

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9810280011 DOC. DATE: 98/10/22 NOTARIZED: NO DOCKET #
 FACIL: 50-313 Arkansas Nuclear One, Unit 1, Arkansas Power & Light 05000313
 AUTH: NAME AUTHOR AFFILIATION
 SCHEIDE, R.H. Entergy Operations, Inc.
 VANDERGRIFF, J. Entergy Operations, Inc.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 98-004-00: on 980923, inadvertent actuation of EFS occurred during surveillance testing. Caused by personnel error. Personnel involved with event were counseled & procedure changes were implemented. With 981022 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 5
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD4-1PD	1 1	HILTON, N	1 1
INTERNAL:	ACRS	1 1	AEOD/SPD/RAB	2 2
	AEOD/SPD/RRAB	1 1	FILE CENTER	1 1
	NRR/DE/ECGB	1 1	NRR/DE/EELB	1 1
	NRR/DE/EMEB	1 1	NRR/DRCH/HICB	1 1
	NRR/DRCH/HOHB	1 1	NRR/DRCH/HQMB	1 1
	NRR/DRPM/PECB	1 1	NRR/DSSA/SPLB	1 1
	RES/DET/EIB	1 1	RGN4 FILE 01	1 1
EXTERNAL:	L ST LOBBY WARD	1 1	LITCO BRYCE, J H	1 1
	NOAC POORE, W.	1 1	NOAC QUEENER, DS	1 1
	NRC PDR	1 1	NUDOCS FULL TXT	1 1

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

FULL TEXT CONVERSION REQUIRED

TOTAL NUMBER OF COPIES REQUIRED: LTTR 23 ENCL 23

C
A
T
E
G
O
R
Y

1

D
C
C
U
M
E
N
T

/ 10



Entergy

Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72801
Tel 501 858-5000

October 22, 1998

1CAN109801

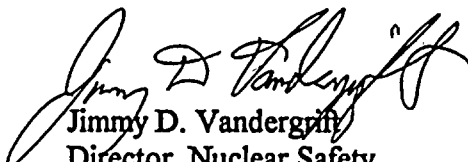
U. S. Nuclear Regulatory Commission
Document Control Desk
Mail Station OP1-17
Washington, DC 20555

Subject: Arkansas Nuclear One - Unit - 1
Docket No. 50-313
License No. DPR-51
Licensee Event Report 50-313/98-004-00

Gentlemen:

In accordance with 10CFR50.73(a)(2)(iv), enclosed is the subject report concerning an inadvertent actuation of the Emergency Feedwater System.

Very truly yours,


Jimmy D. Vandergift
Director, Nuclear Safety

JDV/rs

enclosure

15321

9810280011 981022
PDR ADDCK 05000313
S PDR

U. S. NRC
October 22, 1998
1CAN109801 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 (MMBB 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 1

DOCKET NUMBER (2)

05000313

PAGE (3)

1 of 3

TITLE (4) Inadvertent Actuation Of The Emergency Feedwater System During Surveillance Testing As A Result Of 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	FACILITY NAME	DOCKET NUMBER
09	23	98	98	004	00	10	22	98	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (Check one or more) (11)								
	N	20.402(b)		20.405(c)		X		50.73(a)(2)(iv)		73.71(b)
POWER LEVEL (10)		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)(vi)		OTHER
		20.405(a)(1)(iii)		50.73(a)(2)(i)				50.73(a)(2)(vii)(A)		Specify in Abstract Below and in Text
		20.405(a)(1)(iv)		50.73(a)(2)(ii)				50.73(a)(2)(vii)(B)		
		20.405(a)(1)(v)		50.73(a)(2)(iii)				50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

NAME

Richard H. Scheide, Nuclear Safety and Licensing Specialist

TELEPHONE NUMBER (Include Area Code)

501-858-4618

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES		NO		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
(If yes, complete EXPECTED SUBMISSION DATE)		X					

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

On September 23, 1998, at approximately 1033, an inadvertent actuation of the Emergency Feedwater System (EFW) occurred during the performance of the Emergency Feedwater Initiation and Control System (EFIC) monthly surveillance test. When the technicians reached a point in the procedure requiring a half trip in the "A" and "B" EFW train trip modules to be reset, the lead technician read the step which stated, "Reset the EFW Trip Modules in Channels A and B." The technician performing the step repeated the instruction; however, instead of depressing the reset toggle switch, he depressed the "B" EFW trip module Trip 1 button. This action satisfied the actuation logic for the "B" train of EFW and one EFW pump started. Since the OTSGs were at normal levels and pressure, no EFW flow was injected. The EFW pump was immediately secured, the trip modules were reset, and EFIC and EFW were returned to their normal configuration. The root cause of this event was personnel error. The individuals involved were counseled. Also, this event and expectations regarding self-checking were discussed with appropriate personnel.

