

January 7, 2000

2CAN010002

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 50-368/1999-006-00

Gentlemen:

In accordance with 10CFR50.73(a)(2)(i)(B), enclosed is the subject report concerning offsite power circuit breaker alignment verification.

Very truly yours,

Jimmy D. Vandergrift

Director, Nuclear Safety

JDV/tfs

enclosure

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U. S. NRC January 7, 2000 2CAN010002 PAGE 2

cc: Mr. Ellis W. Merschoff
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U. S. Nuclear Regulatory Commission
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NRC FORM (5-92)	ORM 366 U.S. NUCLEAR REGULATORY COMMISSION (APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95								
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)								DOCKET NUMBER (2) PAGE (3)								
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LICENSEE CONTACT FOR THIS LER (12)																
NAME Thomas F. Scott, Nuclear Safety and Licensing Specialist						t				TELEPHONE NUME 501-858-4623	ER (Includ	le Area	Code)			
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SUPPLEMENTAL REPORT EXPECTED (14)							Ε	XPECTED	MONTH	DAY	YEAR					
YES						NO		SUBMISSION								

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

(If yes, complete EXPECTED SUBMISSION DATE)

On December 8, 1999, one Emergency Diesel Generator (EDG) was removed from service to perform scheduled maintenance. The Technical Specification Action requirement for this condition is to verify offsite power circuit breaker alignment within one hour. This surveillance was not performed within the required time. The EDG was restored to an operable status in one hour and 53 minutes. When it was discovered that the surveillance had not been completed, it was satisfactorily performed on December 11, 1999. The root cause of the event was inadequate tracking of the progress and status of the maintenance activity. Contributing factors included overconfidence based on the time it had taken to perform previous similar activities, time pressure to complete the work near shift turnover, and initiation of the work within the last 15 minutes of the shift. Appropriate Operations personnel from both units will review lessons learned from this event.

DATE (15)

NRC FORM 366A U.S. N (5-92)	UCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95				
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Arkansas Nuclear One - Unit 2	05000368	1999	006	00	2 OF 4	

TEXT (If 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 conditions at 100 percent power, Mode 1.

B. Event Description

Offsite power circuit breaker alignment not being performed as required by Technical Specifications (TS) with one Emergency Diesel Generator (EDG) [EK] inoperable resulted in entry into TS 3.0.3.

At 1745 on December 8, 1999, the handswitch for "A" EDG was placed in pull-to-lock as part of planned maintenance to reduce the oil level in the engine crankcase. It was anticipated that the evolution could be completed in less than one hour. TS 3.8.1.1.b requires operability of two EDGs. With one EDG inoperable, Action b of the TS requires demonstration of operability of both the offsite AC circuits by performing the surveillance to verify correct circuit breaker alignments within one hour and at least once per eight hours thereafter. The surveillance was not performed before the oil level was reduced to the desired value and the EDG was restored to an operable status at 1938. When it was discovered that the surveillance had not been completed, it was satisfactorily performed at 0715 on December 11, 1999.

C. Root Cause

The Control Room Supervisor (CRS) entered TS 3.8.1.1 when the EDG was removed from service but intentionally did not initiate the offsite breaker surveillance. This was based on previous experience where EDG oil level reduction had been completed in less than 15 minutes and an assumption that Maintenance personnel would promptly begin removing the oil. At 1750, when the Maintenance Lead signed on the clearance, he was informed by the CRS that the job was ready to work but was not informed of the one-hour surveillance requirement. After leaving the Control Room, the Lead turned over the job to the night crew in the shop. The CRS and operating crew completed shift turnover and left the Control Room at approximately 1800. The off-going CRS, believing that the job would be promptly completed, did not discuss with his relief the one-hour time limitation or notify the Shift Superintendent or the rest of his crew of his decision not to initiate the surveillance. The oncoming CRS was aware of the EDG maintenance but did not inquire about the surveillance. After the Operations crew completed their shift brief at approximately 1845, the Maintenance shop was contacted concerning job status. The CRS was informed that they were awaiting notification from Operations to begin the work. The CRS informed Maintenance to start the job. The work was completed promptly from that point. Not having performed the surveillance was discovered On December 11, 1999, by the CRS who removed the EDG from service during a review of logs when he returned to work.

NRC FORM 366A (5-92)	U.S. NUCLEAR RE	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95				
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Arkansas Nuclear One	- Unit 2	05000368	1999	006	00	3 OF 4

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The root cause of this event is attributed to inadequate tracking of the progress and status of the maintenance activity (supervisory methods). The CRS made a decision not to initiate the surveillance based on two assumptions; however, adequate triggers and tracking mechanisms were not initiated to ensure that the maintenance activity was completed within one hour. Tracking measures could have included better verbal communication with Maintenance personnel regarding the time-critical nature of the job, more detailed turnover to the on-coming CRS, and some form of mechanical trigger such as a plant computer programmable alarm, status board entry, or rough log entry.

Contributing to the event were certain human performance "traps." The CRS and operating crew felt some time pressure to remove the EDG from service so that the Maintenance crew could complete the job before shift turnover. There was overconfidence regarding the time required based on the experience of the CRS. There was also a late-in-shift effect. The EDG was made inoperable in the last 15 minutes of the day shift. The on-coming Operations crew was in the Control Room to begin shift turnover when the decision was made to start the job.

D. Corrective Actions

Following discovery that the surveillance had not been performed, it was satisfactorily completed.

Operations personnel from both units have been informed of significant aspects of this event. A more detailed lessons learned from this event will be reviewed with appropriate Operations personnel from both units by February 18, 2000.

E. Safety Significance

Satisfactory completion of the offsite power circuit breaker alignment verification confirmed that both circuits were operable during the period when "A" EDG was inoperable. This condition did not involve a safety system functional failure. The TS Action allows continued operation with one EDG inoperable for up to 72 hours if other AC power sources are operable. "A" EDG was inoperable for less than two hours. In the proposed rulemaking to modify event reporting requirements for power reactors, the NRC has indicated that missed or late surveillance tests have proven to be of little or no risk significance when the affected equipment is tested and found to be functional. This condition is considered to have had minimal actual safety significance.

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F. Basis for Reportability

Technical Specification 3.0.3 is applicable to conditions where a Limiting Condition for Operation and/or the associated Action requirement cannot be satisfied because of circumstances in excess of those addressed in the specification. Therefore, not having complied with the LCO or associated Action requirement of TS 3.8.1.1 resulted in entry into TS 3.0.3 at 1845 on December 8, 1999. When "A" EDG was restored to an operable status at 1938, the TS 3.0.3 requirements were no longer applicable. NUREG-1022, Event Reporting Guidelines 10CFR50.72 and 50.73, Section 3.2.2 states that entry into TS 3.0.3 for any reason or justification is reportable as 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.

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].