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ComEd

January 31, 1995

TPJ LTR.: 95-0015

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

Attached please find Licensee Event Report 94-021-01, Docket 50-237. This revised report is being submitted to provide an update of corrective actions and further clarifying information.

Sincerely,

Thomas P. Joyce
Site Vice President
Dresden Station

TPJ/kls

cc: J. Martin, Regional Adminstrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

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NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95
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 (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.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Dresden Nuclear Power Station, Unit 2	05000237	1 OF 10

TITLE (4) HPCI Turbine Tripped on High Exhaust Pressure Due to a Failed Exhaust Check Valve

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 None	DOCKET NUMBER
08	04	94	94	-- 021 --	01				FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
			20.2201(b)		20.2203(a)(3)(i)		50.73(a)(2)(iii)		73.71(b)
POWER LEVEL (10)	099		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)

NAME	TELEPHONE NUMBER (Include Area Code)
Mark Churilla, System Engineer Ext. 2788	(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
E	JB	INV	R340	Y						

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X	YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO		02	08	95

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

On August 4, 1994, at 1559 hours, with Unit 2 at 99% rated core thermal power, while performing Dresden Operating Surveillance (DOS) 2300-03, High Pressure Coolant Injection (HPCI) System Monthly Operability Verification, the turbine tripped due to high exhaust pressure. Inspection of the turbine drain system was performed. The rupture diaphragm was also replaced. The turbine was retested on August 7, 1994. The drain system and the exhaust line check valves were functionally tested. The turbine was manually tripped prior to exhaust pressure reaching 30 psig. Following a failed Local Leak Rate Test (LLRT) Unit 2 was shutdown. The cause of the high exhaust pressure was the failure of the 2-2301-74 check valve. The valve disc was found separated from the piston guide assembly. Tack welds which prevent the assembly from rotating were found cracked due to fatigue. The valve disc was reassembled with the piston guide and tack welded. The safety significance of this event is considered moderate. There have been no previous events.

EVENT IDENTIFICATION:

HPCI [BJ] Turbine Tripped on High Exhaust Pressure Due to a Failed Exhaust Check Valve

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 2 Event Date: 08/04/94 Event Time: 1559

Reactor Mode: N Mode Name: R Power Level: 99%

Reactor Coolant System Pressure: 1004 psig

B. DESCRIPTION OF EVENT:

On August 4, 1994, at 1559 hours, with Unit 2 at 99% rated core thermal power, while performing Dresden Operating Surveillance (DOS) 2300-03, High Pressure Coolant Injection System Monthly Operability Verification, the turbine tripped due to high exhaust pressure. Prior to the trip, the turbine was operated for approximately 5 minutes at 2500 rpm during manual trip verification. Following the manual trip, the turbine was rolled back up to 2500 RPM for a fifteen minute warming period. During the time the turbine was being rolled back up to 2500 rpm, steam was noted to be leaking from the Low Pressure Gland Seal area. The turbine automatically tripped approximately one minute into the warming evolution. The HPCI system was declared inoperable and the steam supply was isolated. Following the failure of the test, the exhaust line high pressure switches, 2-2368A and 2-2368B, were functionally checked. Both switches actuated at 100 psig (+/- 3 psig). In order to determine the cause of the steam leakage out of the low pressure gland seal, a walkdown of the cooling water valving was performed. The walkdown found the 2-2399-94 valve, the HPCI cooling sensing line valve, closed. The closure of this valve decreased the cooling water flow to the Gland Seal Condenser (GSC). The valve was restored to the proper position. There was no further testing or troubleshooting performed on August 4, 1994.

Based on Commonwealth Edison experience, the high exhaust pressure was believed to have been caused by the presence of water in the turbine exhaust. Two previous turbine high exhaust events, within Commonwealth Edison at other stations concerning HPCI/RCIC turbines, have been caused by the presence of water in the turbine exhaust. During this event, an unexpected exhaust drain [WK] pot high level alarm did annunciate and clear during the initial warming of the turbine indicating the presence of water in the turbine exhaust. In addition, several weeks earlier, the turbine exhaust drain pot high level alarm annunciated while the HPCI system was in its normal standby condition. The drain pot was drained and the leakage into the drain pot was later determined to be caused by steam leakage past AO2-2301-28, HPCI Inlet Drain Pot Discharge valve.

