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	LICENSEE CODE: N E F C S 1 (2) LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3) LICENSE TYPE: 4 1 1 1 1 (4) CAT: (5)
CON'T 0 1	REPORT SOURCE: L (6) DOCKET NUMBER: 0 5 0 0 0 2 8 5 (7) EVENT DATE: 1 2 1 1 8 2 (8) REPORT DATE: 1 2 1 5 8 2 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

During performance of "refueling" surveillance test ST-ESF-3, F.2, "Containment Pressure Channel Check", pressure switch A/PC-742-1 was found to initiate above the Technical Specification limit of 5 psig. Pressure switch A/PC-742-1 is one of four switches in the "A" channel of the containment pressure high signal (CPHS) initiation matrix. During the time period A/PC-742-1 would have failed to initiate at or below 5 psig, the other three pressure switches of the "A" channel were operational and a CPHS could have been initiated by two of these three switches actuating. Additionally, the redundant "B" channel pressure switches which initiate the "B" CPHS were fully operable and would have actuated to mitigate the consequences of an accident, if required.

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
I B (11)	E (12)	X (13)	I N S T R U (14)	S (15)	Z (16)

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
8 2	—	0 2 1	/	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
E (18)	A (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	X (25)	B 0 6 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

The District postulates that switch A/PC-742-1 was out of calibration due to instrument drift. The "out-of-specification" switch was immediately calibrated and brought back to within satisfactory operating limits. The switch will be changed out with an exact duplicate as soon as replacement parts become available.

FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
H (28)	0 0 0 (29)	NA	B (31)	Annual Calibration

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

PERSONNEL EXPOSURES

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

PERSONNEL INJURIES

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

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE	DESCRIPTION
Z (42)	NA

8301180104 830110
PDR ADOCK 05000385
S PDR

PUBLICITY

ISSUED	DESCRIPTION (45)
N (44)	NA

NRC USE ONLY

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GPO 917-926

LER No. 82-021
Omaha Public Power District
Fort Calhoun Station Unit No. 1
Docket No. 05000285

ATTACHMENT NO. 1

Safety Analysis

The Fort Calhoun Station is designed with sufficient redundancy such that no single failure of the engineered safeguards features (ESF) system can prevent the plant from being safely shutdown.

During the time period pressure switch A/PC-742-1 was considered to be failed in the nonconservative direction, the CPHS matrix logic was still capable of fulfilling its design function of actuating applicable ESF signals and shutting down the plant. Although one of the eight pressure switches feeding the CPHS matrix was not functioning properly, a CPHS signal could still have been initiated by either of the redundant "A" and "B" channel systems, if required. The "A" channel could have initiated a CPHS upon actuation of two of the three operational pressure switches and the "B" channel, which was fully operational, would have initiated a CPHS upon actuation of two-out-of-four of its pressure switches. Thus, the redundancy of the CPHS actuation system was sufficient to ensure plant safety.

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ATTACHMENT NO. 2

Corrective Action

The A/PC-742-1 pressure switch was recalibrated and verified to be operating within required tolerances. Although the District postulates that the A/PC-742-1 pressure switch simply drifted out of calibration tolerance, the District will install a new switch, for precautionary reasons, when replacement parts become available. This changeout is expected to be completed in the next few weeks. After changeout, the existing switch will be carefully inspected for any apparent damage or problems to determine whether the other containment pressure switches warrant replacement or inspection. The District believes the timing of this switch inspection is justified since the Fort Calhoun Station is presently in a refueling outage which is expected to last until April 1, 1983.

Additionally, because the Fort Calhoun Station containment pressure high switch channels have experienced slight drifting in the past (which was not of a degree to require reportability) and as a result of this incident, the District will temporarily increase the surveillance frequency for these channels. The District will check and calibrate the containment pressure high signal channels approximately every six months, vice the refueling outage frequency specified in the surveillance tests, until the District is confident that significant drifting is not a recurrent problem for these switches, including the newly installed switch. The Fort Calhoun Station surveillance tests (ST) manual will not be revised to reflect this new frequency since it is anticipated only to be a temporary measure. Assurance of the more frequent testing will be accomplished by identifying this schedule on the plant's tickler system.

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ATTACHMENT NO. 3

Failure Data

This is the first reportable failure of a CPHS switch to remain at or below the 5 psig setpoint required by Technical Specification 2.14.