

September 19, 1994

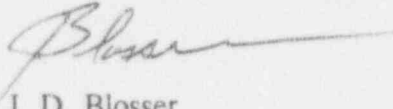
U. S. Nuclear Regulatory Commission
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ULNRC-03074

Gentlemen:

**DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
FACILITY OPERATING LICENSE NPF-30
LICENSEE EVENT REPORT 94-005-00
*MISSED TECH SPEC 4.3.3.6 SURVEILLANCE OF THE
THERMOCOUPLE/CORE COOLING DETECTION SYSTEM
DUE TO INADEQUATE SURVEILLANCE PROCEDURES***

The enclosed Licensee Event Report is submitted pursuant to
10CFR 50.73(a)(2)(i)(B) concerning a condition prohibited by Callaway
Plant Technical Specifications.


J. D. Blosser
Manager, Callaway Plant

JDB/HDB/JGB/lrj

Enclosure

cc: Distribution attached

TE221

cc distribution for ULNRC-03074

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Callaway Plant Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 8 3	PAGE (3) 1 OF 0 5
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TITLE (4) **Missed Tech Spec 4.3.3.6 Surveillance of the Thermocouple/Core Cooling Detection System Due to Inadequate Surveillance Procedures**

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV. NO.	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
0 8	2 0	9 4	9 4	0 0 5	0 0	0 9	1 9	9 4			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)			20.405(a)			50.73(a)(2)(iv)			73.71(b)	
	20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v)			73.71(c)	
	20.405(a)(1)(ii)			50.36(c)(2)			50.73(a)(2)(vi)			OTHER (Specify in	
	20.405(a)(1)(iii)			X 50.73(a)(2)(i)			50.73(a)(2)(viii)(A)			Abstract below and in	
	20.405(a)(1)(iv)			50.73(a)(2)(ii)			50.73(a)(2)(viii)(B)			Text, NRC Form 366A)	
20.405(a)(1)(v)			50.73(a)(2)(iii)			50.73(a)(2)(x)					

LICENSEE CONTACT FOR THIS LER (12)						TELEPHONE NUMBER					
NAME H. D. Bono, Supervising Engineer, Site Licensing						AREA CODE					
						3 1 4 6 7 6 - 4 4 2 8					

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

SUPPLEMENTAL REPORT EXPECTED (14)						EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)						X NO				

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

On 8/20/94, licensed utility Reactor Operators were performing the monthly Technical Specification (T/S) 4.3.3.6 CHANNEL CHECK of the Thermocouple/Core Cooling Detection System when they discovered a discrepancy in the numbers taken from the Core Cooling Detection System printers versus known actual conditions. The plant was in Mode 1 at 100% reactor power at the time of event discovery.

A review by utility engineers indicated that incorrect T/S 4.3.3.6 surveillance data had been recorded on numerous occasions since 6/4/88. The printers would stop updating with current data if the Core Cooling Monitor was reset at the same time data was being sent from the processor to the printer. Surveillance procedure OSP-SH-00001, "Post Accident Monitoring (PAM) CHANNEL CHECK", did not detail this fact. Upon discovery of this condition, both printers were reset and the surveillance was successfully performed on 8/23/94.

OSP-SH-00001 was revised to only allow the use of the calibrated Core Cooling Monitor local or remote display for meeting surveillance acceptance criteria until further detail can be added to clarify printer operation. Utility personnel reviewed other PAM instrumentation listed in T/S and associated surveillance procedures for compliance with T/S and Reg Guide 1.97. This event will be incorporated in utility licensed Operator requal training.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Callaway Plant Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 8 3 9 4 - 0 0 5 - 0 0 0 2 OF 0 5	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REV NO.			

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

BASIS FOR REPORTABILITY:

This event is reportable per the requirements of 10CFR50.73(a)(2)(i)(B) as a condition prohibited by the plant's Technical Specifications (T/S).

T/S 4.3.3.6 states "Each accident monitoring instrumentation⁽¹⁾ channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION at the frequencies shown in Table 4.3-7." Table 4.3-7 ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS, item 17 requires a Thermocouple/Core Cooling Detection System⁽²⁾ channel check be performed monthly. A historical review of the monthly Thermocouple/Core Cooling Detection System surveillances indicates that data obtained from the system printers for the below referenced dates was incorrect:

TRAIN A

06/04/88
07/02/88
10/21/89
11/18/89
01/13/90
02/10/90
03/10/90
04/06/91
08/24/91
09/21/91
10/19/91
07/25/92
08/22/92
09/19/92
10/17/92
11/14/92
12/12/92
01/09/93
04/03/93
03/05/94
04/02/94
04/30/94
05/28/94
06/25/94
07/23/94

