

## (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

CON'T

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0	8
---	---

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1	4
---	---

1	5
---	---

1	6
7	

1	7
---	---

1	8
---	---

1	9
---	---

2	0
---	---

PHONE: (609) 339-4309



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

Salem Generating Station

November 30, 1983

Dr. Thomas E. Murley  
Regional Administrator  
USNRC  
Region 1  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Dear Dr. Murley:

LICENSE NO. DPR-70  
DOCKET NO. 50-272  
REPORTABLE OCCURRENCE 83-052/03L

Pursuant to the requirements of Salem Generating Station Unit No. 1, Technical Specifications, Section 6.9.1.9.b, we are submitting Licensee Event Report for Reportable Occurrence 83-052/03L. 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.", is written above the typed name.

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

JR:k11

CC: Distribution

IE22  
11

Report Number: 83-052/03L  
Report Date: 11-30-83  
Occurrence Date: 11-04-83  
Facility: Salem Generating Station Unit 1  
Public Service Electric & Gas Company  
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Containment Cooling System - No. 11 Containment Fan Coil Unit - Inoperable

This report was initiated by Incident Report 83-198

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 100 % - Unit Load 1152 MWe

DESCRIPTION OF OCCURRENCE:

At approximately 1230 hours, November 4, 1983, during normal power operation, No. 11 Containment Fan Coil Unit (CFCU) tripped while attempting to start it in fast speed for the daily routine shift surveillance. Following an initial investigation of the breaker, the CFCU was started in low speed while monitoring motor current. The unit started with normal starting current; the motor current was then observed fluctuating rapidly and the unit tripped after approximately ten (10) seconds. Coincident with the motor current fluctuating, the control room operator observed all reactor coolant pump vibration monitors peg high and then return to normal when the CFCU tripped. No other alarms or abnormal indications were observed during the occurrence. Personnel were immediately sent into the containment to perform a visual inspection of No. 11 CFCU; the unit was declared inoperable and Technical Specification Action Statement 3.6.2.3a was entered at 1300 hours, November 4, 1983. Work orders were generated to investigate and repair No. 11 CFCU and to investigate any possible problems with the reactor coolant pump vibration monitors.

APPARENT CAUSE OF OCCURRENCE:

Investigation revealed that No. 11 CFCU motor stator windings were reading zero resistance to ground and were shorted phase-to-phase.

Subsequent examination of the motor indicated that the rotor bars were damaged. It appears that the damaged rotor caused the damage to the stator winding insulation.

The reactor coolant pump vibration monitor alarms were attributed to electrical interference which was generated from the electrical surge when the CFCU motor windings shorted.

ANALYSIS OF OCCURRENCE:

The operability of the containment cooling system ensures that the containment air temperature will be maintained within limits during normal operation and that there will be adequate heat removal capacity available when operated in conjunction with the containment spray systems during post-LOCA conditions. The CFCUs operate in conjunction with the containment spray systems to remove heat and radioactive contamination from the containment atmosphere in the event of a design basis accident. Operability of this equipment is necessary to ensure offsite radiation dose is maintained within the limits of 10CFR100.

Technical Specification 3.6.2.3 requires three (3) independent groups of containment cooling fans to be operable with two (2) fan systems to each of two (2) groups and one (1) fan system to the third group.

Action Statement 3.6.2.3a states:

With one group of the above required containment cooling fans inoperable and both containment spray systems operable, restore the inoperable group of cooling fans to operable status within seven (7) days or be in at least hot standby within the next six (6) hours and in cold shutdown within the following thirty (30) hours.

The capability for containment cooling was provided by the redundant containment cooling fan groups and both containment spray systems throughout the occurrence; No. 11 CFCU motor was replaced and the unit was returned to service within the time specified by the action requirement. No undue risk to the health or safety of the public was therefore involved in the occurrence. The event constituted operation in a degraded mode permitted by a limiting condition for operation and is therefore reportable in accordance with Technical Specification 6.9.1.9b.

CORRECTIVE ACTION:

No apparent external physical damage was noted during the visual inspection of No. 11 CFCU. No problems with the equipment or operation of the reactor coolant pump vibration monitors could be found; functional checks of the equipment were satisfactory.

No. 11 CFCU Motor was replaced, aligned, tested, vibration analysis was performed, and SP(0) 4.6.2.3a was completed satisfactorily. The unit was declared operable and Technical Specification Action Statement 3.6.2.3a was terminated at 0048 hours, November 8, 1983.

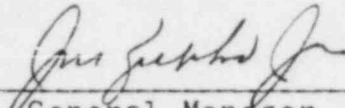
Field Directive S-C-M945 will be issued to ensure that periodic stator winding insulation testing of all CFCU motors is incorporated in the Managed Maintenance System.

The damaged motor is presently under evaluation by Engineering and Westinghouse Corporation.

FAILURE DATA:

CFCU Unit  
Motor  
Westinghouse Electric Corp.

Prepared By J. Rupp



---

General Manager -  
Salem Operations

SORC Meeting No. 83-144B