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ULNRC-2238

Gentlemen:

DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
FACILITY OPERATING LICENSE NPF-30
LICENSEE EVENT REPORT 90-006-00
TECHNICAL SPECIFICATION ACTION STATEMENT NOT ENTERED
FOR INOPERABLE REMOTE MANUAL CONTAINMENT ISOLATION VALVES
DUE TO HUMAN PERFORMANCE

The enclosed Licensee Event Report is submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) concerning operation of the Callaway Plant with a condition prohibited by the plant's Technical Specification. The condition resulted from the failure to enter the action statement for the Essential Service Water to Containment Cooler remote manual isolation valves when they were tagged in their open position and rendered inoperable. This was due to a human performance error.

J. D. Blosser
for J. D. Blosser
Manager, Callaway Plant

TPS JLR
TPS/LAM/lrj

Enclosure

cc: Distribution attached

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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 1 OF 0 3										PAGE 13	
TITLE (4) Technical Specification Action Statement Not Entered For Inoperable Remote Manual Containment Isolation Valves Due to Human Performance																					
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 6	0 3	9 0	9 0	0 0 6	0 0 0 6	2 8	9 0								0 5 0 0 0 0						
OPERATING MODE (9) 1			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)																		
POWER LEVEL (10) 1 0 0		20.402(b)				20.405(c)				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 Abstract below and in Text, NRC Form 306A)							
		20.405(a)(1)(iii)				X 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 T. P. Sharkey, Supervising Engineer, Site Licensing										TELEPHONE NUMBER 3 1 4 6 7 6 - 8 3 3 6											
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) (16)										X NO											

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

On 6-3-90, the Essential Service Water (ESW) to containment cooler isolation valves were tagged with Worker Protection Assurance in their safety injection signal (SIS) position, open. These valves are remote manual valves as listed in Technical Specification (T/S) 3.6.3 Table 3.6-1. The plant's Technical Specification Interpretation (TSI) written for T/S 3.6.3 states: "Those valves which are listed as remote manual in Table 3.6-1 do not receive a containment isolation signal. Therefore, simply moving power from these valves does not in and of itself make the valves inoperable from a containment isolation standpoint." Utility licensed Scheduling and Operations personnel applied this TSI to mean that the T/S 3.6.3 Action Statement did not need to be entered for the work performed on the valves. Subsequent evaluation verified that the valves should have been considered manual containment isolation valves, requiring the valves to be closed per T/S 3.6.1.1. T/S 3.6.3 and T/S 3.6.1.1 were violated as their Action Statements were never entered. The plant was in Mode 1 - Power Operations at 100 percent Reactor Power at the time of the event.

The root cause of this event was the TSI for T/S 3.6.3 remote manual valves was incorrect.

The TSI will be revised to clarify the effect of removing power to remote manual valves. The revised TSI and the root cause will be reviewed with Scheduling and Operations personnel, the On-Site Review Committee (ORC) and the alternate ORC members.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/90

FACILITY NAME (1) Callaway Plant Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 4 8 3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 0	0 0 6	0 0 0	2	OF	0 3

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

Description of Event

At 1316 CST on 6-3-90, the Essential Service Water (ESW)⁽¹⁾ supply to⁽³⁾ containment cooler 'B' train⁽²⁾ outside containment isolation valve, EFHV0032, and the containment cooler 'B' train outside containment return valve, EFHV0050, were tagged with Worker Protection Assurance in their safety injection signal (SIS) position, open. These valves are remote manual valves as listed in Technical Specification (T/S) 3.6.3 Table 3.6-1. The plant's Technical Specification Interpretation (TSI) written for T/S 3.6.3 states: "Those valves which are listed as remote manual in Table 3.6-1 do not receive a containment isolation signal. Therefore, simply removing power from these valves does not in and of itself make the valves inoperable from a containment isolation standpoint." Utility licensed Scheduling personnel applied this TSI to mean that the T/S 3.6.3 Action Statement did not need to be entered for the work performed on the valves. The work included removing power from the valves, rewiring the limit switches, cleaning and inspecting of the limit torque operators, and the installation of breaker trip setpoints. Due to Scheduling personnel's application of the TSI, the valves were not declared inoperable and were not entered in the Equipment Out of Service log by the Control Room operators when the work package was approved and commenced.

On 6-5-90 at 1645, the Shift Technical Advisor discovered the condition during a review of the completed work package in preparation for the valve retests. The remote manual valves were isolated and the T/S 3.6.2.3 Action Statement was entered for the 'B' train containment cooling system.

Basis for Reportability

T/S 3.6.3 requires that the containment isolation valves specified in Table 3.6-1 be OPERABLE with isolation times as shown in Table 3.6-1. Per T/S Table 3.6-1, the ESW to Containment Cooler isolation valves have an active safety function to close by remote manual operation. Due to the work that was performed on the valves and the tagging involved, remote operation was not possible. Subsequent evaluation verified that the valves should have been considered manual containment isolation valves, requiring the valves to be closed per T/S 3.6.1.1. T/S 3.6.3 and T/S 3.6.1.1 were violated as their Action Statements were never entered. The plant was in Mode 1 - Power Operations at 100 percent Reactor Power at the time of the event.

This Licensee Event Report is submitted pursuant to 10CFR50.73(a)(2)(i)(B) to report a condition prohibited by the plant's T/S.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/86

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Callaway Plant Unit 1	0 5 0 0 0 4 8 3	9 0	0 0 6	0 0	0 3 OF 0 3	

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

Root Cause

The TSI for T/S 3.6.3 remote manual valves was incorrect. The TSI did not require the remote manual valves to be in their isolation position with power removed. The TSI led utility licensed Scheduling and Operations personnel to believe that tagging the valves open, in their SIS position, did not make them inoperable from a containment isolation standpoint.

Corrective Actions

The TSI will be revised to clarify the effect of removing power to remote manual valves.

The revised TSI and the event will be reviewed with Scheduling and Operations personnel, the On-Site Review Committee (ORC) members and the alternate ORC members.

Safety Significance

The associated inside containment isolation valves were OPERABLE at all times. The maximum containment pressure expected during a design basis accident is 48.1 psig for a Main Steam Line Break. ESW system pressure inside containment ranges from approximately 53 to 110 psig, therefore, no release from containment would occur through this release path if the inside reactor containment isolation valve were the active failure unless a major rupture of the Class III ESW system occurred. This possibility is assumed and recognized in the FSAR Figure 6.2.4-1 and in the Safety Evaluation Report 6.2.3 in reference to isolation being provided by the same power source. For most plant conditions, an equipment operator could have been directed to shut the outside containment isolation valves locally by manual operation. The valves are located in an auxiliary building penetration room. This event posed no threat to the health or safety of the public.

Previous Occurrences

None.

Footnotes

The system and component codes below are from IEEE Standards 805 and 803A, respectively.

- 1) System - BI
- 2) System - BK
- 3) System - JM, Component - VLV