

**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	14						15	25										26	30					57	58			
		LICENSEE CODE							LICENSE NUMBER											LICENSE TYPE						CAT			

CON'T

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

0 5 0 0 0 3 1 1 7 1 1 1 8 8 3 8 1 2 1 6 8 3 9

DOCKET NUMBER EVENT DATE REPORT DATE

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 On November 18, 1983, during a maintenance shutdown, while performing Manual Safety

03 Injection testing, 2C Diesel Generator failed to accelerate to 900 RPM upon receiving

04 a valid start signal, as required by the Technical Specifications. Maximum speed

05 obtained was 180 RPM. This was classified as a "valid test failure" in accordance

06 with Regulatory Guide 1.108. This report is submitted in accordance with Technical

07 Specification 6.9.1 and contains the information required by Regulatory Guide 1.108,

08 Revision 1, August 1977, Regulatory Position C.3.b.

09		SYSTEM CODE E E		CAUSE CODE X	CAUSE SUBCODE Z	COMPONENT CODE E N G I N E				COMP. SUBCODE Z	VALVE SUBCODE Z	
7	6	9	10	11	12	13	13	14	18	19	20	
17 LER/RO REPORT NUMBER		EVENT YEAR 8 3		23	SEQUENTIAL REPORT NO. 0 6 3		27	OCCURRENCE CODE 0 3		REPORT TYPE L		REVISION NO. 0
21	22	23	24	25	26	27	28	29	30	31	32	
ACTION TAKEN X		FUTURE ACTION X		EFFECT ON PLANT Z		SHUTDOWN METHOD Z		HOURS 0 0 0 0		ATTACHMENT SUBMITTED Y		NPRD-4 FORM SUB. Y
33	34	35	36	37	38	39	40	41	42	PRIME COMP. SUPPLIER A		COMPONENT MANUFACTURER A 1 5 2
18	19	20	21	22	23	24	25	26	27	28	29	30

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Extensive testing and inspections were performed; it appears that the fuel racks did

1 1 not go to the full-fuel position upon receiving the start signal. Three successful

1 2 starts were performed, and a valid test was performed with satisfactory results on

1 3 November 22, 1983. A Supplemental Report will be issued.

[illegible]

PERSONNEL EXPOSURES										
NUMBER		TYPE		DESCRIPTION (39)						
1	7	0	0	0	(37)	2	(38)	NA		

PERSONNEL INJURIES		DESCRIPTION	
NUMBER			
1	8	40	NA

8312300120 831231

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

PUBLICITY  
 ISSUED DESCRIPTION (45)  
 2 0 N (44) NA  
 7 8 9 10 68 69 80  
 NRC USE ONLY

NAME OF PREPARER

J. L. Rupp

PHONE: (609) 339-4309

NRC USE ONLY

0-9-078



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

Salem Generating Station

December 16, 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 83-063/03L

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 83-063/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "J. M. Zupko, Jr.", written in a cursive style.

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

JR:k11

CC: Distribution

Report Number: 83-063/03L  
Report Date: 12-16-83  
Occurrence Dates: 11-18-83  
11-25-83  
Facility: Salem Generating Station Unit 2  
Public Service Electric & Gas Company  
Hancock's Bridge, New Jersey 08038

#### IDENTIFICATION OF OCCURRENCE:

Electrical Power Systems - 2C Diesel Generator - Test Failures

This report was initiated by Incident Report 83-208

#### CONDITIONS PRIOR TO OCCURRENCES:

11-18-83 - Mode 5 - Rx Power 000 % - Unit Load 0000 MWe  
11-25-83 - Mode 5 - Rx Power 000 % - Unit Load 0000 MWe

This report describes two (2) test failures involving 2C Diesel Generator; one was a valid test failure occurring on November 18, 1983, and the other was a non-valid test failure which occurred on November 25, 1983. This report is submitted for informational purposes in accordance with Technical Specification Surveillance Requirement 4.8.1.1.4, and contains the information required by Regulatory Guide 1.108, Revision 1, August 1977, Regulatory Position C.3.b.

Surveillance Requirement 4.8.1.1.4 states:

All diesel generator failures, valid or non-valid, shall be reported to the Commission pursuant to Specification 6.9.1.

