

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 3		
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TITLE (4)  
Excure Neutron Monitoring Power Range Channels Not Surveilled Due to Personnel Error

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)
0 8	2 3	8 8	8 8	0 0 9	0 0 9	2 2	8 8				0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9) 1

POWER LEVEL (10) 0 6 5

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)

<input type="checkbox"/> 20.405(a)	<input type="checkbox"/> 20.405(i)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.73(a)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)	<input type="checkbox"/> 50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)
<input type="checkbox"/> 20.405(a)(1)(iv)	<input checked="" type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(vii)(A)	
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(vii)(B)	
<input type="checkbox"/> 20.405(a)(1)(vi)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME: Michael E. Taylor - Superintendent, Operations

TELEPHONE NUMBER: 3 1 4 6 7 6 - 1 8 2 0 7

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)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15): MONTH DAY YEAR

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

At 0900 CDT on 8/23/88, it was discovered that the excure neutron monitoring system's power range (PR) channels had not been surveilled before the late finish time of 0709 as required by Technical Specification (T/S) 4.3.1.1 Table 4.3-1 Item 2a. At the time of discovery, the plant was in Mode 1 - Power Operations, at 65% reactor power.

The root cause of this event was the failure of the licensed operators to realize that the T/S surveillance needed to be completed on their shift rather than anytime that particular day. They had decided to delay the surveillance during a planned maintenance power reduction.

Upon discovery, the missed surveillance was immediately completed. To prevent recurrence, the event and T/S surveillance frequency requirements will be reviewed during requalification training. Enhanced methods of tracking frequent surveillances will be evaluated.

Actual power and excure PR channel data recorded showed that three of the four PR channels remained in calibration (within 2% of actual power) during the event. One PR channel (N42) was no more than 3% lower than actual power between 0001 and the 0934 gain adjustment on 8/23/88.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (if more space is required, use additional NRC Form 365A's) (17)

Basis for Reportability

At 0900 CDT on 8/23/88, the licensed Operating Supervisor (OS) discovered during a review of control room logs that the excore neutron monitoring system's power range (PR) channels (1) had not been surveilled before the late finish time of 0709 on 8/23/88. Technical Specification (T/S) 4.3.1.1 Table 4.3-1 Item 2a requires a daily comparison of a calorimetric to excore power range indications above 15% Rated Thermal Power (RTP) and adjustments to excore channel gains consistent with the calorimetric power if the absolute difference is greater than 2%. The surveillance was not completed within the specified time interval of 24 hours plus the allowed 25% extension. At the time of discovery, the plant was in Mode 1 - Power Operations, at 65% reactor power for maintenance purposes. This report is submitted pursuant to 10CFR50.73(a)(2)(i) as a condition prohibited by the plant's T/S.

Description of Events

At 1600 CDT on 8/22/88, the plant began to reduce power from 100% reactor power in order to remove 'B' Main Feedwater Pump (2) (MFP) from service to replace a recently failed power supply circuit card. (3) At 0100 on 8/23/88, the plant reached 65% reactor power. As the result of the recent plant downpower transient, the surveillance was deferred in anticipation of a return to full power (in about 3 hours) following the replacement of the MFP circuit card. Procedure OTG-22-00004 "Power Operations" required that a calorimetric be performed at 80% when reactor power was increased. The licensed OS and Shift Supervisor decided to delay the calorimetric surveillance until that time. However, maintenance difficulties delayed the return to full power beyond the current shift. The need for completion of the calorimetric surveillance was communicated between the licensed RO's during the shift turnover at 0700 but a late finish time was not discussed. The oncoming RO understood this to mean an on-demand 80% reactor power calorimetric would be required on the power increase rather than that the daily calorimetric surveillance was due. The same surveillance procedure is used for both daily and on-demand calorimetrics. The surveillance was not completed until 0934 on 8/23/88 after the oversight was recognized by the day shift's OS during a review of the control room shift and daily log readings. The plant was restored to full power on 8/24/88.

Root Cause

The root cause of the failure to perform the daily surveillance within the specified time period is attributable to cognitive personnel error. The licensed operators failed to realize that the T/S daily calorimetric surveillance was required to be performed within 30 hours (includes 25% extension). They mistakenly believed that the surveillance could be

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		88	009	00	03	OF	03

TEXT (if more space is required, use additional NRC Form 305A's) (17)

(cont.)

performed anytime during that particular day. The last satisfactory completion of the surveillance had been at 0109 CDT on 8/22/88. When the decision was made to delay its performance, no additional mechanism for tracking its completion was initiated. The calorimetric surveillance's completion is documented on the control room shift and daily log sheet but does not specify a next due time.

Corrective Actions

Upon discovery of the missed surveillance, a calorimetric surveillance was immediately performed and PR channel gains were adjusted accordingly. To prevent recurrence, this event and T/S surveillance frequency requirements will be reviewed during requalification training for licensed operators and other groups responsible for surveillances performed more frequently than weekly. An enhanced method for time tracking surveillances that are performed more frequently than weekly will be evaluated. (Surveillances of this frequency are tracked differently than those performed less frequently.)

Safety Significance

Data recorded for the NSSS computer reactor core thermal power and the four excore PR channels showed the four PR channels to be within 2% of actual power until 2400 CDT on 8/22/88. Between 0001 and 0934 on 8/23/88, three PR channels remained within the required 2% difference. The fourth PR channel (N42) was no more than 3% lower than actual power. The surveillance performed at 0934 on 8/23/88 at 65% reactor power required excore PR gain adjustments that increased indicated power by 1.49, 2.07, 1.25, and .97 percent on channels N41, N42, N43, and N44 respectively, to match the actual power found using the calorimetric calculation. At 1915, when PR gain adjustments were made for 80% reactor power, these channels were adjusted back down by 2.12, 3.23, 1.59, and 1.24 percent respectively. Because three of the four channels remained within the required limit, this event posed no threat to the public health and safety.

Previous Occurrence

None.

Footnotes

The system and component codes below are from IEEE Standards 875-1983 and 803A-1983, respectively.

- (1) System - IG, Component - CHA
- (2) System - SJ, Component - P
- (3) System - SJ, Component - RJX



Callaway Plant

September 22, 1988

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

ULNRC-1835

Gentlemen:

DOCKET NUMBER 50-483  
CALLAWAY PLANT UNIT 1  
FACILITY OPERATING LICENSE NPF-30  
LICENSEE EVENT REPORT 88-009-00  
EXCORE NEUTRON MONITORING POWER RANGE  
CHANNELS NOT SURVEILLED DUE TO PERSONNEL ERROR

The enclosed Licensee Event Report is submitted pursuant to 10 CFR 50.73(a)(2)(1) concerning operation of the Callaway Plant with a condition prohibited by the plant's Technical Specifications. The condition resulted from a failure to perform a daily surveillance requirement on the Excore Neutron Monitoring Power Range Channels within the specified time limit due to personnel error.

*John D. Blosser*  
J. D. Blosser  
Manager, Callaway Plant

*RS*  
TPS/JKB:jlh

Enclosure

cc: Distribution attached

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cc distribution for ULNRC-1835

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