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U. S. Nuclear Regulatory Commission
Washington, DC 20555

Docket No. 50-277

SUBJECT: Licensee Event Report,
Peach Bottom Atomic Power Station-Unit 3

This LER concerns the High Pressure Coolant Injection system being made inoperable when its Steam Supply Valve was closed to stop a packing leak.

Reference:	Docket No. 50-278
Report Number:	3-94-004
Revision Number:	00
Event Date:	09/24/94
Report Date:	10/07/94
Facility:	Peach Bottom Atomic Power Station RD1, Box 208, Delta, PA 17314

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(v).

Sincerely,

GDE/GAJ:gaj

enclosure

cc: R. A. Burricelli, Public Service Electric & Gas
R. R. Janati, Commonwealth of Pennsylvania
INPO Records Center
T. T. Martin, US NRC, Administrator, Region I
R. I. McLean, State of Maryland
W. L. Schmidt, US NRC, Senior Resident Inspector
A. F. Kirby III, DelMarVa Power
H. C. Schwemm, VP - Atlantic Electric

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CCN 94-14157

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NRC FORM 366 (6-89)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

ESTIMATED BURDEN PER RESPONSE TO COMPLY WTH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Peach Bottom Atomic Power Station Unit 3	0 5 0 0 0 2 7 8	1 OF 0 3

TITLE (4) High Pressure Injection System being Inoperable when Steam Supply Valve was Closed to Isolate a Leak

EVENT DATE (5) MONTH	DAY	YEAR	LER NUMBER (6) YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	REPORT DATE (7) MONTH	DAY	YEAR	OTHER FACILITIES INVOLVED (8) FACILITY NAMES	DOCKET NUMBER(S)
0 9	2 4	9 4	9 4	— 0 0 4 —	0 0	1 0	0 7	9 4		0 5 0 0 0
										0 5 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

OPERATING MODE (9): N

POWER LEVEL (10): 1 0 0

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER AREA CODE	
Anthony J. Wasong, Manager-Experience Assessment	7 1 7	4 5 6 - 7 0 1 4

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 fifteen single-space typewritten lines) (16)

On 09/24/94, it was identified that Drywell (DW) pressure and temperature were increasing. It was expected that a valve inside the DW had developed a packing leak. A systematic approach of closing DW valves to locate the leak was utilized. The High Pressure Coolant Injection (HPCI) system Steam Supply Valve (MO-3-23-15) was closed and both DW pressure and temperature started to decrease. The electrical power was removed from this valve to prevent it from automatically opening on a HPCI initiation signal. On 9/28/94, MO-3-23-15 was coasted into its back seat to isolate the leak. This method of back seating a valve was performed to prevent damaging the valve in any way. Verification that the valve was coasted into its back seat was ensured using Valve Operation Test and Evaluation System (VOTES) data. DW parameters were monitored to ensure that the valve was sufficiently back seated to stop the leak. This returned the HPCI system to an operable status. In addition, the valve was stroked from the back seated condition to ensure that the valve was operable for isolation purposes. The cause of this event is believed to be a packing leak on MO-3-23-15. The exact cause of the packing failure can not be determined until the unit is shutdown and an inspection is performed. MO-3-23-15 will be repaired as necessary at a future shutdown. Corrective actions will be implemented as appropriated following identification of what caused the leak. One previous similar event has been identified.

Requirements for the Report

This report is submitted to satisfy the requirements of 10CFR50.73(a)(2)(v) describing conditions that alone could have prevented the fulfillment of a safety function.

Unit Conditions at Time of Discovery

Unit 3 was in the "RUN" mode at approximately 100 % of rated thermal reactor (EIIS:EA) power. There were no systems, structures, or components that were inoperable that contributed to the event.

Description of the Event

On 09/24/94 at approximately 1520 hours, it was identified that Drywell pressure and temperature were increasing. The Drywell cooling system was maximized causing pressure and temperatures to stabilize. At 1655 hours, Drywell pressure started to increase again. It was expected that a valve inside the Drywell had developed a packing leak. A systematic approach of closing Drywell valves to locate the leak was utilized. At 1709 hours, the High Pressure Coolant Injection (HPCI) system (EIIS:BJ) Steam Supply Valve (MO-3-23-15) was closed and both Drywell pressure and temperature started to decrease. The electrical power was removed from this valve to prevent it from automatically opening on a HPCI initiation signal. Having MO-3-23-15 closed and de-energized, would have prevented HPCI from being able to automatically inject per its intended design. Therefore, the applicable Tech Spec Limiting Condition for Operation (LCO) was entered. The NRC was notified of this condition at 1937 hours. On 9/28/94 at 1630 hours, using an electronic timer in conjunction with a valve stroke calculation, MO-3-23-15 was coasted into its back seat to isolate the leak. This method of back seating a valve was performed to prevent damaging the valve in any way. Verification that the valve was coasted into its back seat was ensured using Valve Operation Test and Evaluation System (VOTES) data. Drywell parameters were monitored to ensure that the valve was sufficiently back seated to stop the leak. This returned the HPCI system to an operable status. In addition, the valve was stroked from the back seated condition to ensure that the valve was operable for isolation purposes. The associated Tech Spec LCO was exited.

Cause of the Event

The cause of this event is believed to be a packing leak on MO-3-23-15. The exact cause of the packing failure can not be determined until the unit is shutdown and an inspection is performed.

Analysis of Event

No actual safety consequences occurred as a result of this event.
Prior to closing the MO-3-23-15, HPCI was operable to inject per its design. After the HPCI system was manually secured, if a design basis accident or transient would have occurred, the Automatic Depressurization System (EIIS:RV) was operable, if required, to reduce reactor (EIIS:RPV) pressure to allow the Low Pressure Coolant Injection (EIIS:BO) Systems to inject. The Reactor Core Isolation Cooling (RCIC) system was also operable to provide core cooling.

Corrective Actions

Following discovery of the cause of the leak, MO-3-23-15 was coasted into its back seat to isolate the leak. This returned the HPCI system to an operable status. In addition, the valve was stroked from the back seated condition to ensure that the valve was operable for isolation purposes. The associated Tech Spec LCO was exited.

MO-3-23-15 will be inspected and repaired as necessary at a future Unit 3 shutdown. Corrective actions will be implemented as appropriated following identification of what caused the leak.

Previous Similar Events

One previous similar event (LER 2-91-33) has been identified which involved excessive seal leakage on MO-3-23-15. The cause of this event was that the valve stem had an excessive gouge. This was due to a combination of a reversed packing configuration and the valve operator being horizontally mounted. This combination changed the load supporting characteristics of the valve which resulted in the valve bonnet area gouging the valve stem. The corrective actions associated with that event involved repairing the valve, correcting the packing configuration on this and other similar valves, and the generation of a maintenance procedure to address similar type configurations in the future. It is not possible at this time to determine if these corrections should have prevented this event.