



Commonwealth Edison
Dresden Nuclear Power Station
R.R. #1
Morris, Illinois 60450
Telephone 815/942-2920

July 30, 1992

CWS LTR #92-478

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

Attached please find Licensee Event Report 92-10-01, Docket 050237. This revised report is submitted to provide further information concerning corrective actions.

L. J. Hemen for 7/31/92
Charles W. Schroeder
Station Manager
Dresden Nuclear Power Station

CWS/cfq

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2	Docket Number (2) 0 5 0 10 0 2 3 17	Page (3) 1 of 0 5
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Title (4) SRM Calibration Test Frequency Technical Specification Requirements
Not Met Due to Management Deficiency

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	4	02	9	2	9	2	0	1	0	1	0	4	1	6	9	2	N/A	
										N/A								

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)																				
POWER LEVEL (10) 0 9 8	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 20.405(a)(1)(ii)	<input checked="" type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.36(c)(2)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.71(b)	<input type="checkbox"/> 73.71(c)	<input type="checkbox"/> Other (Specify in Abstract below and in Text)

LICENSEE CONTACT FOR THIS LER (12)

Name Brian W. Sampson, Technical Staff System Engineer Ext. 2544	TELEPHONE NUMBER AREA CODE 8 1 5 9 4 2 - 2 9 2 10
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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)

<input type="checkbox"/> Yes (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> X NO	Expected Submission Date (15) Month Day Year
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ABSTRACT (Limit to 1400 spaces, i.e, approximately fifteen single-space typewritten lines) (16)

A Technical Staff System Engineer was notified by a procedure writer working for the Instrument Maintenance Department that the requirements of Technical Specification Table 4.2.4, Post Accident Monitoring Instrumentation Surveillance Requirements, may not have been performed. A review conducted by Technical Staff, Instrument Maintenance, and Operations confirmed that the required calibration and instrument check frequency for the Source Range Monitors (SRMs) had not been met. Technical Specification Table 4.2.4 requires that calibrations of the SRMs be performed quarterly and that instrument checks be performed daily regardless of unit operating mode. The Station practice was to perform SRM calibrations and instrument checks only in the Startup and Refuel modes when these instruments were required to be operable. The cause of this event has been attributed to management deficiency. Adequate controls were not in place to insure that all Technical Specification requirements were met. The safety significance is minimal because calibrations have been performed within the last three months and instrument checks have been performed successfully since the event. In addition, previous calibrations, although not performed at the required frequency, indicate that the SRMs were not degraded. Corrective actions included issuance of a temporary procedure change to insure proper testing frequency. Long term corrective actions will include permanent procedure changes and additional surveillance frequency requirements.

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TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]

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:

SRM [IG] Calibration Test Frequency Technical Specification Requirements Not Met Due to Management Deficiency

A. CONDITIONS PRIOR TO EVENT:

Unit(s): 2(3) Event Date: April 2, 1992 Event Time: 1430 Hours
 Reactor Mode(s): N(N) Mode Name(s): Run(Refuel) Power Level(s): 98(0)%
 Reactor Coolant System (RCS) Pressure(s): 1008(0) psig

B. DESCRIPTION OF EVENT:

On April 2, 1992 a Technical Staff System Engineer and the Instrument Maintenance Department (IMD) Supervisor were notified by a procedure writer working for the IMD that the requirements of Technical Specification Table 4.2.4, Post Accident Monitoring Instrumentation Surveillance Requirements, may not have been performed. Specifically, it was believed that the required frequency for post-accident neutron monitoring calibrations and instrument checks had not been met. The post accident neutron monitoring system is composed entirely of the Source Range Monitors (SRM) [IG]. In response to this concern, the Technical Staff, Instrument Maintenance, and Operations began a review of applicable Station procedures and surveillance requirements. Station practice is to perform SRM calibrations weekly only when that system is required to be operable. Similarly, instrument checks are performed each shift when the instruments are required to be operable. Since SRMs are not required in Run mode, these surveillances were not performed. However, Technical Specification Table 4.2.4 requires neutron monitoring instrumentation (SRM) calibrations once every three months and instrument checks daily regardless of unit operating mode. Therefore, it was concluded that the requirements of Technical Specification Table 4.2.4 had not been met.

A 24 hour Emergency Notification System (ENS) Phone notification was made on April 3, 1992 to report the Technical Specification Surveillance deficiency.

C. APPARENT CAUSE OF EVENT:

This event is being reported in accordance with Title 10 of the Code of Federal Regulations Part 50 Section 73(a)(2)(i)(b), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

The root cause of this Technical Specification violation is management deficiency. There were no controls in place requiring that SRM calibrations be performed every three months or requiring that instrument checks be performed daily regardless of unit operating mode. Existing procedures and surveillance frequency requirements were not adequate to insure that all Technical Specifications were met in this case.

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A contributing cause to this deficiency was that the frequency of the performance of the SRM calibration procedure has changed over the history of the plant. Previously, all SRM and Intermediate Range Monitor (IRM) [IG] calibrations were performed each week regardless of plant operating mode. This was done because Technical Specification Table 4.2.1 requires that SRM and IRM calibrations be performed within one week prior to reactor startup. The practice of doing the surveillances weekly, even in the Run mode, insured that in the event of a unit shutdown and fast recovery, the startup would not be delayed to perform the calibrations because they would always be less than one week old. However, this practice was halted early in 1990 at the request of the IMD. The reason for this request was that unit shutdowns were less frequent and recovery from a unit shutdown is typically much longer than in the past. Thus, neutron monitoring calibrations are not a likely source of startup delay. Because of this, along with the IMD manpower required to perform the surveillances weekly, an On-Site Review (OSR) was performed to examine the possibility of reducing the surveillance frequency. This OSR (89-49) concluded that it was not necessary to perform the SRM or IRM calibrations with the unit in Run mode on a weekly basis. This conclusion was based on Technical Specification Table 4.2.1, Minimum Test and Calibration Frequency for Core and Containment Cooling Systems Instrumentation, Rod Blocks, and Isolations, which requires that calibrations only be performed prior to each startup or during controlled shutdowns. In addition, this table states that calibrations are not required when the instruments are not required to be operable. The on-site review, however, was inadequate in that it failed to address the requirements of Technical Specification Table 4.2.4. despite the fact that this table was referenced in the SRM calibration procedure. Consequently the improper conclusion was reached. Upon completion of OSR 89-49, the practice of performing SRM and IRM calibrations weekly in Run mode was halted, which led to the Technical Specification Surveillance deficiency.

