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

January 10, 1990
LIC-90-0034

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 89-023 for the Fort Calhoun Station

Please find attached Licensee Event Report 89-023 dated January 10, 1990. This report is being submitted per requirements of 10 CFR 50.73(a)(2)(i)(B).

If you should have any questions, please contact me.

Sincerely,

K. J. Morris
Division Manager
Nuclear Operations

KJM/tcm

Attachment

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

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NRC FORM 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92
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 (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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 Comply with High Radiation Area Access Requirements

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)
									N	0 5 0 0 0
1 2	1 1	8 9	8 9	– 0 2 3	– 0 0	0 1	1 0	9 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)	X 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
	AREA CODE
Keith Voss, Shift Technical Advisor	4 0 2 5 3 3 – 6 8 4 3

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)	X NO				

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

On December 11, 1989, Fort Calhoun Station was operating at 100 percent power in mode 1. A Nuclear Security Sergeant (NSS) performing an hourly firewatch patrol entered a posted high radiation area without meeting the entry requirements for that area. The NSS failed to utilize an Integrated Alarming Dosimeter while in the high radiation area. The NSS was in the room for less than a minute; later surveys indicated the dose rate in the occupied area was approximately 0.4 mr/hr. The cause of this event was a cognitive error made by the NSS in not realizing the area entered was a high radiation area, even though the door was plainly posted. The NSS received disciplinary action.

This report is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B) for the failure to comply with the requirements of Technical Specification 5.11.1.

Fort Calhoun Station Technical Specification 5.11.1 provides for high radiation area access controls which are approved alternatives to the requirements of 10 CFR 20.203(c)(2). One of the requirements specified for dose measurement is that any individual or group entering a high radiation area be provided with a radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrating dose is received. This requirement is reflected in Radiation Protection Procedure RP-204 and appropriate Radiation Work Permits, and is normally met through the use of a XETEX Integrating Alarming Dosimeter. Radiation Work Permit (RWP) 89-673-1 specifically details radiological requirements for the Security Force with respect to Door and Alarm Checks.

On December 11, 1989, the plant was operating in mode 1 at 100 percent power. A Nuclear Security Sergeant (NSS) was assigned to perform an hourly firewatch patrol at approximately 1300 hours. One of the doors (989-4) listed on the Hourly Firewatch Patrol Log was to the Charging Pump Valve room (Room 7) in the Auxiliary Building. When entering Room 7 via access door 989-4, one must walk to the end of a shield wall to observe the equipment area of the room. The room was plainly posted as a high radiation area on door 989-4. Upon entry into the Auxiliary Building Radiation Control Area, the NSS signed in on the Pencil Dosimetry Log and reviewed RWP 89-673-1 prior to continuing the patrol. The NSS proceeded to door 989-4 but failed to recognize the high radiation area posting. Because of this failure to note that the room was a high radiation area, the NSS did not procure a XETEX Integrating Alarming Dosimeter prior to entry.

At approximately 1340 hours the NSS entered Room 7 via door 989-4, walked to the end of the bioshield wall, visually inspected the room, and immediately exited the area. The NSS was in the room for less than one minute. A Radiation Protection Technician who was touring the area noticed when the NSS exited the room that the NSS was not wearing a XETEX dosimeter. The NSS was asked about not wearing a XETEX dosimeter in a high radiation area. At that time the NSS realized that Room 7 was a posted high radiation area. When leaving the Radiation Controlled Area the NSS informed Radiation Protection personnel in the Radiation Protection office what had occurred. The Radiation Protection personnel then informed the Radiation Operations Coordinator of the incident. Upon return of the NSS to the security building, the Shift Security Supervisor was informed of the incident.

This event constituted a failure to comply with the high radiation area entry requirements of the Technical Specifications and station procedures. This report is submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B).

Investigation and analysis revealed that the cause of this event was a cognitive personnel error by the NSS in failing to realize that Room 7 was a high radiation area. Lack of attention and carelessness resulted in failure to comply with high radiation area access controls. Training and posting associated with high radiation area access were determined to be adequate and not contributing factors.

The following corrective actions were completed:

(1) At 1445 hours on December 11, 1989 a radiological survey of the part of Room 7 near door 989-4 and the shield wall was performed. The survey revealed a dose rate of less than 0.4 mr/hr in the portion of the room traversed by the NSS.

(2) The Thermo-Luminescent Dosimeter (TLD) assigned to the NSS was pulled and authorization for the NSS to enter the Radiation Control Area was revoked.

(3) The NSS was suspended from duty pending management investigation completion. Following preliminary investigation, disciplinary action was administered to the NSS.

(4) Briefings on high radiation area entry requirements were held for personnel with assigned dosimetry.

(5) All appropriate Security personnel have been briefed on this event. They have been reminded of the procedural requirements for firewatch patrols, including entry requirements for high radiation areas.

Nuclear safety was not impacted by this event. The firewatch patrol of Room 7 was performed, although radiation protection requirements were not met. The radiological consequences were minimal due to the low dose rate and the short exposure time.

LER 89-05 also described an entry into a high radiation area without meeting entry requirements. LER's 87-26 and 88-01 described degraded access controls for very high radiation areas.