

October 29, 1998

2CAN109806

U. S. Nuclear Regulatory Commission Document Control Desk Mail Station OP1-17 Washington, DC 20555

Subject:

Arkansas Nuclear One - Unit - 2

Docket No. 50-368 License No. NPF-6

Licensee Event Report 50-368/98-007-00

# Gentlemen:

In accordance with 10CFR50.73(a)(2)(i)(B), enclosed is the subject report concerning minimum shift crew composition for licensed operators.

Very truly yours,

Jimmy D. Vandergrift

Director, Nuclear Safety

JDV/tfs

enclosure

11

030053

9811030325 981029 PDR ADOCK 05000368 S PDR U. S. NRC October 29, 1998 2CAN109806 PAGE 2

cc: Mr. Ellis W. Merschoff
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector Arkansas Nuclear One P.O. Box 310 London, AR 72847

Institute of Nuclear Power Operations 700 Galleria Parkway Atlanta, GA 30339-5957

# 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 INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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)

Arkansas Nuclear One - Unit 2

DOCKET NUMBER (2) 05000368 PAGE (3) 1 of 4

TITLE (4) Minimum Shift Crew Composition Was Not Maintained As Required By Technical Specifications When A Biennial Requalification Examination Failure By A Licensed Operator Was Not Promptly Detected

EVEN	STAG TH	(5)	LER NUMBER (6)				REPO	RT DATE	(7)	OTHER FACILITIES INVOLVED (8)				
HONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISIO NUMBER		MONTH	DAY	YEAR	FACILI	TY NAME	DOCKET NUMBER		
10 05		98	98 007		00		10	29	98	FACILI	TY NAME	DOCKET NUMBER		
OPER/	ATING	DESCRIPTION OF THE PARTY OF THE	THIS RE	PORT IS SUBMITE	ED PURSU	ANT	TO THE	REGUIR	EMENTS	OF 10 C	FR: (Check one or mor	e) (11)		
MODE (9)		1	20.402(b)				20.405(c)				50.73(a)(2)(iv)	73.71(b)		
POWER			20.	20.405(a)(1)(i)			50.36(c)(1)				50.73(a)(2)(v)	73.71(c)		
LEVEL	(10)	100	20.	405(a)(1)(ii)			50.36(c)(2)				50.73(a)(2)(vii)	OTHER		
			20.405(a)(1)(iii)			X	50.73(a)(2)(i)				50.73(a)(2)(viii)(A)	2)(viii)(A) Specify in		
		20.405(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(8)	Abstract Below			
			20.405(a)(1)(v)				50.73(	a)(2)(i	ii)		50.73(a)(2)(x)	and in Text		

LICENSEE CONTACT FOR THIS LER (12)

NAME

Thomas F. Scott, Nuclear Safety and Licensing Specialist

TELEPHONE NUMBER (Include Area Code) 501-858-4623

	NAME OF THE PERSON NAMED IN COLUMN NAMED IN CO	COMPL	ETE ONE LINE FO	OR EACH COMPO	NENT	FAIL	URE DESCR	IBED IN TH	IS REPORT (13	3)	ac.annhaseowna		
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS			CAUSE	SYSTEM	COMPONENT	MANUFACTURER		TO NPROS	
	-	MON. STATE OF THE STATE AND ADDRESS OF THE STATE OF THE S											
SUPPLEMENTAL MEPORT EXPECTED (14)							NAME AND PARTY OF	EXPECTED		MONTH	DAY	YEAR	
YES (If yes, complete EXPECTED SUBMISSION DATE)						NO		SUBMISSION DATE (15)					

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

ANO-2 determined that the biennial requalification examination for one Senior Reactor Operator had been mis-graded. The error was discovered while preparing the exam packages for transmittal to records. The corrected exam score was less than the minimum for passing and resulted in the individual not meeting requirements for maintaining an active license. Between completion of the exam and discovery of the correct score, the individual stood watch on eleven occasions. This resulted in not maintaining minimum shift crew composition as required by Technical Specifications. The individual was removed from watchstanding duties and a remediation program was successfully completed. One root cause of this condition was attributed to not providing training to instructors on use of the Scantron grading machine. A second root cause was lack of procedural guidance concerning timeliness of verification of exam grades. A review of other exams for the training cycle revealed no other deficiencies. Corrective actions include training on the Scantron machine and revision of an administrative procedure for licensed operator training.

#### U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB NO. 3150-0104 (5-92) EXPIRES 5/31/95 ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATIC4 COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBG 7714), U.S. NUCLEAR REGULATORY COMMISSION, LICENSEE EVENT REPORT (LER) TEXT CONTINUATION WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK (3150-0104) REDUCTION PROJECT OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503. FACILITY NAME (1) DOCKET NUMBER (2) PAGE (3) LER NUMBER (6) SEQUENTIAL REVISION YEAR NUMBER NUMBER Arkansas Muclear One - Unit 2 05000368 2 OF 4 007 00

TEXT (1f more space is required, use additional copies of NRC Form 366A) (17)

### A. Plant Status

At the time this condition was discovered, Arkansas Nuclear One Unit 2 (ANO-2) was operating in steady-state condition at 100 percent power.

# B. Event Description

On October 5, 1998, ANO discovered that the minimum shift crew composition had not been maintained as required by Technical Specifications (TS) when a biennial requalification examination failure by a licensed operator was not promptly detected.

