LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1	N J S G S 1 (2) LICENSEE CODE; 0 0 - 0 0 0 0 0 - 0 0 (3) LICENSE NUMBER; 4 1 1 1 1 (4) LICENSE TYPE; CAT (5)
CON'T 0 1	REPORT SOURCE L (6); DOCKET NUMBER 0 5 0 0 0 2 7 2 (7); EVENT DATE 1 1 1 1 8 3 (8); REPORT DATE 0 8 3 0 8 4 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2	On November 11, 1983, while performing a routine shutdown, the Steam Dump Pressure
0 3	Controller signal went to full scale low. This caused RCS pressure to decrease below
0 4	the technical specification DNB limit. Pressure was restored within the allowable band
0 5	within 2 minutes; well within the time specified by the action requirement (2 hours).
0 6	No undue risk to the health or safety of the public was involved. The event consti-
0 7	tuted operation in a degraded mode permitted by a limiting condition for operation, and
0 8	is therefore reportable in accordance with technical specification 6.9.1.9b.

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	C C (11)	E (12)	G (13)	I N S T R U (14)	C (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 3	—	0 5 6	/	0 3	X	—	1

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
A (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	Y (24)	A (25)	H 0 2 0 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0	The Pressure Controller was declared inoperable. A temporary change was made to
1 1	the shutdown procedure to prevent recurrence. Investigation revealed the servo-
1 2	driven setpoint station output to be unstable. The servo setpoint station module
1 3	was replaced, followed by a satisfactory channel calibration procedure.
1 4	

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	D (28)	0 2 0 (29)	N/A	A (31)	Operator Observation

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	N/A	N/A

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	N/A

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	N/A

8409070073 840830
PDR ADOCK 05000272
S PDR

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	N/A

IE22 1/1

PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	N/A	

NAME OF PREPARER J.L. Rupp PHONE: (609) 339-4309

Report Number: 83-056/03X-1

Report Date: 08/30/84

Occurrence Date: 11/11/83

Facility: Salem Generating Station Unit 1
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

DNB Parameters - Pressurizer Pressure - Out-of-Specification

This report was initiated by Incident Report 83-206

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 20 % - Unit Load 127 MWe.

DESCRIPTION OF OCCURRENCE:

At 0600 hours, November 11, 1983, while performing a routine shutdown for maintenance in accordance with IOP-5 (Minimum Load to Hot Standby) procedure, the steam dump was placed in main steam pressure control. While lowering the pressure controller setpoint, the signal went to full scale low causing the steam dumps to open; this caused Reactor Coolant System (RCS) pressure to decrease below the Technical Specification DNB Parameter minimum limit of 2220 PSIA. This pressure transient was accompanied by a decrease in average RCS temperature. The operator immediately raised the steam dump pressure controller setpoint to full scale high to close the steam dumps and halt the transient. The steam dumps closed and pressure and temperature were restored to the normal operating bands at 0602 hours (two minutes after the occurrence). Minimum pressure and temperature reached were 2160 PSIA and 542 degrees. Technical Specification Action Statement 3.2.5 was entered at 0600 hours.

Investigation proceeded while the Unit was shutdown. The component responsible for causing the pressure controller signal to go to full scale low was not positively identified; although, the servo unit was suspected to have malfunctioned. Due to the components involved, a thorough investigation could not be completed during normal power operation. The controller was declared inoperable, and was scheduled for repair during the next available shutdown of sufficient duration.

To prevent recurrence during the next routine shutdown, a temporary change was made to IOP-5; item 5-4 was changed to use MS-10 valves in place of the pressure controller.

APPARENT CAUSE OF OCCURRENCE:

Investigation continued during a subsequent Unit shutdown, and on January 4, 1984, the servo-driven setpoint station output was found to be unstable.

ANALYSIS OF OCCURRENCE:

In accordance with the Technical Specification basis for Limiting Condition for Operation 3.2.5, compliance with the Specification limits assure DNB parameters are within the steady state envelope of operation assumed in the transient and accident analyses of the FSAR. The limits are consistent with the initial FSAR assumptions, and have been analytically demonstrated to maintain a minimum DNBR of 1.30 throughout each analyzed transient.

Action Statement 3.2.5 requires:

> With any of the DNB parameters exceeding its limit, restore the parameter to within its limit within 2 hours, or reduce thermal power to less than 5% of rated thermal power within the next 4 hours.

The 2 hour limit contained in the action statement ensures that, following unexpected transients of the type involved in this occurrence, DNB parameters are returned within the envelope assumed in the FSAR. In this instance, pressurizer pressure was within the DNB limit within 2 minutes (well within the 2 hours allowed by the action requirement); therefore, no undue risk to the health or safety of the public was involved in this event.

The occurrence constituted operation in a degraded mode permitted by a limiting condition for operation, and is reportable in accordance with Technical Specification 6.9.1.9b. It should also be noted that in the event the operator had failed in his attempt to shut the steam dumps, a Pressurizer Pressure Low trip would have initiated a reactor shutdown at 1880 PSIA, maintaining a minimum DNBR of 1.30 as demonstrated by the FSAR.

CORRECTIVE ACTION:

As noted, pressurizer pressure was returned to within specification at 0602 hours, November 11, 1983, and Action Statement 3.2.5 was terminated.

The servo setpoint station module was replaced, followed by the performance of a satisfactory channel calibration procedure. The steam dump pressure controller has performed satisfactory since repairs were completed. This was an isolated case of servo malfunction; and, no further corrective actions were deemed necessary.

FAILURE DATA:

Steam Dump Pressure Controller
Servo Setpoint Station Module
Hagan Controls
Part No. 6627D08-G01

Prepared By J. Rupp

SORC Meeting No. 84-103

General Manager -
Salem Operations

PSE&G

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

Salem Generating Station

August 30, 1984

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 83-056/03X-1
SUPPLEMENTAL REPORT

Pursuant to the requirements of Salem Generating Station Unit No. 1 Technical Specifications, Section 6.9.1.9.b, we are submitting supplemental Licensee Event Report for Reportable Occurrence 83-056/03X-1.

Sincerely yours,

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

JR:kll

CC: Distribution

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