NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Dresden Nuclear Power Station Unit 3	0 5 0 0 0 2 4 9	1 OF 0 2

TITLE (4)

Unit 3 Reactor Scram

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)
									N/A	0 5 0 0 0
0 2	0 1	8 5	8 5	0 0 2	0 0	0 2	2 6	8 5	N/A	0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 9 9	20.405(a)(1)(i)	50.36(a)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		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)

NAME	TELEPHONE NUMBER
	AREA CODE
Tim Wojtulewicz (X-529)	8 1 5 9 4 2 - 2 9 2 0

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	
X	J A	L I	Y 0 1 0	N							

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

During normal unit operation, the reactor scrammed on low water level without a known cause. At the time of the scram the process computer was off line, and could not provide any data to assist in the root cause investigation. Subsequent investigation revealed that the scram was caused by vibration from an ISI standard which inadvertently hit the floor near instrument rack 2203-6.

To help reduce inadvertent scrams, no contractor work is allowed inside the fence surrounding the 2203-5 and 2203-6 racks during reactor operation. Also Shift Engineer permission is required by everyone who is doing work inside the fence surrounding the racks. All Dresden personnel will be cautioned about this event during Dresden's weekly tailgate session. A modification has been installed on Unit 2 and will be installed on Unit 3 during the next refueling outage that will replace the low water level switches with switches that are less susceptable to vibration.

This event was of minimal safety significance since the safety systems operated as designed. Previous similar occurrence was reported by DVR 12-3-80-42.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station Unit 3	0 5 0 0 0 2 4 9	8 5	— 0 0 2	— 0 0	0 2 OF 0 2

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

During normal unit operation, the reactor scrammed at 1022 on low water level without a known cause. The process computer went off line at 0917, consequently no alarms were printed to assist in the root cause investigation. Vibration to instrument rack 2203-5 or 2203-6 was the suspected cause, since these racks contain the ECCS low water level initiation switches and previous scrams have occurred during maintenance on or near these racks. An inspection of both areas indicated no evidence of on-going maintenance activities. The Operating Department visually inspected both of these racks for loose wires, as well as other racks that could inadvertently have caused scrams, and found none. To determine if vibration on the 2203-5 and 2203-6 racks could still cause a scram, each rack was jarred to simulate vibration. The simulated vibration resulted in scram signals on each rack tested. Although vibration was shown to be a potential cause the source of vibration was unknown. Startup was authorized on 2/2/85 at 0225 since no additional problems were discovered. During the day shift on 2/2/85 a Mechanical Maintenance Foreman realized that he was in the area of instrument rack 2203-6 at the time of the scram. The Foreman was relocating a 150-200 lb. (6 inch by 6 inch by 30 inch steel block) inservice inspection standard (ISI) to the inside of the ISI storage area which is approximately 20 feet west of instrument rack 2203-6. As the Foreman tilted the bottle cart to remove the standard, the standard fell from the vertical to horizontal position onto the floor. The Foreman noted that the standard made an unexpectedly loud noise when it hit the floor; however he thought that the noise was caused by the way the standard hit the floor. The increased sound was probably a combination of the standard hitting the floor and the CRD accumulators discharging on the floor below.

It is believed that when the ISI standard hit the floor, it caused enough vibration to activate the reactor low water level scram switches on instrument rack 2203-6, causing the reactor scram. The Foreman noted that he did not observe any other person on the second floor of the Unit 3 reactor building during this event.

Because of previous similar scrams, work immediately around the instrument racks by contractors is not permitted during reactor operation. A fence surrounds the racks and entry to the instrument racks requires permission from the Shift Engineer. All Dresden personnel will be cautioned about this event during the weekly tailgate session. The low level scram transmitters on Unit 2 have been replaced with the Rosemount type which are less susceptable to vibration. Similar modifications will be performed on Unit 3 as part of the environmental qualification program. The last previous similar event was reported by DVR 12-3-80-42.

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March 1, 1985

DJS Ltr #85-226

U.S. Nuclear Regulatory Commission
Document Control Desk
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Licensee Event Report #85-002-0, Docket #050249 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73 (a)(2)(iv).

D.J. Scott
Station Superintendent
Dresden Nuclear Power Station

DJS/kjl

Enclosure

cc: J.G. Keppler, Regional Administrator, Region III
File/NRC
File/Numerical

IE22
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