



**Entergy  
Operations**

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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 50-368/91-009-00

Gentlemen:

In accordance with 10CFR50.73(a)(2)(i)(B), attached is the subject report concerning a personnel error which resulted in the Containment Ventilation System effluent pathway not being monitored for particulate and iodine activity as required by the plant's Technical Specifications.

Very truly yours,

James J. Fisicaro  
Manager, Licensing

JJF/RHS/ams  
Attachment

cc: Regional Administrator  
Region IV  
U. S. Nuclear Regulatory Commission  
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## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Arkansas Nuclear One, Unit Two

DOCKET NUMBER (2)										PAGE (3)									
0	5	0	0	0	3	6	8	1	OF	0	3								

TITLE (4) Personnel Error Results In The Containment Ventilation System Effluent Pathway Not Being Monitored For Particulate And Iodine Activity As Required By Technical Specifications

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)		
0	3	1	1	9	1	9	1	--	0	0	9	--	0	0
0	3	1	1	9	1	9	1	--	0	0	9	--	0	0

OPERATING	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §
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MODE (9) 6 (Check one or more of the following) (11)

POWER	---	20.402(b)	---	20.405(c)	---	50.73(a)(2)(iv)	---	73.71(b)
LEVEL	---	20.405(a)(1)(i)	---	50.36(c)(1)	---	50.73(a)(2)(v)	---	73.71(c)
(10)	0 0 0	20.405(a)(1)(ii)	---	50.36(c)(2)	---	50.73(a)(2)(vii)	---	Other (Specify in
		20.405(a)(1)(iii)	X	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)

LICENSEE CONTACT FOR THIS LER (12)

Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

Richard H. Scheide, Nuclear Safety and Licensing Specialist

Aren

Code

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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)

Month	Day	Year
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[illegible][illegible]

<input type="checkbox"/>	Yes (If yes, complete Expected Submission Date)	<input checked="" type="checkbox"/>	No
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 11, 1991, at approximately 1940, plant Chemistry personnel identified that a violation of the ANO-2 Technical Specifications had occurred in that the Containment Ventilation System effluent had not been adequately monitored for particulate and iodine activity for a period of approximately 5 hours and 39 minutes. The normal radiation monitor for the system was out of service for maintenance from 1322 until 1901 on March 11. An auxiliary sample pump was installed, as required by Technical Specifications, to collect samples to be analyzed for particulate and iodine activity. However, at approximately 1930, after the normal monitor had been returned to service, the technician that was removing the auxiliary pump discovered that its sample holder did not contain either a particulate or a charcoal filter. Therefore, that effluent pathway had not been monitored for particulates and iodine while the normal monitor was out of service. The process monitor for the Containment Purge System showed no adverse trends during the time that the effluent pathway was unmonitored. The root cause of this event was personnel error. The technician that installed the auxiliary pump had the filters in the area, but forgot to install them. Disciplinary action was taken against the responsible individual.

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 Two	05000368	91	--009	--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 Two (ANO-2) was in Mode 6 (Refueling Shutdown). The Reactor Coolant System (RCS) [AB] was at atmospheric pressure and RCS temperature was approximately 86 degrees.

B. Event Description

On March 11, 1991, at approximately 1940, plant chemistry personnel identified that a violation of the ANO-2 Technical Specifications had occurred in that the Containment Ventilation and Purge System [VA] effluent had not been adequately monitored for particulate and iodine activity for a period of approximately 5 hours and 39 minutes.

On March 11, 1991, Instrumentation and Controls personnel requested that channel 5 of the Super Particulate, Iodine and Noble Gas Monitor (SPING) be removed from service to allow performance of surveillance testing. Channel 5 of the SPING provides on-line monitoring of the Containment Ventilation and Purge System effluent for noble gases, and is used to collect samples which are subsequently analyzed to determine particulate and iodine activity in the effluent stream.

ANO-2 Technical Specifications require that, with the system in operation and this monitor inoperable, system flow rate must be estimated at least every 4 hours, grab samples must be taken at least once every 12 hours, and particulate and iodine samples must be collected using auxiliary sampling equipment. In accordance with these requirements, system flow was estimated to be 43,600 cubic feet per minute, a grab sample was obtained and, at 1322, the SPING was removed from service and an auxiliary sample pump was installed and placed in service by plant Chemistry personnel to collect particulate and iodine samples.

Surveillance testing was completed and channel 5 of the SPING was returned to service at 1901 on March 11. At 1940, the Chemistry technician that removed the auxiliary sample pump from the system discovered that the pump's sample holder did not contain a particulate filter or a charcoal cartridge. Therefore, the Technical Specifications requirement to sample for particulate and iodine activity had not been accomplished during the time that channel 5 of the SPING was out of service. Since the SPING had been returned to service and the effluent pathway was being monitored at the time this condition was discovered, no immediate corrective actions were required.

C. Root Cause

The root cause of this event was determined to be personnel error. The Chemistry technician who installed the auxiliary sample pump had both the particulate filter and the charcoal cartridge in the area at the time the pump was installed, but forgot to place them in the sample holder.

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

D. Corrective Actions

Disciplinary action was taken against the technician responsible for this event.

Procedure 2607.010 (Sampling the Unit 2 Vents), which governs the installation of auxiliary sampling equipment, was reviewed for adequacy. It was verified that the procedure contained adequate guidance regarding the installation of auxiliary sampling equipment, including the placement of particulate and iodine sampling cartridges in the sample holder. The equivalent ANO-1 procedure was also verified to be adequate.

Since no previous occurrences of this type have been documented, this was determined to be an isolated event.

E. Safety Significance

An additional process monitor (2RE-8233), which also monitors the Containment Ventilation and Purge System effluent, was in service during the time period in which the pathway was unmonitored. Since this monitor showed no adverse trends during this time, it is reasonable to conclude that no significant releases occurred while the pathway was unmonitored. Therefore, this event was not safety significant.

F. Basis For Reportability

Since the Containment Ventilation System effluent was not monitored for particulate and iodine activity during the time that channel 5 of the SPING was out of service, this condition is reportable pursuant to 10CFR50.73(a)(2)(i)(B) as operation prohibited by the plant's Technical Specifications.

G. Additional Information

There have been no previous similar events reported by ANO.

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