NRC FORM (5-92)	366		U.S. NUCLEAR REGULATORY COMMISSION						1	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95					
LICENSEE EVENT REPORT (LER)									ESTIMATED BURDEN PER RESPONSE TO COMPLY THIS INFORMATION COLLECTION REQUEST: 50.0 FORWARD COMMENTS REGARDING BURDEN ESTIMA THE INFORMATION AND RECORDS MANAGEMENT E (MMBB 7714), U.S. NUCLEAR REGULATORY COMMIS WASHINGTON, DC 2055-0001, AND TO THE PAPE REDUCTION PROJECT (3150-0104), OFFICE MANAGEMENT AND BUDGET, WASHINGTON, DC 20503						
FACILITY NAME (1) Dresden Nuclear Power Station, Unit 3							DOCK	DOCKET NUMBER (2) 05000249			PAGE (3) 1 OF 4				
TITLE (4) Inad Surv	verte: eilla:	nt Unit nce Due	: 3 Scram Wh e To Personn	ile Sh el Err	utdown or.	Dur	ing Pe	erfor	ma	nce of Ins	strumen			
EVENT	DATE	(5)		LER NUMBER (6)		REP	DRT DA	TE (7)	T		OTHER FACIL	ITIES INV	OLVED	(8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACION	.IT e	ITY NAME			DOCKET NUMBER	
05	26	97	97	008	00	06	24	97	FACIL	FACILITY NAME			DOCKET NUMBER		
OPERAT	TING		THIS REP	ORT IS SUBMITTE	D PURSUAN	T TO THE	REQUI	REMENTS	OF 10	CF	R§: (Check o	one or mor	·e) (11)	
NODE	(9)	5	20.22	201(b)		20.220	3(a)(3	5)(i)			50.73(a)(2)(i	ii)	73	.71(b)	
POWER		20.2203(a)(1)			20.220	20.2203(a)(3)(ii)			X	50.73(a)(2)(i	v)	73.71(c)			
LEVEL (10)		000 20.2203(a)(2)(i) 20.2203(a)(2)(ii)		03(a)(2)(i)		20.220	20.2203(a)(4)			50.73(a)(2)(v)		OTHER			
					50.36(c)(1)				50.73(a)(2)(vii)		(Specify in				
			20.22	2203(a)(2)(iii)		50.36(c)(2)			50.73(a)(2)(viii)		(iii)(A)	and in Text,			
		20.2		03(a)(2)(iv)		50.73(a)(2)(i)			50.73(a)		(viii)(B) NRC		; Form 366A)		
Γ			20.2203(a)(2)(v)			50.73(50.73(a)(2)(ii)			50.73(a)(2)(x)		()			
					LICENSEE	CONTACT	FOR T	HIS LER	(12)						
NAME											TELEPHONE NUN	BER (Incl	ude Ar	ea Code)	
•	R. Ja	ackson	n, Main	tenance Sta	ff		· .	Ext	. 248	33	(81	5) 942-	2920		
			COMPL	ETE ONE LINE FO	R EACH C	MPONENT	FAILU	RE DESCR	IBED I	NT	HIS REPORT (1	3)			
CAUSE	CAUSE SYSTEM COMPONENT MANUFACTURER REPORTABLE TO NPRDS		BLE DS		CAUSE	SYST	EM	COMPONENT	MANUFAC	TURER	REPORTABLE TO NPRDS				
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				TAL REPORT EXPER	TED (14)				ĵ	E		MONTH	DA	Y YEAR	
YES	YES (If yes complete EXPECTED SUBMISSION DATE).				x	NO			SUBMISSION DATE (15)						

On May 26, 1997 at 1404 with Unit 3 in startup activities and fuel load in progress, the unit received a full reactor scram while Instrument Maintenance Department (IMD) was performing Dresden Instrument Surveillance (DIS) 0500-19, Reactor Protection System Logic System Functional Test. This first time test was being performed by one CST, two 'B' technicians and one contractor 'A' technician. An error was made by one of the 'B' technicians by re-positioning the mode switch for the wrong Average Power Range Monitor (APRM) channel. The technician had successfully completed four APRM channels with similar steps just prior to the error. The four APRMs previously completed were on the top bank of the cabinets while the one in error was on the bottom bank.

The root cause of this event was a failure to self-check by the IMD 'B' technician. Corrective action involves establishing a Peer Check Program and training all IMD technicians on the STAR simulator. One previous event occurred on May 20, 1997 involving a IMD 'B' technician failing to check his meter prior to re-installation. The corrective actions for this event had not been implemented when the current event occurred.

The safety significance of this event is minimal. 9707030108

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NRC FORM 366A U.S. NUCLEAR RU (5-92)	A U.S. NUCLEAR REGULATORY COMMISSION				APPROVED BY ONB NO. 3150-0104 EXPIRES 5/31/95					
LICENSEE EVENT REPORT (LE TEXT CONTINUATION	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 RUDGET. WASHINGTON, DC 20503.									
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

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.

