

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Catawba Nuclear Station, Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 4 1 3 1 OF 4										PAGE 13				
TITLE (4) Failure of Security Computer System Multiplexer Causes Two Missed Fire Watches																								
EVENT DATE (5)			LER NUMBER (6)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)														
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES N/A						DOCKET NUMBER(S) 0 5 0 0 0									
1	2	2	6	8	5	8	5	0	7	2	0	0	0	1	2	7	8	6	0 5 0 0 0					
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)																						
1		20.402(b)				20.405(e)				50.73(a)(2)(iv)				73.71(b)										
POWER LEVEL (10)		01914				20.405(a)(1)(i)				50.36(a)(1)				50.73(a)(2)(iv)				73.71(a)						
		20.405(a)(1)(ii)				50.36(a)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 305A)										
		20.405(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(viii)(A)														
		20.405(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)														
		20.405(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)														
LICENSEE CONTACT FOR THIS LER (12)																								
NAME Roger W. Ouellette, Associate Engineer - Licensing										TELEPHONE NUMBER 7104 3173 - 73510														
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																								
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS															
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)				MONTH DAY YEAR										
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO														

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

On December 26, 1985, an hourly firewatch for Diesel Generator Room 1B and the Auxiliary Feedwater Pump Room was made 21 minutes and 22 minutes late, respectively. The Fire Detection Response Officer (FDRO) on duty attempted to check both zones before the hourly limit had expired. However, in both cases he was unable to access the areas due to a malfunction in the Security Computer System Multiplexer that controls the Computer Access Doors. The unit was at 94% power at the time of this incident.

This event is assigned Cause Category X, Other, due to the malfunction of the computer system multiplexer. A contributing cause to this event is a Defective Procedure. The procedure for the FDRO duties does not clearly state the immediate response expected in the event a firewatch cannot be performed.

This incident is reportable pursuant to 10 CFR 50.73, Section (a)(2)(i)(b).

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

BACKGROUND

The Fire Protection System (EIIS:KP) for Diesel Generator (D/G) Room 1B is an automatic, low pressure, carbon dioxide (Cardox) System. Technical Specification (Tech Spec) 3.7.10.3 requires that an hourly firewatch be established in the event one of the two cardox systems becomes inoperable and the redundant D/G is still protected by the other operable cardox system.

On July 28, 1985, a firewatch patrol was initiated on the Auxiliary Feedwater (EIIS:BA) Pump Room (AFPR), by recommendation of the NRC, due to cables that were improperly wrapped. This requires an hourly surveillance.

DESCRIPTION OF INCIDENT

On November 19, 1985, at 0130 hours, the Diesel Generator (D/G) Room 1B Cardox System was declared inoperable due to the inability to clear the trouble alarm in the Control Room. Per Tech Spec 3.7.10.3, an hourly firewatch of the area was initiated.

On December 26, 1985, the Fire Detection Response Officer (FDRO) began his normal hourly firewatch rounds. At 1340 hours, the Security Computer/Unit 2 door testing began. Problems with the Multiplexer made the Controlled Access Doors (CAD) inaccessible. Per normal procedure, when the testing process began, Security announced over the public address system that manual sign-in at all unoccupied vital access areas would be required. At approximately 1405 hours, the FDRO attempted to enter the AFPR. Due to the malfunction in the Security Computer System the FDRO could not gain access to the area. The FDRO felt that he needed to continue in order to avoid missing his next 1 hour firewatch at 1409 hours. He felt the door for heat and smelled no smoke in the vicinity and, therefore, continued with his firewatch. Upon reaching the next firewatch post at approximately 1409 hours, the FDRO attempted to enter D/G Room 1B. The FDRO could not gain access to the area due to the Security computer malfunction. The FDRO decided to continue his firewatch to make sure he would not exceed the 1 hour firewatch at the next post. Prior to leaving the D/G Room 1B, he felt the door for heat and detected no smell of smoke in the area. At 1414 hours, the Security computer became operable and the CAD doors became accessible. The FDRO performed the required firewatch on D/G Room 2A and 2B at 1415 hours. This was the last firewatch post that required an inspection. At approximately 1425 hours, the FDRO returned to the Fire Protection Console (FPC) and informed the FPC Officer (FPCO) that the 1 hour Tech Spec limit had been exceeded for the AFPR and for the D/G Room 1B. The FPCO immediately notified the Central Alarm Station (CAS) personnel of the problem.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

