Commonwealth Edison
Dresden Nuclear Power Station
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Morris, Illinois 60450
Telephone 815/942-2920

June 03, 1993

CWS PMLTR 93-0198

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

Licensee Event Report 93-007, Docket 050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73 (a)(2)(iv).

Charles W. Schroeder
Station Manager
Dresden Station

CWS/slb

Enclosure

cc: T. Martin, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

(p:\plntmgr\cws93\0198.93)

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1)	Docket Number (2)	Page (3)
Dresden Nuclear Power Station, Unit 2	0 5 0 0 0 2 3 7	1 of 0 3

Title (4)

ESF actuation (ADS) Due to Simultaneous Performance of LPCI and ADS Surveillance

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 5	0 4	9 3	9 3	--- 0 0 7	--- 0 0	0 5	2 8	9 3	N/A	
									N/A	

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIRMENTS OF 10CFR (Check one or more of the following) (11)					
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(c)	X	50.73(a)(2)(iv)		73.71(b)
		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)(vii)		Other (Specify in Abstract below and in Text)
		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)		

LICENSE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
T. J. Johnson Ext.3526	AREA CODE 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	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS

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)

While performing Auto-Blowdown Logic Test (DIS 250-4) and LPCI Pump Operability Test (A monthly surveillance, DOS 1500-6) simultaneously, all five Automatic Depressurization System (ADS) valves received an open signal.

On May 4, 1993 at 1929 with Unit 2 in a refueling outage, the Unit 2 Automatic Depressurization System Relief Valves received a signal to open during the performance of the monthly LPCI Operability surveillance, (DOS 1500-6). Instrumentation Technicians were performing Auto-Blowdown Logic Testing (DIS 250-04) at the same time. The ADS Logic Testing was immediately secured.

PLANT AND SYSTEM IDENTIFICATION:

General Electric-Boiling Water Reactor-2527 Mwt rated core thermal power.

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

EVENT IDENTIFICATION:

ESF Actuation (ADS) due to simultaneous performance of LPCI and ADS Surveillances.

A. CONDITIONS PRIOR TO EVENT:

Unit: 2 Event Date: May 5, 1993 Event Time: 1929

Reactor Mode: Refuel Mode Name: R Power Level: 0%

Reactor Coolant System Pressure: 0 psig

B. DESCRIPTION OF EVENT:

On May 4, 1993 at 1929 with Unit 2 in a refueling outage, the Unit 2 Automatic Depressurization System Relief Valves received a signal to open during the performance of the monthly LPCI Operability surveillance, (DOS 1500-6). Instrumentation Technicians were performing Auto-Blowdown Logic Testing (DIS 250-04) at the same time. The ADS Logic Testing was immediately secured.

C. APPARENT CAUSE OF EVENT:

Investigation revealed that the pump operability test allowed the second train of ADS Logic (-106B relay) to be completed when, at the same time, the 8.5 minute timer was timed out and the -107B relay actuated as part of the DIS test. The logics test provided two of the three conditions that are required for ADS actuation to occur (-59" reactor level and the 8.5 minute timer timed out). The operability test provided the third and final condition required for actuation (any LPCI pump discharge pressure of 100 lbs).

There is no safeguard in either test procedure to prevent both tests from being performed simultaneously. Consequently, two independent events combined to cause an unplanned condition. Each procedure accomplishes its objectives when performed alone. It is only when both procedures are performed simultaneously that the unwanted situation occurs.

A search for similar or related historical events was conducted on the (Dresden and industry) event reporting database. Of twenty-one possible "hits", none were found to be related.

D. SAFETY ANALYSIS OF EVENT:

The safety significance of the event is considered minimal. The simultaneous performance of both tests can only be done during a system outage. Though the operability test (DOS 1500-06) requires a LPCI pump run, the logics test (DIS 250-04) requires that the Reactor Mode Switch is in SHUTDOWN or REFUEL and that reactor pressure be at zero pressure (Prerequisite C.3). The logics test further requires that Main Steam lines are drained (Prerequisite C.5). Therefore, plant safety was not adversely impacted.

E. CORRECTIVE ACTIONS:

Procedures that start LPCI and/or Core Spray Pumps and procedures that test ADS Logic will be changed to prevent simultaneous performance. In the case of pump operability tests, the change is to be in the form of a prerequisite step to verify that ADS Logic testing is not being conducted prior to commencing the pump operability test. In the case of ADS Logic tests, the change is to be in the form of a prerequisite step to verify that no LPCI and/or Core Spray Pump is running prior to conducting the ADS Logic test.

Specifically, the procedures to be changed are:

DOS 1400-01 Core Spray System Pump Test with Torus Available
DOS 1400-3 Core Spray System Operability Test with the Torus Unavailable
DOS 1400-04 Core Spray Check Valves Inservice Test (IST) and Piping Flush
DOS 1400-05 Quarterly Core Spray System Pump Test with Torus Available for the InService Testing (IST) program
DOS 1500-04 LPCI System Operability Test with the Torus Unavailable
DOS 1500-05 LPCI System Quarterly Flow Rate Test
DOS 1500-06 LPCI System Pump Operability Test with Torus Available
DOS 1500-10 Quarterly LPCI System Pump Operability Test with Torus Available for the In-Service Test (IST) Program

The Above procedure changes will be complete by 11/19/93 (NTS # 237-180-93-00701).

DIS 250-04 Unit 2 Auto-Blowdown Logic Test

The above procedure change will be complete by 9/1/93 (NTS # 237-180-93-00702).

DIS 250-10 Unit 3 Auto-Blowdown Logic Test

The Above Procedure Change will be complete by 9/1/93 (NTS # 237-180-93-00703).

F. PREVIOUS OCCURRENCES:

None Found.

G. COMPONENT FAILURE DATA:

Manufacturer	Nomenclature	Model Number	Mfg. Part Number
Not Applicable			