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October 24, 2001

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 a condition prohibited by Technical Specifications which resulted when a grab sample of the primary containment was not analyzed within the time frame required by Technical Specifications. The LER is being submitted pursuant to the requirements of 10CFR50.73(a)(2)(i)(B).

Reference: Docket No. 50-277
Report Number: 2-01-003
Revision Number: 00
Event Date: 09/14/00
Report Date: 10/24/01

Facility: Peach Bottom Atomic Power Station Unit 2 & 3
1848 Lay Road, Delta, PA 17314-9032

Sincerely,


Gordon L. Johnston, Plant Manager
GLJ/scb
enclosure

cc: PSE&G, 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
A. C. McMurtry, US NRC, Senior Resident Inspector
A. F. Kirby III, DelMarVa Power

CCN 01-14101

IE22

Estimated burden per response to comply with this mandatory information 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 Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOF-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose 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)

FACILITY NAME (1) Peach Bottom Atomic Power Station, Unit 2	DOCKET NUMBER (2) 05000 277	PAGE (3) 1 OF 4
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TITLE (4)
Condition Prohibited by Technical Specification – Required Actions Not Completed When LCO Not Met.

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
09	14	01	01	003	00	10	24	01		
OPERATING MODE (9)		1		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) (11)						
POWER LEVEL (10)		100		20.2201(b)		20.2203(a)(3)(ii)		50.73(a)(2)(ii)(B)		50.73(a)(2)(x)(A)
				20.2201(d)		20.2203(a)(4)		50.73(a)(2)(iii)		50.73(a)(2)(x)
				20.2203(a)(1)		50.36(c)(1)(i)(A)		50.73(a)(2)(iv)(A)		73.71(a)(4)
				20.2203(a)(2)(i)		50.36(c)(1)(ii)(A)		50.73(a)(2)(v)(A)		73.71(a)(5)
				20.2203(a)(2)(ii)		50.36(c)(2)		50.73(a)(2)(v)(B)		OTHER
				20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)		Specify in Abstract below or in
				20.2203(a)(2)(iv)		50.73(a)(2)(i)(A)		50.73(a)(2)(v)(D)		NRC Form 366A
				20.2203(a)(2)(v)	x	50.73(a)(2)(i)(B)		50.73(a)(2)(vii)		
				20.2203(a)(2)(vi)		50.73(a)(2)(i)(C)		50.73(a)(2)(viii)(A)		
				20.2203(a)(3)(i)		50.73(a)(2)(ii)(A)		50.73(a)(2)(viii)(B)		

LICENSEE CONTACT FOR THIS LER (12)

NAME Steven C. Beck - Regulatory Assurance	TELEPHONE NUMBER (Include Area Code) (717) 456-3243
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
X	IL	RLY		N					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On September 14, 2001 at approximately 0840, the operating crew received an alarm, "Drywell Radiation Monitor Trouble." Further investigation determined that the drywell radiation gas sampler had isolated due to a failed relay to the solenoid on the isolation valve. The crew entered Technical Specifications and initiated the required actions for a loss of the drywell radiation monitor.

The Technical Specification action required that a grab sample of the primary containment atmosphere be analyzed once per twelve hours. Technicians initiated the surveillance procedure steps for performing and analyzing a primary containment grab sample. Samples were obtained and analyzed at 1654 on September 14, 2001 and later at 0159 on September 15, 2001. Both surveillances were completed and documented as satisfactory. At 0830 on September 15, 2001, during preparations for performing the surveillance a third time, it was noted that the existing flow path being used for the grab sample was downstream from the closed isolation valve.

Since neither of the first two surveillances resulted in analyzing primary containment atmosphere and the atmosphere was not sampled and analyzed within the time period required by Technical Specifications, the plant was in a condition prohibited by Technical Specifications.

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

Unit Conditions Prior to the Event

Unit 2 was in Mode 1 and operating at approximately 100% rated thermal power when the event occurred. There was one system out of service that contributed to this event. Specifically, a solenoid failure on the drywell radiation monitor gas sampler resulted in the sample line becoming isolated.

