



March 15, 2000

PSLTR: #00-0065

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

Dresden Nuclear Power Station, Unit 2 and Unit 3
Facility Operating License No. DPR-19 and DRP-25
NRC Docket No. 50-237 and No. 50-249

Subject: Licensee Event Report 2000-001-00, "Main Steam Low Pressure and Isolation Condenser High Pressure Time Delay Relays Technical Specification Calibration Frequency Intervals Exceeded due to Inadequate Management Oversight"

The enclosed Licensee Event Report, which is a final report, describes the Main Steam Low Pressure and Isolation Condenser High Pressure time delay relays Technical Specification calibration frequency intervals which were exceeded due to inadequate management oversight. This condition is being reported pursuant to 10 CFR 50.73 (a)(2)(i) (B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

The following actions were taken:

Reviewed the current Improved Technical Specification (ITS) submittal to ensure proper standards were enforced during preparation of the ITS submittal and that comparisons had been performed between current and proposed Technical Specification wording. The review indicated that proper standards and comparisons were performed.

The calibration procedures were performed on the affected time delay devices. All were found to be within calibration tolerances.

Pre-defines for the time delay devices were changed to a quarterly frequency.

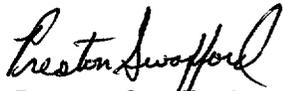
Pre-defines for the time delay devices were flagged as Technical Specification requirements.

Performed a review to determine if any additional time delay devices fell within the definition of CHANNEL. No additional items were discovered.

March 15, 2000
U.S. Nuclear Regulatory Commission
Page 2

If you have any questions, please contact Dale Ambler, Dresden Regulatory Assurance Manager at (815) 942-2920 extension, 3800.

Respectfully,

A handwritten signature in cursive script that reads "Preston Swafford".

Preston Swafford
Site Vice President
Dresden Nuclear Power Station

Enclosure

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Dresden Nuclear Power Station

LICENSEE EVENT REPORT (LER)

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the information and Records Management Branch (1-6 f33), 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. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

FACILITY NAME (1)
Dresden Nuclear Power Station, Unit 2

DOCKET NUMBER (2)
05000237

PAGE (3)
1 of 4

TITLE (4)
Main Steam Low Pressure and Isolation Condenser High Pressure Time Delay Relays Technical Specification Calibration Frequency Intervals Exceeded due to Inadequate Management Oversight

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MON TH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
02	15	2000	2000	001	00	03	15	2000	Dresden Unit 3	05000249
									FACILITY NAME	DOCKET NUMBER
									N/A	N/A

OPERATING MODE (9)	POWER LEVEL (10)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more) (11)				
1	100	20.2201(b)	20.2203(a)(2)(v)	X	50.73(a)(2)(i)	50.73(a)(2)(viii)
		20.2203(a)(i)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71
		20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER
		20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A
		20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME
Dale Eaman, Design Engineer

TELEPHONE NUMBER (Include Area Code)
(815) 942-2920 Ext. 2865

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE). **X** **NO**

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i. e., approximately 15 single-spaced typewritten lines) (16)

On February 15, 2000 at 1630 hours, during a review of the Improved Technical Specification (ITS) submittal it was determined that the calibration frequency for the Main Steam Low-Pressure Isolation time delay relays were being performed once every 18 months. Technical Specification (TS) Table 4.2.A-1 requires CHANNEL CALIBRATION to be performed on a quarterly frequency. In addition, on February 16, 2000 at 1800 hours, it was determined that the calibration frequency for Isolation Condenser time delay relay was being performed once every two years, while TS Table 4.2.D-1 required CHANNEL CALIBRATION to be performed on a quarterly frequency. A detailed review was performed on the channel definition criteria. Completion of the review determined that although the CHANNEL is monitoring pressure and not time delay requirements, station personnel concluded that the CHANNEL CALIBRATION by definition should include the time delay function. Upon discovery of the missed calibration frequencies site personnel immediately performed the required instruments CHANNEL CALIBRATION for both relays with satisfactory results.