#### DESCRIPTION OF OCCURRENCES:

Valid Test Failure - Classified in accordance with Regulatory Guide 1.108, Regulatory Position C.2.e.(1).

On November 18, 1983, during a maintenance shutdown, Emergency Safeguards Feature Manual Safety Injection testing was being performed in accordance with Surveillance Procedure SP(0)4.3.2.1(A). At 1528 hours, a valid test was completed on 2C Diesel Generator. The output breaker was opened, a normal shutdown was performed and the diesel was returned to a standby condition following a satisfactory twenty-four (24) hour endurance run.

At 1614 hours, as part of the Manual Safety Injection testing, Emergency Safeguards Actuation Mode-1 was initiated. 2C Diesel rolled, but failed to accelerate to 900 RPM as required. Maximum speed reached by the diesel was 180 RPM; the diesel then tripped on low lube oil pressure. 2C Diesel was declared inoperable at this time, and a work order was generated to investigate the problem.

DESCRIPTION OF OCCURRENCES: (cont'd)

Investigation by the Maintenance Department proceeded with assistance from the Engineering Department and a vendor representative from White Industries, Alco Engine Division. The overspeed mechanism was inspected and tested. The fuel racks were inspected and cycled in conjunction with an inspection of the fuel rack air boost. The governor was inspected and, the fuel pump was inspected and tested. All tests and inspection results were satisfactory. It appears, from the inspection results and observations during the attempted start, that the fuel racks did not go to the full-fuel position upon receiving the start signal. The problem could not be duplicated during the troubleshooting process.

On November 21, 1983, three (3) satisfactory starts were performed on 2C Diesel Generator. These starts were classified as non-valid satisfactory tests. On November 22, at 1159 hours, a valid test was performed in accordance with Surveillance Procedure SP(O)4.8.1.1.2(A). The results of the test were satisfactory, with the diesel generator performing as designed. 2C Diesel Generator was declared operable at this time.

Prior to this event, the test interval for the diesel generators was 14 days. This occurrence marked the third (3rd) failure of a diesel generator in the last 100 valid tests; but, it was the first valid test failure associated with 2C Diesel. The last valid test failure occurred on November 7, 1983, involving 2B Diesel, and events associated with that occurrence were documented in LER 83-058/03L. Due to this failure, the frequency for diesel generator testing has been increased to 7 days, in accordance with Regulatory Guide 1.108, Regulatory Position C.2.d.(3).

Non-Valid Test Failure - Classified in accordance with Regulatory Guide 1.108, Regulatory Position C.2.e.(2).

At 2129 hours, November 25, 1983, 2C Diesel Generator was started for a routine test surveillance. The operator, observing an indication of a generator field ground, immediately shutdown the diesel prior to attempting to reset the indication. Indication of a generator field ground has been experienced (on previous infrequent occasions) immediately upon starting. The ground indication clears when reset by the operator. Investigation has shown this to be a spurious indication, and determined not to be detrimental to the generator or its operation. At 2141 hours, the diesel generator was restarted and a valid test was performed in accordance with Surveillance Procedure SP(O)4.8.1.1.2(A). The results of the test were satisfactory, with the diesel generator performing as designed.

This occurrence was the first non-valid test failure associated with 2C Diesel Generator in the last 100 valid tests. The last non-valid test failure occurred on November 7, 1983, involving 2B Diesel. It occurred while troubleshooting the diesel generator in conjunction with the event documented in LER 83-058/03L.

ANALYSIS OF OCCURRENCES:

As required by the Technical Specifications, during plant shutdown operations, mode 5, two diesel generator units were maintained in an operable status at all times. To this date, no other failures, valid or non-valid, have been experienced with 2C Diesel Generator. All subsequent tests have been satisfactory. These occurrences involved no undue risk to the health or safety of the public.

FUTURE CORRECTIVE ACTION:

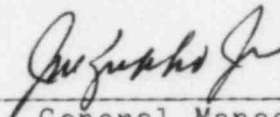
Because the problem associated with the valid test failure could not be duplicated and the exact failure mechanism was not determined, investigations and discussions are continuing. A supplemental report will be issued upon final resolution.

The Engineering Department has been requested to investigate the spurious generator field ground indication.

FAILURE DATA:

Not Applicable

Prepared By J. Rupp



General Manager -  
Salem Operations

SORC Meeting No. 83-152