On August 5, 1994, a multi-disciplined troubleshooting team (team) was assembled to assess the turbine trip and prepare the system for a retest, if possible. The team consisted of the System Engineering Supervisor, HPCI System Engineer, Site Engineering Supervisor, General Electric Site Representative, Unit 2 Master Work Scheduler and the Operations Department Supervisor. In addition, the Quad Cities System Engineer was taking part in our teleconference for additional insight of similar problems at Quad Cities. The team was responsible for determining the cause of the turbine exhaust high pressure problem and to resolve it prior to retesting the turbine. The following actions were presented to the team by the HPCI System Engineer: inspection or functional check of the exhaust check valves 2-2301-45, HPCI Turbine Exhaust Check Valve 2-2301-74, HPCI Turbine Exhaust Check Valve, 2-2301-34, HPCI Turbine Drain Exhaust Check Valve, 2-2301-71, HPCI Turbine Drain Exhaust Check Valve, disassemble the rupture diaphragm, functionally check exhaust drain pot level switch, check turbine drain restricting orifices for blockage, inspect AO2-2301-28, review the potential impact of the new revision to DOS 2300-03, and functionally check gland seal condenser (GSC) drain pressure switch.

The team discussed the aforementioned items and the sequence of the events that occurred on August 4, 1994. The areas focused on were the high exhaust line pressure alarm and the steam leak from the low pressure gland seal area. The team determined that the probability of a turbine exhaust check valve failure was not the potential cause of the high exhaust pressure. This was based on the short duration of the exhaust high pressure alarm and the fact that the turbine operated for approximately 5 minutes prior to failure. It was determined that the HPCI exhaust check valves would be functionally tested during performance of the HPCI retest, as provided for in DOS 2300-03. The original duration of the exhaust alarm that was reported to the team on August 5, 1994, was .07 seconds. The exhaust alarm duration was determined from review of the Sequence of Events Recorder (SER) [IQ] print out. The following actions were recommended by the team: verified turbine case drain restricting orifice is free of blockage, functionally checked Gland Seal Condenser (GSC) pressure switch, functionally checked the Exhaust Drain Pot Level Switch, and installed exhaust line instrumentation to monitor pressure. The team reviewed the new DOS 2300-03 procedure revision that was used during the performance of the August 4, 1994, test, replaced the rupture diaphragm, and performed a valve check list on all valves in the HPCI room. The applicable changes made involved the initial speed at which the turbine is brought up to for manual turbine trip verification. The procedure was changed from 1000 rpm to 2500 rpm with General Electric concurrence and the first HPCI run, under the new speed, was conducted on August 4, 1994. General Electric has stated that the process of bringing the turbine up to an initial speed of 2500 rpm is acceptable. The HPCI turbine has been fast start tested numerous times without any exhaust pressure problems occurring. In addition, NRC Information Notice (IN) 82-26, RCIC and HPCI Exhaust Check Valve Failures, recommends that "System operation below the recommended turbine rated speed should be minimized." Therefore, based on previous operation of the turbine and recommendations from General Electric, it was determined that the new procedure revision used for this event was not a contributing factor to the high exhaust pressure.

Following the original recommendations, the duration of the high exhaust line pressure alarm was later verified, on August 5, 1994, to be 7 seconds instead of the reported .07 seconds. This oversight was the result of the HPCI System Engineer mis-reading the SER printout. After discovering the mistake, the decision was made by the team leader to continue with the present course of action and add the requirement to replace the rupture diaphragm.

In addition, the team recommended that the Operations Department perform a valve checklist on all valves in the HPCI room prior to the next test. The performance of the check list would identify any valve mispositioning prior to the performance of the next test.

The following repairs and inspections were completed successfully on August 6, 1994: verified turbine case drain restricting orifice is free of blockage, functionally checked Gland Seal Condenser (GSC) pressure switch, functionally checked the Exhaust Drain Pot Level Switch, installed exhaust line instrumentation to monitor pressure, the team reviewed the new DOS 2300-03 procedure revision that was used during the performance of the August 4, 1994, test and replaced the rupture diaphragms. In addition, the HPCI valve check list was performed on all valves in the HPCI room on August 7, 1994. Due to a lack of control room personnel manpower, the performance of the HPCI test was postponed until August 7, 1994.

On August 7, 1994, an extensive Heightened Level of Awareness (HLA) meeting was held with the operating crew prior to retesting HPCI. The HLA was conducted by the HPCI System Engineer. The areas that were covered extensively involved the verification of the HPCI Exhaust Line Check valves' operation. The Nuclear Station Operator (NSO) was informed that the expected exhaust line pressure would be a maximum of 35 psig at full turbine speed. The instructions were given to the NSO to trip the turbine if exhaust pressure approached 35 psig prior to reaching full power conditions on the turbine (4000 rpm).

