



Entergy
Operations

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June 3, 1991

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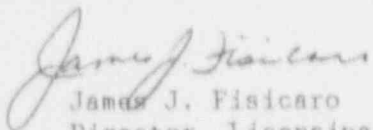
U. S. Nuclear Regulatory Commission
Document Control Desk
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Washington, D. C. 20555

SUBJECT: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
Licensee Event Report 50-313/91-004-00

Gentlemen:

In accordance with 10CFR50.73(a)(2)(iv), attached is the subject report.

Very truly yours,


James J. Fisicaro
Director, Licensing

JJF/RHS/mmg
Enclosure

cc: Regional Administrator
Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Arkansas Nuclear One - Unit 1

DOCKET NUMBER (2) PAGE (3)
050003 131 OF 03

TITLE (4) Inadvertent Actuation of the Control Room Emergency Ventilation System due to a Chlorine Monitor Trip Which was Caused by 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 Names	Docket Number(s)		
05	02	91	91	--	004	00	06	03	91	AND-2	050003	68

OPERATING MODE (9) N THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 6:

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

POWER LEVEL (10)	20.402(b)	20.405(a)(1)(i)	20.405(a)(1)(ii)	20.405(a)(1)(iii)	20.405(a)(1)(iv)	20.405(a)(1)(v)	20.405(c)	50.36(c)(1)	50.36(c)(2)	50.73(a)(2)(i)	50.73(a)(2)(ii)	50.73(a)(2)(iii)(A)	50.73(a)(2)(iii)(B)	50.73(a)(2)(iv)	50.73(a)(2)(v)	50.73(a)(2)(vii)	50.73(a)(2)(viii)(A)	50.73(a)(2)(viii)(B)	50.73(a)(2)(ix)	73.71(b)	73.71(c)	Other (Specify in Abstract below and in Text, NRC Form 366A)	
100																							

LICENSEE CONTACT FOR THIS LER (12)

Name

Richard H. Scheide, Nuclear Safety and Licensing Specialist

Telephone Number

Area Code
501964-5000

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

Cause	System	Component	Manufacturer	Reportable to NRC	Cause	System	Component	Manufacturer	Reportable to NRC

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 May 2, 1991, at approximately 1042, an automatic actuation of the Control Room Emergency Ventilation System (CREVS) occurred as a result of the inadvertent tripping of a chlorine monitor. At the time of the event, a technician was working from a ladder to remove a pressure switch from service for calibration. While performing his task, the technician shifted his position and inadvertently contacted the reset pushbutton of the chlorine monitor. The contact with the pushbutton resulted in the tripping of the monitor and actuation of the CREVS. Since the cause of the actuation was immediately known, the CREVS was reset and the Control Room ventilation lineup was returned to its normal configuration. The root cause of this event was personnel error. The technician failed to use caution while working in the vicinity of the chlorine monitor, which has a warning placard affixed next to its reset pushbutton. The technician was counselled regarding the importance of using caution when working around plant equipment. In addition, protective covers will be placed over the chlorine monitor reset pushbuttons to prevent them from being inadvertently depressed.

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 One	05000313	91--	004--	00	02 OF 03

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

A. Plant Status

At the time of this event, Arkansas Nuclear One, Unit 1 (ANO-1) and Unit 2 (ANO-2) were operating at approximately 100 percent of rated power.

B. Event Description

On May 2, 1991, at approximately 1042, an automatic actuation of the Control Room Emergency Ventilation System (CREVS) [1V] occurred as a result of the inadvertent tripping of chlorine monitor 2CLS-8761-1.

The CREVS for the ANO-1 and ANO-2 combined Control Room consists of two redundant filter trains, both of which are located outside the ANO-1 section of the Control Room. Each filter train includes a centrifugal fan, roughing filter, absolute filter, and charcoal adsorbent. In addition to recirculation and filtration of Control Room air, filtered outside makeup air is also provided to pressurize the Control Room to minimize unfiltered air leakage into the Control Room under isolated conditions. The CREVS trains are normally isolated from the Control Room by isolation dampers. In the event of detection of high radiation or high chlorine concentration, the normal Control Room air ventilation systems of both Unit-1 and Unit-2 are automatically isolated and the CREVS is automatically started.

Two quick acting chlorine detectors (2CLS-8760-2 and 2CLS-8761-1) are provided at the normal ventilation system supply duct for ANO-1 and two detectors (2CLS-8762-2 and 2CLS-8763-1) at the ANO-2 supply air duct. Any one of these detector signals will initiate operation of the CREVS. Additionally, radiation monitors RE-8001 (an area radiation monitor located in the ANO-1 Control Room area) and 2RE-8750-1 (a process radiation monitor located in the ANO-2 normal ventilation system outside air intake ductwork) are provided to automatically actuate CREVS upon detection of high radiation. If either one of these radiation monitors detects radiation levels above predetermined values the CREVS will be automatically actuated.

At the time of this event, an Instrumentation and Controls (I&C) technician was in the process of removing a pressure switch from service for calibration. This pressure switch is in close proximity to chlorine monitor 2CLS-8761-1. Due to the inaccessible location of the switch (approximately 10 feet above the floor) the technician was working from a ladder. While performing his task, the technician shifted his position on the ladder and inadvertently contacted the reset pushbutton of 2CLS-8761-1. The contact with the pushbutton resulted in the tripping of the monitor and actuation of the CREVS. Since the cause of the actuation was immediately known, the CREVS was reset and the Control Room ventilation lineup was returned to its normal configuration.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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Arkansas Nuclear One, Unit One	05000313	91	04	00	03

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

C. Root Cause

The root cause of this event was determined to be personnel error. 2CLS-8761-1 has a warning placard affixed next to its reset pushbutton. However, the technician failed to notice the placard and, therefore, did not take the appropriate precautions while performing his job.

A contributing factor to this event is the design of the chlorine monitor reset circuit which initiates a trip when the reset pushbutton is depressed. Normally, reset circuits would have no affect on the equipment unless it was in the tripped condition.

D. Corrective Actions

The personnel involved in this event were counselled regarding the importance of using caution when working around plant equipment in order to preclude inadvertent undesirable consequences.

In addition, protective covers will be placed over the reset pushbuttons of the four chlorine monitors to prevent them from being inadvertently depressed. These covers are expected to be in place by June 30, 1991.

E. Safety Significance

The CREVS actuated as designed even though no actual high chlorine concentration existed. Therefore, there was no safety significance associated with this event.

F. Basis for Reportability

This event is reportable pursuant to 10CFR5073(a)(2)(IV) as an automatic actuation of an Engineered Safety Features System. It was also reported in accordance with 10CFR50.72 at 1129 on P v 2, 1991.

G. Additional Information

Previous events in which the CREVS was actuated due to the inadvertent tripping of a chlorine monitor were reported in LERs 50-313/89-009-01, 50-313/89-011-00, 50-313/89-035-00, 50-313/89-036-00, 50-313/89-042-01, and 50-313/90-011-00.

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