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

January 7, 1991
LIC-91-0002L

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 90-27 for the Fort Calhoun Station

Please find attached Licensee Event Report 90-27 dated January 7, 1991. This report is being submitted pursuant to requirements of 10 CFR 50.73(a)(2)(i)(B).

If you should have any questions, please contact me.

Sincerely,

W. G. Gates
Division Manager
Nuclear Operations

WGG/tcm

Attachment

c: R. D. Martin, NRC Regional Administrator
W. C. Walker, NRC Project Manager
R. P. Mullikin, NRC Senior Resident Inspector
INPO Records Center

1/1

IE22

NRC FORM 366 (6-89)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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.

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 4

TITLE (4)
Inadequate Hourly Firewatch Patrols

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	0 7	9 0	9 0	-	0 2 7	-	0 0	0 1	0 7	9 1		0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	1 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		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
Matt Roberts - Supervisor, Security Support Services	4 0 2 5 3 3 - 6 3 4 9

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 7, 1990, at approximately 0001 hours CST, the Shift Security Supervisor determined that an adequate compensatory firewatch inspection of Door 971-1 (Room 23) was not being conducted. Upon further investigation, it was determined that three additional doors/areas were also not being properly inspected.

The Shift Security Supervisor briefed the Firewatch Patrol Officer on the proper procedure and directed that the four areas be visually inspected after compliance with the appropriate radiation protection measures. The cause of the inadequate firewatch inspections was inappropriate actions by Firewatch Patrol Officers resulting from an inadequate understanding of the procedural requirements. Corrective actions include retraining of Firewatch Patrol Officers on proper inspection methods and emphasis on increased involvement in the firewatch inspection process by the Shift Security Supervisors.

Fort Calhoun Station Unit No. 1 Technical Specification 2.19(7) requires in part "with a penetration fire barrier nonfunctional, within one hour, either establish a continuous fire watch on at least one side of the affected penetration, or verify the operability of fire detectors on at least one side of the penetration and establish an hourly fire watch patrol." The compensatory fire watch patrol is to be maintained until the penetration is restored to functional status. Security Operating Procedure SECOP-26, Security Fire Watch Patrols and Fire Door Alarms, outlines in detail the procedures to be followed by the Firewatch Patrol Officers in conducting their hourly checks. Specifically addressed in paragraph 4.3 are the actions to be taken if there are obstructions, such as a step off pad, which prevent or hinder the proper observation of the area in question. Paragraph 4.4 further states that the Shift Security Supervisor should be notified immediately if for any reason the officer cannot complete the check as directed.

On December 6 [illegible], Fort Calhoun Station Unit No. 1 was operating in Mode 1 at 100 percent po[illegible] Just before midnight, the Shift Security Supervisor, in conjunction wi[illegible] the Firewatch Patrol Officer, was in the process of updating form FC-1006, Hourly Fire Watch Log, for December 7, 1990. During their discussion, the officer mentioned to the Supervisor that a step off pad had been placed in front of Door 971-1 to Room 23. The officer indicated that she had visually inspected the door and the vent above the door for any signs of smoke or fire.

Concerned that this was not an adequate firewatch inspection, the Supervisor reviewed the Fire Protection Impairment Permit (FC-1142) to see what compensatory measures were required. He then contacted the Operations Shift Supervisor regarding the proper method to check Door 971-1 and Room 23. It was determined that Room 23 could not be properly checked by a visual inspection from outside Door 971-1. It was, instead, necessary for the officer to enter the room in order to conduct a physical inspection of the room.

The Shift Security Supervisor contacted on-duty Radiation Protection personnel to review the necessary radiological and safety requirements for that area. The Supervisor then contacted the Firewatch Patrol Officer and provided instructions on the proper method to check the area as well as the necessary radiation protection requirements.

Upon completion of the next firewatch patrol, the Firewatch Patrol Officer approached the Shift Security Supervisor and pointed out three additional doors [989-3 (Room 6), 989-4 (Room 7), and 1007-11 (Room 60)] with step off pads on the outside of the doors. The supervisor again contacted on-duty Radiation Protection personnel about the radiation protection requirements and then instructed the firewatch officer on these requirements and the need to physically inspect the area inside the door, in accordance with the provisions of procedure SECOP-26.

Investigation revealed that five (5) different Firewatch Patrol Officers had not performed adequate hourly fire watch patrols for the areas where step off pads had been placed outside the doors. In these cases, the officers had not crossed the step off pads in order to open the doors and check inside. They had instead checked the outside of these areas by various means such as looking through vents, feeling the doors for heat, attempting to smell smoke, or questioning personnel who had just been in the areas or rooms. These officers felt that they were meeting the intent of the procedure by these actions.

Applicable records were reviewed to determine the dates on which these doors were added to the fire barrier impairment list and when the step off pads were placed outside these doors. Door 1007-11 (Room 60) was added to the list on September 21, 1990 and the step off pad was placed outside the door no earlier than November 5, 1990. Doors 989-4 (Room 7) and 989-3 (Room 6) were added to the list on September 7, 1990 and a single step off pad was placed outside the two doors no earlier than November 13, 1990. The final door, 971-1 (Room 23), was added to the list on November 27, 1990, and the pad placed outside no earlier than December 5, 1990.

It was concluded that inadequate hourly fire patrols for the applicable areas occurred only from each earliest step off pad placement date noted above to December 7, 1990. This failure to conduct adequate hourly fire patrols constitutes a violation of Technical Specification 2.19(7), and is therefore reportable pursuant to 10 CFR 50.73(a)(2)(i)(B).

The cause of the inadequate firewatch inspections was attributed to inappropriate actions by Firewatch Patrol Officers resulting from an inadequate understanding of the procedural requirements and inadequate direct supervisory guidance. Although the overall training program for Firewatch Patrol Officers was determined to be adequate, some officers did not clearly understand all of the door inspection requirements.

Completed corrective actions include:

(1) The Supervisor - Nuclear Security Operations issued a letter on December 7, 1990 to all firewatch personnel outlining the steps which must be taken to properly check fire impairments within a Radiation Control Area.

(2) Remedial training for firewatch personnel was completed by December 31, 1990 which included a complete review of SECOP-26. Special emphasis was placed on inspecting both sides of a fire door and on the proper method of inspecting doors within Radiation Control Areas (i.e., the wearing of protective clothing, use of step of pads, etc.). The security training instructors have been directed to place special emphasis, during formal and on-the-job training of Fire Patrol Officers, on the proper conduct of inspections within contaminated or radiation areas.

(3) The need for increased direct supervisory oversight of the firewatch function has been emphasized to the Shift Security Supervisors.

Attempts were made to determine times when these areas or rooms were occupied, which would meet the intent of a firewatch. Taking into account the minimal available documentation, a rough estimate was that these areas were occupied at least hourly approximately 30 percent of the periods when inadequate fire patrols were being performed. Fire detection instrumentation associated with impairment permits for the affected rooms or areas was operable throughout these periods.

Previous LERs relating to Firewatch Patrols, LERs 88-30, 89-11, 89-18, 90-01, and 90-24, documented failures to perform the hourly firewatch for a variety of reasons, primarily administrative. It is concluded that the corrective actions for these LERs were adequate, were not related to the situation in this case, and could not have prevented occurrence of this event.