The cause of this event was determined to be a programmatic weakness in the review process of the Technical Specification Upgrade Project (TSUP), implemented in 1997, associated with the review of the CHANNEL CALIBRATION definition change. The health and safety of the public were not compromised during this condition. Thus the safety significance of this condition is minimal.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 2	05000237	2000	001	00	2 OF 4

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 (EIIIS) Codes are identified in the text as [XX] and are obtained from IEEE Standard 805-1984, IEEE Recommended Practice for System Identification in Nuclear Power Plants and Related Facilities.

EVENT IDENTIFICATION:

Main Steam Low Pressure and Isolation Condenser High Pressure Time Delay Relays Technical Specification Calibration Frequency Intervals Exceeded due to Inadequate Management Oversight

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 2 (3)	Event Date: 02-15-2000	Event Time: 16:30
Reactor Mode: 1 (1)	Mode Name: Run (Run)	Power Level: 100 (100)
Reactor Coolant System Pressure: 1002 psig (1003psig)		

B. DESCRIPTION OF EVENT:

This LER is being submitted pursuant to 10 CFR 50.73 (a)(2)(i)(B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications (TS).

On February 15, 2000 during the preparation of the submittal for ITS package, it was discovered that the Main Steam Line Low-Pressure signal to Primary Containment Isolation (PCIS) had a time delay device down stream of the pressure switch. The review indicated that this time delay device was not being calibrated on a quarterly frequency but was being calibrated on an 18 month refueling frequency. The Technical Specifications (TS) do not specifically have the time delay requirement in the surveillance requirements, although station personnel determined that the time delay relay should have been included as part of the CHANNEL CALIBRATION. The TS defines CHANNEL CALIBRATION as follows;

"A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the CHANNEL output such that it responds with the necessary range and accuracy to know values of the parameter which the CHANNEL monitors. The CHANNEL CALIBRATION shall encompass the entire CHANNEL including the required sensor and alarm and/or trip functions, and shall include the CHANNEL FUNCTIONAL TEST. The CHANNEL CALIBRATION may be performed by any series of sequential, overlapping or total CHANNEL steps such that the entire CHANNEL is calibrated."

The definition of CHANNEL is,

"A CHANNEL shall be an arrangement of a sensor and associated components used to evaluate plant variables and generate a single protective action signal. A CHANNEL terminates and loses its identity where single action signals are combined in a TRIP SYSTEM or logic system."

And the definition of TRIP SYSTEM is,

A TRIP SYSTEM shall be an arrangement of instrument CHANNEL trip signals and auxiliary equipment required to initiate action to accomplish a protective trip function. A TRIP SYSTEM may require one or more instrument CHANNEL trip signals related to one or more plant parameters in order to initiate TRIP SYSTEM action. Initiation of protective action may require the tripping of a single TRIP SYSTEM or the coincident tripping of two TRIP SYSTEMS.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 2	05000237	2000	001	00	3 OF 4

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

On February 15, 2000, a review was performed of the Technical Specifications by site personnel and it was determined that the time delay relays were part of the CHANNEL instead of the TRIP SYSTEM and therefore should be encompassed under the CHANNEL CALIBRATION and be tested on a quarterly frequency.

Actions associated with TS 4.0.C were entered, which allowed 24 hours to perform the missed surveillance requirement. The time delay relays were calibrated satisfactorily within the allowed times frame and thus the action statement exited.

Following the February 15, 2000 discovery, site personnel performed an extensive review of all the Instrumentation CHANNEL CALIBRATION frequency requirements to determine if there were any additional items that had incorrect surveillance frequencies. This review identified one additional item on February 16, 2000 associated with the time delay relay for the Isolation Condenser High-Pressure signal. This revealed that as part of the TSUP process the setpoint for initiation of the Isolation Condenser was changed from "≤1070 psig for 15 Seconds" to "≤ 1070 psig." A station program to extend Preventive Maintenance intervals changed the frequency for testing the Isolation Condenser time delay device to 2 years on September 24, 1997.