ANO Training routinely uses a Scantron automatic grading machine to score multiple choice examination answer sheets. The machine identifies missed answers by printing the correct letter for each incorrect response. It also prints the total number of correct answers and percentage (score) at the bottom of the answer sheet. It will not print the score if it senses that it has not correctly graded the answer sheet.

On August 27, 1998, Training personnel administered the biennial operator requalification exam to three individuals. The multiple-choice exam was graded by a Scantron machine. Since an erasure mark on the answer key for this exam caused the machine to mis-grade one question, the percentage score indicated on each sheet was known to be incorrect. The instructor determined how this question was marked on each sheet and assigned a score based on the number of other answers noted by Scantron as being incorrect. The instructor ignored the scores printed by Scantron since they were all incorrect due to the key error. When the answer sheet for one Senior Reactor Operator (SRO) was graded by Scantron, seven incorrect answers were indicated but an incorrect answer for one question was not marked. The total score or percentage was not printed at the bottom of that answer sheet indicating that the answer sheet had not been graded correctly. A grade of 81.6 percent was assigned by the instructor based on the number of questions marked as in orrect by Scantron. In the process of preparing exam packages for submittal to records, the exam of the SRO was re-graded as required by administrative procedures because it was a "marginal pass" (less than 82 percent). A different instructor from the one who had administered the exam discovered the grading error on October 5, 1998. The resulting score was 78.9 percent and constituted a failure by being less than 80 percent. Upon discovery of the failing score, the individual was removed from the qualified watchstanders list. It was determined that he had been on watch eleven times since the exam and on these occasions the minimum shift crew composition required by TS Table 6.2-1 had not been met.

#### NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB NO. 3150-0104 (5-92) EXPIRES 5/31/95 ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO LICENSEE EVENT REPORT (LER) THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, TEXT CONTINUATION WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503. FACILITY NAME (1) DOCKET NUMBER (2) LER NUMBER (6) PAGE (3) SEQUENTIAL REVISION YEAR NUMBER NUMBER Arkansas Nuclear One - Unit 2 05000368 3 OF 4 98 007 00

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

## C. Root Cause

One root cause of this condition was not providing training to instructors on use of the Scantron grading machine. The instructor involved in this condition did not realize that failing to print the score at the bottom of the answer sheet is an indication that the sheet has not been correctly graded. A survey of instructors indicated that others were not familiar with the significance of an answer sheet with no score or that sending the sheet back through the machine will correct this problem. A second root cause was a lack of procedural guidance concerning timeliness of verification of grades on written exams.

### D. Corrective Actions

When the condition was discovered, the individual was removed from the ANO-2 qualified watchstander list. A remediation package for that individual was developed by Training. The individual successfully passed a remedial exam with a score of 100 percent and has been returned to the qualified watchstanders list.

All other answer sheets for the examination package with the grading error were reviewed and verified to have been graded correctly. All other biennial exams taken during the current cycle were also compared against grading keys and no other deficiencies were identified.

The affected exam answer sheet was re-graded by passing it through the Scantron machine. The machine graded the answer sheet correctly and printed the score and number of correct answers at the bottom.

Training has been provided to appropriate Training Department personnel on capabilities and limitations of the Scantron grading machine.

The procedure for administration of training to licensed operators will be revised to provide guidance regarding timeliness of grade verification for written exams. This revision will be completed prior to administration of the next biennial requalification exams and is expected to be completed by December 31, 1998.

## E. Safety Significance

The individual involved is an experienced SRO. The average of his requalification training exams since September 1994 has exceeded the average for the Operations Department. He had successfully completed the dynamic simulator exam and Job Performance Measures (JPM) plant walkthrough exam. He also completed the static simulator portion of this requalification exam with no incorrect answers. While reviewing the results of the exam in question with the instructor when it was initially graded, he noted that one of his answers was marked correctly on the exam but had been transposed to the answer

#### NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB NO. 3150-0104 (5-92) EXPIRES 5/31/95 ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING RUNDEN ESTIMATE TO LICENSEE EVENT REPORT (LER) THE INFORMATION AND RECORDS MANAGEMENT GRANCH (MNB8 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK TEXT CONTINUATION (3150-0104) REDUCTION PROJECT OFFICE OF AND BUDGET, WASHINGTON MANAGEMENT DC 20503. FACILITY NAME (1) DOCKET NUMBER (2) LER NUMBER (6) PAGE (3) SEQUENTIAL REVISION YEAR NUMBER NUMBER Arkansas Nuclear One - Unit 2 05000368 4 OF 4 007 98 00

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

sheet in error. (No credit was given for this question.) For these reasons, this condition is judged to have had minimal actual safety significance.

# F. Basis for Reportability

Not having received a passing score on the written requalification examination required by 10CFR55.59 resulted in the individual not meeting conditions of 10CFR55.53(h) for maintaining an active license. Following the examination failure, but before the failure was discovered, the individual resumed normal watchstanding duties and stood watch in one of the positions required by TS Table 6.2-1, Minimum Shift Crew Composition, a position for which he was not qualified because of the examination failure. Section 3.2.2 of NUREG-1022, Revision 1, states that operation with less than the required number of people on shift constitutes operation prohibited by TS. This report is submitted in accordance with 10CFR50.73(a)(2)(i)(B).

### G. Additional Information

There have been no previous similar events reported by ANO as Licensee Event Reports.