NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

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)
Crack Indications in RHR Pipe Welds

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 NAMES	DOCKET NUMBER(S)
0 7	2 6	8 5	8 5	— 0 1 3	— 0 0	0 8	2 2	8 5		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 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)	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)	X 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
W. C. Birely, Senior Engineer - Licensing Section	AREA CODE 2 1 5 8 4 1 5 0 4 8

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
X	B 0		G 0 8 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15) *	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO				

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

* See "Corrective Actions"

Abstract: 3-85-13

On July 26, 1985, with Unit 3 shutdown for refueling, various indications were discovered in welds on residual heat removal system piping. Specifically, ultrasonic testing performed to comply with NRC Generic Letter 84-11 revealed circumferential indications on welds 10-IB-3, 10-IB-4, 10-IB-11 and 10-0-2. Full structural weld overlays will be performed on welds 10-IB-4, 10-IB-11, and 10-0-2 before returning the unit to service. Weld 10-IB-3 is being analyzed to determine the corrective action required in accordance with the crack evaluation and repair criteria in Generic Letter 84-11.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Description of the Event:

On July 26, 1985, with Unit 3 shutdown for refueling, ultrasonic examination of welds on residual heat removal (RHR) system piping revealed indications in welds 10-IB-3, 10-IB-4, 10-IB-11, and 10-0-2. Welds 10-IB-3 and 10-IB-4 are located on the 'B' RHR injection line between the drywell penetration and testable check valve AO-3-10-46B. Weld 10-IB-11, also on the 'B' RHR injection line, is located between AO-3-10-46B and manual valve 3-10-81B. Weld 10-0-2 is located on the RHR shutdown cooling suction line between manual valve 3-10-88 and the 'A' recirculation pump suction line.

Preliminary test results indicate the following:

Weld 10-IB-3

One 2-inch circumferential indication approximately 18% thru-wall, and one 2-inch circumferential indication approximately 15% thru-wall.

Weld 10-IB-4

An intermittent 24-inch circumferential indication varying in depth from 20-50% thru-wall.

Weld 10-IB-11

An intermittent 12-inch circumferential indication approximately 25% thru-wall.

Weld 10-0-2

A 360-degree indication varying in depth from 35-55% thru-wall.

The EIIS code for the RHR system is BO.

Consequences of the Event:

In order to determine the effects of the indications on the piping, fracture mechanics analyses are being performed on these welds as required.

Cause of the Event:

Analysis of the data regarding these indications shows a pattern typical of intergranular stress corrosion cracking.

Corrective Actions:

Weld 10-IB-3 is being analyzed to determine the need for weld overlay. Welds 10-IB-4, 10-IB-11, and 10-O-2 will be weld overlay repaired in order to provide the structural reinforcement necessary for at least 18 months of full power operation. The weld overlays will be designed and sized as full structural overlays meeting the requirements of NRC Generic Letter 84-11 and providing all ASME code safety margins.

Inspections of other pipe welds are currently in progress. Additional indications detected by these inspections will be reported in a supplement to this LER following completion of the inspection program.

Previous Similar Occurrences

Peach Bottom LERs 3-84-08, 2-84-10, and 2-84-16 concerned cracks characteristic of intergranular stress corrosion cracking.

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August 22, 1985

Docket No. 50-278

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

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

This LER concerns crack indications in residual heat removal system pipe welds.

Reference:	Docket No. 50-278
Report Number:	3-85-13
Revision Number:	00
Event Date:	July 26, 1985
Report Date:	August 22, 1985
Facility:	Peach Bottom Atomic Power Station RD #1, Box 208, Delta, PA 17314

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

Very truly yours,

W. T. Ullrich
Superintendent
Nuclear Generation Division

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC
T. P. Johnson, NRC Resident Inspector

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