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10CFR 50.73

April 26, 2005

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Peach Bottom Atomic Power Station (PBAPS) Unit 3
Facility Operating License No. DPR-56
NRC Docket No. 50-278

Subject: Licensee Event Report (LER) 3-05-01

This LER reports a loss of safety function involving the High Pressure Coolant Injection System (HPCI) resulting from an inoperability of the system flow controller. In accordance with NEI 99-04, the regulatory commitment contained in this correspondence is to restore compliance with the regulations. The specific methods that are planned to restore and maintain compliance are discussed in the LER. If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,



Joseph P. Grimes
Plant Manager
Peach Bottom Atomic Power Station

JPG/djf/CR 308116

Attachment

cc: PSE&G, Financial Controls and Co-owner Affairs
R. R. Janati, Commonwealth of Pennsylvania
INPO Records Center
S. J. Collins, US NRC, Administrator, Region I
R. I. McLean, State of Maryland
F. L. Bower, USNRC Senior Resident Inspector

CCN 05-14036

IE22

SUMMARY OF EXELON NUCLEAR COMMITMENTS

The following table identifies commitments made in this document by Exelon Nuclear. (Any other actions discussed in the submittal represent intended or planned actions by Exelon Nuclear. They are described to the NRC for the NRC's information and are not regulatory commitments.)

Commitment	Committed Date or "Outage"
In accordance with NEI 99-04, the regulatory commitment contained in this correspondence is to restore compliance with the regulations. The specific methods that are planned to restore and maintain compliance are discussed in the LER.	In accordance with the Corrective Action Program

LICENSEE EVENT REPORT (LER)

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

Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose 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.

1. FACILITY NAME Peach Bottom Atomic Power Station (PBAPS)	2. DOCKET NUMBER 05000 278	3. PAGE 1 OF 3
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4. TITLE
Loss of High Pressure Coolant Injection System Function as a Result of Inoperable Flow Controller

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
03	03	2005	05	- 01 -	0	04	26	2005		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE I	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply)									
	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)						
10. POWER LEVEL 100	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)						
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)						
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)						
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)						
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)						
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)						
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER						
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/>						

Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME PBAPS Unit 3, James Mallon, Regulatory Assurance	TELEPHONE NUMBER (Include Area Code) 717-456-3351
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
B	BJ	FIC	M430	Y					

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO			

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

On 3/3/05, at approximately 1825 hours, during the performance of routine Main Control Room panel walk downs for the High Pressure Coolant Injection (HPCI) system, Licensed Operations personnel discovered that the HPCI system flow controller faceplate had a blank indicator reading. Subsequently, the flow controller was determined to not be able to perform its HPCI flow control function. Therefore, HPCI was declared inoperable. The inoperability was discovered promptly since the faceplate had been observed to have proper indication approximately 10 minutes prior to discovery. Troubleshooting of the HPCI system confirmed that the HPCI system flow controller was inoperable resulting in the HPCI system not being capable of developing sufficient flow rates if it had been required for a design basis event. The flow controller was promptly replaced. HPCI was satisfactorily tested and returned to an operable status on 3/4/05 by 1800 hours. The flow controller had previously been dedicated for safety related usage by a qualified off-site vendor in December 2002 and was installed in March 2004. The preliminary failure analysis report has determined that the internal power supply of the flow controller failed. Additional corrective actions are being evaluated in accordance with the corrective action program including the need to ensure appropriate rebuilding of components sent to off-site vendors for dedication. There were no actual safety consequences associated with this event. This event was not considered to be risk significant.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
Peach Bottom Atomic Power Station, Unit 3	05000278	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		05	- 01	- 00	

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

Unit Conditions Prior to the Event

Unit 3 was in Mode 1 and operating at approximately 100% rated thermal power when the event occurred. There were no structures, systems or components out of service that contributed to this event.

Description of the Event

On 3/3/05, at approximately 1825 hours, during the performance of routine Main Control Room panel walk downs for the High Pressure Coolant Injection (HPCI) (EIS: BJ) system, Licensed Operations personnel discovered that the HPCI system flow controller faceplate had a blank indicator reading. The flow controller was determined to not be able to perform its HPCI flow control function. Therefore, HPCI was declared inoperable. The inoperability was discovered promptly since the faceplate had been observed to have proper indication approximately 10 minutes prior to discovery.

