

December 16, 1994

2CAN129407

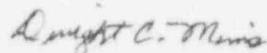
U. S. Nuclear Regulatory Commission
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Subject: Arkansas Nuclear One - Unit 2
Docket No. 50-368
License No. NPF-6
Licensee Event Report 50-368/94-005-00

Gentlemen:

In accordance with 10CFR50.73(a)(2)(i)(B), enclosed is the subject report concerning entry into Technical Specification 3.0.3.

Very truly yours,



Dwight C. Mims
Director, Licensing

DCM/kjm

enclosure



U. S. NRC
December 16, 1994
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cc: Mr. Leonard J. Callan
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

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.

1)

One - Unit 2

DOCKET NUMBER (2)

05000368

PAGE (3)

1 OF 4

into Technical Specification 3.0.3 Due to Two Channels of the Plant Protective System
ously Inoperable as a Result of a Personnel Error

2)

LER NUMBER (6)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
94	94	005	00	12	16	94	FACILITY NAME	DOCKET NUMBER

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (Check one or more) (11)					
100	20.402(b)		20.405(c)	50.73(a)(2)(iv)	70.71(b)
	20.405(a)(1)(i)		50.36(c)(1)	50.73(a)(2)(v)	70.71(c)
	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)	Specify in Abstract Below and in Text
	20.405(a)(1)(iv)		50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)		50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

er, Nuclear Safety and Licensing Specialist

TELEPHONE NUMBER (Include Area Code)
501-858-4605

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

lete EXPECTED SUBMISSION DATE)	X	NO	EXPECTED	MONTH	DAY	YEAR
			SUBMISSION DATE (15)			

limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On 21, 1994, at approximately 1407 hours, an ANO Instrumentation and Control technician performing the "B" channel Plant Protective System (PPS) monthly test procedure inadvertently reset the variable setpoint (VSP) for the "A" channel low steam generator (S/G) pressure trip causing Channel "A" trip setpoints below the minimum allowable Technical Specification (T.S.) value. Since channel bypass for testing, ANO-2 entered T.S. 3.0.3 based on two channels of PPS becoming inoperable simultaneously. The technician and the Control Board Operator (CBO) diagnosed the error and immediately suspended PPS testing. Channel "B" PPS was returned to operable status by removing it from bypass. Channel "A" of PPS was placed in T.S. 3.0.3 was exited at 1412. The S/G low pressure trips on channel "A" were at the required value of 751 psia and channel "A" was declared operable at 1414. The cause of this event was a personnel error on the part of the I&C technician due to inattention to detail and lack of adequate self-checking during performance of the surveillance procedure. The technician involved was individually counseled by the line supervisor. In addition, the other I&C crews were briefed on the event and the practice of self-checking.

NSEE EVENT REPORT (LER)
TEXT CONTINUATION

PLANT NAME (1)	DOCKET NUMBER (2)	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 (MNB 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.		
Unit 2	005000368	LER NUMBER (6)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
		94	005	00
		PAGE (3)		
		2 OF 4		

Required, use additional copies of NRC Form 366A (17)

is event, Arkansas Nuclear One Unit Two (ANO-2) was operating at 100 percent power. System (RCS) [AB] average temperature was approximately 572 degrees Fahrenheit and is 2200 psia. The monthly surveillance for "B" channel of the Plant Protective System progress.

1994, at approximately 1407 hours, an ANO Instrumentation and Control (I&C) the "B" channel PPS monthly surveillance procedure inadvertently reset the variable the "A" channel of the low steam generator (S/G) pressure trip causing Channel "A" below the minimum allowable Technical Specification (T.S.) value.

consists of four independent channels which monitor selected plant parameters and relations of limiting core conditions. The system provides reliable and rapid reactor engineered safety features operation if a trip setpoint is reached by any two of the Technical Specifications require a minimum of three channels of PPS to be operable (Mode 1).