The CAS dispatched an officer to the AFPR in order to perform the required firewatch. The FPCO dispatched the FDRO back to D/G Room 1B in order to perform the required firewatch. At 1427 hours, the firewatch was performed on the AFPR, making the firewatch late by 22 minutes. At 1430 hours, the FDRO performed the firewatch on D/G Room 1B, making the firewatch late by 21 minutes. Both firewatches exceeded the 1 hour limit as set forth in Tech Spec 3.7.10.3.

CONCLUSION

This incident is assigned Cause Category X, Other, due to the malfunction of the Security Computer System Multiplexer which prevented the FDRO from performing the required firewatches.

A contributing cause to this incident is classified as a Defective Procedure. When the FDRO could not gain access to the firewatch zones, the expected response was for him to immediately contact the FPCO. The Fire Detection Response Officer Procedure #222 does not explicitly direct the FDRO to immediately contact the FPCO. The procedure requires the FPCO to be notified, but puts much more emphasis on meeting the 1 hour firewatch as specified by the Tech Specs.

The FDRO was put into a position that required him to make a decision regarding the required firewatches. Using the training and procedures available to him, he made an appropriate decision. The FDRO may have been able to make a different decision in this incident if he had had more time between the required firewatches.

The access problem was determined to be due to a hardware malfunction in the Security Computer System Multiplexer. The make and model number of this equipment is safeguard information. Computer hardware problems are not reportable to the NPRDS network. This is the second incident to occur at Catawba in which malfunction of the Security Computer System was the root cause (see LER 413/85-70).

CORRECTIVE ACTION

- (1) FDRO and CAS Security Officer entered D/G Room 1B and the AFPR, respectively, and performed the required firewatches.
- (2) A Security Memorandum For File, Computer Failure, identifying CAD fuses to be pulled in order to override CAD keys during a similar computer failure, was written. A memorandum is safeguard information and only available to Security Personnel in the event of an emergency situation.

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- (3) A Work Request was written to install a dedicated phone for FPC personnel.
- (4) The computer problem was investigated immediately and normal functions were restored by 1414 hours on December 26, 1985.
- (5) Security Procedure #222, Fire Detection Response Officer Procedure, is to be revised to specify that the FDRO should notify the FPCO immediately in the event a firewatch cannot be performed.

SAFETY ANALYSIS

Both D/G's were operable during this incident with D/G Room 1A being protected by an operable cardox system. The Auxiliary Feedwater Pumps were protected by operable cardox systems. Both areas could have been accessed with keys on file in the Control Room, if access had been necessary. No fire occurred during the period.

The health and safety of the public were not affected by this incident.

DUKE POWER COMPANY

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VICE PRESIDENT
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January 27, 1986

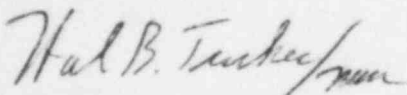
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Washington, D. C. 20555

Subject: Catawba Nuclear Station, Unit 1
Docket No. 50-413

Gentlemen:

Pursuant to 10 CFR 50.73 Section (a) (1) and (d), attached is Licensee Event Report 413/85-72 concerning a failure of the Security Computer System Multiplexer resulting in two missed fire watches. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,


Hal B. Tucker

RWO:slb

Attachment

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Document Control Desk
January 27, 1986
Page Two

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