NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Fort Calhoun Station, Unit No. 1	0 5 0 0 0 2 8 5	1 OF 0 3

TITLE (4)

Failure to Bypass Inoperable Reactor Protective System Channel

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 9	8 8	8 8	0 1 3	0 0	0 6	0 9	8 8	N	0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
1	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
1 0 0	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	XX 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
Bruce W. Shubert, Shift Technical Advisor	AREA CODE 4 0 2 — 4 2 6 - 4 0 1 1

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)	XX NO				

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

On May 9, 1988, at 0902 (CDT), during the performance of surveillance test ST-RPS-3 F.2, channel "C" reactor coolant low flow trip setpoint was found to be out of tolerance low. Upon completion of the surveillance test the Instrument and Control Technician submitted a maintenance order to conduct an investigation into the problem. The problem was later determined to be a failed power supply to the trip unit, which was replaced and the unit returned to operability on May 11, 1988 at 2042 (CDT). This condition resulted the trip unit being inoperable longer than Technical Specifications allow.

Specific corrective actions in response to this include:

1. A caution has been included in the RPS surveillance tests governing trip unit setpoint verification, to instruct the technician conducting the test that whenever a trip unit is found out of specification to notify the Shift Supervisor for operability determination.

2. A memorandum from the Supervisor - Maintenance was issued to Instrument and Control and Electrical Maintenance personnel stressing the importance of operability determination when Technical Specification equipment is found to be out of specification.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Fort Calhoun Station, Unit No. 1	0 5 0 0 0 2 8 5	8 8	— 0 1 3	— 0 0	0 2 OF 0 8

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

On May 9, 1988, at 0902 (CDT), during the performance of surveillance test ST-RPS-3 F.2, channel "C" reactor coolant low flow trip setpoint was found to be out of tolerance low. Surveillance test ST-RPS-3 F.2, Reactor Protective System (RPS) Reactor Coolant Flow Test, is conducted to compare the reactor coolant flow channel readings and to verify the pretrip setpoint, trip setpoint, and control functions. During the trip setpoint verification, the Instrument and Control Technician found that channel "C" reactor coolant flow trip failed to meet the acceptance criteria. Upon completion of the test the technician submitted a maintenance order to investigate the cause of the out of specification condition and an incident report was generated to document the discovery. The investigation determined that a failed power supply to the channel "C" low flow trip unit caused the setpoint to be driven out of specification. On May 11, 1988, the trip unit was bypassed, power supply replaced, and returned to operable status at 2042 (CDT).

Later investigation revealed that the RPS channel "C" reactor coolant low flow trip unit should have been considered inoperable from the time it failed the surveillance test until the unit was repaired, 59 hours 40 minutes later, which is in contradiction to Technical Specification 2.15. Technical Specification 2.15 requires that if the number of operable channels falls below the total number of installed channels, the inoperable channel shall be placed in either the bypassed or tripped condition within one hour. The inoperable channel may be bypassed for up to 48 hours.

Following the investigation into the cause of the inoperability, the RPS trip unit was repaired, calibrated, tested using Surveillance Test ST-RPS-3 F.2, and returned to operable status. The degradation of the "C" channel low flow trip unit reduced the RPS trip logic to a 2 out of 3 configuration. The RPS trip logic is normally 2 out of 4 on all trip functions. Had a low flow condition existed during the inoperability of the "C" channel low flow trip unit, a reactor trip would have been actuated by the remaining operable channels within the limits as specified in the Technical Specifications. Therefore, the health and safety of the plant and the public were not degraded.

Since the trip unit was found to be out of specification, the technician should have notified the Shift Supervisor to discuss the possible inoperability of the channel. To preclude events of a similar nature from recurrence the following corrective actions have been taken:

1. A caution will be included in the RPS surveillance tests governing trip unit setpoint verification, to instruct the technician conducting the test that whenever a trip unit is found out of specification to notify the Shift Supervisor for operability determination.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Fort Calhoun Station, Unit No. 1	0 5 0 0 0 2 8 5	8 8	0 1 3	0 0	0 3 OF 0 3

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

2. A memorandum from the Supervisor - Maintenance was issued to Instrument and Control and Electrical Maintenance personnel stressing the importance of operability determination when Technical Specification equipment is found to be out of specification.

Additional activities associated with Surveillance Testing Program improvements are detailed in OPPD's response to deviation 285/8810-03, dated June 3, 1988.

Omaha Public Power District
1623 Harney Omaha, Nebraska 68102-2247
402/536-4000

June 9, 1988
LIC-88-485

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

Reference: Docket No. 50-285

Gentlemen:

SUBJECT: Licensee Event Report for the Fort Calhoun Station

Please find attached Licensee Event Report 88-013 dated June 9, 1988. This report is being submitted per requirements of 10 CFR 50.73.

Sincerely,

R. L. Andrews
Division Manager
Nuclear Production

RLA/me

Attachment

c: R. D. Martin, NRC Regional Administrator
P. D. Milano, NRC Project Manager
P. H. Harrell, NRC Senior Resident Inspector
INPO Records Center
American Nuclear Insurers

IE22
1/1