



PECO NUCLEAR

A Unit of PECO Energy

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December 11, 1999

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

Docket No. 50-277
SUBJECT: Licensee Event Report, Peach Bottom Atomic Power Station Unit 2

This LER reports an inoperability of a Core Spray pump room cooler fan due to the control switch not being in the RUN position. This caused one Core Spray subsystem to be inoperable for a time period greater than allowed by Technical Specifications. The LER is being submitted pursuant to the requirements of 10 CFR 50.73 (a)(2)(i)(B) due to a condition prohibited by Technical Specifications existing for greater than the time allowed by the applicable action statement .

Reference: Docket No. 50-277
Report Number: 2-99-007
Revision Number: 00
Event Date: 11/11/99
Report Date: 12/11/99

Facility: Peach Bottom Atomic Power Station Unit 2
1848 Lay Road, Delta, PA 17314

Sincerely,

Mark E. Warner, Plant Manager

MEW/scb

enclosure

cc: N. J. Sproul, Manager, Financial Controls and Co-owner Affairs
R. R. Janati, Commonwealth of Pennsylvania
INPO Records Center
H. J. Miller, US NRC, Administrator, Region I
R. I. McLean, State of Maryland
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CCN 99-14096

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APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001
Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to the industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), 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. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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TITLE (4)
This LER reports an inoperability of a Core Spray pump room cooler fan due to the control switch not being in the RUN position, causing the associated Core Spray subsystem to be inoperable for a time period greater than the Technical Specification allowable outage time.

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
11	11	99	99	007	00	12	11	99	Facility Name	Docket Number

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more) (11)	20.2201(B)	20.2203(a)(2)(v)	X	50.73(a)(2)(i)	50.73(a)(2)(viii)
POWER LEVEL (10) 100		20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71
		20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER
		20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 336A
		20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)	
NAME Steven C. Beck	TELEPHONE NUMBER (include area code) 717.456.3243

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
Cause	System	Component	Manufacturer	Reportable to EPIX	Cause	System	Component	Manufacturer	Reportable to EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED Submission Date (15)		
YES (if yes, complete EXPECTED SUBMISSION DATE)	X	NO		Month	Day	Year

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)
On November 11, 1999, with Unit 2 operating at approximately 100 percent power, the operating crew performed a surveillance test of the 2B Core Spray pump. The applicable Core Spray pump room cooler fan failed to automatically start, as expected. The operating crew declared the room cooler inoperable and declared the Core Spray subsystem inoperable, as directed by the Technical Requirements Manual. A seven day Technical Specification Action was entered. Subsequent investigation determined that the contact for the control switch for the Core Spray pump room cooler fan was not fully made up when the switch indicated in the RUN position. All other ECCS cooler switch positions were verified.

Further investigation revealed the Core Spray room cooler fan and its associated Core Spray subsystem were inoperable for approximately forty-eight days. The Technical Specification allowable outage time is seven days for a Core Spray subsystem. The unit was also started up and taken to Mode 1 with an inoperable Core Spray subsystem, which violated Technical Specification 3.0.4.

The LER is being submitted pursuant to the requirements of 10 CFR 50.73 (a)(2)(i)(B) due to a condition prohibited by Technical Specifications existing for greater than the time allowed by the applicable action statement and violating Technical Specification 3.0.4.

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TEXT (If more space is required, use additional copies of NRC form 336A) (17)

Requirements of the Report

The LER is being submitted pursuant to the requirements of 10 CFR 50.73 (a)(2)(i)(B) due to a condition prohibited by Technical Specifications existing for greater than the time allowed by the applicable action statement and violating Technical Specification 3.0.4.

Unit Conditions at Time of Event

Unit 2 was in Mode 1 (RUN) at approximately 100 percent power (EIS: EA) at the time of the event. No other systems, structures, or components were inoperable at the start of the event which contributed to this event.

