NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

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.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Dresden Nuclear Power Station, Unit 3	05000249	1 OF 4

TITLE (4)
GROUP I Isolation Due to Vibrations Caused by Dropping A Heavy Item Near the Instrument Rack Due to Personnel Error

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
09	10	96	96	-- 013 --	00	10	07	96	None	
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N
POWER LEVEL (10)	0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

	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)	X 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)		50.73(a)(2)(ii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
R. Kelly Ext. 2924	(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)

On September 10, 1996 at 1122, with Unit 3 in cold shutdown, a Spurious Group I isolation signal occurred when a safety rope stanchion dropped through a removed floor plug and struck Main Steam Sensing lines feeding into the 2203-9 and 2203-35 instrument racks. Floor plugs had been removed to facilitate removal of the HPCI 3-2301-53 relief valve. A main and redundant hoist had been rigged for valve removal. A chain on the redundant hoist became tangled and was pulled back out of the opening. While untangling the chain on the redundant hoist, it became tangled with a safety rope which was serving as the work area safety barrier. The chain slipped back into the removed floor plug opening dragging the safety rope and stanchion. The stanchion fell approximately forty feet striking the Main Steam Sensing lines. The work group immediately notified the Control Room. In addition, the Drywell Pneumatic supply trouble alarm annunciated. Engineering and Instrument Maintenance department walkdowns indicated no instrument or instrument line damage as a result of this event. Corrective actions included counseling of the involved individuals and additional training on safety practices. The safety significance of the event was determined to be minimal.

EVENT IDENTIFICATION:

GROUP I Isolation Due to Vibrations Caused by Dropping A Heavy Item Near the Instrument Rack Due to Personnel Error

PLANT AND SYSTEM IDENTIFICATION

General Electric - boiling water reactor - 2527 MWt rated core thermal power.

Energy Industry Identification System (EIIS) codes are identified in the text as [XX] and are obtained from IEEE Standard 805-1984, IEEE Recommendation Practice for System Identification in Nuclear Power Plants and Related Facilities.

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 3 Event Date: September 10, 1996 Event Time: 1122

Reactor Mode: N Mode Name: Cold Shutdown Power Level: 0%

Reactor Coolant System Pressure: 0 psig

B. DESCRIPTION OF EVENT:

This report is being submitted in accordance with 10CFR50.73(a)(2)(iv),which requires the reporting of any event or condition which results in manual or automatic actuation of any Engineered Safety Feature (ESF). Initial notification of the event was performed pursuant to 10CFR72(b)(2)(ii) at 1428 (CDT) on September 10, 1996 through Emergency Notification System (ENS) number 30989.

On September 10, 1996 at 0745, a prejob briefing was performed in preparation for the planned removal of the High Pressure Coolant Injection (HPCI) valve 3-2301-53 "Unit 3 HPCI Cooling Water Line Relief Valve" from the Unit 3 East LPCI Corner Room. During the briefing, safe rigging points, vibration sensitive equipment and equipment usage were discussed by the valve team first line supervisor. The need to contact the Safety and Property Loss Prevention Group (S&PLP) to verify acceptable use of rope and stanchion as a temporary safety barrier was also discussed.

At approximately 0900, permission was given to the valve maintenance team members by the S&PLP Group to use rope and stanchions as a temporary safety barrier for the floor opening in the Unit 3 reactor building 517' elevation. Stanchions and rope were then placed on the 517' elevation. The 476-6' floor area immediately below the rigging staging area was not roped off and a safety observer was not stationed there as required by safety rules.

At 1000, the Control Room was notified and the floor plug was removed. At 1100, an air hoist and redundant chain hoist were hung in preparation for valve removal. The chains on the redundant hoist became tangled when used. While attempting to untangle the chain it became tangled with an installed safety barrier rope attached to a stanchion nearby the floor hole. The hoist chain then slipped back into the open floor plug hole dragging the barrier safety rope and stanchion with it. The stanchion fell through the opening and descended down to the 476-6' elevation striking the Main Steam Sensing Lines feeding into the 2203-9 and 2203-35 Instrument Rack. This caused a Group I Isolation at 1122. Required automatic Group I valve closures actuated as expected. At 1145 a Maintenance Component Engineer was dispatched to inspect the 2203-9 and 2203-35 Instrument Racks for damage. The Component Engineer determined that no damage was evident. At 1200, the Group I Isolation was reset. At 1428, an ENS phone call was made to notify the NRC of the Group I Isolation and of the subsequent equipment inspections.

It was determined that the area which was roped off for the removal of the floor plug was not adequate and not in accordance with established ComEd Safety Practices. The roped area was approximately 1-1/2 to 2 feet from the opening. The ComEd Generating Stations Safety Rulebook Section G107.01.1.a requires:

> "If ropes or ribbons are used in lieu of barriers, they must be placed no closer than six (6) feet from a fall hazard or sufficient distance from all other hazards so as to prevent injury, and shall have a sign of sufficient size and lettering to describe the hazard".

It was determined that the requirements for properly setting up the temporary barrier according to these requirements was not discussed during the prejob briefing.

C. CAUSE OF EVENT:

C.1 The cause of this event is attributed to non-licensed personnel cognitive error (NRC Cause Code A) because the valve team first line supervisor failed to follow accepted approved practice. Requirements for properly setting up the temporary barrier according to safety rulebook requirements was not discussed during the prejob briefing. Self-checking was not applied to ensure the intended action was correct before it was performed.

C.2 A contributing cause was inadequate knowledge of safety rules pertaining to fall protection. The requirements of the ComEd Generating Station Safety Rulebook Section G107.01.1.a were not adequately understood by individuals involved in establishment of the temporary barriers.

D. SAFETY ANALYSIS:

The safety significance of the spurious Group I isolation was minimal. At the time of the event, Unit 3 was in Cold Shutdown for forced outage D3F22. Following the Group I isolation, sensing lines and instrument racks were visually examined for signs of damage; none were found. Group I isolation is directly attribute to vibration caused to the Main Steam Sensing lines. If the event had occurred during power operations, the isolation would have resulted in a Reactor Scram.

E. CORRECTIVE ACTIONS:

E.1 Immediate corrective action included the dispatch of a Maintenance Component Engineer to inspect Instrument Racks 2203-9 and 2203-35 for damage. The inspection was completed and no visible damage was found.

E.2 A station procedure will be developed and implemented which addresses ComEd general safety requirements along with additional site specific issues during maintenance evolutions. The Station & Property Loss Prevention Team will be included in the procedure development. (C.2/2491809601301)

E.3 The maintenance prejob briefing checklist, included in DAP 15-06, will be revised to include emphasis on safety barriers, floor plug removal and hatchway openings. (C.2/2491809601302)

E.4 The proper use of Safety Rope and Barriers will be added to the Safety Module for NGET Training. (C.2/2491809601303)

E.5 The valve team first line supervisor involved in the event was counselled in the importance to self-check the work area to ensure that care is taken when working near or above vibration sensitive equipment. All valve team workers involved with this event have reviewed the root cause and understand this error. (C.1/Complete)

E.6 The proper method for placing temporary barriers which considers fall protection was communicated to the station through the station Tailgate system (C.2/Complete).

F. PREVIOUS OCCURRENCES:

NONE

G. COMPONENT FAILURE DATA:

NONE