NRC FORM 366
(7-77)

LICENSEE EVENT REPORT

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

Line							
01	LICENSEE CODE: N J S G S 2 (2)	LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3)	LICENSE TYPE: 4 1 1 1 1 (4)	CAT: (5)			
CON'T 01	REPORT SOURCE: L (6)	DOCKET NUMBER: 0 5 0 0 0 3 1 1 (7)	EVENT DATE: 0 7 2 1 8 3 (8)	REPORT DATE: 0 8 1 9 8 3 (9)			

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 On July 21, 1983, during routine startup operations, time response testing of No. 23
03 Auxiliary Feedwater Pump revealed that the pump did not consistently attain the
04 desired speed. The pump was tagged out and Action Statement 3.7.1.2 was entered.
05 The redundant electrical driven pumps remained operable, and the occurrence constituted
06 operation in a degraded mode in accordance with Technical Specification 6.9.1.9b.
07
08

Line	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
09	C H (11)	E (12)	B (13)	P U M P X X (14)	B (15)	Z (16)

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

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
A (18)	F (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	Y (24)	A (25)	T 1 4 7 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Investigation revealed a worn roller in the pump governor linkage was causing variation
11 in linkage displacement. The roller was replaced, the pump was satisfactorily
12 tested and the action statement was terminated. New design rollers will be
13 installed and a review performed of the procedure for periodic inspection of the
14 linkage.

Line	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
15	C (28)	0 0 0 (29)	NA	B (31)	Surveillance Testing

Line	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
16	Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

Line	NUMBER	TYPE	DESCRIPTION (39)
17	0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

Line	NUMBER	DESCRIPTION (41)
18	0 0 0 (40)	NA

LOSS OF OR DAMAGE TO FACILITY (43)

Line	TYPE	DESCRIPTION
19	Z (42)	NA

8309070308 830819
PDR ADOCK 05000311
S PDR

IE22

PUBLICITY

Line	ISSUED	DESCRIPTION (45)	NRC USE ONLY
20	N (44)	NA	

NAME OF PREPARER R. Frahm PHONE (609) 935-6000 Ext. 4309

PSE&G

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

Salem Generating Station

August 19, 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 83-038/03L

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 83-038/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

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

RF:kll

CC: Distribution

IE22
1/1

Report Number: 83-038/03L

Report Date: 08-19-83

Occurrence Date: 07-21-83

Facility: Salem Generating Station Unit 2
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Plant Systems - No. 23 Auxiliary Feedwater Pump - Inoperable.

This report was initiated by Incident Report 83-124.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 3 - Rx Power 0 % - Unit Load 0 MWe.

DESCRIPTION OF OCCURRENCE:

At 1905 hours, July 21, 1983, during a routine startup following refueling, time response testing of No. 23 Auxiliary Feedwater Pump revealed that the pump did not consistently attain the proper speed. The steam supply valves to the pump were closed and tagged to allow investigation of the problem. The tagout rendered the pump inoperable and Technical Specification Action Statement 3.7.1.2 was entered. The redundant electrical driven pumps were operable throughout the occurrence, and no event requiring initiation of cooldown of the Reactor Coolant System (RCS) occurred.

APPARENT CAUSE OF OCCURRENCE:

Investigation of the problem revealed that a brass roller in the governor linkage had flat spots on the roller surface. Vibration and normal movement of the steel linkage member riding on the roller apparently flattened portions of the surface of the softer brass roller. The flat spots resulted in changes in displacement of the linkage which in turn caused inconsistencies in the operating speed attained at startup.

ANALYSIS OF OCCURRENCE:

The operability of the Auxiliary Feedwater System ensures that the Reactor Coolant System (RCS) can be cooled down to less than 350°F from normal operating conditions in the event of a total loss of offsite power. The capacity of either both electric driven pumps or the steam driven pump is sufficient to remove decay heat and reduce the RCS to 350°F when the Residual Heat Removal System may be placed in operation.

As noted, the redundant electric pumps were operable and capable of meeting system flow requirements. The event therefore did not involve any undue risk to the health and safety of the public. The occurrence constituted operation in a degraded mode permitted by a limiting

ANALYSIS OF OCCURRENCE: (cont'd)

condition for operation, and is reportable in accordance with Technical Specification 6.9.1.9b.

Action Statement 3.7.1.2a requires:

> With one auxiliary feedwater pump inoperable, restore the inoperable pump to operable status within 72 hours or be in at least hot standby within the next 6 hours and in hot shutdown within the following 6 hours.

CORRECTIVE ACTION:

The worn roller was replaced and the pump was satisfactorily tested. No. 23 Auxiliary Feedwater Pump was declared operable at 0600 hours, July 22, 1983, and Action Statement 3.7.1.2a was terminated. A set of rollers has been fabricated for installation in the auxiliary feedwater pump governor linkage; the rollers are stainless steel for improved wear resistance. They will be installed in the linkage as soon as the pump may be conveniently removed from service.

Due to previous problems with the pump linkage (see LER 82-020/03X-1) annual visual inspection of the linkage was incorporated into the Inspection Order System. The inspection was performed as required; however, the wear was not detected. Accordingly, a review of the Inspection Order procedures will be performed and the procedures revised as necessary to insure that all linkage problems are detected.

FAILURE DATA:

Terry Steam Turbine Company
One Stage Drive Turbine
Type GS2

Prepared By R. Frahm

General Manager -
Salem Operations

SORC Meeting No. 83-107