EVENT IDENTIFICATION:

Inadvertent Unit 3 Scram While Shutdown During Performance of Instrument Surveillance Due To Personnel Error.

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 3	Event Date:	05/26/97	Event	Time:	1404
Reactor Mode: 5	Mode Name:	Refuel	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 that resulted in manual or automatic actuation of any engineered safety feature (ESF), including the reactor protection system.

On May 26, 1997 at 1404 hours with Unit 3 in startup activities and fuel loading in progress, the unit received a full reactor scram while the Instrument Maintenance Department (IMD) was performing Dresden Instrument Surveillance (DIS) 0500-19, Reactor Protection System [JC] Logic System Functional Test. IMD was conducting this first time refueling surveillance with one CST, two 'B' technicians and one contractor 'A' technician. The crew was starting on checklist C of the procedure, the 3rd and final checklist, when this event occurred. The test began with the CST at the IRM panel [IG] (903-37 back panel) and one 'A' technician at the front panel for alarm verifications. One 'B' technician was assigned relay verifications who was awaiting direction from the CST. The remaining 'B' technician was assigned to the APRM panel (903-37 back panel) to manipulate control switches.

The CST directed the start of Checklist 'C' and maintained communications with the entire team using head-sets and face-to-face verbal communications. The crew had successfully performed over 200 steps in the checklist and had finished four previous APRM's before having the problem with APRM #5. The previous steps were all performed on the upper bank of the APRM cabinets with identical steps and component manipulations.

NRC FORM 366A U.S. NUCLEAR (5-92)	U.S. NUCLEAR REGULATORY COMMISSION					
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When APRM #5 channel was to be performed with its corresponding IRM #15, it was the first APRM on the lower bank of the APRM cabinet. At step 216 of Checklist "C", the 'B' technician was correctly depressing the APRM #5 Inop push button. The CST than directed the 'B' technician to take the APRM #5's mode switch to the power position per step 218 of the checklist. As the 'B' technician was looking at his procedure, holding down the Inop push button with one hand and watching for the APRM light indication for the next step, he reached for APRM #1's, instead of APRM #5, mode switch and moved it to the power position (Inappropriate Action). This action caused a RPS Channel 'A' half scram. Since a RPS Channel 'B' half scram was already present from previous steps, a RPS full scram occurred.

The Shift Manager directed the IMD crew to back out of the surveillance and the full scram was reset at 1406 hours.

All systems operated as designed. There were no inoperable structures, systems, or components that contributed to the event.

C. CAUSE OF EVENT:

The root cause of this event was personnel error [Personnel Error (Procedural) -NRC Cause Code A] in that the STAR Self-Checking technique was not used by the 'B' technician. The APRM Channels are configured on the panels in close vicinity and with one above the other. The steps in the procedure are identical for each channel requiring the same type of manipulation for each channel. When the technician performed the step on the first channel of the bottom bank, he had locked his mind on the previous steps as a result of their repetitiveness. Since APRM channels #1 & #5 are in close vicinity of each other and with the technician's arm movement use to an upward motion from previous repetitive steps, he inadvertently manipulated the wrong switch.

D. SAFETY ANALYSIS:

The RPS System is designed to initiate a reactor full scram upon plant transient conditions. The automatic scram occurs to preserve the integrity of the primary system and fuel cladding. RPS system channels 'A' and 'B' actuated as designed. No anomalies occurred during the event. As a result, this event is considered to have minimal safety significance.

E. CORRECTIVE ACTIONS:

- 1) The Shift Manager directed the IMD crew to back out of the surveillance and the full scram was reset at 1406 hours.
- 2) A prompt investigation was initiated for the event.
- 3) Establish a Peer Check Program within IMD. (NTS #237-180-97-01201)
- 4) Train all Instrument Maintenance Technicians in self-checking to include demonstration on a "STAR" simulator. (NTS #237-180-97-01204)

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

NRC FORM 366A U.S. NUCLE (5-92)	366A U.S. NUCLEAR REGULATORY COMMISSION					
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

F. PREVIOUS SIMILAR OCCURRENCES:

97-012/05000237 Unexpected Unit 2 HPCI Isolation Due To Failure of IMD Technician To Self-Check During Surveillance.

This event occurred on May 20, 1997 while performing a HPCI functional test. A 'B' technician failed to check his meter mode of operation before re-connecting his test leads. The meter was in the resistive mode instead of the voltage mode. Consequently, a short was created across a relay contact completing the circuit path and providing a auto-isolation of HPCI. The root cause was due to a failure of the IMD technician to self-check while re-installing test leads. The corrective actions included establishing a Peer Checking Program and training IMD technicians on the STAR simulator.

These actions were not yet in place when the current event occurred. Therefore, a determination of the corrective action effectiveness can not be made.

G. COMPONENT FAILURE DATA:

Not Applicable.