NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Callaway Plant Unit 1	0 5 0 0 0 4 8 3	1 OF 0 3

TITLE (4)

Technical Specification Violation

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 5 0 0 0
0 7	1 9	8 4	8 4	0 2 1	0 0	0 8	1 7	8 4		0 5 0 0 0

OPERATING MODE (9)	5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 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)	X 50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		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)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Charles D. Naslund - Superintendent, I&C	AREA CODE 3 1 4 — 6 7 6 - 8 5 0 0

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)	X NO				

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

On 7/19/84 at 1300 CDT, while performing ESFAS testing, plant personnel discovered train "A" of SSPS in the inhibit mode with train "B" in test. This rendered the automatic actions of both trains of Source Range Flux Doubling inoperable. The alarm associated with each Source Range channel for flux doubling remained operable. Investigation revealed that this had been done at approximately 0806 on this date in accordance with the surveillance procedure for the ESFAS testing.

Upon discovery, the Shift Supervisor was notified, and the "B" train was returned to normal at 1325. The surveillance procedure was also changed to permit the required testing without requiring this condition to exist.

Although both trains of Source Range Flux Doubling were inoperable, the high flux alarms and Source Range High Flux trip were operable, and the Reactor Makeup Water System was isolated from the Reactor Coolant System. This eliminated the possibility of a boron dilution accident. Therefore, this event posed no threat to the public health or safety.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

On 7/19/84 at 1300 CDT, while performing surveillance procedure ESP-SA-02413, "Integrated ESFAS Testing," plant personnel discovered train "A" of SSPS in the inhibit mode with train "B" in the test mode. This effectively rendered the automatic actions of both trains of Source Range Flux Doubling inoperable although the alarms remained functional. Investigation revealed that ESP-SA-02413 required this condition to exist and that this condition had been established at approximately 0806 on this date.

The Source Range Flux Doubling circuits act to automatically realign the suction for the charging pumps from the Volume Control Tank (VCT) to the Refueling Water Storage Tank (RWST) when source range flux doubles in nine minutes or less. This serves to mitigate the consequences of a boron dilution accident.

The Plant Technical Specifications require two source range channels of reactor trip instrumentation in modes 2, 3, 4 and 5. The associated action statement requires that: "With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or open the Reactor trip breakers, suspend all operations involving positive reactivity changes and verify Valves BG-V178 and BG-V601 are closed and secured in position within the next hour." Since Specification 3.0.3 is not applicable in modes 5 and 6, there is currently no Technical Specification guidance for both trains inoperable in mode 5.

During this event, the high flux alarms and Source Range High Flux trip were operable, the Reactor trip breakers were open, no positive reactivity changes were being made and the Reactor Makeup Water System was isolated from the charging pump suctions. This eliminated the possibility of a boron dilution accident.

Review of other surveillance procedures revealed five more which required concurrent blocking of both trains of Source Range Flux Doubling. This review also showed that the performance of these procedures had resulted in a similar blocking of the Source Range Flux Doubling automatic actions eight times (total) since entering mode 5 on 6/17/84. These procedures were written with the aid of vendor recommendations. These recommendations and the vagueness of the Technical Specifications, which do not make clear that Flux Doubling is considered part of the Source Range Neutron Flux reactor trip instrumentation, allowed these procedures to be approved and used despite administrative controls designed to prevent this. These procedures have now been revised to resolve this problem.

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

A Technical Specification change has been requested to provide an action statement should both trains of Source Range Reactor trip instrumentation become inoperable in modes 3, 4 and 5. Design changes (CMRs 84-0461, 0462 and 0408A) have also been requested to facilitate the integrated testing of the Engineered Safeguards System actuations without defeating both trains of the Source Range Flux Doubling circuit automatic actions.

Due to the isolation of the Reactor Makeup Water System from the charging pump suctions and the operable Source Range Flux Doubling alarms, this event posed no threat to the public health or safety.

Previous occurrences: none

UNION ELECTRIC COMPANY
CALLAWAY PLANT

MAILING ADDRESS:
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August 17, 1984

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

ULNRC-908

DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
LICENSEE EVENT REPORT 84-021-00
TECHNICAL SPECIFICATION VIOLATION

Gentlemen:

The enclosed Licensee Event Report is submitted pursuant to 10 CFR 50.73(a)(2)(i) and 50.73(a)(2)(vii) concerning a Technical Specification violation due to concurrent blockage of both channels of Source Range Flux Doubling.

S. E. Miltenberger
Manager, Callaway Plant

APN/CDN/DRM/drs
Enclosure

cc: Distribution attached

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cc distribution for ULNRC-908

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