

L I C E N S E E E V E N T R E P O R T (L E R)

FACILITY NAME (1) Arkansas Nuclear One Unit 2										DOCKET NUMBER (2) PAGE (3) 10 5 0 0 1 0 3 1 6 8 1 1 0 F 0 1 2															
TITLE (4) Reactor Trip on High Steam Generator Level																									
EVENT DATE (5)					LER NUMBER (6)					REPORT DATE (7)					OTHER FACILITIES INVOLVED (8)										
Month		Day		Year		Sequential Number		Revision Number		Month		Day		Year		Facility Names Docket Number(s)									
0	6	1	8	8	4	8	4	--	0	1	4	--	0	0	0	7	1	7	8	4	10 5 0 0 1 0 3 1 6 8 1 1 0 F 0 1 2				
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) 0 0 0 1 8					20.402(b)					20.405(c)					X 50.73(a)(2)(iv)					73.71(u)					
					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					
					20.405(a)(1)(iii)					50.73(a)(2)(i)					50.73(a)(2)(viii)(A)					Abstract below and					
					20.405(a)(1)(iv)					50.73(a)(2)(ii)					50.73(a)(2)(viii)(B)					in Text, NRC Form					
					20.405(a)(1)(v)					50.73(a)(2)(iii)					50.73(a)(2)(x)					366A)					
Name Patrick C. Rogers, Plant Licensing Engineer																									
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)															Telephone Number										
Cause System Component Manufacturer Reportable to NPRDS															Area Code										
X SI J F IC IV FI 1 3 0															5 0 1 1 9 6 4 3 1 0 0										
SUPPLEMENT REPORT EXPECTED (14)															EXPECTED SUBMISSION DATE (15)										
Yes (If yes, complete Expected Submission Date) No															Month Day Year										
ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)																									

On June 18, 1984, at 1334 ANO-2 tripped during startup at approximately 8% full power (FP) due to a high level on "A" steam generator. The cause of the "A" steam generator high level was a main feedwater bypass regulating valve E/P converter malfunction which caused the valve to open to approximately 85% over several seconds without demand from the controller. The unexpected feedwater flow increase compounded normally difficult manual feedwater flow control operations during startup and a high level trip resulted. The cause of the malfunction appears to be due to contamination of the instrument air system, probably by desiccant carryover. This conclusion was a result of the non-repeatable open positioning of the valve when air was removed then re-applied and an instrument air system blowdown yielding material which appeared to be desiccant. The valve positioner was adjusted, tested, and returned to service. In addition to the instrument air system blowdown, one of the instrument air filters was replaced. No post-trip anomalies were noted, and the low power level trip did not present any unusual problems for operations.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		Year	Sequential Number	Revision Number	
Arkansas Nuclear One Unit-2	051010103 61 81 81 4--	0	1 4 --	0 0	01210F1012

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

On June 18, 1984, at 1334 a reactor turbine trip occurred at approximately 8% FP due to high level in "A" steam generator. The unit was in the process of returning to power after a trip which occurred on June 17 (reference LER 50-368/84-013). The Emergency Feedwater (EFW) System was placed in service manually to control steam generator levels as part of routine post trip recovery actions. No post-trip anomalies were noted, and the low power level trip did not present any unusual problems for operations.

The cause of the high level was a malfunction of an E/P converter for main feedwater (MFW) bypass regulating valve 2CV-0753 (EIIIS identifier = 025J - FCV-0753). This malfunction caused 2CV-0753 to open to approximately 85% with no demand from the controller. The resultant unexpected feedwater flow increase compounded normally difficult manual feedwater flow control operations during startup, and a high steam generator level trip resulted. The cause of the malfunction of the E/P converter appears to be due to contamination of the instrument air system, probably by desiccant carryover. This conclusion was a result of non-repeatable open positioning of the valve when air was removed and then reapplied and an instrument air system blowdown yielding material which appeared to be desiccant. In addition to the air system blowdown, one of the two redundant instrument air filters was replaced. Inspection of removed filter revealed that the filter was dirty but was still intact. The other filter could not be replaced due to isolation problems which should be corrected during the next refueling outage. Another instrument air system blowdown was conducted on 7/12/84, and only a small amount of a fine white powder was observed. On a monthly frequency, a sampling of points in the instrument air system will be checked for foreign material and the isolable filter will be changed until inspection results allow for a longer interval. The valve positioner was adjusted for proper travel, tested, and returned to service.



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July 17, 1984

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U. S. Nuclear Regulatory Commission
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Washington, D.C. 20555

Subject: Arkansas Nuclear One - Unit 2
Docket No. 50-368
License No. NPF-6
Licensee Event Report
No. 84-014-00

Gentlemen:

In accordance with 10CFR50.73(a)(2)(iv), attached is the subject report concerning the "A" steam generator.

Very truly yours,

John R. Marshall
Manager, Licensing

JRM:RJS:ac

Attachment

cc: Mr. Richard C. DeYoung
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. Norman M. Haller, Director
Office of Management & Program Analysis
U. S. Nuclear Regulatory Commission
Washington, DC 20555

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