

NRC FORM 366 (5-92)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95
<b>LICENSEE EVENT REPORT (LER)</b>		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 (3150-0304), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

<b>FACILITY NAME (1)</b> Dresden Nuclear Power Station, Unit 3	<b>DOCKET NUMBER (2)</b> 05000249	<b>PAGE (3)</b> 1 OF 4
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**TITLE (4)**  
HPCI System Declared Inoperable Due to Turbine Stop Valve Above Seat Drain Valves Leaking Steam.

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
06	19	97	97	-- 003 --	00	07	15	97	None	
									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>	13	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)	X 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)**

<b>NAME</b> R. Jackson, Maintenance Staff	<b>TELEPHONE NUMBER (Include Area Code)</b> Ext. 2483 (815) 942-2920
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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

<b>SUPPLEMENTAL REPORT EXPECTED (14)</b>				<b>EXPECTED SUBMISSION DATE (15)</b>	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 June 19, 1997 at 0920 hours with Unit 3 in startup activities at 13% power, the Unit 3 HPCI turbine stop valve above seat drain valves AO3-2301-64 and AO3-2301-65 were leaking steam to the HPCI sump during performance of Dresden Operating Surveillance (DOS) 2300-03, High Pressure Coolant Injection System Operability Verification. Steam began to fill the HPCI room and HPCI was subsequently secured. The seat loading for the 64 valve was below the minimum pressure range. This allowed the valve to lift during High Pressure Testing of HPCI. Also, the 65 valve was found with its actuator casing binding against the valve frame preventing the valve from fully seating. A procedure revision was made to a generic Copes-Vulcan procedure to include a gap clearance between the diaphragm case and valve frame. However, the specific procedure for the 65 valve was not changed. The root cause of this event is attributed to failure to identify all affected procedures when revising maintenance procedures for the 65 valve. The cause of the 64 valve improper loading could not be determined.

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NRC FORM 366A (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95	
LICENSEE EVENT REPORT (LER) 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 BUDGET, WASHINGTON, DC 20503.	
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Dresden Nuclear Power Station, Unit 3		05000249	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

The 65 valve was found with its diaphragm casing binding against the valve's upper frame, preventing the valve from fully seating. An overhaul of the HPCI 65 valve and actuator had been completed on June 4, 1997 per WR 950118106-01. A review was conducted of the WR and it was discovered that no guidance was provided from DMP 2300-07, HPCI Stop Valve Seat Drain Isolation Valve 2301-65 Maintenance, concerning the required gap clearance between the diaphragm case and the valve's upper frame. After Mechanical Maintenance Department (MMD) performed stroke setting of the valve per WR 950118106-01, the Air Operated Valve (AOV) diagnostic test team, consisting of Instrument Maintenance Department (IMD) personnel, conducted a diagnostic flowscan and looked for the required gap clearance. However, the test team member only observed gap clearances on the two front areas of the valve. The two rear areas of the valve were not observed due to space limitations. Mechanical binding was found between the diaphragm case and valve frame on one of the rear areas of the valve after stroking. The AOV diagnostic test team normally observes the gap clearances for these type of valves in all four areas of the diaphragm casing. However, in this case, a team member did not think to observe the rear two areas because of space limitation in rear of the drain valve.

The AOV Coordinator stated that maintenance is also performed on reverse acting Copes-Vulcan AOVs per the generic procedure DMP 040-06, Copes-Vulcan And Reverse Acting (Air To Open) Operator Maintenance. The procedure was recently upgraded with major changes including gap clearance measurements. The change incorporated into DMP 040-06 for the gap clearance was not incorporated into the specific procedure for the 65 valve (DMP 2300-07) and all other procedures for maintenance on Copes-Vulcan reverse acting actuators.

Specific guidance is provided to the Technical Reviewer of procedures to ensure that changes made are checked against other affected procedures per DAP 09-01 Attachment "A", Technical Review And Control Guidelines. However, the Technical Reviewer of DMP 040-06, the AOV Coordinator, had no knowledge of this requirement. He had not reviewed these requirements prior to performing the technical review. Therefore, DMP 2300-07 was overlooked in the revision process.

After repairs and proper adjustments made to both drain valves, Unit 3 HPCI was declared operable on June 21, 1997 at 0345 hours and DOS 2300-03 was successfully completed.

C. CAUSE OF EVENT:

A lack of attention to detail for procedural revision requirements by the AOV Coordinator caused the specific maintenance procedure for the 65 valve (DMP 2300-07) to be missed during the revision process when changes were made to a generic procedure (DMP 040-06) on Copes-Vulcan reverse acting AOVs [NRC Cause Code A]. The cause of the seat loading being found below the procedural requirement of 3 psig for the 64 valve could not be determined. No work history could be found indicating the change from the previous setpoint of 12 psig to the as found set point of 2.7 psig.

A contributing cause is attributed to a failure of the diagnostic team member to conduct a complete observation of all four areas of the diaphragm casing when checking for gap clearances.

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D. SAFETY ANALYSIS:

The HPCI system is designed to provide adequate core cooling under high reactor pressure conditions. Although HPCI was declared inoperable during this event, its backup, Automatic Depressurization System (ADS) was operable. In the event of a LOCA, ADS was available to depressurize the reactor primary system to enable cooling water injection by the Low Pressure Coolant Injection and Core Spray systems. As a result, the safety significance of this event was minimal.

E. CORRECTIVE ACTIONS:

- 1) Adjustment of the seat loading to within the required pressure range for the 64 valve per WR 970068133-01.
- 2) Adjustment of the stem length, stroke, and seat loading for the 65 valve per WR 970068132-01.
- 3) The AOV Coordinator will review the Dresden Maintenance procedures to determine if any Copes-Vulcan reverse acting actuator procedures need to be revised. These procedures will be marked-up for revision and submitted to the Mechanical Maintenance procedure writer. NTS #249-180-97-00301.
- 4) After completion of corrective action number 3, the Mechanical Maintenance procedure writer will incorporate all comments and revise the procedures as required. NTS # 249-180-97-00302.
- 5) The Plant Programs Superintendent has counseled the AOV Coordinator in accordance with Marc principles concerning a complete understanding of procedural requirements when conducting procedure changes. (Complete)
- 6) The Valve Team Supervisor has counseled the IMD diagnostic team member in accordance with Marc Principles concerning complete observation of components when performing testing in the field. (Complete)

F. PREVIOUS OCCURRENCES:

There were no previous events involving improper adjustment of seat loading for AOVs. Also, no events were found involving missed revision to station procedures due to Technical Reviewers knowledge deficiency concerning procedural revision requirements.

G. COMPONENT FAILURE DATA:

There is no component failure identified with this event. Therefore, this section is not applicable.