Description of the Event

On September 14, 2001, at 0840, the Unit 2 Reactor Operator reported to the Control Room Supervisor that alarm "Drywell Radiation Monitor Trouble" had actuated and that the isolation valve to the drywell radiation gas sampler had indicated closed on the control panel. The Control Room Supervisor contacted the chemistry department and referenced Technical Specification 3.4.5.B, which required that a grab sample of the primary containment be analyzed once per twelve hours. The chemistry department initiated action to perform the surveillance procedure steps for analyzing grab samples of the primary containment atmosphere. The Control Room Supervisor contacted maintenance and initiated actions to investigate and repair the cause of the isolation.

The surveillance for analyzing primary containment atmosphere was conducted at 1654 on September 14, 2001 and at 0159 on September 15, 2001. Both surveillances were documented as being completed satisfactorily.

At 0830, the Unit 2 Reactor Operator was informed that the surveillance for obtaining a grab sample was being conducted, again. The Reactor operator reviewed the prints and determined that the sample point being used by the chemistry technician was downstream of the isolation valve. It was also noted that the previous two surveillances used the same flow path and that no actual primary containment grab sample was obtained in either case. The Chemistry and Operations departments initiated action to determine an adequate flow path for obtaining a valid grab sample of the primary containment.

As an adequate flow path was being identified, maintenance determined that a failed relay caused the solenoid to several isolation valves to de-energize, which resulted in the isolation valves closing. Maintenance replaced the relay and the isolation valves were re-opened and operability was restored at 1210 on September 15, 2001. Once operability was restored the Control Room Supervisor exited the Technical Specification action and efforts to obtain a grab sample were discontinued.

With one channel of primary containment atmospheric monitoring inoperable, Technical Specification 3.4.5.B requires that a grab sample of the primary containment be analyzed once per twelve hours AND the monitoring system be restored within thirty days. If 3.4.5.B Required Action is not completed in the required time frame, Required Action 3.4.5.C requires the unit be placed in Mode 3 within twelve hours AND Mode 4 within thirty-six hours.

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

The primary containment atmospheric gaseous monitoring system was out of service for approximately twenty-seven and one half hours without a grab sample of the primary containment being analyzed as required by Technical Specifications. The Technical Specification allowable outage time was exceeded by approximately three and one half hours, resulting in a condition prohibited by Technical Specifications.

This report is being submitted pursuant to 10CFR50.73(a)(2)(i)(B) due to operating in a condition prohibited by Technical Specifications.

Analysis of the Event

The primary containment atmospheric monitoring system continuously monitors the primary containment atmosphere for airborne gaseous radioactivity. A sudden increase of radioactivity provides indication of a possible reactor coolant system pressure boundary leak or reactor water leakage into the primary containment. The Drywell sump monitoring system is used to quantify the amount of leakage into the primary containment.

There was no safety significance to this event. Even though grab samples were not taken, the ability to detect excessive leakage into the primary containment still existed via the drywell sump monitoring system.

There was no change in core damage frequency as a result of this event. The primary containment atmospheric monitoring system is not credited as a mitigating system; however, in the event of a design basis accident, the system is designed to automatically isolate on a high drywell pressure or a low reactor water level signal as part of the primary containment isolation system. Since the system was already isolated, the primary containment function was met.

Cause of the Event

The cause of the isolation of the primary containment atmospheric monitoring system was the failure of a relay, which provided power to the solenoid of several isolation valves.

The cause of the failure to obtain adequate grab samples of the primary containment atmosphere was inadequate procedural guidance for determining that a flow path existed. It should be noted that the flow meter on the sample rig had a crack, which allowed it to indicate higher than normal flow due to the introduction of outside air. The investigation determined that previous samples using the same sample rig indicated normal flow rates when samples were taken.

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

Corrective Action Completed

The failed relay was replaced and the primary containment atmospheric monitoring system was restored to its normal configuration.

The flow meter on the sample rig has been repaired.

Corrective Actions Planned

The surveillance procedure for obtaining grab samples will be revised to give adequate guidance for determining that a flow path exists when an alternate method is being used.

Previous Similar Occurrences

None