At 1900 hours, the HPCI operability surveillance began. The initial warming of the turbine was performed to functionally check the drain system. The exhaust drain pot and associated drain line check valves were verified to be operating satisfactorily by the system engineer. The turbine was then rolled up to 1600 rpm when it was noted by the NSO that exhaust pressure was increasing at a higher than normal rate. The turbine was manually tripped prior to the exhaust pressure reaching 30 psig. The HPCI steam supply was immediately isolated to prevent the turbine from starting on an Emergency Core Cooling System initiation signal. The 2-2301-74 valve was then manually closed to isolate the exhaust line.

After the August 7th run, investigation of the turbine exhaust check valves was pursued. A local leak rate test (LLRT) of the check valve volume was performed and leakage was found which exceeded the Technical Specifications (TS) limit (the LLRT failure is being addressed in a separate Licensed Event Report (LER) Docket 50-237, number 94-022). Since the HPCI exhaust line check valves could not be repaired on line, the reactor was shutdown.

The 2-2301-45 valve HPCI Turbine Exhaust Check Valve, was disassembled and inspected under work request D26915. The check valve seats were found to be slightly worn due to normal valve operation. This failure did not affect the operation of the HPCI system.

The 2-2301-74 valve HPCI Turbine Exhaust Check Valve, was disassembled and inspected under work request D26919. The valve disk was found not attached to the valve guide piston. Further inspection revealed that the four tack welds, which prevent the assembly from rotating, had broken due to fatigue.

A search of industry operating experience was performed and two documents were found which are directly related to this event: INPO Significant Operating SOER Experience Report (SOER) 86-3, Check Valve Failures Or Degradation

(Recommendation 1), and NRC Information Notice (IN) 82-26, RCIC and HPCI Turbine Exhaust Check Valve Failures.

Review of SOER 86-3, (Recommendation 1), was performed initially in July of 1986, addressing the preventive maintenance program for check valves. Dresden Administrative Procedure (DAP) 11-25, Check Valve Inspection Program, was issued in October, 1988, to implement the check valve preventive maintenance program. However, stop check valve 2-2301-74 was included in the preventative maintenance program for inspection/testing in January, 1994. Dresden's original response to SOER 86-3 stated that the HPCI system check valves would be included in the program. The reason for not including the 2-2301-74 valve in the original preventive maintenance program has not been determined. However, Site Engineering and Construction personnel recognized, in the fourth quarter of 1993, that the 2-2301-74 valve was not included in the preventive maintenance program and informally added it to the PM program in January, 1994, prior to this event. The 2-2301-74 valve had been scheduled for inspection during D2R14 starting in March of 1995.

NRC IN 82-26 concerned problems with HPCI turbine exhaust high pressures resulting from check valve problems. In the IN's discussion section, General Electric (GE) Application Information Document (AID) No. 56, High Pressure Core Injection and Reactor Core Isolation Cooling Turbine Exhaust Check Valve Cycling, recommended actions are provided.

Recommendation 5 states, "the turbine exhaust check valve internals should be inspected on a routine schedule such as every refuel outage" due to possible system flow blockage. In the response to this recommendation, the reviewer stated that local leak rate tests (LLRT) would be performed every outage rather than valve inspection and if the valve failed the LLRT, then an inspection would be performed. This response is deficient in three aspects. First, the response apparently failed to include the 2-2301-74 valve. If the LLRT failed, the focus for repairs would have centered on the 2301-45 check valve since this valve is the only valve taken credit for when performing LLRT on this volume. The reviewer also states that the IN does not apply because the failures in the IN are on swing check valves unlike the Duo-Check valve (2301-45), but fails to address the 2-2301-74 valve. Secondly, the focus of review is on primary containment, not elevated HPCI exhaust pressure. Leak rate testing is to assure valve closure and sealing and provides little indication of blockage in the line which could affect exhaust pressure. Thirdly, the scope of the review was too narrow. The generic applicability of turbine exhaust line blockage causing exhaust pressure to go high is not addressed.

C. CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR50.73 (a)(2)(v)(B), which requires the reporting of any event that alone could have prevented the fulfillment of the safety function of systems that are needed to remove residual heat.

The root cause of this event is due to inadequate review of IN 82-26. If the reviewer had performed an adequate review of the IN, he may have recognized the need for inspection of both HPCI exhaust valves. If the HPCI exhaust valve internals would have been inspected, as recommended in IN 82-26, it is believed the valve degradation would have been found prior to the 2-2301-74 valve failure in August, 1994.

