

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)  
|0|5|0|0|0| 3| 6| 8|1|0|0|2

TITLE (4)

Reactor Trip Caused by Low 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)
01	13	1984	004	0	01	30	1984		0 5 0 0 0

OPERATING MODE (9) |1| THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8:

(Check one or more of the following) (11)

POWER LEVEL (10)  0 1 1 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify in
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	Abstract below and
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	in Text, NRC Form
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	366A)

LICENSEE CONTACT FOR THIS LER (12)

Name	Telephone Number
Patrick Rogers, Special Projects Coordinator	5 0 1 1 9 6 4 3 1 1 0 0

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

SUPPLEMENT REPORT EXPECTED (14)

EXPECTED SUBMISSION DATE (15)

☐ Yes (If yes, complete Expected Submission Date) ☒ No

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

On 1/31/84 at 2047 hours the reactor tripped from ~ 10% FP because of low steam generator level in 'B' steam generator. The main generator was not yet on line and feedwater controls were in manual during power escalation for the beginning of cycle 4. Switchover from the auxiliary feedwater system to the main feedwater system had occurred shortly before the trip. The low steam generator level condition was caused by manual level control difficulties that exist at low power levels and was compounded by a positive Moderator Temperature Coefficient (MTC).

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
			Sequential	Revision	
Arkansas Power & Light Co., Unit 2	015101010	Year	Number	Number	
TEXT (If more space is required, use additional NRC Form 366A's) (17)		8	4	0	0

On 1/31/84 at 2047 hours the reactor tripped from ~ 10% FP because of low steam generator level in 'B' steam generator. Preparations were being made to synchronize the turbine-generator with the grid. Feedwater controls were in manual during power escalation for the beginning of cycle 4. Switchover from the emergency feedwater system to the main feedwater system had occurred shortly before the trip. The low level trip may be attributed to manual level control difficulties that exist at low power levels compounded by a positive Moderator Temperature Coefficient (MTC). The positive MTC added to the level control problems because changes to temperature in the primary system had the opposite effects on the secondary system than those normally exhibited. Automatic feedwater control at this power level is not feasible and manual control is difficult to master with the course controls provided. The systems responded as designed and no problems were encountered during reactor trip recovery.



ARKANSAS POWER & LIGHT COMPANY

PCCT OFFICE BOX 551 LITTLE ROCK, ARKANSAS 72203 (501) 371-4000

March 5, 1984

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U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Subject: Arkansas Nuclear One - Unit 2  
Docket No. 50-368  
License No. NPF-6  
Licensee Event Report  
No. 84-004-00

Gentlemen:

In accordance with 10CFR50.73(a)(2)(iv), attached is the subject report concerning a reactor trip on low steam generator level during low power operation.

Very truly yours,

John R. Marshall  
Manager, Licensing

JRM:RJS:s1

Attachment

cc: Mr. John F. Streeter, Chief  
Reactor Project Branch #2  
U. S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

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