This condition was reported to the NRC on 3/3/05 at approximately 1950 hours pursuant to the requirements of 10CFR 50.72(b)(3)(v)(D) (Event Notification # 41458).

Subsequent troubleshooting of the HPCI system confirmed that the HPCI system flow controller (EIS: FIC) was inoperable resulting in the HPCI system not being capable of developing sufficient flow rates if it had been required for a design basis event. The flow controller was promptly replaced. HPCI was satisfactorily tested and returned to an operable status on 3/4/05 by 1800 hours.

Analysis of the Event

There were no actual safety consequences associated with this event.

The HPCI system is part of the Emergency Core Cooling System (ECCS) network that provides cooling water to the reactor vessel for certain design basis events. The HPCI system is designed to provide core cooling for a wide range of reactor pressures. Upon receipt of an initiation signal, the HPCI system valves align as necessary, the turbine accelerates, and the appropriate flow rate is achieved. As the HPCI system flow increases, the turbine governor valve is automatically adjusted to maintain design flow. As a result of the failed controller, HPCI would not have been able to provide the necessary flow to the reactor core had there been a design basis event.

HPCI was known to be Technical Specification inoperable from 3/3/05 at approximately 1825 hours to 3/4/05 at approximately 1800 hours. Main Control Room panel walk downs are done hourly by licensed Operations personnel. Interviews with licensed Operations personnel revealed that the flow controller had been observed with a normal indication approximately 10 minutes prior to the 3/3/05, 1825 hours detection time. Therefore, the duration of inoperability prior to discovering the condition on 3/3/05 at 1825 is minimal. During the inoperability time period, other core cooling systems (Automatic Depressurization System (ADS) (EIS: RV), Core Spray (EIS: BM) and Low Pressure Coolant Injection (EIS: BO)) were fully operable. The Reactor Core Isolation Cooling (RCIC) system (EIS: BN) was also operable during this time period. This event is not considered to be risk significant.

NRC FORM 366AU.S. NUCLEAR REGULATORY COMMISSION
(1-2001)**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Peach Bottom Atomic Power Station, Unit 3	05000278	05	01	00	3 OF 3

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

Cause of the Event

Troubleshooting of the HPCI system determined that the HPCI system flow controller was inoperable and therefore, would not be able to perform its HPCI flow control function. The preliminary failure analysis report has determined that the internal power supply (EISS: JX) of the flow controller failed.

The flow controller is a Moore Controller, Model # 352EA21NNF and had previously been used in a non-safety related application. The controller was removed from this application and was dedicated for safety related usage by a qualified vendor in December 2002. The flow controller was installed in the Unit 3 HPCI application in March 2004.

The cause investigation determined that the internal power supply was not replaced when the flow controller was dedicated in December 2002, resulting in exceeding the expected service life of the power supply. Additional underlying causes including the process for procurement / dedication of spare parts are being further evaluated in accordance with the Corrective Action Program requirements.

Corrective Actions

The flow controller was replaced. HPCI was satisfactorily tested and returned to an operable status on 3/4/05 by 1800 hours.

Additional corrective actions are being evaluated in accordance with the corrective action program including the need to ensure appropriate rebuilding of components sent to off-site vendors for dedication.

Other similar flow controllers (e.g. HPCI and Reactor Core Isolation Cooling) on Units 2 and 3 were evaluated and determined to remain operable. Additional extent of condition evaluations concerning the dedication of used components are being performed in accordance with the Corrective Action Program.

Previous Similar Occurrences

LER 3-04-01 reported a failure of the previously installed HPCI flow controller. This previous flow controller had been in service since 1994 and failed in March 2004. The cause of the previous flow controller event was due to an internal power supply failure as a result of exceeding its service life. Corrective actions planned as part of LER 3-04-01 included updating the preventive maintenance template to specify a shorter periodicity for routine maintenance of flow controller internal power supplies. Although significant extent of condition corrective actions were taken as a result of the event reported in LER 3-04-01, the flow controller installed in March 2004 was not replaced since it was assumed that the controller had been refurbished when it was dedicated for safety related usage.