of "B" channel PPS monthly surveillance procedure, the I&C technician at the dule in the front of the ANO-2 Control Room was directed by technicians at the "B" channel VSP for the low S/G pressure trip. The technician inadvertently reset lowering the "A" PPS S/G low pressure trip setpoints from 751 psia to This is below the minimum allowable T.S. value of 729.613 psia and resulted in inoperable simultaneously because the corresponding functions of channel "B" the surveillance.

ered T.S. 3.0.3 based on two channels of PPS being inoperable simultaneously. Control Board Operator (CBO) both recognized the error and immediately channel "B" PPS was returned to operable status by removing it from bypass. placed in bypass and T.S. 3.0.3 was exited at 1412. The S/G low pressure trip e reset to the required value of 751 psia. The "A" channel was removed from at 1414. The surveillance was subsequently completed satisfactorily at 1821

LICENSEE EVENT REPORT (LER)

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FACILITY NAME (1) Arkansas Nuclear One - Unit 2				DOCKET NUMBER (2) 05000368		PAGE (3) 1 OF 4	
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TITLE (4) Entry into Technical Specification 3.0.3 Due to Two Channels of the Plant Protective System being Simultaneously Inoperable as a Result of a Personnel Error

EVENT DATE (5)			LER NUMBER (6)		REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	DOCKET NUMBER
11	21	94	94	005	00	12	16	94	

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (Check one or more) (11)							
POWER LEVEL (10)	100	20.402(b)	20.405(c)	50.73(a)(2)(iv)	70.71(b)				
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	70.71(c)				
		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)	Specify in			
		20.405(a)(1)(iv)		50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	Abstract Below			
		20.405(a)(1)(v)		50.73(a)(2)(iii)	50.73(a)(2)(x)	and in Text			

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER (Include Area Code)
Timberly J. Miller, Nuclear Safety and Licensing Specialist		501-858-4605

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)		
YES	NO			MONTH	DAY	YEAR
(If yes, complete EXPECTED SUBMISSION DATE)	X					

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

On November 21, 1994, at approximately 1407 hours, an ANO Instrumentation and Control (I&C) technician performing the "B" channel Plant Protective System (PPS) monthly surveillance procedure inadvertently reset the variable setpoint (VSP) for the "A" channel of the low steam generator (S/G) pressure trip causing Channel "A" trip setpoints to be below the minimum allowable Technical Specification (T.S.) value. Since channel "B" was in bypass for testing, ANO-2 entered T.S. 3.0.3 based on two channels of PPS being inoperable simultaneously. The technician and the Control Board Operator (CBO) both recognized the error and immediately suspended PPS testing. Channel "B" PPS was returned to operable status by removing it from bypass. Channel "A" of PPS was placed in bypass and T.S. 3.0.3 was exited at 1412. The S/G low pressure trips on channel "A" were reset to the required value of 751 psia and channel "A" was declared operable at 1414. The root cause of this event was a personnel error on the part of the I&C technician involving inattention to detail and lack of adequate self-checking during performance of the "B" PPS surveillance procedure. The technician involved was individually counseled by his first line supervisor. In addition, the other I&C crews were briefed on the event and on the practice of self-checking.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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)		LER NUMBER (6)			PAGE (3)
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Arkansas Nuclear One - Unit 2		005000368		94	005	00	2 OF 4

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

A. Plant Status

At the time of this event, Arkansas Nuclear One Unit Two (ANO-2) was operating at 100 percent power. Reactor Coolant System (RCS) [AB] average temperature was approximately 572 degrees Fahrenheit and RCS pressure was 2200 psia. The monthly surveillance for "B" channel of the Plant Protective System (PPS) [JC] was in progress.

B. Event Description

On November 21, 1994, at approximately 1407 hours, an ANO Instrumentation and Control (I&C) technician performing the "B" channel PPS monthly surveillance procedure inadvertently reset the variable setpoint (VSP) for the "A" channel of the low steam generator (S/G) pressure trip causing Channel "A" trip setpoints to be below the minimum allowable Technical Specification (T.S.) value.

