

Commonwealth Edison Company  
Dresden Generating Station  
6500 North Dresden Road  
Morris, IL 60450  
Tel 815-942-2920

**ComEd**

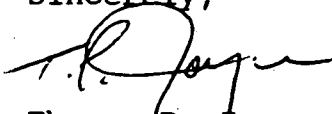
January 31, 1995

TPJ Ltr.: 95-0016

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

Licensee Event Report 95-002, Docket 50-249 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10CFR50.73(a)(2)(iv).

Sincerely,



Thomas P. Joyce  
Site Vice President  
Dresden Station

TJP/klb

Enc.

cc: J. Martin, Regional Administrator, Region III  
NRC Resident Inspector's Office  
File/NRC  
File/Numerical

1006

9502150302 950130  
PDR ADOCK 05000249  
S PDR

A Unicom Company

LE22  
11

**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.

<b>FACILITY NAME (1)</b> Dresden Nuclear Power Station, Unit 3	<b>DOCKET NUMBER (2)</b> 05000249	<b>PAGE (3)</b> 1 OF 4
---	--------------------------------------	---------------------------

**TITLE (4)**  
Unit 3 Scram from a False Reactor Vessel Low Water Level During the Replacement of an Isolation Valve for Pressure Switch (PS) 3-263-51A Due to Air Intrusion into the System

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
01	10	95	95	002	0	01	30	95	None	None

<b>OPERATING MODE (9)</b> N	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)</b>									
<b>POWER LEVEL (10)</b> 000	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(c)						
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> OTHER						
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(vii)	(Specify in Abstract below and in Text, NRC Form 366A)						
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)								
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(x)							

<b>LICENSEE CONTACT FOR THIS LER (12)</b>									
<b>NAME</b> Gerald L. Cooper, System Engineer							<b>TELEPHONE NUMBER (Include Area Code)</b> Ext. 2270 (815) 942-2920		

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
N/A										

<b>SUPPLEMENTAL REPORT EXPECTED (14)</b>					<b>EXPECTED SUBMISSION DATE (15)</b>		
<b>YES</b> (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MONTH	DAY	YEAR

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

On January 10, 1995, at 1424 hours, with Unit 3 shutdown, the Instrument Maintenance Department (IMD) was replacing the instrument isolation valve for Pressure Switch (PS) 3-263-51A. After replacing the valve, system integrity was verified. The instrument rack isolation valve was opened to place the instrument in service prior to performing Dresden Instrument Surveillance (DIS) 0201-01. Immediately after opening the valve, the instrument technician noticed fluctuations on the local instrument rack level indications and, after approximately 30 seconds, a SCRAM signal, Group II, and Group III isolations were received on a low reactor water level signal. The subsequent root cause investigation identified that air had been introduced into the system during the valve replacement and when the instrument was valved in, the air traversed its way through the reference leg, creating the false low level signal as a result of the air leaving the reference leg. Safety significance of this event is considered minimal, since all instrument functions were operational. No previous similar occurrences were identified.



NRC FORM 366A (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95	
<b>LICENSEE EVENT REPORT (LER)</b> <b>TEXT CONTINUATION</b>				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 (MABB 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.	
<b>FACILITY NAME (1)</b>		<b>DOCKET NUMBER (2)</b>	<b>LER NUMBER (6)</b>		<b>PAGE (3)</b>
Dresden Nuclear Power Station, Unit 3		05000249	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
			95	-- 002 --	00
					3 OF 4

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

An engineering investigation began on January 10, 1995 to investigate the root cause of this event. After data retrieval and interviews with personnel involved with the actions leading to the SCRAM, it was determined that air intrusion into the system was the only realistic cause of this event. The time delay of approximately 30 seconds from the time that the instrument rack isolation valve was opened and the time that SCRAM from the false Reactor Low Level signal occurred and the level instrument fluctuations prior to the SCRAM are indications that air was introduced into the system. Further engineering review confirmed that the eleven inch level increase on the "A" medium range channel that was identified from the SCRAM data was a possible result from the volume of tubing that was drained during the valve replacement.

The root cause of the event was identified as follows:

- 1) Instructions in the work package were not specific to vent the volume at the high point and at the pressure switch. Failure to identify this step allowed air to be introduced into the system without being identified.
- 2) Craft capability did not recognize that a volume of air was trapped in the sensing line prior to valving the instrument back into the system.

A lack of specific work instructions and a failure by the worker to identify air in the system are two factors that led to the occurrence of this event.

**D. SAFETY ANALYSIS:**

The safety significance of this event was minimal. Due to the plants design, each loop of instrumentation can provide all trips and initiations. The air did not degrade the "A" medium range reference leg, partially due to the fact that the Reactor Vessel Water Level Instrumentation Backfill System was valved in during this event. If the air would have displaced water from the reference leg without it being refilled, all trips and initiations would have been available from the other loop. All systems operated as expected after the SCRAM.

**E. CORRECTIVE ACTIONS:**

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX).

Immediate corrective actions after this event included explaining the root cause of the event to operations and the IMD after the engineering review of the event was complete. These discussions were held approximately 24 hours after the event. The IMD revised the work instructions to purge any additional air from the system and complete the job which included calibration of the pressure switch. Additional corrective actions include the following:

The IMD will perform a review of this event with all IMD personnel to communicate the cause of event by 2/20/95 (249-180-95-00201).

The Training Department will implement, as part of continuing training, a session for instrument technicians and work analysts to emphasize the implications of valve operations on an instrument rack to include proper

NRC FORM 366A (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95			
<b>LICENSEE EVENT REPORT (LER)</b> <b>TEXT CONTINUATION</b>				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.			
<b>FACILITY NAME (1)</b>		<b>DOCKET NUMBER (2)</b>		<b>LER NUMBER (6)</b>		<b>PAGE (3)</b>	
Dresden Nuclear Power Station, Unit 3		05000249		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 OF 4
				95	-- 002 --	00	

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

methodology for ensuring our purge from sensing lines following the repair or replacement of components. This training will be completed by 6/2/95 (249-180-95-00202).

The System Engineer will provide information from this event to be included in Appendix J of the Work Analyst Writers Guide. A memo will be given to the lead work analyst by 2/17/95 (249-180-95-00203). The lead work analyst will incorporate this information into the Work Analyst Guide by 3/3/95. (249-180-95-00204). As an interim action until the IMD work analysts have reviewed this information, the system engineer has requested that the IMD work analysts send all work packages which require replacement of a valve in an instrument process line (liquid applications only) or the replacement of a bourdon tube type instrument (liquid applications only) to him for a technical review for the following systems: Reactor Protection, Emergency Core Cooling, Shutdown Cooling, and Isolation Condenser.

F. PREVIOUS OCCURRENCES:

A review of station records identified a previous event involving a spurious Unit 3 scram signal while performing DIS 0500-01, Reactor Vessel High Pressure Scram Pressure Switch Calibration, on October 26, 1994 (LER 94-019/050249). The event was caused by a pressure transient produced while valving in a pressure switch with a differential pressure across the isolation valve. During this event, there was no air introduced into the system and the scram signal was received immediately upon valving in the pressure switch.

G. COMPONENT FAILURE DATA:

N/A