

January 17, 2003

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Stop P1-137  
Washington, DC 20555-0001



ULNRC-04797

Ladies and Gentlemen:

**DOCKET NUMBER 50-483  
Callaway PLANT UNIT 1  
UNION ELECTRIC CO.  
FACILITY OPERATING LICENSE NPF-30  
LICENSEE EVENT REPORT 2002-013-00  
RPS actuation in Mode 4 while performing TADOT testing**

The enclosed licensee event report is submitted in accordance with 10CFR50.73(a)(2)(iv)(A) to report a Reactor Protection System (RPS) actuation in Mode 4 while performing a Trip Actuating Device Operational Test (TADOT)

Very truly yours,

A handwritten signature in cursive script that reads "Warren A. Witt".

Warren A. Witt  
Manager, Callaway Plant

WAW/ewh

Enclosure

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cc: Mr. Ellis W. Merschoff  
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1. FACILITY NAME: CALLAWAY PLANT UNIT 1  
 2. DOCKET NUMBER: 05000 483  
 3. PAGE: 1 OF 3

4. TITLE: RPS actuation in Mode 4 while performing TADOT testing

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
11	21	2002	2002	013	00	01	17	2003		05000
										05000

9. OPERATING MODE	10. POWER LEVEL	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR *: (Check all that apply)			
		20 2201(b)	20 2203(a)(3)(ii)	50 73(a)(2)(ii)(B)	50 73(a)(2)(ix)(A)
4	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. LICENSEE CONTACT FOR THIS LER

NAME: Mark A. Reidmeyer  
 TELEPHONE NUMBER (Include Area Code): (573) 676-4306

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

15. EXPECTED SUBMISSION DATE: MONTH: DAY: YEAR:

16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

At 2156, 11/21/02, with Callaway Plant in Mode 4 at zero percent power, an unplanned actuation of "B" Reactor (Rx) Trip Breaker occurred while performing plant procedure OSP-SB-0002B, Reactor Trip Breaker 'B' TADOT (Trip Actuating Device Operational Test) - Shutdown. At step 6.4.9.2, the Solid State Protection System (SSPS) logic testing switch "A" was inadvertently mispositioned, which activated permissive P-10. This in turn activated permissive P-7, which enabled the Low Pressurizer Pressure Reactor Trip set at 1885 psig. With the Reactor Coolant System (RCS) at approximately 970 psig, a low pressure was sensed, processed by SSPS, and a trip signal sent which opened the "B" Rx Trip Breaker. Since the plant was already shutdown, no adverse consequences resulted. An Event Review Team (ERT) was convened to review the event. It was determined that the event was due to human error caused by over-rotating the SSPS logic switch. Proposed corrective actions include a procedure enhancement on test switch alignment and manipulations.

**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)	
Callaway Plant Unit 1	05000483	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3	
		2002	- 013	- 00		

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

**I. DESCRIPTION OF THE REPORTABLE EVENT**

**A. REPORTABLE EVENT CLASSIFICATION**

This event was determined to be reportable per 10 CFR 50 73(a)(2)(iv)(A), System Actuation.

**B. PLANT OPERATING CONDITIONS PRIOR TO THE EVENT**

This event occurred while in Refuel 12 with Callaway Plant in Mode 4 at zero percent power. Both Rod Drive Motor Generator sets were secured and control rods were incapable of being withdrawn.

**C. STATUS OF STRUCTURES, SYSTEMS OR COMPONENTS THAT WERE INOPERABLE AT THE START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT**

Not Applicable for this event.

**D. NARRATIVE SUMMARY OF THE EVENT, INCLUDING DATES AND APPROXIMATE TIMES**

At 2156, 11/21/02, with Callaway Plant in Mode 4 at zero percent power, an unplanned actuation of "B" Reactor (Rx) Trip Breaker occurred while performing plant procedure OSP-SB-0002B, Reactor Trip Breaker 'B' TADOT-Shutdown.

Prior to performing the procedure, a pre-job brief was conducted due to the critical nature of the test to be performed. During the pre-job brief Operating Experience (OE) was covered discussing the potential results of mispositioning these SSPS logic testing switches. These switches are multiposition selector switches that can be rotated 360 degrees either counterclockwise or clockwise.

At step 6.4.9.2, the Solid State Protection System (SSPS) logic testing switch "A" was inadvertently mispositioned by over-rotating the switch one position counterclockwise, which activated normally blocked permissive P-10. This in turn activated permissive P-7, which enabled the Low Pressurizer Pressure Reactor Trip set at 1885 psig. With the Reactor Coolant System (RCS) at approximately 970 psig, a low pressure was sensed, processed by SSPS, and a trip signal sent which opened the "B" Rx Trip Breaker. Additionally, P-10 also blocked source range high voltage and thus Source Range (SR) channel N-32 was de-energized. Since both Rod Drive Motor Generators were secured and control rod withdrawal was not possible, the loss of SR N32 did not violate Technical Specification 3.3.1, Table 3.3.1-1 Function 5.

Upon mispositioning the switch, the licensed operator immediately recognized the error and stopped all further procedure performance. The Control Room staff was immediately aware of the error due to receiving unexpected alarm annunciators. A meeting was held with Operations and Instrument and Control personnel to discuss what had occurred and determine how to restore from the event. Once a plan of action was established, restoration was performed as expected and the procedure was then successfully completed.

Since the plant was already shutdown, no adverse consequences resulted. An Event Review Team (ERT) was convened to review the event. It was determined that the event was due to human error caused by over-rotating the SSPS logic switch. Proposed corrective actions include a procedure enhancement on test switch alignment and manipulations.

**E. METHOD OF DISCOVERY OF EACH COMPONENT, SYSTEM FAILURE, OR PROCEDURAL ERROR**

Upon mispositioning the SSPS Logic Switch, the Licensed Operator recognized the error and immediately stopped. The Control Room was immediately aware of the problem due to unexpected alarm annunciators being received.

**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Callaway Plant Unit 1	05000483	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		2002	- 013	- 00	

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

II. EVENT DRIVEN INFORMATION

A. SAFETY SYSTEMS THAT RESPONDED

The Reactor Protection System (RPS) sensed an actual plant parameter that satisfied the criteria for generating an actuation signal and responded appropriately.

B. DURATION OF SAFETY SYSTEM INOPERABILITY

Not Applicable for this event.

C. SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT.

At the time of this event, the plant was shutdown in Mode 4 with all rods fully inserted and both rod drive motor generator sets de-energized. There was no safety consequence due to this event.

III. CAUSE OF THE EVENT

The cause of the event was human error when positioning the SSPS Logic Switch.

IV. CORRECTIVE ACTIONS

Proposed corrective actions include a procedure enhancement on test switch alignment and manipulations

V. PREVIOUS SIMILAR EVENTS

There has been one similar LER, 2001-001-00, event involving TADOT testing This occurred on 1/21/01 when a non-licensed individual failed to perform a step within a plant procedure, which resulted in the actuation of the "A" Rx Trip Breaker.

A review of the Callaway Action Request (CAR) system for the previous three years only identified one CAR, 200100116, which documents the event described in the above mentioned LER

VI. ADDITIONAL INFORMATION

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

System:

NOT APPLICABLE – THIS EVENT WAS NOT CAUSED BY COMPONENT OR SYSTEM FAILURE

Component: