



OPPD
Omaha Public Power District

444 South 16th Street Mall
Omaha NE 68102-2247

July 11, 1997
LIC-97-0102

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

Reference: Docket No. 50-285

Subject: Licensee Event Report 97-007 Revision 0 for the Fort Calhoun
Station

Please find attached Licensee Event Report 97-007 Revision 0 dated
July 11, 1997. 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,

James K. Gambhir
For

S. K. Gambhir
Division Manager
Engineering & Operation Support

EPM/epm

Attachment

c: Winston and Strawn
E. W. Merschoff, NRC Regional Administrator, Region IV
L. R. Wharton, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector
INPO Records Center

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PDR ADOCK 05000285
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LICENSEE EVENT REPORT (LER)

(See reverse for required number of
digits/characters for each block)ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY
INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED
ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO THE
INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE
INFORMATION AND RECORDS MANAGEMENT BRANCH (T-3 F33), U.S. NUCLEAR
REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE
PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND
BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

Fort Calhoun Station Unit No. 1

DOCKET NUMBER (2)

05000285

PAGE (3)

1 OF 4

TITLE (4)

Failure to Satisfy Surveillance Requirement for Reactor Coolant Flow

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 NAME	DOCKET NUMBER
06	14	97	97	-- 007	-- 00	07	11	97	FACILITY NAME	DOCKET NUMBER 05000
									FACILITY NAME	DOCKET NUMBER 05000
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check one or more) (11)							
POWER LEVEL (10)		100	20.2201(b)		20.2203(a)(2)(v)		X		50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)		20.2203(a)(3)(i)				50.73(a)(2)(ii)	50.73(a)(2)(x)
			20.2203(a)(2)(i)		20.2203(a)(3)(ii)				50.73(a)(2)(iii)	73.71
			20.2203(a)(2)(ii)		20.2203(a)(4)				50.73(a)(2)(iv)	OTHER
			20.2203(a)(2)(iii)		50.36(c)(1)				50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iv)		50.36(c)(2)				50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Laurence P. Lees, Shift Technical Advisor	TELEPHONE NUMBER (Include Area Code) (402) 533-6971
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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 15 single-spaced typewritten lines) (16)

At 1850 on June 14, 1997, during the performance of OP-ST-SHIFT-0001, "Operations Technical Specification Required Shift Surveillance," it was discovered that the readings for Reactor Coolant System (RCS) flow voltages had not been recorded for the 1300 performance that day. The last recorded entry for RCS flow voltages was at 0658 on June 14, 1997. With a Technical Specification (TS) required frequency of shiftly, defined as every 8 hours, the TS required frequency had been exceeded. The Shift Technical Advisor (STA) and the Shift Supervisor (SS) reviewed the results of the 1300 performance of OP-ST-SHIFT-0001, and neither detected the missed readings, but signed the surveillance test review sheet signifying that the results were satisfactory.

The root causes for this event were the lack of self-checking by the Control Room operator taking the OP-ST-SHIFT-0001 readings and the inadequate reviews performed by both the STA and SS.

Corrective actions include re-emphasizing the need for adequate self-checking on logs and accurate review of documents to all operators and instituting the use of data loggers in the control room.

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Fort Calhoun Station Unit No. 1	05000285	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 4
		97	- 007 -	00	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

BACKGROUND

Technical Specification (TS) 3.1, Table 3-1, Item 3a, requires a shiftly channel check of Reactor Coolant (RC) flow. The basis for this requirement is that failures, such as blown instrument fuses, defective indicators, or faulted amplifiers, which result in upscale or downscale indications, shall be easily recognized. During the performance of this portion of OP-ST-SHIFT-0001, "Operations Technical Specification Required Shift Surveillance," a comparison of the input voltage signals to the Reactor Protection System (RPS) Low Flow trip units is made. This input signal is derived from the instrument loop, which measures Steam Generator (SG) differential pressures. Documentation of this comparison is contained in surveillance test OP-ST-SHIFT-0001.

