

**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 (MNB 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.

**NRC FACILITY NAME (1)**  
Dresden Nuclear Power Station, Unit 3

**DOCKET NUMBER (2)**  
05000249

**PAGE (3)**  
1 OF 5

**TITLE (4)**  
High Pressure Coolant Injection Low Flow Setpoint Calibration Found Outside Technical Specification Limit Due to Inattention to Detail During the Recording and Review of Previous Calibration Data

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
02	09	97	97	-- 001 --	00	03	06	97	FACILITY NAME	DOCKET NUMBER

<b>OPERATING MODE (9)</b>	1	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)</b>			
<b>POWER LEVEL (10)</b>	074	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)	X 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)	
<b>NAME</b> T. Lane - IMD Training Coordinator Ext. 2833	<b>TELEPHONE NUMBER (Include Area Code)</b> (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 February 9, 1997, during the performance of Dresden Instrument Surveillance 2300-02, High Pressure Coolant Injection Flow Calibration, the low flow switch setpoint was found outside of technical specification limits. It was determined that during the previous calibration, the low flow switch was left outside of administrative limits due to inattention to detail on the part of the technicians in the data recording and supervisors reviewing the completed data. The individuals involved in this event were disciplined in accordance with Dresden Station Policy. The safety significance of this event is minimal because the low flow switch causes the minimum flow bypass valve to open on lowering pressure to ensure adequate recirculation flow through the pump and does not effect the ability of the High Pressure Coolant Injection System from performing its safety function.

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

On November 14, 1996, the technician inadvertently recorded the low flow switch reset value as the low flow trip as-found value and the low flow switch trip setpoint value as the as-found reset value. The high flow switch values were recorded correctly. This error was not discovered because the as-found reset point was within the tolerance specified for the setpoint.

Although the setpoint appeared (the reset point was within the setpoint tolerance) to be within tolerance, the recorded reset value (actually the trip setpoint) was significantly lower than setpoint which is inconsistent with the expected relationship between trip setpoint and reset point for a decreasing trip setpoint. This was not identified by the technicians during data recording or review nor by the supervisory review conducted by the Unit Supervisor and the IMD Supervisor.

During interviews, the individuals involved indicated that they were aware of their responsibilities concerning independent data review and verification.

In addition, although upgraded technical specifications had not been implemented (implementation date was January 1997) when DIS 2300-02 had been performed on November 14, 1996, the procedure identified a TS limit of  $\geq 2.82$  inWC. The as-found low flow trip value (recorded as the reset value) was below this limit, and although it is not reportable, a Process Improvement Form (PIF) was initiated for the out of tolerance condition.

An informal review of the performance history of this switch and instrument calculation NED-I-EIC-0109, High Pressure Coolant Injection (HPCI) Pump Discharge Flow Loop Accuracy and Minimum Flow Setpoints, indicate that the switch performance, a shift of 0.4 inWC over the three month period, is as expected.

C. CAUSE OF EVENT:

The root cause of this event is attributed to cognitive personnel error (NRC Cause Code A). Based on a barrier analysis, it was determined that inadequate attention to detail on the part of the IM technicians and reviewers resulted in the incorrect logging of the as-found data for the low flow switch setpoint and reset point on 11/14/96. Contributing to this is the failure to self check.

D. SAFETY ANALYSIS:

The impact of having the HPCI low flow switch setpoint set too low is the possibility of running the HPCI pump without the required minimum flow of 600 gallons per minute (GPM) when manually reducing flow following an automatic or manual initiation of HPCI. The ability of the system to perform its safety function during an accident would not have been affected. The system would have operated as designed, providing 5600 GPM to the reactor vessel, and the pump's minimum flow requirements would have been satisfied during this system initiation since the high flow switch was set as required.

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If the HPCI system were operated to control reactor vessel level or pressure in accordance with DOP 2300-03, High Pressure Coolant Injection System Manual Startup and Operation, flow to the reactor could have been reduced below the pump's minimum flow requirements. With the low flow switch setpoint set too low, the pump's minimum flow requirements would not have been satisfied during this condition and the potential would have existed for pump overheating and possible pump degradation.

During the time period that the low flow switch setpoint was set too low, the Unit 3 HPCI system was not operated in any mode that would have resulted in not meeting the pump's minimum flow requirements. The system was operated for a normal surveillance in accordance with DOS 2300-03, High Pressure Coolant System Operability Verification, during which the high flow switch was operationally checked as satisfactory as required by Tech Specs.

**E. CORRECTIVE ACTIONS:**

1. Surveillance performed on 02/09/97 restored low flow switch setpoint to the appropriate setting. (Complete)
2. IM personnel involved in this event were disciplined in accordance with Station Policy #60. (Complete)
3. Other work performed by the same crew over an approximate three month period, as well as previous performances of the same surveillance, were inspected for discrepancies and found acceptable. (Complete)
4. Data recording practices for IMD personnel have been changed to require two independent data recorders and a separate subsequent review. (Complete)
5. This event and the previous similar event will be reviewed by the Department Head with all IM department management and technical personnel to reinforce expectations regarding surveillance performance and review. (NTS #237-225-97R12-97018)
6. IM Department will review a representative sample of Tech Spec procedures performed between 11/14/96 and 02/14/97 and determine if discrepancies exist. (NTS 249-180-97-001.01)

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

F. PRIOR SIMILAR OCCURRENCES:

LER/Docket Number

97-002/05000237 Turbine First Stage Pressure Scram Bypass Switches Adjusted Outside Technical Specification Limits Due to Personnel Error.

Corrective actions included restoring setpoints to correct settings, discipline of maintenance personnel involved, review of additional work performance, and reinforcement of expectations to department. The date of discovery of the 97-002 LER was after the date of occurrence of the HPCI event reported in this LER. This means that the corrective actions reported in 97-002 occurred after the HPCI event, and could not have been effective, at the time, in preventing its occurrence.

G. COMPONENT FAILURE DATA:

Not applicable.