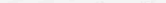


LICENSEE EVENT REPORT

CONTROL BLOCK: 

(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	LICENSEE CODE						14	15	LICENSE NUMBER										25	26	LICENSE TYPE					30	57 CAT SE		

CON'T

0 1 7 8

REPORT SOURCE

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

DOCKET NUMBER

EVENT DATE

REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | On November 18, 1983, during a maintenance shutdown, while performing Manual Safety
0 3 | Injection testing, 2C Diesel Generator failed to accelerate to 900 RPM upon
0 4 | receiving a valid start signal, as required by the Technical Specifications.
0 5 | Maximum speed obtained was 180 RPM. This was classified as a "valid test failure"
0 5 | in accordance with Regulatory Guide 1.108. This report is submitted in accordance
0 7 | with Technical Specification 6.9.1 and contains the information required by
0 8 | Regulatory Guide 1.103, Revision 1, August 1977, Regulatory Position C.3.b.

SYSTEM CODE E E (11)		CAUSE CODE X (12)		CAUSE SUBCODE Z (13)		COMPONENT CODE E N G I N E (14)				COMP SUBCODE Z (15)		VALVE SUBCODE Z (16)	
EVENT YEAR 8 3 (17)		SEQUENTIAL REPORT NO 0 6 3 (18)		OCCURRENCE CODE 0 3 (19)		REPORT TYPE X (20)		REVISION NO 1 (21)		ACTION TAKEN X (22)		FUTURE ACTION Z (23)	
EFFECT ON PLANT Z (24)		SHUTDOWN METHOD Z (25)		HOURS 0 0 0 (26)		ATTACHMENT SUBMITTED Y (27)		NPRD-4 FORM SUB Y (28)		PRIME COMP SUPPLIER A (29)		COMPONENT MANUFACTURER A 1 5 2 (30)	

CAUSE, DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Extensive testing and inspections were performed with the diesel vendor present.

1 1 It appears that the fuel racks did not go to the full-fuel position upon receiving

1 2 the start signal; however, the problem could not be duplicated. 2C Diesel was

1 3 returned to an operable status on November 22, 1983, following satisfactory

1 4 testing.

FACILITY STATUS			% POWER			OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION	
1	5	G	28	0	0	0	29	NA	B	31	Manual SI Testing
7	8	9	10	11	12	13	14	15	16	17	18

ACTIVITY CONTENT
RELEASED OF RELEASE

1 6 2 33 2 34 NA

7 8 9 10 11

AMOUNT OF ACTIVITY (35)

NA

LOCATION OF RELEASE (36)

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

PERSONNEL INJURIES		11	12	3	80
NUMBER		DESCRIPTION			
1	H	d	d	40	NA

8 9 11 12 80
LOSS OF OR DAMAGE TO FACILITY (43)
TYPE DESCRIPTION
1 9 2 (42) NA
3601230138 860115
PDR ADOCK 05000311
S PDR

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

NRC USE ONLY

NAME OF PREPARER J. L. Rupp

PHONE 609-339-4309

80 017-928

Report Number: 83-063/03X-1
Occurrence Dates: 11/18/83
11/25/83
Report Date: 01/15/86
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(O)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.

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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 appeared, 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; however, 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 that 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. Investigation revealed this to be a spurious ground indication and not an actual generator fault. 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.

APPARENT CAUSE OF OCCURRENCES:

Engineering Evaluation S-2-E300-MEE-026 documented the testing and inspections previously stated in the "Description of Occurrences" section of this LER and concluded that, although the root cause of the valid test failure could not be determined, the Technical Specification requirement for accelerated testing assures the reliability of the diesel generators.

APPARENT CAUSE OF OCCURRENCES: (cont'd)

To date, there have been no similar occurrences involving an unexplained failure of a diesel generator to accelerate to normal speed during surveillance testing.

Subsequent investigation of the non-valid test failure revealed that a field ground indication has been previously received (on infrequent occasions) immediately upon starting 2C Diesel; however, the alarm cleared immediately when reset by the operator. Although this spurious indication is not detrimental to the generator, an engineering investigation was requested. The field ground relay was subsequently tested with satisfactory results, and no reason for its intermittent actuation could be found. Testing and existing operation indicate that spurious field ground alarms on 2C Diesel Generator no longer occur.

ANALYSIS OF OCCURRENCES:

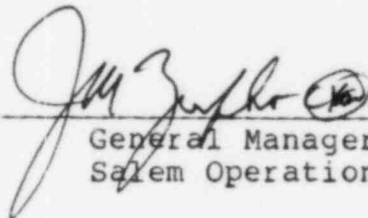
As required by the Technical Specifications, during plant shutdown operations, mode 5, two diesel generator units were maintained in an operable status at all times. These occurrences involved no undue risk to the health or safety of the public. However, as previously stated, all diesel generator failures, both valid and non-valid, are required to be reported to the Commission pursuant to the requirements of Specification 6.9.1.

CORRECTIVE ACTION:

As previously stated, testing failed to duplicate the events described in this report. To date, no similar occurrences have been experienced, and no further corrective action is deemed necessary at this time.

Prepared By J. L. Rupp

SORC Meeting No. 86-001


General Manager -
Salem Operations



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

Salem Generating Station

January 15, 1986

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

Dear Sir:

SALEM GENERATING STATION
LICENSE NO. DPR-75
DOCKET NO. 50-311
UNIT NO. 2
LICENSEE EVENT REPORT 83-063/03X-1
SUPPLEMENTAL REPORT

This update report is being submitted pursuant to the requirements of Technical Specification 6.9.1.9.b.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "J. M. Zupko, Jr.", with a circular flourish at the end.

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

JLR:ama

C Distribution

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