NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | N J S G S 1 (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

0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 2 7 2 (7) | 0 5 2 6 8 2 (8) | 0 6 0 1 8 3 (9)

7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | On Two occasions, during routine surveillance, No. 2 Fire Pump failed to start. On

0 3 | May 26, 1982, and again on June 3, 1982, the pump was declared inoperable, and Action

0 4 | Statement 3.7.10.1.a was entered. On June 10, 1982, the 7 day time limit of the

0 5 | Action Statement expired, and the occurrence became reportable in accordance with

0 6 | Technical Specification 6.9.2f.

0 7 |

0 8 | 7 8 9 80

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP SUBCODE	VALVE SUBCODE
0 9	A B (11)	E (12)	A (13)	E N G I N E (14)	Z (15)	Z (16)
7 8	9 10	11	12	13 18	19	20

(17) LER RO REPORT NUMBER: EVENT YEAR 8 2 (21 22) | — (23) | SEQUENTIAL REPORT NO. 0 3 5 (24 26) | / (27) | OCCURRENCE CODE 9 9 (28 29) | REPORT TYPE X (30) | — (31) | REVISION NO. 1 (32)

	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)	W 0 7 0 (26)
	33	34	35	36	37 40	41	42	43	44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | Investigation revealed that a faulty wiring harness had resulted in damage to the fire

1 1 | pump electrical system, including the voltage regulator and alternator. The harness

1 2 | and the damaged components were replaced, and the action statement was terminated.

1 3 | The Hope Creek Fire Suppression System was used to provide for the loss of

1 4 | redundancy.

7 8 9 80

1 5 | FACILITY STATUS E (28) | % POWER 1 0 0 (29) | OTHER STATUS (30) N/A | METHOD OF DISCOVERY B (31) | DISCOVERY DESCRIPTION (32) Surveillance Testing

7 8 9 10 12 13 44 45 46 80

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

7 8 9 10 11 44 45 80

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

7 8 9 11 12 13 80

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

7 8 9 11 12 80

1 9 | LOSS OF OR DAMAGE TO FACILITY (43) TYPE Z (42) | DESCRIPTION N/A

7 8 9 10 80

2 0 | PUBLICITY ISSUED N (44) | DESCRIPTION (45)

7 8 9 10 68 69 80

8306210189 830601
PDR ADOCK 05000272
S PDR

NRC USE ONLY

NAME OF PREPARER R. Frahm

PHONE (609) 935-6000 Ext. 4309

GPO 917-926

PSEG

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

Salem Generating Station

June 6, 1983

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

Dear Mr. Allan:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 82-035/99X-1
SUPPLEMENTAL REPORT

Pursuant to the requirements of Salem Generating Station Unit No. 1 Technical Specifications, Section 6.9.2f, we are submitting supplemental Licensee Event Report for Reportable Occurrence 82-035/99X-1.

Sincerely yours,

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

RF:kls

CC: Distribution

IE 22
1/1

Report Number: 82-035/99X-1

Report Date: 06-01-83

Occurrence Date: 05-26-82

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

IDENTIFICATION OF OCCURRENCE:

Plant Systems - No. 2 Diesel Fire Pump - Inoperable.

This report was initiated by Incident Reports 82-133 and 82-140.

CONDITIONS PRIOR TO OCCURRENCE:

Unit 1 - Mode 1 - Rx Power 100% - Unit Load 1120 MWe.
Unit 2 - Mode 1 - Rx Power 100% - Unit Load 1130 MWe.

DESCRIPTION OF OCCURRENCE:

At 1330 hours, May 26, 1982, during routine surveillance, an operator observed that No. 2 Diesel Fire Pump failed to start in both the automatic and manual modes. The pump was declared inoperable, and Technical Specification Action Statement 3.7.10.1a was entered.

Later that day, at 2300 hours, after no apparent reason for the occurrence could be determined, No. 2 Fire Pump was satisfactorily tested. The pump was declared operable and Action Statement 3.7.10.1a was terminated. However, at 0916 hours, June 3, 1982, during surveillance testing, No. 2 Fire Pump again failed to start. The operator observed sparks emanating from the starter motor, and the pump was immediately secured. No. 2 Fire Pump was declared inoperable and Action Statement 3.7.10.1a was entered for a second time.

Equipment damage was confined to No. 2 Fire Pump. No. 1 Fire Pump was tested satisfactorily on May 26, 1982, and was operable in the event of a fire.

APPARENT CAUSE OF OCCURRENCE:

Investigation of the incident revealed that a faulty wiring harness had resulted in an intermittent ground in the fire pump electrical system. The ground in turn resulted in the starter motor remaining engaged with the engine running. Damage to the alternator and voltage regulator also resulted. Previous failures of the fire pump (see LERs 82-019/03L and 82-027/99X0) were of a similar nature and were apparently related to the faulty harness.

ANALYSIS OF OCCURRENCE:

The failure of No. 2 Fire Pump led to operation in a degraded mode permitted by a limiting condition for operation, and is reportable in accordance with Technical Specification 6.9.1.9b. Due to redundancy

ANALYSIS OF OCCURRENCE: (cont'd)

in the Fire Suppression System, one pump being inoperable did not result in any loss of protection. No. 1 Fire Pump was satisfactorily tested and was capable of meeting system requirements in the event of fire. Consequently, no risk to plant equipment, utility personnel, or to the health and safety of the general public was involved.

Action Statement 3.7.10.1a requires:

> With one pump and/or water supply inoperable, restore the inoperable equipment to operable status within 7 days, or prepare and submit a special report to the Commission pursuant to Specification 6.9.2 within the next 30 days, outlining the plans and procedures to be used to provide for the loss of redundancy in this system.

At 0916 hours, June 10, 1982, the 7 day time limit of Action Statement 3.7.10.1a expired, and No. 2 Fire Pump was still inoperable. The occurrence, therefore, became reportable in accordance with Technical Specification 6.9.2f, Special Reports for Fire Suppression Systems.

CORRECTIVE ACTION:

The Hope Creek Fire Suppression System was operable and was used to provide for the loss of redundancy in the Salem system. Operating Instruction OI V-3.3.4 contains the procedure for cross-connection of the Salem and Hope Creek systems. Finally, the original version of this report was submitted outlining the plans for providing for the loss of redundancy, in compliance with Technical Specification 6.9.2f.

The faulty wiring harness, alternator and voltage regulator were replaced. No. 2 Fire Pump was satisfactorily tested, and no further problems were noted. The pump was declared operable and at 1735 hours, June 23, 1982, Action Statement 3.7.10.1a was terminated.

FAILURE DATA:

Waukesha Foundry Co., Inc.
Diesel Engine
Model H-1077-DSU

Prepared By R. Frahm

General Manager -
Salem Operations

SORC Meeting No. 83-074