

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Catawba Nuclear Station, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 1 3	PAGE (3) 1 OF 0 3
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TITLE (4)
Both Trains Control Room Ventilation Inoperable Due to Faulty Temperature Sensing Module

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			DOCKET NUMBER(S)																	
									N/A			0 5 0 0 0																	
0	1	1	6	8	6	3	6	-	0	0	3	-	0	0	0	2	1	4	8	6				0	5	0	0	0	0

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)									
POWER LEVEL (10) 1 0 0	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)						
	20.406(a)(1)(i)	50.38(e)(1)	50.73(a)(2)(v)	73.71(a)						
	20.406(a)(1)(ii)	50.38(e)(2)	50.73(a)(2)(vii)	X OTHER (Specify in Abstract Below and in Text, NRC Form 366A) 50.72(b)(1)(i)						
	20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)							
	20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)							
20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)								

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
NAME	AREA CODE		
Roger W. Ouellette, Associate Engineer - Licensing	710	431	7131-17151310

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
X	KIM	ITEC	11510	No					

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 January 16, 1986, at 0345 hours, both trains of the Control Room Area Ventilation (VC) System and their associated Chilled Water (YC) Systems were simultaneously inoperable. Operations began reducing power within 1 hour as required by Technical Specifications. Train B of the VC/YC Systems had been declared inoperable on January 15, 1986, at 0515 hours. Train A was declared inoperable the next morning when the train's chiller failed to start. The unit was operating at 100% power at the time of the incident.

This incident is assigned Cause Code X, Other, because it was determined that the chilled water compressor motor's temperature sensing module had failed, preventing the chiller from starting.

This incident is reportable pursuant to 10 CFR 50.73, Section (a)(2)(i)(B), and 10 CFR 50.72, Section (b)(1)(i)(A).

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

BACKGROUND

The Control Room Area Ventilation (VC) System (EIIS:VI) and the Chilled Water (YC) System (EIIS:KM) combine to form one system which provides ventilation and pressure requirements to the Control Room, Cable Spreading Room, Battery Room, Switchgear Rooms, Motor Control Center Rooms, and the 594 elevation Electrical Penetration Rooms. The VC and YC Systems are divided into two separate 100% capacity trains. The YC System A and B chillers are cooled by the A and B trains of the Nuclear Service Water (RN) System (EIIS:BI). If one train of RN becomes inoperable, the YC chiller supplied by that train becomes technically inoperable, although it can be physically operable by having the A and B headers of RN cross-connected. The reason the YC chiller on the inoperable train of RN is considered inoperable is that in the event of a LOCA, the A and B trains of RN would be automatically isolated.

Technical Specification (Tech Spec) 3.7.6 states that if one train of VC/YC becomes inoperable, the inoperable train must be restored to operable status within seven days or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.

If both trains of VC/YC become inoperable, the limiting condition for Tech Spec 3.7.6 cannot be met, and the action statement for Tech Spec 3.0.3 is entered, requiring action be initiated within 1 hour to place the unit in hot standby within the next 6 hours, hot shutdown with the following 6 hours, and cold shutdown within the subsequent 24 hours.

DESCRIPTION OF INCIDENT

On January 16, 1986, at 0345 hours, both trains of the VC and YC Systems were inoperable, causing the unit to enter the action statement of Tech Spec 3.0.3. Train B of VC/YC had been declared inoperable on January 15, at 0515 hours, when Train B of the RN System was removed from service for routine maintenance. Train B of VC/YC was left in service, with A and B trains of the RN System cross-connected to provide cooling flow to YC Chiller B. On January 16, 1986, at 0305 hours, personnel attempted to start Train A VC/YC as required by the monthly Idle Equipment Rotation Schedule. Chiller A motor would not start. Personnel began an investigation at 0315 hours to determine if the problem was in the system's valves or breaker alignments. When system alignments were determined to be correct, a Work Request was issued to investigate and repair the YC chiller. A Work Request was also issued to return Train B of the RN System to service in the event that the YC chiller could not be repaired in a timely manner. Train A of VC/YC

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

was declared inoperable at 0345 hours, and at 0440 hours, Operations began to reduce power as required by Tech Spec 3.0.3. At 0553 hours, personnel determined that the temperature sensing module in the YC chiller motor had malfunctioned, preventing the motor from starting. By this time, power had been reduced to 81.9%. The temperature sensing module in YC Chiller Motor A was replaced and the chiller was started. Train A VC/YC was declared operable at 0607 hours, and Tech Spec 3.0.3 was exited. Unit power had been reduced to 78%. Operations then began to increase power to 100%.

The temperature sensing module for the YC chiller motor was supplied by Carrier. The model number is 17FA999-1004-14. No failures of this component have been reported to the NPRDS Network. This component is not reportable in this application to the NPRDS.

There have not been any other failures of this type at Catawba, Unit 1.

CONCLUSION

This incident is assigned Cause Category X, Other, because of the failure of the temperature sensing module in the system chiller motor. Operations properly complied with the action statement of Tech Spec 3.0.3 by initiating the reduction in unit power.

CORRECTIVE ACTION

- (1) A Work Request was issued to investigate and repair the YC chiller.
- (2) A Work Request was issued to make Train B of RN System operable again in the event that YC chiller could not be repaired in a timely manner.

SAFETY ANALYSIS

Within one hour after declaring Train A of VC/YC inoperable, Operations began unit shutdown in accordance with the action statement of Tech Spec 3.0.3. Due to Train B of VC/YC being physically operable throughout this incident, there was no increase in Control Room temperature.

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

DUKE POWER COMPANY

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HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

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February 14, 1986

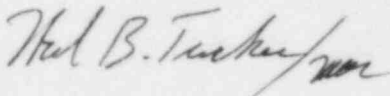
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Washington, D. C. 20555

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 413/86-03 concerning both trains of Control Room Area Ventilation simultaneously inoperable due to a malfunction of a temperature sensing module on a chilled water compressor motor. 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
February 14, 1986
Page Two

cc: Dr. J. Nelson Grace, Regional Administrator
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NRC Resident Inspector
Catawba Nuclear Station