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A Duke Energy Company

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March 16, 1998

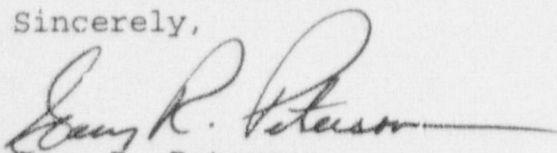
U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Catawba Nuclear Station, Unit 1
Docket No. 50-413
LER 413/98-004

Attached is Licensee Event Report 413/98-004 concerning
**Missed Technical Specification Surveillance on Control Room
Area Ventilation System Actuation Instrumentation.**

This event is considered to be of no significance with
respect to the health and safety of the public.

Sincerely,



Gary R. Peterson

Attachment

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Document Control Desk
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xc (with attachment):

Mr. Luis A. Reyes
Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
61 Forsyth Street, S.W., Suite 23T85
Atlanta, GA 30303

Mr. Peter S. Tam
U.S. Nuclear Regulatory Commission
Mail Stop O-14H25
11555 Rockville Pike
Rockville, MD 20852-2738

Mr. Darrell J. Roberts
NRC Senior Resident Inspector
Catawba Nuclear Station

INPO Records Center
700 Galleria Place
Atlanta, GA 30339-5957

Marsh & McLennan, Inc.
Mr. Kenneth W. Gannaway
100 N. Tryon Street
Charlotte, NC 28202

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH: (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Catawba Nuclear Station Unit 1	DOCKET NUMBER (2) 05000413	PAGE (3) 1 of 5
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TITLE (4)
Missed Technical Specification Surveillance on Control Room Area Ventilation System Actuation Instrumentation

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 NAME	DOCKET NUMBER(S)
02	16	98	98	004	00	03	16	98	Catawba Unit 2	05000414

OPERATING MODE (9) 100%	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (Check one or more of the following) (11)																				
POWER LEVEL (10)		<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.36(c)(2)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.71(b)	<input type="checkbox"/> 73.71(c)	<input type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)

NAME R.L. Bain, Safety Review Group Manager	TELEPHONE NUMBER
	AREA CODE: (803) 831-3743

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>				

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

EVENT DESCRIPTION: On 2-16-98, it was determined that literal compliance to Technical Specification (T/S) 3/4.3.2 (Engineered Safety Features Actuation System Instrumentation) had not been met in the past. The minimum channels operable requirement of T/S Table 3.3-3 and the surveillance requirements of T/S Table 4.3-2 had not been met for Modes 5 and 6 for Item 11a. Item 11a governs Control Room Area Ventilation Operation, Automatic Actuation Logic and Actuation Relays. These T/S requirements are erroneous in that while they literally state applicability in all modes, they should only be applicable in Modes 1 through 4.

EVENT CAUSE: The root cause is due to incorrect mode specification requirements in the affected T/S.

CORRECTIVE ACTIONS: It was verified that all T/S requirements are presently being met while the units are in Modes 1 through 4. A license amendment submittal has been initiated to change the erroneous T/S mode requirements.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

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		98	004	00	

BACKGROUND

The Control Room Area Ventilation System [EIIS:VI] is designed to maintain the environment in the control room and control room area within acceptable limits for the operation of unit controls, for maintenance and testing of the controls as required, and for uninterrupted safe occupancy of the control room during post-accident shutdown. This function is accomplished by pressurizing the control room to greater than or equal to 1/8 inch water gauge with respect to all surrounding areas, by filtering the outside air used for pressurization, by filtering a portion of the return air from the control room to clean up the control room environment, and by maintaining the control room temperature less than 90 degrees F. The system is comprised of two redundant trains so that it will be able to perform its required function in the event that a single failure disables one train.

The Engineered Safety Features Actuation System [EIIS:JE] uses selected plant parameters to determine whether or not predetermined safety limits are exceeded. If limits are exceeded, the system combines the signals into logic matrices sensitive to combinations indicative of accident conditions. Once the required logic combination is completed, the system sends actuation signals to the appropriate Engineered Safety Features components, including those in the Control Room Area Ventilation System. In the event of a safety injection initiation, the Engineered Safety Features Actuation System will cause an automatic start of the non-running Control Room Area Ventilation System train.