Upon completion of each performance of OP-ST-SHIFT-0001, the Shift Technical Advisor (STA) and the Shift Supervisor (SS) are required to review the most recent performance of OP-ST-SHIFT-0001. They document their review and approval of the results obtained by signing the "Shift Review Sheet."

The shiftly performance of OP-ST-SHIFT-0001 is defined in TS 3.0.2 as "at least once per 8 hours." TS 3.0.1 states that "each surveillance requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the specified surveillance interval." The 25 percent overrun allows for consideration of plant operating conditions and provides flexibility for performing the surveillance, without mandating an absolute time of day for performing the test. In the case of OP-ST-SHIFT-0001, the maximum allowable extension of 2 hours allows for an absolute maximum time between performances of 10 hours.

EVENT DESCRIPTION

On June 14, 1997, at 0658, the OP-ST-SHIFT-0001 readings for RC flow voltages, along with the other parameters required by the surveillance test, were taken and recorded. The results were reviewed and approved by the STA and SS. When OP-ST-SHIFT-0001 was next due, at 1300, the Control Room (CR) operator recorded the information in the next set of data entry blocks, but, RC flow voltages were inadvertently not recorded. The CR operator did not verify that all pages of OP-ST-SHIFT-0001 had been completed, even though this is a common practice among the other CR operators and a part of good self-checking. The CR operator acknowledged that there were no distractions that contributed to the missed entries.

The STA and SS reviewed the 1300 entries to OP-ST-SHIFT-0001 within the time frame prescribed. Both failed to detect that the RC flow voltages had not been recorded. The STA and SS signed for having reviewed the entries, thinking that

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they had seen all of the pages, and that all of the pages were filled in correctly.

At approximately 1850, the relieving CR operator was recording the 1900 readings in OP-ST-SHIFT-0001, and noticed that no readings had been recorded for RC flow voltages at 1300. He informed the SS of the missed readings and a condition report was generated. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B).

SAFETY SIGNIFICANCE

The instrument channel check is a qualitative measure of operability by observation of channel behavior during normal plant operation. OP-ST-SHIFT-0001 was performed both prior and subsequent to the occasion of missing the RC flow channel check, with no problems noted. A review of plant computer data during the interval between readings indicated normal values for calculated RC flow. In addition, annunciators, computer alarms and control board indications were available to CR operators that would have alerted them to a potential problem. Therefore, the failure to check and record the missed RC flow channel check had minimal safety significance.

CONCLUSIONS

The root causes of this event were the lack of self-checking by the CR operator taking the OP-ST-SHIFT-0001 readings, and the inadequate reviews performed by both the STA and SS.

A contributing cause to this event was ineffective implementation of a corrective action taken as a result of LER 94-011. This corrective action included a revision to OP-ST-SHIFT-0001 to more clearly distinguish between shifts and days in the data entry area. A part of that corrective action was to shade various data entry blocks to provide a visual barrier for the operators. As a result of not being provided a printer quality copy of OP-ST-SHIFT-0001 for reproduction, the shading has faded.

CORRECTIVE ACTIONS

1. The operator, the STA, and the SS were counseled on attention to detail and self-checking practices.
2. A memo was issued to all operators reminding them of management's expectation that they verify that all data is recorded in the logs after they complete them.

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In addition the following enhancements are being made:

3. The Omaha Public Power District (OPPD) will begin using electronic data loggers in place of handwritten paper records for OP-ST-SHIFT-0001 by March 31, 1998.
4. Until action number 3 above is implemented, OP-ST-SHIFT-0001 will be revised to reinstate the shading using an improved printing technique to distinguish between each set of readings, as discussed in LER 94-11. In addition a check mark will be required for each entry the STA and SS review on a given page. These revisions will be completed by July 18, 1997.

PREVIOUS SIMILAR EVENTS

LERs 89-013 and 94-011 both document instances of missed surveillances by CR operators.