The PPS system consists of four independent channels which monitor selected plant parameters and perform on-line calculations of limiting core conditions. The system provides reliable and rapid reactor trips and/or initiates engineered safety features operation if a trip setpoint is reached by any two of the four PPS channels. Technical Specifications require a minimum of three channels of PPS to be operable during power operations (Mode 1).

During the performance of "B" channel PPS monthly surveillance procedure, the I&C technician at the PPS remote control module in the front of the ANO-2 Control Room was directed by technicians at the PPS panel to reset the "B" channel VSP for the low S/G pressure trip. The technician inadvertently reset the "A" channel VSP, lowering the "A" PPS S/G low pressure trip setpoints from 751 psia to approximately 660 psia. This is below the minimum allowable T.S. value of 729.613 psia and resulted in two PPS channels being inoperable simultaneously because the corresponding functions of channel "B" PPS were in bypass for the surveillance.

At 1407 hours, ANO-2 entered T.S. 3.0.3 based on two channels of PPS being inoperable simultaneously. The technician and the Control Board Operator (CBO) both recognized the error and immediately suspended PPS testing. Channel "B" PPS was returned to operable status by removing it from bypass. Channel "A" of PPS was placed in bypass and T.S. 3.0.3 was exited at 1412. The S/G low pressure trip setpoints on channel "A" were reset to the required value of 751 psia. The "A" channel was removed from bypass and declared operable at 1414. The surveillance was subsequently completed satisfactorily at 1821 hours.

NRC FORM 366A (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95	
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION				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 (MNB 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)		LER NUMBER (6)	
Arkansas Nuclear One - Unit 2		005000368		YEAR	SEQUENTIAL NUMBER
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					00
				PAGE (3)	
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

C. Root Cause

The root cause of this event was a personnel error on the part of the I&C technician involving inattention to detail and lack of adequate self-checking during performance of the "B" PPS surveillance procedure. The direction to reset channel "B" functions was clearly understood and acknowledged by the technician who was experienced in the performance of the PPS monthly surveillance. The procedural steps were clear and the PPS remote control modules are well labeled and color coded. Peer checking by the CBO, although initiated during this surveillance, was not properly completed in the case of the initiating error for this event.

D. Corrective Actions

Prior to recommencing the "B" PPS Monthly Surveillance, the I&C crew involved in this event was briefed on the practice of self-checking.

The technician involved was individually counseled by his first line supervisor. In addition, the other I&C crews were briefed on the event and on the practice of self-checking.

This event will be reviewed with appropriate members of the Operations and Maintenance staffs of both units. Management expectations regarding peer checking between Operations and Maintenance during equipment manipulations will be communicated to appropriate maintenance personnel. These actions will be completed by March 1, 1995.

E. Safety Significance

This event was of short duration (five minutes) and the immediate recognition of the error by both the I&C technician and the CBO would have allowed compensatory measures to be taken if a transient had occurred while two of the four PPS channels were simultaneously inoperable. Also, the "C" and "D" PPS channels and functions from "A" and "B" PPS other than the low S/G pressure trip setpoints remained operable for the five minute duration of this event and would have functioned normally. For the above reasons, this event is considered to be of low safety significance.

F. Basis for Reportability

Entry into T.S. 3.0.3 is reportable pursuant to 10CFR50.73(a)(2)(i)(B) as an operation or condition prohibited by the plant's Technical Specifications.

NRC FORM 366A (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95	
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION				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)		LER NUMBER (6)	
Arkansas Nuclear One - Unit 2		005000368		YEAR	SEQUENTIAL NUMBER
				94	005
				REVISION NUMBER	00
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				4 OF 4	

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

G. Additional Information

A review of the corrective action database revealed no previous events where human error during PPS testing caused less than the required minimum channels to be operable; therefore, this event is considered to be an isolated incident.

No instances of a similar event have been reported as Licensee Event Reports by ANO.

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