Technical Specifications (T/S) govern operability and surveillance requirements for the Control Room Area Ventilation System and the Engineered Safety Features Actuation System. Specifically, T/S 3/4.3.2, Tables 3.3-3 and 4.3-2 delineate operability and surveillance requirements, respectively, for that portion of the Engineered Safety Features Actuation System which actuates the Control Room Area Ventilation System. Functional unit 11a (Automatic Actuation Logic and Actuation Relays) states that two channels of the subject instrumentation are required operable in all modes of plant operation. The surveillance requirements for this functional unit are a monthly actuation logic test (on a staggered test basis), a monthly master relay test (on a staggered test basis), and a quarterly slave relay test. The T/S stipulates that these surveillances are required in all modes of plant operation.

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EVENT DESCRIPTION

- 1985-1986 Catawba Units 1 and 2 began operation with T/S requirements for the Control Room Area Ventilation System Automatic Actuation Logic and Actuation Relays that stipulated that this functional unit was required operable in all modes of plant operation. The T/S further stipulated that surveillances for this functional unit were required in all modes of plant operation.
- 2/18/91 A T/S interpretation was developed which stated that the surveillances for functional unit 11a were only required to be performed whenever either unit is in Modes 1, 2, 3, or 4.
- 2/16/98 During a review of plant procedures in support of the Catawba conversion to the Improved T/S, Engineering personnel noted that the current T/S required the above functional unit to be operable in all modes and that the surveillances for this functional unit were required in all modes. Engineering personnel contacted Regulatory Compliance and it was determined that T/S requirements were not always literally satisfied in the past when the units were in Modes 5 and 6.

CONCLUSION

The root cause of this event was attributed to incorrect mode specification requirements in the affected T/S. The only relationship between automatic actuation of the Control Room Area Ventilation System and the Engineered Safety Features Actuation System is through safety injection initiation. If a safety injection initiation occurs, it will cause an automatic start of the non-running Control Room Area Ventilation System train. The Engineered Safety Features Actuation System requirements for safety injection initiation are correctly specified in T/S as being applicable in Modes 1 through 4 in functional unit 11c. A documented T/S interpretation was written at Catawba in 1991 which addressed the fact that the mode requirements for the Automatic Actuation Logic and Actuation Relays in functional unit 11a conflicted with the mode requirements for the safety injection initiation function in functional unit 11c. When it was recently realized that the T/S interpretation guidance was not consistent with the literal requirements of the T/S itself, the interpretation was deleted. The proper course of action should have been to process a license amendment

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request to change the mode requirements for the Automatic Actuation Logic and Actuation Relays to Modes 1 through 4, in lieu of the T/S interpretation.

A review of plant history for the past 24 months has shown that there have been other reportable events involving missed T/S surveillances where the root cause was attributed to inadequate written communication. This event is therefore considered recurring. None of the previous events, however, were attributed to incorrect T/S requirements. Nevertheless, as indicated in planned corrective action number 4 of LER 413/97-004, the causal analysis of events generically associated with "surveillance testing" will be performed for commonality.

CORRECTIVE ACTION

Immediate

None

Subsequent

1. A review of T/S verified that all T/S requirements are presently being met while the units are in Modes 1 through 4.
2. The affected T/S interpretation was deleted.
3. A license amendment submittal has been initiated to request a change to the T/S to specify mode requirements of 1 through 4 for the Automatic Actuation Logic and Actuation Relays.

Planned

1. The above license amendment submittal will be completed, submitted to the NRC, and implemented when NRC approval is received.

SAFETY ANALYSIS

The function of the Control Room Area Ventilation System Automatic Actuation Logic and Actuation Relays is to initiate automatic actuation of the non-running train of the system in the event of an accident. Since the function will only occur in the event of a safety injection initiation, the ability of the system to fulfill its design function was not compromised by this

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event. Having the Automatic Actuation Logic and Actuation Relays inoperable in Modes 5 and 6 would not have compromised the ability of the system to function had it been required in Modes 1 through 4. The health and safety of the public were not affected by this event.