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 (MHBB 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)
Arkansas Nuclear One - Unit 1		05000313	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
			98	004	00
					2 OF 3

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

A. Plant Status

At the time this event occurred, Arkansas Nuclear One Unit 1 (ANO-1) was operating in steady-state conditions at 100 percent power.

B. Event Description

On September 23, 1998, at approximately 1033, an inadvertent actuation of the Emergency Feedwater System (EFW) [BA] occurred during performance of the Emergency Feedwater Initiation and Control System (EFIC) [JE] monthly surveillance test.

The EFW system is a two train system consisting of a steam driven pump (P-7A) and a motor driven pump (P-7B). EFW is actuated to protect the reactor core from overheating upon loss of main feedwater flow or reactor coolant pump (RCP) circulation. EFIC is a four channel system that monitors Once Through Steam Generator (OTSG) levels and pressures, main feedwater pump status, RCP status, and Engineering Safeguards Actuation System [JE] channels 3 and 4 in order to initiate EFW should an actuation setpoint be reached. The EFIC logic is a "one out of two taken twice" format. To actuate either train of EFW, at least two of the four channels must be initiated. If only two EFIC channels are initiated, it is possible to have one or both trains of EFW actuated, depending upon which channels are initiated.

The monthly EFIC Channel "B" surveillance test was commenced at approximately 0825 on September 23. At approximately 1030, the technicians performing the surveillance verified that a simulated low level in the "A" OTSG appropriately initiated the "Trip 1" logic in the "A" EFW Train trip module and the "Trip 2" logic in the "B" EFW Train trip module. After resetting the simulated low OTSG level, the procedure required that the EFW trip modules be reset. The lead technician read the procedure step which stated, "Reset the EFW Trip Modules in Channels A and B." The technician performing the step repeated the instruction; however, instead of depressing the reset toggle switch, he depressed the "B" EFW trip module trip 1 button. This action satisfied the actuation logic for the "B" train of EFW and P-7A started. Since the OTSGs were at normal operating levels and pressure, no EFW flow was injected. The control board operator immediately secured P-7A. The EFW trip modules were properly reset, EFIC and EFW were returned to their normal configuration, and the surveillance procedure was exited.

The surveillance test was recommenced at 1247 and successfully completed at 1422 on September 23.

C. Root Cause

The root cause of this event was determined to be personnel error. The technician performing the action understood the procedure step read by the lead technician and repeated it; however, he failed to self-check before performing the action.

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 (MN88 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)
Arkansas Nuclear One - Unit 1		05000313		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
				98	004	00	

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

A contributing cause to this event was a procedural ambiguity. The procedure step (8.3.6.K) that resulted in the EFW actuation simply stated, "Reset the EFW Trip Modules in Channels A and B." Preceding steps stipulating manipulation of devices were more specific with respect to the actions required. For example, step 8.3.6.I. states in part, "Press and release the Reset button...." If the procedure had stated, "Press and release the Reset toggle switch....," the error might not have occurred.

D. Corrective Actions

The technicians involved with this event were counseled by management prior to recommencing the surveillance test. The importance of self-checking was emphasized.

This event and management expectations regarding self-checking were discussed with the Unit-1 Instrumentation and Control shop personnel during their morning meetings.

Procedure changes were implemented to clearly specify depressing the reset toggle switch when resetting the EFW trip modules.

The Maintenance Human Performance Committee will develop a summary of the lessons learned from this event to be presented to the Maintenance Departments of ANO-1 and ANO-2. The summary is expected to be completed by December 21, 1998.

E. Safety Significance

The EFIC and EFW systems performed as designed after the inadvertent actuation signal was initiated. However, since the OTSGs were at normal operating levels and pressure, no EFW flow was initiated and no plant perturbation resulted from this event. Therefore, this condition is considered to be of low safety significance.

F. Basis For Reportability

This condition is reportable pursuant to 10CFR50.73(a)(2)(iv) as an actuation of an Engineered Safety Feature (ESF).

It was also reported to the NRC Operations Center at 1336 on September 23, 1998, in accordance with 10CFR50.72(b)(2)(ii).

G. Additional Information

There have been no previous similar LERs submitted by ANO regarding the inadvertent actuation of an ESF as a result of inadequate self-checking by Maintenance personnel.

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