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Dresden Generating Station
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ComEd

January 10, 1995

TPJLTR 95-0002

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

Licensee Event Report 94-022, Docket 50-249 is being
submitted as required by Technical Specification 6.6, NUREG
1022 and 10CFR50.73(a)(2)(ii).

Sincerely,



Thomas P. Joyce
Site Vice President

TPJ/KS:pt

Enclosure

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

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NRC FORM 366 (5-92)				U.S. NUCLEAR REGULATORY COMMISSION				APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95									
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.					
FACILITY NAME (1) Dresden Nuclear Power Station, Unit 3								DOCKET NUMBER (2) 05000249				PAGE (3) 1 OF 4					
TITLE (4) Control Rod Drive Insert/Withdraw Lines Outside Design Basis Due to Inadequate Seismic Supports																	
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					
12	14	94	94	-- 022 --	00	01	07	95	None								
									FACILITY NAME			DOCKET NUMBER					
OPERATING MODE (9)		N		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)													
POWER LEVEL (10) 098		20.2201(b)				20.2203(a)(3)(i)				50.73(a)(2)(iii)				73.71(b)			
		20.2203(a)(1)				20.2203(a)(3)(ii)				50.73(a)(2)(iv)				73.71(c)			
		20.2203(a)(2)(i)				20.2203(a)(4)				50.73(a)(2)(v)				OTHER			
		20.2203(a)(2)(ii)				50.36(c)(1)				50.73(a)(2)(vii)				(Specify in Abstract below and in Text, NRC Form 366A)			
		20.2203(a)(2)(iii)				50.36(c)(2)				50.73(a)(2)(viii)(A)							
		20.2203(a)(2)(iv)				50.73(a)(2)(i)				50.73(a)(2)(viii)(B)							
20.2203(a)(2)(v)				X 50.73(a)(2)(ii)				50.73(a)(2)(x)									
LICENSEE CONTACT FOR THIS LER (12)																	
NAME Kevin L. Simmons, Plant Support Engineer								Ext. 3228		TELEPHONE NUMBER (Include Area Code) (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							
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 15 single-spaced typewritten lines) (16)

It was discovered on 12/14/94 that the insert and withdraw lines for Control Rod Drive (CRD) [AA] M-8 had branch connections installed on both lines. The branch lines were installed during initial construction in 1971 to facilitate CRD testing. The branch lines were not seismically supported. This condition caused the insert and withdraw lines to fall outside of design basis.

NRC FORM 366A (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95	
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Dresden Nuclear Power Station, Unit 3		05000249		YEAR 94	SEQUENTIAL NUMBER -- 022 --
				REVISION NUMBER 00	PAGE (3) 2 OF 4

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

EVENT IDENTIFICATION:

Control Rod Drive Insert/Withdraw Lines Outside Design Basis Due to Inadequate Seismic Supports

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 3 Event Date: 12/14/94 Event Time: 1130 hrs.

Reactor Mode: N Mode Name: Run Power Level: 98%

Reactor Coolant System Pressure: 1005 (00) psig

B. DESCRIPTION OF EVENT:

On December 14, 1994 with Unit 3 in Run Mode at 98% power, it was discovered that there were branch lines that had been tapped into the insert / withdraw lines for Control Rod Drive M-8. It appeared that these lines were not adequately supported. Site Engineering was contacted and an operability determination was initiated.

The operability determination was issued on December 15, 1994 via Engineering letter CHRON# 0305071 dated 12/15/94. Engineering recommended that the insert/withdraw lines continue to be declared operable based on piping analysis. However; the insert and withdraw lines for CRD M-8 were determined to be outside of design basis due to lack of seismic support for the branch lines.

Operating personnel were notified of this determination on 12/15/94. It was discussed that the compensatory action required would be to administratively control and maintain the double isolation valves on the branch lines in a closed position. These four valves (two per line) were originally installed when the branch lines to insert/withdraw lines were added.

Engineering letter CHRON# 0305092 dated 12/22/94 provided supplemental information for the operability determination. The following issues were discussed:

- 1) The lines will be restored to design basis during the next Unit 3 outage (maintenance or refueling, whichever comes sooner).
- 2) The calculations have been formalized and documented. All assumptions and judgements used for the calculations have been revised and approved.
- 3) The best option to restore the lines to original design basis is to cut and cap the branch lines between the isolation valves and tee connection. This removes both lines and all four isolation valves. They are not required to be left in place for any purpose.
- 4) The as-built DCR will reflect the final configuration in the design basis calculations.

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C. CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR50.73(a)(2)(ii) which requires the reporting of any event or condition that results in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded, or results in the nuclear plant being in a condition that is outside the design basis of the plant. The branch lines were installed in 1971 by General Electric to facilitate CRD oscillation testing. The lines were never removed when the testing was completed. In addition, the branch lines were not adequately supported for a seismic event. The root cause of the event is attributed to inadequate design control. The branch lines have remained in place and unused since initial testing. The presence of these branch lines caused the insert and withdrawn lines to be outside of design basis.

D. SAFETY ANALYSIS:

The insert and withdraw lines of all Control Rod Drives are integral parts of the entire CRD system. The control rods perform dual functions; they shape the core power distribution and provide reactivity control. The loss of the insert and withdraw lines for CRD M-8 would only affect the operability of that particular drive. The effect on reactivity control of the loss of one control rod has been previously evaluated and found to be acceptable. It would not affect the operability of the other 176 drives on the unit. However; if the lines were to break during a seismic event, an unisolable leak from the reactor coolant pressure boundary would have occurred. But, the consequences of the release of inventory is well within analyzed limits for impact on core cooling and releases to the Reactor Building. Per NUREG 0803, the maximum possible leakage through a single CRD seal is less than 10 gallons per minute. The resistance in the postulated break in the lines would further reduce this leakage rate. This rate is well below the 25 gallons per minute allowed by the Technical Specifications.

E. CORRECTIVE ACTIONS:

The insert and withdraw lines are being restored to original design basis by cutting and capping the branch lines. The work will be done during the next Unit 3 outage (maintenance or refuel). The work request is D28940.

All of the remaining insert/withdraw lines on Unit 3 and all of insert/withdraw on Unit 2 were checked for the same condition. It was determined that the condition was isolated and unique to Unit 3.

There are procedures and controls that exist today that were not in place during installation of the branch lines in 1971. These procedures such as the Modification and Temporary Alterations procedures give reasonable assurance that the risk of such an event is minimized today.

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94	-- 022 --	00									
				PAGE (3)							
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F. PREVIOUS OCCURRENCES:

None.

G. COMPONENT FAILURE DATA:

N/A