Technical Specification Table 4.2.4 was implemented on June 24, 1985 as a part of Technical Specification Amendments 90 (Unit 2) and 83 (Unit 3). The Table 4.2.4 requirement for daily instrument checks in all modes had been missed since that time.

D. SAFETY ANALYSIS OF EVENT:

Prior to this event, the most recent SRM calibration on Unit 2 had been performed on February 2, 1992, while the most recent Unit 3 calibration was done on March 30, 1992. Therefore, both units were within the required interval of performing a calibration once every three months. An SRM instrument check was performed on Unit 2 most recently on February 7, 1992. However, a check was successfully performed on the day of the event and unit operating orders were revised to include a requirement for a daily instrument check on the SRMs. Unit 3 was in Refuel mode at the time of the event, so instrument checks were being performed each shift. Therefore, at the time of the event both units met all SRM calibration requirements and only Unit 2 failed to meet the instrument check requirement.

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The purpose of the instrumentation listed in Table 3.2.6, Post Accident Monitoring Instrumentation Requirements, is to provide the unit operator with adequate information concerning the condition of the drywell and reactor following a loss-of-coolant accident (LOCA). The purpose of the SRMs following a LOCA is to provide neutron flux information which allows the operator to determine subcriticality and if neutron flux is changing. This information is primarily intended to allow the operator to monitor the core for possible recriticality. Daily instrument checks and quarterly calibrations of the SRMs insure that the instruments should function properly in the event of a LOCA. Although these surveillance intervals had been exceeded, there is reasonable confidence that the SRMs would have functioned adequately following a LOCA. A review of Deviation Reports for the past three years shows that the SRM system has exhibited stable operation with regards to the calibration of the instrument setpoints. With the exception of SRM 21 on Unit 2, occurrences of instrument setpoint drifts of the SRMs have been infrequent. SRM 21 on Unit 2 experienced a recurring setpoint drift problem until September 28, 1990, when the SRM 21 chassis in the control room was replaced. A drift event occurred on SRM 21 on November 8, 1990, but was attributed to "burn-in" of the new chassis. Since that event, there have been no further reported setpoint drifts on SRM 21.

Due to the fact that all Technical Specification requirements have currently been met for the post-accident neutron monitoring system and the fact that the SRMs have exhibited reasonable stability in the past, the safety significance of this event is minimal.

E. CORRECTIVE ACTIONS:

Immediate corrective actions involved first verifying that both units currently met all surveillance requirements. The only requirement which was not met was the daily SRM instrument check on Unit 2. As a short term corrective action, the Unit 2 Operating Engineer included instructions in the daily orders requiring the instrument check. Also, a Temporary Procedure Change (TPC) was initiated on Appendix A, Unit 2(3) Operator's Daily Surveillance Log. This TPC was implemented on April 7, 1992, and included a requirement that SRM instrument checks be completed once each shift in all plant operating modes. Finally, a review of all other post accident monitoring instrumentation surveillance requirements was performed. This review showed that current station procedures adequately meet the requirements of all other post accident instrumentation surveillance requirements. In addition, a review of other neutron monitoring instrumentation surveillance requirements was performed. This review included requirements for the Source Range Monitor, Intermediate Range Monitor, Average Power Range Monitor, and Rod Block Monitor systems found in Technical Specification Tables 3.1.1, 4.1.1, 4.1.2, 3.2.3, 3.2.6, 4.2.1, 4.2.4, and Section 3.10.B. This review also showed that these requirements are currently met.

The Appendix A TPC will be incorporated into a permanent procedure revision by the Operations Department (237-200-92-14001). Also, the IMD will initiate a General Surveillance (GSRV) item which requires SRM calibrations to be completed once every three months regardless of plant operating mode by April 28, 1992. This will ensure that the next calibration due dates of May 2, 1992 (Unit 2) and July 18, 1992 (Unit 3) will not be exceeded (237-200-92-14002). Furthermore, this event will be included in a station tailgate to stress the importance of attention to detail when performing On-Site Reviews (237-200-92-14003). The Station, with the assistance of the On-Site Nuclear Safety Group, will create a Technical Specification/Procedure cross reference database, and will provide the appropriate administrative controls for use and update of the database (237-200-92-14004). The database will be created by December 18, 1992.

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F. PREVIOUS OCCURENCES:

LER/Docket Numbers Title

91-025-0/050237 SRM/IRM Functional Test Technical Specification Requirements Not Met Due to Procedure Deficiencies

On August 12, 1991 it was discovered that the Technical Specification requirements for the functional testing of the IRM inoperable Reactor Protections System (RPS) trip were not fully met by station procedures. In addition, it was found that the requirements for testing the IRM Hi Hi RPS trip, the SRM Hi rod block and the IRM Hi rod block were not met in some cases. The cause was determined to be procedure deficiency. Corrective actions included issuance of temporary procedure changes to be followed by permanent revisions.

G. COMPONENT FAILURE DATA:

There were no component failures involved with this event.