The 2301-74 valve is a stop check valve, of which none were initially included in the preventive maintenance program, in response to SOER 86-3. The reason the stop check valves were not included in the program was not documented at the time and cannot be determined. In the Station response to the SOER 86-3, it was stated that all check valves in the HPCI system would be included in the preventive maintenance program. However, the 2301-74 valve was not included in the tabulated list of valves for inspection/maintenance. Consequently, an inadequate review was performed and thus is a contributing cause to this event. It should be noted that all safety-related check valves, including stop check valves have been in the program since January, 1994. However, the 2(3)-2301-74 valves were not scheduled to be inspected until D2R14, starting in March, 1995 and D3R14, starting in January, 1996.

In addition, SOER 86-3 was reviewed for effectiveness on April 6, 1989, and October 22, 1993. Both reviews missed identifying the HPCI 2301-74 valve as being excluded from the preventive maintenance program. The April 1989 effectiveness review contains very little documentation, which prevents determining why the review missed the 2301-74 valve. The October, 1993 effectiveness review took a sampling of systems specified in the SOER 86-3 response and verified that those valves were included in the PM program. However, the sampling did not include the HPCI system, which prevented the reviewer from detecting the exclusion of the 2301-74 valve.

The closure of 2-2399-94, Cooling water sensing valve was determined to have been inadvertently closed during maintenance in the area on August 3, 1994. The valve is orientated next to oil filters which were cleaned. It is believed that during maintenance the valve was inadvertently closed by being brushed against.

Root Cause for 2-2301-74 valve separation:

On August 19, 1994, the tack welds that prevent the two components of the HPCI Turbine Exhaust stop check valve (2-2301-74) piston from disassembling were inspected by engineering and a member of the System Material Analysis Department (SMAD). Three important items were noticed during the inspection and are listed as follows:

1. The four tack welds were found broken. There was evidence of beaching marks (rough, chevron-shaped surface with curved rows extending from the initial crack area) on the surface of the tack weld fracture area. These marks are evidence that the initial cracks were caused by fatigue.

2. The tack welds were worn. Only two of the four tack welds had a surface with small remains of beaching marks.

3. The threads of the two components of the piston, which are normally covered if the two components are properly fastened, had very little corrosion. This is relative to the rest of the surface of the piston surrounding the threaded region.

From these observations, it was concluded that the fracture of the tack welds was due to fatigue, occurred recently and the separation of the two piston components occurred during the last HPCI turbine operation.

SMAD believed that the tack welds would be likely to fracture after twenty years of service in a high vibration, low cyclic stress environment. A tack weld fracture in this environment is not abnormal. The cause for the vibrations in the weld area is the loosening of the two piston components. Originally, the two components of the piston are tightened and tack welded, however, after time and many cycles of thermal expansion/contraction, the two components became loose. As the two components loosened, they were able to vibrate, and thereby caused cyclic stress in the tack welds, eventually initiating cracks and fracture in the welds.

The actual fracture of the tack welds was recent. This conclusion is proven by the condition of the surface of the fractures. The extent of the wear of the fracture surface was enough to remove most of the beaching marks except for the small traces found on two of the four tack welds.

The separation of the two piston components would have occurred during the last HPCI Turbine operation. This conclusion is supported by the fact that the HPCI Turbine Exhaust pressure has remained constant until this last turbine operation. This assumes that the HPCI turbine exhaust pressure will increase as the length of the piston is increased as it separates. Also, water was noted in the HPCI turbine before operation. This water can cause higher vibrations in the exhaust line and consequently an adverse effect on the check valve piston. These higher vibration amplitudes could have caused the two piston components to unscrew and finally separate; whereas, the previous vibration amplitude was not large enough. Therefore, it is believed that water in the HPCI turbine was a contributing cause to this event. Although the exhaust drain pot level alarm cleared during the performance of DOS 2300-03, it is believed that some water remained in the system. A verification which would have insured that the turbine was completely free of water, following the alarm, was not performed.

A maintenance history review indicated that the 2(3)-2301-74 valves have never been disassembled. A further review of the station safety related check valves with piston type design indicated that the 2-1402-8A, Core Spray [BM] pump discharge check valve, was a similar style and manufacturer. In addition, it was found that Quad Cities HPCI 2301-74 valve had a similar piston type design as Dresden's 2301-74 valve. The tack welds on the Quad Cities valve were found cracked during routine check valve inspection in April, 1994.

