

Omaha Public Power District
444 South 16th Street Mall
Omaha, Nebraska 68102-2247
402/636-2000

February 24, 1992
LIC-92-057L

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Reference: Docket No. 50-285

Gentlemen:

Subject: Licensee Event Report 92-006 for the Fort Calhoun Station

Please find attached Licensee Event Report 92-006 dated February 24, 1992.
This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B). If you
should have any questions, please contact me.

Sincerely,

W. G. Gates
W. G. Gates
Division Manager
Nuclear Operations

WGG/lah

Attachment

c: R. D. Martin, NRC Regional Administrator
D. L. Wigginton, NRC Senior Project Manager
P. P. Mullikin, NRC Senior Resident Inspector
S. D. Bloom, NRC Project Engineer
INPO Records Center

020045

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (2150-0156), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Fort Calhoun Station Unit No. 1										DOCKET NUMBER (2) 0 5 0 0 0 2 8 5					PAGE (3) 1 OF 0 3				
TITLE (4) Inoperable Alarm Function on Radioactive Waste Building Stack Monitors																			
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 N				DOCKET NUMBER(S) 0 5 0 0 0						
0 1	2 5	9 2	9 2	0 0 6	0 0	0 2	2 4	9 2					0 5 0 0 0						
OPERATING MODE (9)		1		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)															
POWER LEVEL (12)		0 7 9		20.402(b)		20.405(i)		50.75(a)(2)(iv)				75.71(b)							
				20.405(a)(1)(i)		50.38(a)(1)		50.75(a)(2)(iv)				75.71(c)							
				20.405(a)(1)(ii)		50.38(a)(2)		50.75(a)(2)(iv)				OTHER (Specify in Abstract below and in Text, NRC Form 305A)							
				20.405(a)(1)(iii)		X 50.75(a)(2)(i)		50.75(a)(2)(vii)(A)											
				20.405(a)(1)(iv)		50.75(a)(2)(ii)		50.75(a)(2)(vii)(B)											
				20.405(a)(1)(v)		50.75(a)(2)(iii)		50.75(a)(2)(v)											
LICENSEE CONTACT FOR THIS LER (13)																			
NAME William J. Blessie, Shift Technical Advisor										TELEPHONE NUMBER AREA CODE 4 0 2 5 3 3 - 6 8 9 6									
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (14)																			
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)									
X YES (If yes, complete EXPECTED SUBMISSION DATE)										MONTH DAY YEAR 0 3 2 5 9 2									
NO																			

ABSTRACT (limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (10)

On January 25, 1992 it was discovered that the annunciator circuitry for the Laboratory and Radioactive Waste Processing Building (LRWPB) Exhaust Stack particulate, iodine and noble gas radiation monitors would not function correctly. The as-found wiring was installed in such a way that the Control Room annunciation has not been operable from the time of original installation (September 30, 1991). The inability to provide the annunciator alarm function to the Control Room has been determined as not meeting Technical Specification 2.9.1(2)h.(i). This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

A formal root cause analysis is currently in progress to further assess this event. The safety significance of this incident is minimal based on the nature of the releases associated with the LRWPB Exhaust Stack.

Corrective action to make the alarm function operable and functionally test the circuit has been completed. OPPD plans to supplement this LER in 30 days to provide additional information regarding the cause of the event and corrective actions.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARDED COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20546, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (3)

PAGE (3)

Fort Calhoun Station Unit No. 1

YEAR

SEQUENTIAL NUMBER

PREVIOUS NUMBER

0 | 5 | 0 | 0 | 0 | 2 | 8 | 5 | 9 | 2 | — | 0 | 0 | 6 | — | 0 | 0 | 0 | 2 | OF | 0 | 3

TEXT (If more space is required, use additional NRC Form 308A's)(17)

The Chemistry and Radiation Protection (CARP) Building and the Radioactive Waste Building (RWB) are two new structures built as part of station improvements. Their ventilation systems use a common exhaust stack that is independently operated from the rest of the plant and is equipped with its own radiation monitors designated as the Laboratory and Radioactive Waste Processing Building (LRWPB) Exhaust Stack particulate, iodine and noble gas radiation monitors (RM-041, RM-042 and RM-043, respectively).

Technical Specification 2.9.1(2)h(i) states, in part, that the monitors shall be set in accordance with the Offsite Dose Calculation Manual (ODCM) to alarm prior to exceeding the limits specified in Technical Specification 2.9.1(2)a(i). The alarm function is provided in the Control Room on AI-33C, Windows 40 (RM-041 through RM-043, Rad Waste Bldg Stack High Radiation) and 44 (RM-041 through RM-043, Rad Waste Bldg Stack Trouble).

On January 25, 1992, RM-041, RM-042 and RM-043 were de-energized to allow installation of a temporary modification which changed the control switch for the RM-041, RM-042 and RM-043 sample pump from a momentary contact to a maintain contact switch. When the radiation monitors were de-energized, control power was lost to the annunciator control circuit and should have given Control Room Operators the associated alarms on AI-33C; however, the alarms were never received. A Maintenance Work Order (MWO) was initiated to troubleshoot the annunciator circuitry to determine the failure.

In working the MWO, it was discovered that the wire identifiers, although landed in the proper terminal board locations, did not correspond to the same conductor on opposite ends of the cable. A review of the modification package which installed the annunciator circuit revealed that there was no post-modification operability testing on the circuit. The modification had been accepted for use by plant operations. Final closeout and document update was in progress. Calibration procedures and surveillance tests for the annunciator circuit are in the final review stages and no other maintenance or testing had been performed on the annunciator circuitry prior to the discovery on January 25, 1992. The as-found wiring was installed in such a way that the Control Room annunciation has not been operable from the time of original installation (September 30, 1991).

The inability to provide the annunciator alarm function to the Control Room has been determined as not meeting Technical Specification 2.9.1(2)h(i) which indicates the monitors shall be set to alarm prior to exceeding specified limits. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-500), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (5150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (3)

PAGE (4)

Fort Calhoun Station Unit No. 1

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TEXT (If more space is required, use additional NRC Form 365A's)(17)

The maximum annual doses at the site boundary from releases through the LRWPB Exhaust Stack has been estimated at $2.25E-5$ mRem using the bounded case of 1% failed fuel inventory in the Reactor Coolant System (RCS) and the annual average X/Q. Actual fuel failures did not exist for the cycle which ran from June 1, 1990 through February 1, 1992 (Cycle 13). RCS coolant activity was equivalent to only 0.0088% failed fuel. Thus, the safety significance of this incident is minimal.

Corrective action to make the alarm function operable and functionally test the circuit has been completed. A formal root cause analysis is currently in progress to further assess this event. OPPD plans to supplement this LER within 30 days to provide additional information regarding the cause of the event and corrective actions.

Two other incidents related to the operation of RM-041, RM-042 and RM-043 have been reported in LERs 91-028 and 92-001.