TRAIN B

02/11/89
03/11/89
08/26/89
09/23/89
10/21/89
11/18/89
01/13/90
02/10/90
03/10/90
04/07/90
05/05/90
03/09/91
04/06/91
09/21/91
10/19/91
02/06/93
03/06/93
04/03/93
05/01/93
05/29/93
06/26/93
07/24/93
08/21/93
09/18/93
01/08/94

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Callaway Plant Unit 1	0500048394	YEAR	SEQUENTIAL NUMBER	REV NO.	00	3	OF 05

TEXT (If more space is required, use additional NRC Form 365A's)(17)

08/20/94

02/05/94

03/05/94

04/02/94

04/30/94

05/28/94

06/25/94

07/23/94

08/20/94

PLANT CONDITIONS AT TIME OF EVENT:

Mode 1 - Power Operations

100% Reactor Power

DESCRIPTION OF EVENT:

On 8/20/94, licensed utility Reactor Operators were performing the monthly T/S surveillance 4.3.3.6 CHANNEL CHECK of the Thermocouple/Core Cooling Detection System in accordance with plant procedure OSP-SH-00001, "PAM CHANNEL CHECK" when they discovered a discrepancy in the numbers taken from the Core Cooling Detection System printers⁽³⁾ versus known actual conditions. On 8/23/94, an investigation by utility engineers into the cause of this discrepancy revealed that the data provided by the printers on both trains of the Core Cooling Monitor⁽⁴⁾ had not been updating since early in Cycle 7. A review of Thermocouple/Core Cooling Detection System surveillance data indicated that the Train 'A' Detection System printer had not been updating since 2/5/94 and Train 'B' had not been updating since 12/16/93. Upon discovery of this condition, both printers were reset and the surveillance was re-performed on 8/23/94 to obtain current incore thermocouple data.

ROOT CAUSE:

The failure to properly perform the monthly T/S 4.3.3.6 CHANNEL CHECK of the Thermocouple/Core Cooling Detection System was due to insufficient level of detail concerning printer operation in surveillance procedure OSP-SH-00001. Troubleshooting of the printers determined that they would stop updating if the Core Cooling Monitor was reset at the same time data was being sent from the processor to the printer.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Callaway Plant Unit 1	0 5 0 0 0 4 8 3 9 4 - 0 0 5 - 0 0	YEAR	SEQUENTIAL NUMBER	REV NO.			

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

CORRECTIVE ACTIONS:

1. Post Accident Monitoring (PAM) Channel Check procedure, OSP-SH-00001, was revised to only allow the use of the calibrated Core Cooling Monitor local or remote display for meeting the surveillance acceptance criteria until further detail can be added to clarify printer operation.
2. Utility personnel reviewed the other PAM instrumentation listed in Tech Specs and associated surveillance procedures for compliance with Tech Specs and Reg Guide 1.97. This review confirmed that T/S 3/4.3.3.6 is the only section which references Reg Guide 1.97. No new items of Tech Spec non-compliance were identified.
3. The problems encountered and subsequent corrective actions resulting from this event will be incorporated into utility licensed Operator requal training.

SAFETY SIGNIFICANCE:

Primary core cooling information in an accident situation comes from the main control board sub-cooling instruments. These instruments are fed directly from the incore thermocouples. Additionally, a review by utility Nuclear Engineering personnel indicated that calibrated, local digital indication was available to obtain incore thermocouple data since plant startup. Utility Operations personnel had diverse indication available in the form of plant computers and main control board annunciators. This event, therefore, did not present a risk to the public health and safety.

PREVIOUS OCCURRENCES:

LER 94-003-01, ULNRC-03073, dated 9/16/94: This LER describes improperly performed T/S 4.3.3.6 PAMS CHANNEL CHECK due to utility personnel using instrumentation that does not meet the requirements of Reg. Guide 1.97. Although these two events are similar in that they deal with Reg Guide 1.97 instrumentation surveillances, the human performance errors that occurred in the present event are a result of improperly operating the instrumentation to obtain data. The corrective actions for LER 94-003-01 therefore could not have prevented the occurrence of LER 94-005-00.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REV NO.			
Callaway Plant Unit 1	0 5 0 0 0 4 8 3	9 4 -	0 0 5	- 0 0	0 5	OF	0 5

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

FOOTNOTES:

The system and component codes listed below are from IEEE Standard 805-1984 and 803A-1984, respectively.

- (1) System - IP
- (2) System - IG
- (3) System - IG, Component - PRNT
- (4) System - IG, Component - MON