

LICENSEE EVENT REPORT

50-285/76-12

CONTROL BLOCK

(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME														LICENSE NUMBER												LICENSE TYPE					EVENT TYPE	
01	N	E	F	C	S	1	0	0	-	0	0	0	0	0	0	0	4	1	1	1	1	0	3									
7	8	9	14	15	25	26	30	31	32																							
01		CATEGORY		REPORT TYPE	REPORT SOURCE	DOCKET NUMBER					EVENT DATE					REPORT DATE																
01	CON'T			L	L	0	5	0	-	0	2	8	5	0	4	0	5	7	6	0	4	1	4	7	6							
7	8	57	58	59	60	61	68	69	74	75	80																					

EVENT DESCRIPTION

02	During power reduction Channel B APD positive limit was noted to be reading 12.1																								80
03	which exceeds the upper limit of 4.600 at 70 percent power of 4.600. The APD																								80
04	calculator is one of four redundant channels.																								80
05																									80
06																									80

SYSTEM CODE				CAUSE CODE		COMPONENT CODE						PRIME COMPONENT SUPPLIER		COMPONENT MANUFACTURER				VIOLATION	
07	I	A	E	I	N	S	T	R	U	N	B	1	6	5	Y				
7	8	9	10	11	12	17	43	44	47	48									

CAUSE DESCRIPTION

08	The Bell and Howell 19-301A adder-subtractor module which is used to generate the																								80
09	upper limit was found to have gone into oscillation and saturated, causing the posi-																								80
10	tive limit to go out of specification. The module was replaced and the calculator																								80

FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION																
11	D	0	7	0	NA	B	Operator Checks																	
7	8	9	10	12	13	44	45	46																
FORM OF ACTIVITY RELEASED		CONTENT OF RELEASE		AMOUNT OF ACTIVITY		LOCATION OF RELEASE																		
12	Z	Z	NA	NA																				
7	8	9	10	11	44	45																		

PERSONNEL EXPOSURES

NUMBER		TYPE		DESCRIPTION	
13	0	0	0	Z	NA
7	8	9	11	12	13

PERSONNEL INJURIES

NUMBER		DESCRIPTION		
14	0	0	0	NA
7	8	9	11	12

OFF-SITE CONSEQUENCES

15	NA																								80
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LOSS OR DAMAGE TO FACILITY

TYPE		DESCRIPTION	
16	Z	NA	
7	8	9	10

PUBLICITY

17	NA																								80
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ADDITIONAL FACTORS

18	Description of Cause (continued): was returned to service.																								80
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19																									80
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NAME: Robert Mehaffey

PHONE: 402-426-4011

ATTACHMENT 1

Safety Analysis

The Reactor Protective System is so designed that the failure of B APD calculator would not have prevented a reactor trip if the unit had exceeded the ASI Limits as shown in Figure 1-4 of the Technical Specifications. Under normal operating conditions the reactor protective system is in a two-out-of-four logic configuration. ~~The failure of B APD placed~~ the RPS in a two-out-of-three logic. The two-out-of-three logic exceeds the minimum requirements for safe reactor operation as stated in Table 2-2 of the Technical Specifications. A check of Channels A, C and D showed them to be operational.

ATTACHMENT 2

Corrective Action

The Bell and Howell 19-301A adder-subtractor module used to generate the positive limit was replaced and Surveillance Test ST-RPS-12 Section F.2 was performed. Proper calculator operation was verified and the calculator returned to service.

The APD calculator limits are checked once per shift by Surveillance Test ST-RPS-12 Section F.1 and an operational check is made once per month by Surveillance Test ST-RPS-12 Section F.2.

Conversations have been held with Combustion Engineering, the NSSS vendor, with regard to this problem. They are currently performing a safety analysis on a proposed fix which was successfully demonstrated in field testing.

ATTACHMENT 3

Failure Data

Related failures were reported as listed:

Abnormal Occurrence 50-285/75-12
Abnormal Occurrence 50-285/75-15
LER 50-285/76-6
LER 50-285/76-7

Omaha Public Power District

1623 HARNEY ■ OMAHA, NEBRASKA 68102 ■ TELEPHONE 536-4000 AREA CODE 402



April 14, 1976
FC-118-76

Mr. E. Morris Howard
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, TX 76012



Dear Mr. Howard:

Reference: Fort Calhoun Station Unit No. 1
Docket No. 50-285

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 copies of the following licensee event report 50-285/76-12 to satisfy the requirements of Regulatory Guide 1.16.

Sincerely,

W. C. Jones
Section Manager
Operations

WCJ/WDD:rge

Enclosure

cc: Director, Office of Management
Information and Program Control
U. S. Nuclear Regulatory Commission
Washington, DC 20555 (3)

Director, Office of Inspection and
Enforcement
U. S. Nuclear Regulatory Commission
Washington, DC 20555 (30)

Mr. L. C. Shalla
SARC Chairman
PRC Chairman
Fort Calhoun File (2)

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IV