approved on a different shift, the supervisor involved approved the tagout of the vital instrument bus. The incident was viewed as involving isolated inadequacies in operating practices and the conduct of shutdown operations.

ANALYSIS OF OCCURRENCE:

The operability of the Reactor Trip and Engineered Safety Feature Actuation Systems ensure that the associated action or trip will be initiated when the parameter monitored by each channel reaches its setpoint. The operability of these systems is required to provide the overall reliability, redundancy and diversity assumed available in the facility design for the protection and mitigation of accident and transient conditions. The integrated operation of these systems is consistent with the assumptions used in the accident analyses.

The source range channels, as part of the Reactor Trip System, initiate a reactor trip and control rod insertion on increasing shutdown flux levels. Limiting Condition for Operation Action 5 requires:

With the number of channels operable one less than required by the minimum channels operable requirement, verify compliance with the Technical Specification shutdown margin requirements within 1 hour and at least once per 12 hours thereafter.

As noted, a shutdown margin was performed and demonstrated the plant was in a stable shutdown condition. The event therefore did not involve any risk to the health or safety of the public. Due to operation in a degraded mode permitted by a limiting condition for operation, the occurrence was reportable in accordance with Technical Specification 6.9.1.9b.

CORRECTIVE ACTION:

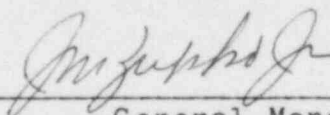
As mentioned, a shutdown margin was immediately performed, in compliance with the action statement. Calibration of the No. 42 Power Range Channel was completed, and power was restored to the channel. This in turn re-energized the source range channels, and at 1210 hours, April 30, 1983. Limiting Condition for Operation 3.3.1 Action 5 was terminated.

The incident was addressed in the Operations Daily Newsletter, providing for improved shift personnel awareness of the problems involved. All shift supervisors have been instructed to require that Nuclear Instrument System fuses be retained by the Senior Shift Supervisor regardless of whether or not an action statement is entered during the performance of a test or calibration. This will insure that the de-energization of any nuclear instrument channel is evident to shift supervision at all times.

FAILURE DATA:

Not Applicable

Prepared By R. Frahm



General Manager -
Salem Operations

SORC Meeting No. 83-070