The event described herein is historical in nature. This condition existed since the implementation of the Technical Specification Upgrade Project (TSUP) on January 13, 1997. Therefore, the requirement to verify the time delays as part of the channel calibration for the Main Steam Low Pressure [JM] and Isolation Condenser [BL] High Pressure relays was not adequately performed prior to February 15, 2000 and February 16, 2000, respectively.

Actions associated with TS 4.0.C were entered, which allowed 24 hours to perform the missed surveillance requirement. The time delay relays were calibrated satisfactorily within the allowed time frame and the action statement exited. Unit 2 had been calibrated within the last 91 days, so only Unit 3 was required to be calibrated.

No other systems, components or structures were identified which contributed to this event.

C. CAUSE OF EVENT:

The investigation revealed that prior to the implementation of TSUP, the CHANNEL CALIBRATION (then termed Instrument Calibration) definition was

" An instrument calibration means the adjustment of an instrument signal output so that it corresponds, within acceptable range, and accuracy, to a known value(s) of the parameter which the instrument monitors. Calibration shall encompass the entire instrument including actuation, alarm and trip. Response time is not part of the routine instrument calibration, but will be checked once per cycle."

During the implementation of TSUP this CHANNEL CALIBRATION definition was revised to correspond to the Standard Technical Specifications wording in NUREG 0123 as stated previously.

The response time section (last sentence) in the pre TSUP definition was deleted from the definition. Had this wording been retained in the Technical Specifications, a calibration frequency of once per cycle would have been justified. This investigation revealed that during the TSUP amendment process a detailed, word by word comparison was not performed between the then current Technical Specifications and the proposed Technical Specifications for Section 1.0 of TS. The lack of proper management oversight with the review of documentation and justification of differences is considered to be the root cause of this event. (NRC Cause Code E)

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 2	05000237	2000	001	00	4 OF 4

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

This kind of comparison of current TS and proposed TS differences was performed for other TS sections as part of the amendment process with differences noted and justified. This included a detailed comparison between the Dresden, Quad Cities, and the Standard Technical Specifications wordings with differences noted and justified.

D. SAFETY ANALYSIS

Although the time setpoint of the time delay devices were not measured and recorded on a 92 day basis, they did change state as part of the surveillance of the associated pressure switches. The time delay devices were demonstrated to be functional, even though their calibration (amount of time delay) was not documented. Therefore, they were available to propagate their respective signals. The channels were capable of performing their functions. Based on this, the health and safety of the public were not compromised at any time during this condition. Thus, the safety significance of this condition is minimal.

E. CORRECTIVE ACTIONS:

Reviewed the current Improved Technical Specifications submittal to ensure proper standards were enforced during preparation of the ITS submittal and that comparisons had been performed between current and proposed Technical Specification wording. The review indicated that proper standards and comparisons were performed. (Complete)

The calibration procedures were performed on the affected time delay devices. All were found to be within calibration tolerances. (Complete)

Pre-defines for the time delay devices were changed to a quarterly frequency. (Complete)

Pre-defines for the time delay devices were flagged as Technical Specification requirements. (Complete)

Performed a review to determine if any additional time delay devices fell within the definition of CHANNEL. No additional items were discovered. (Complete)

F. PREVIOUS OCCURRENCES:

LER/Docket Number	Title
98-014/05000237	Reactor Building to Suppression Chamber Vacuum Breakers were not Surveilled in Accordance with Technical Specification Surveillance Requirements Due to Ambiguity in the Plant's Licensing Bases.
LER/Docket Number	Title
97-004/05000237	Channel Checks for ATWS Level and Pressure Instruments Performed at Incorrect Frequency due to Personnel Error during the Procedure Review Cycle.
LER/Docket Number	Title
97-004/05000237	Source Range Monitor Surveillance Performed at Incorrect Frequency due to Human Error during Technical Specification Upgrade Project.

The corrective actions taken in the three previous LERs would not have prevented this occurrence.

G. COMPONENT FAILURE DATA:

N/A