

LICENSEE EVENT REPORT (LER)

APPROVED OMS NO. 3160-010H
EXPIRES 6/3/93FACILITY NAME (1)
Peach Bottom Atomic Power Station - Unit 2DOCKET NUMBER (2)
050000277PAGE (3)
1 OF 03TITLE (4)
Low Level Scram Due To Operator Error

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(S)		DOCKET NUMBER(S)
09	24	85	85	020	00	10	21	85			050000

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)									
POWER LEVEL (10)	000	20.402(a)		20.406(a)		X		90.736(12)(iv)		73.716(a)	
		20.406(a)(1)(iv)		90.36(a)(1)				90.736(12)(iv)		73.716(a)	
		20.406(a)(1)(iv)		90.36(a)(2)				90.736(12)(iv)		OTHER (Specify in Abstract below and in Test, NRC Form 366A)	
		20.406(a)(1)(iv)		90.736(12)(iv)				90.736(12)(iv)(1A)			
		20.406(a)(1)(iv)		90.736(12)(iv)				90.736(12)(iv)(1B)			
20.406(a)(1)(iv)		90.736(12)(iv)				90.736(12)(iv)					

LICENSEE CONTACT FOR THIS LER (12)

NAME
W. C. Birely, Senior Engineer, Licensing Section

TELEPHONE NUMBER

AREA CODE
215 841-5048

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If you complete EXPECTED SUBMISSION DATE) ☒ NO ☐

EXPECTED SUBMISSION DATE (15)

MONTH
DAY
YEAR

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

Abstract: 2-85-20

On September 24, 1985 at 1807 hours a scram and Group II and Group III isolations occurred due to low reactor water level caused by an operator error. Because Unit 2 was shutdown with all control rods inserted, no control rod movement occurred. Operator error during residual heat removal system valve alignment caused reactor water level to decrease. The automatic isolations stopped the decreasing level. Level was automatically restored to normal by the reactor feedwater level control system. The safety systems performed properly and the scram signal and isolations were reset. The operator was counseled regarding how to prevent recurrence of such an error.

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11

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMS NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1) Peach Bottom Atomic Power Station - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 2 7 7 8 5 - 0 2 0 - 0 0 0 2 OF 0 3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (if more space is required, use additional NRC Form 366A (17))

Description of Event:

On September 24, 1985 at 1807 hours, a scram and Group II and Group III isolations occurred because of low reactor water level. Unit 2 was in cold shutdown with all control rods inserted; therefore, no control rod movement occurred. Group II and Group III isolations involve Reactor Water Cleanup System and Residual Heat Removal System isolations as well as various containment ventilation trips.

The "A" Residual Heat Removal (RHR) pump was operating in the shutdown cooling mode (reactor recirculation loop suction). Reactor water level was being automatically controlled by the "C" reactor feedwater pump bypass level control valve, A0-8091. Previously, the "C" RHR pump had been operated in the shutdown cooling mode and the "C" loop shutdown cooling suction valve, M0-2-10-15C, was left open. The operators received a request to operate the "A" pump in the full flow test mode (torus to torus) to support a pump problem investigation. The licensed reactor operator shut off the "A" RHR pump and closed the "A" loop shutdown cooling suction valve, M0-2-10-15A. Next, he opened the "A" loop full flow test return (to torus) valves, M0-2-10-39A and M0-2-10-34A. Because the "C" loop shutdown cooling suction valve, M0-2-10-15C, was still open, a path was immediately created for gravity flow of reactor water through the "C" RHR pump to the torus. As reactor water level decreased, a scram and Group II and Group III isolations occurred at 0 inches. The isolation signal automatically closed the inboard and outboard shutdown cooling suction valves, M0-2-10-18 and M0-2-10-17, which stopped the decrease of reactor water level. The level had dropped to -10 inches during the transient. The level was restored to normal automatically by the "C" reactor feedwater pump bypass level control valve, A0-8091. Following the scram and isolations, the operator reclosed the M0-2-10-15C, M0-2-10-34A and M0-2-10-39A valves.

The appropriate valves closed in response to the Group II and Group III isolation signals. The scram signal and isolations were subsequently reset.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1) Peach Bottom Atomic Power Station - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 2 7 7	LER NUMBER (3)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 365A (17))

Consequence of the Event:

The decrease in reactor water level was promptly stopped by the automatic isolation, and level was restored automatically. Furthermore, reactor core cooling was not in jeopardy because of the available, operable condensate pumps and low pressure emergency core cooling subsystems. The reactor had been shutdown for approximately five days and decay heat was relatively low. All engineered safety features performed properly, therefore, the safety significance of this event is minimal.

Cause of Event:

The cause of the event was a cognitive error made by the operator. The operator failed to recognize that opening the full flow test return valves would drain the reactor vessel. The "C" loop shutdown cooling suction valve should have been closed first. A RHR system operating procedure exists which, if followed, would have prevented this event. The operator was not using the procedure.

Corrective Actions:

Reactor water level was automatically recovered. The operator was counseled concerning the use of procedures to minimize jeopardizing operational safety.

Previous Similar Occurrences

LER 2-85-14 concerned a low level scram due to a problem with a level controller and operator error on Unit 2 at Peach Bottom Atomic Power Station. There have been no other events caused by inadvertent draining of the reactor vessel.

PHILADELPHIA ELECTRIC COMPANY

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October 21, 1985

Docket No. 50-277

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Washington, DC 20555

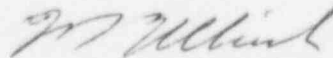
SUBJECT: Licensee Event Report
Peach Bottom Atomic Power Station - Unit 2

This LER concerns a low level scram and Group II and Group III isolations with Unit 2 in cold shutdown.

Reference:	Docket 50-277
Report Number:	2-85-20
Revision Number:	00
Event Date:	September 24, 1985
Report Date:	October 21, 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)(iv).

Very truly yours,



W. T. Ullrich
Superintendent
Nuclear Generation Division

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

IE22
11