D. SAFETY ANALYSIS:

The HPCI system is designed with several exhaust overpressure protection devices. Pressure switches 2-2368A and 2-2368B are connected in parallel and are set to trip at 100 psig. Upon actuation of either pressure switch, the HPCI Turbine and Stop Valve will trip. The Exhaust Line also has a rupture diaphragm which opens at 125 psig to further prevent exhaust line overpressurization.

On August 4, 1994, the turbine tripped as designed when one of the exhaust pressure switches actuated. The HPCI system was isolated and declared inoperable. Further testing that was conducted on August 7, 1994 insured turbine exhaust pressure did not exceed 30 psig in order not to challenge the turbine overpressurization devices. Following the testing the HPCI system, the supply steam was isolated to prevent the turbine from initiating. In addition, the 2-2301-74, HPCI Exhaust check valve, was manually closed to provide an exhaust isolation.

The safety significance of this event is considered moderate since the turbine protective devices operated as designed and all other Emergency Core Coolant Systems required by Technical Specification 3.5.C.a.2 were operable during this event.

E. CORRECTIVE ACTIONS:

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX).

Since the review of IN 82-26, the OPEX program has provided the reviewers with instructions to improve the responses and to assure that the concerns raised in the OPEX document are addressed. These instructions are part of DAP 2-11, Operating Experience Review, and have been in the DAP since May of 1993. The instructions ask for the specific and/or generic applicability to the station.

Dresden Station will create an administrative procedure to control corrective actions effectiveness reviews per Dresden Improvement Plan 1.II.4.4.1.d.

All safety related stop check valves have been informally included in the check valve preventative maintenance program.

Dresden Administrative Procedure (DAP) 11-25, Check Valve Inspection Program, will be updated to reflect the current additions to the check valve preventive maintenance program. (NTS# 237-180-94-02101)

HPCI Exhaust HI Pressure Switches 2-2368A & 2-2368B were functionally verified per Dresden Instrument Surveillance (DIS) 2300-09, HPCI Turbine Pressure Switch Surveillance on August 4, 1994.

The HPCI Turbine Drain System was inspected under work request D26905 on August 6, 1994. The exhaust drain check valves were functionally checked successfully during performance of DOS 2300-03 on August 7, 1994.

HPCI Exhaust Rupture Disks were replaced on August 6, 1994, under work request D25294 due to the diaphragms reaching a pressure greater than 80% of their burst pressure value.

The HPCI Gland Seal Drain Pressure HI switch was functionally verified per acceptance criteria. The switch was recalibrated and tested successfully under work request D25704 on August 6, 1994.

The system engineer was counseled to practice the "STAR" (Stop, Think, Act, Review) program and to take the appropriate time in reviewing items such as the SER print out or a verification that the HPCI turbine exhaust is free of water following an alarm.

Dresden Operating Procedure (DOP) 2300-M1/E1, HPCI Valve Checklist, was performed on all valves in the room to insure correct positions on August 7, 1994, prior to the performance of DOS 2300-03.

A cover was installed on the 2-2399-94 valve to prevent the valve from being inadvertently turned in the future.

The 2-2301-45, HPCI Turbine Exhaust Check Valve was disassembled, inspected and a new valve installed under work request D26915. The check valve seats were found to be slightly worn due to seat impacting. This failure did not affect the operation of the HPCI system.

The 2-2301-74, HPCI Turbine Exhaust Check Valve, was disassembled, inspected and repaired under work request D26919. The valve disk was found not attached to the valve guide piston. Further inspection revealed the tack welds, which prevent the assembly from rotating, had broken due to vibration fatigue. The valve was reassembled and tested satisfactorily during Unit 2 start-up on November 19, 1994.

The 3-2301-74, HPCI Turbine Exhaust Check valve, was disassembled and inspected under work request D27123. The valve internals were found to be intact. The valve was reassembled and tested satisfactorily during Unit 3 start-up on November 4, 1994.

A Problem Investigation Report was generated to address the potential Part 21 issue for the Edwards/Rockwell model exhaust check valve that failed during this event. (NTS# 237-200-94-19400)

AO2-2301-28, HPCI Inlet Drain Pot to Suppression Pool valve, was disassembled and inspected under work request D25302 during D2F23. The seat was found to have some minor indications. The valve seat was repaired and a seat contact check was performed satisfactorily. The valve was then successfully tested during Unit 2 start-up on November 19, 1994.

The Core Spray discharge check valve 2-1402-8A was inspected during D2F23. There were no problems noted during the inspection.

F. PREVIOUS OCCURRENCES:

None.

G. COMPONENT FAILURE DATA:

Edwards/Rockwell Stop Check Valve, Model No. 6504Y.

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.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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