NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1	N E F C S 1 (2)	0 0 - 0 0 0 0 0 - 0 0 (3)	4 1 1 1 1 (4)	(5)
7 8	9 LICENSEE CODE 14	15 LICENSE NUMBER 25	26 LICENSE TYPE 30	57 CAT 58

CON'T 0 1	REPORT SOURCE L (6)	0 5 0 0 0 2 8 5 (7)	0 7 0 9 8 3 (8)	0 7 1 2 8 3 (9)
7 8	60	61 DOCKET NUMBER 68	69 EVENT DATE 74	75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During steady state power operation, it was noted that the "B" channel of the

0 3 Reactor Protective System Axial Power Distribution negative setpoint was fluctuating

0 4 in the non-conservative direction. The reactor protective system "B" channel for

0 5 Axial Power Distribution was bypassed with the three remaining Axial Power Dis-

0 6 tribution channels (i.e., A, C, and D) still operable.

0 7

0 8

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	I A (11)	E (12)	G (13)	I N S T R U (14)	Y (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 3	—	0 0 5	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
C (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	Y (24)	N (25)	B 1 6 5 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The Bell and Howell potentiometer module (part #384612-001) failed allowing the

1 1 reactor protective system "B" channel Axial Power Distribution setpoints to fluctuate or drift in the non-conservative direction. The module was replaced, recalibrated

1 2 and satisfactorily tested prior to returning the "B" Axial Power Distribution Channel

1 3 back to normal operation. The RPS will continue to be monitored by both visual in-

1 4 spection and surveillance testing to detect future failures.

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	E (28)	1 0 0 (29)	NA	A (31)	Visual Inspection

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	NA

8308090680 830712
PDR ADOCK 05000285
S PDR

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	NA

PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	NA	

NAME OF PREPARER Randy Mueller PHONE: 402-426-4011

GPO 917-926

LER No. 83-005
Omaha Public Power District
Fort Calhoun Station Unit No. 1
Docket No. 05000285

ATTACHMENT NO. 1

Safety Analysis

The Reactor Protective System (RPS) is so designed that no single failure can prevent the safe and systematic shutdown of the reactor if required.

During the time the RPS "B" channel for Axial Power Distribution (APD) was inoperable, the remaining three redundant RPS Axial Power Distribution Channels were operable, available and fully capable of performing their design function, i.e., providing adequate reactor protection.

LER No. 83-005
Omaha Public Power District
Fort Calhoun Station Unit No. 1
Docket No. 05000285

ATTACHMENT NO. 2

Corrective Action

The negative Axial Power Distribution setpoint was originally found to be drifting intermittantly on 7/5/83. Maintenance Order 20894 was immediately initiated to investigate and repair the problem. Originally the problem was believed to have been caused by a faulty "adder-subtraction" module. The "adder-subtraction" module was therefore replaced, the "B" channel APD unit was calibrated and satisfactorily tested, and returned to service on 7/8/83. Subsequent drifting problems prompted initiation of Maintenance Order 21015. Upon further analysis, the Bell and Howell dual potentiometer module (S/N 384612-001) was found to be the cause of negative setpoint drift problems. The module was replaced per Maintenance Order 21015. In addition, the original "adder-subtraction" module was returned to service and the spare installed per Maintenance Order 20894 was returned to Stores. The applicable sections of calibration procedure CP-B/APD were performed, the "B" channel APD unit was satisfactorily tested per applicable sections of surveillance test ST-RPS-12, F.2 and the "B" channel APD was taken out of bypass and returned to service on 7/11/83.

All RPS channels will continue to be monitored by both visual inspection and the surveillance testing program to detect future failures.

LER No. 83-005
Omaha Public Power District
Fort Calhoun Station Unit No. 1
Docket No. 05000285

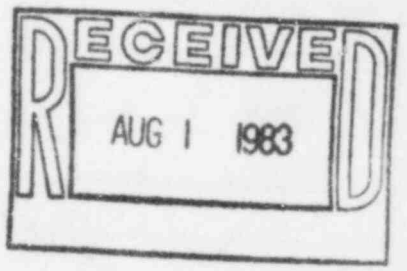
ATTACHMENT NO. 3

Failure Data

This is the second event of a potentiometer module failure in the RPS. The first failure was reported per LER 79-002.

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

July 28, 1983
FC-561-83



Mr. W. C. Seidle, Chief
Reactor Project Branch 2
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Subject: Fort Calhoun Station Unit No. 1
Docket No. 05000285

Dear Mr. Seidle:

In accordance with the Fort Calhoun Station's Technical Specifications, the Omaha Public Power District, as holder of Facility Operating License DPR-40, submits three (3) copies of Licensee Event Report 83-005 [regarding Technical Specification 5.9.2.b(1)] to satisfy requirements of Regulatory Guide 1.16.

Sincerely,

W. C. Jones
Division Manager
Production Operations

WCJ/MRC:jmm

Enclosures

cc: Director, Office of Management
Information & Program Control (3)
Director, Office of Inspection &
Enforcement (30)
Institute of Nuclear Power Operations

SARC Chairman
PRC Chairman
Fort Calhoun File (2)
Mr. L. A. Yandell, Senior
Resident Inspector

IE-22