Description of the Event

On Thursday, November 11, 1999, at approximately 0820 hours, the 2B Core Spray pump room cooler fan (EIS:BK) failed to automatically start during a 2B Core Spray pump (EIS:BM) surveillance.

The operating crew investigated the 2B Core Spray pump room cooler switch and noted that the switch was in the RUN position, as indicated by the label plate on the switch. For the RUN contact to be closed, the switch must be in the fully clockwise position. Subsequently, an operator positioned the switch approximately one-eighth of an inch further clockwise towards the RUN position. The RUN contact closed and the room cooler fan started.

Further investigation revealed that the 2B Core Spray pump room cooler fan was removed from service on September 24, 1999, to support routine maintenance on the fan. Upon completion of the maintenance, the switch was realigned per the Core Spray System Check Off List (COL). The COL required the 2B Core Spray pump room cooler fan switch to be placed in RUN.

The 2B Core Spray pump room cooler fan switch was placed in the RUN position, as indicated by the label plate on the switch. However, the RUN contact was not made up because the switch was still one-eighth of an inch from the actual RUN position. An independent verifier confirmed that the switch was in the RUN position by visually verifying position using the switch label plate.

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TEXT (If more space is required, use additional copies of NRC form 336A) (17)

The 2B Core Spray pump room cooler fan would not have started automatically to support the 2B Core Spray pump operation from September 24, 1999 until November 11, 1999. The Technical Requirements Manual required action for an inoperable room cooler fan is to immediately declare the applicable Core Spray subsystem inoperable and enter the appropriate Technical Specification required action. The required action for an inoperable Core Spray subsystem is to restore the subsystem to operable status within seven days or be in Mode 3 in 12 hours and Mode 4 in 36 hours.

The 2B Core Spray subsystem was inoperable for approximately forty-eight days due to the 2B Core Spray pump room cooler fan being inoperable, which exceeded the Technical Specification allowable outage time.

Additionally, Unit 2 was restarted following a scram on October 5, 1999. This was a violation of Technical Specification 3.0.4, which prohibits changing reactor modes with a Core Spray subsystem inoperable.

Cause of the Event

The cause of the event was failure to place the fan control switch in the RUN position during component restoration. The switch verification was inadequate because the 2B Core Spray pump room cooler fan switch label plate indicated RUN prior to the control switch actually reaching the RUN position.

Analysis of the Event

There were no safety consequences due to this event. If an accident or transient would have occurred during the time period that the 2B Core Spray room cooler fan was inoperable, the High Pressure Coolant Injection System, Reactor Core Isolation Cooling System, Automatic Depressurization System, all Low Pressure Coolant Injection Subsystems, and the redundant Core Spray subsystems would have operated to mitigate the event.

Additionally, the 2B Core Spray pump would have started, if required; however, the room cooling fan would not have started. When the 2B Core Spray Pump room temperature reached 105 degrees F, the Core Spray Room Temp High annunciator would have alarmed. The Annunciator Response Procedure requires the operating crew to dispatch an operator to investigate the cause for the high temperature. Also, the Secondary Containment Control Emergency Operating Procedure directs the crew to monitor and control temperatures in the Core Spray pump room by using available room coolers. It is likely that the operating crew would have started the 2B Core Spray pump room cooler fan prior to the 2B Core Spray pump room reaching its Maximum Safe Operating Temperature of 135 degrees F.

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Corrective Actions

The following corrective actions were taken as a result of this event:

- Other Emergency Core Cooling room cooler fan control switches, including Reactor Core Isolation Cooling system, were checked and verified to be in their proper position. No other discrepancies were noted.
- An Operations Department Event report describing the event and lessons learned was reviewed with Operations Department personnel.
- Labeling on the 2B Core Spray pump room cooler fan control switch and other similar switches have been modified to accurately reflect control switch position.

Previous Events

There were no previous LERs identified where an Emergency Core Cooling System was rendered inoperable due to the room cooler control switch not being fully positioned in the RUN position.