



Gordon Johnston
Plant Manager
Peach Bottom Atomic Power Station

PECO Energy Company
1848 Lay Road
Delta, PA 17314-9032
717 456 4244

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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 "B" Drywell Wide Range Radiation Post Accident Monitor recorder for greater than the Technical Specification allowable outage time. The LER is being submitted pursuant to the requirements of 10 CFR 50.73 (a)(2)(i)(B).

Reference: Docket No. 50-277
Report Number: 2-00-001
Revision Number: 00
Event Date: 07/26/00
Report Date: 08/25/00

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

Sincerely,


Gordon Johnston, Plant Manager

GJ/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
A. C. McMurtry, US NRC, Senior Resident Inspector
A. F. Kirby III, DelMarVa Power

CCN 00-14067

IE22

LICENSEE EVENT REPORT (LER)

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

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.

FACILITY NAME (1) Peach Bottom Atomic Power Station Unit 2	DOCKET NUMBER (2) 0500 277	PAGE (3) 1 of 4
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TITLE (4)
This LER reports the "B" Drywell Wide Range Pressure Instrument Inoperable for Greater Than 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
07	26	00	00	001	00	08	25	00	Facility Name	Docket Number
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more) (11)							
1			20.2201(B)			20.2203(a)(2)(v)		X	50.73(a)(2)(i)	50.73(a)(2)(viii)
POWER LEVEL (10)			20.2203(a)(1)			20.2203(a)(3)(i)			50.73(a)(2)(ii)	50.73(a)(2)(x)
93			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
			20.2203(a)(2)(iv)			50.36(c)(2)			50.73(a)(2)(vii)	or in NRC Form 336A

LICENSEE CONTACT FOR THIS LER (12)

NAME Steven C. Beck	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	Manufacturer	Reportable to EPIX	Cause	System	Component	Manufacturer	Reportable to EPIX
A	IP	PR	F180	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 July 26, 2000, a surveillance was performed on the "B" Drywell Wide Range Pressure recorder in the main control room. The surveillance provides an incremented air test pressure signal of 52.5 psig to the transmitter. When the maximum test pressure was achieved it was noted that the recorder pen for the "B" Drywell Wide Range Pressure indicated 0 psig.

Further investigation revealed that in September of 1999, maintenance was performed on the "B" Drywell Wide Range Pressure recorder to replace the drive motor. During performance of the maintenance, leads to several recorder pen servos were inadvertently disconnected. Upon completion of the maintenance, the lead for the "B" Drywell Wide Range Pressure recorder pen servo was incorrectly connected to a recorder pen servo which was not in service. This resulted in the "B" Drywell Wide Range pressure indication being inoperable for greater than the Technical Specification allowable outage time of 30 days.

The LER is being submitted pursuant to the requirements of 10 CFR 50.73 (a)(2)(i)(B) due to the "B" Drywell Wide Range Pressure Post Accident Monitor inoperable for greater than allowable outage time identified in Technical Specifications.

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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 the "B" Drywell Wide Range Pressure Post Accident Monitor (EIIIS: IP) being inoperable for greater than the allowable outage time identified in Technical Specifications.

Unit Conditions at Time of Event

Unit 2 was in Mode 1 (RUN) at approximately 93 percent power (EIIIS: EA) during unit coastdown prior to a scheduled refueling outage. No other systems, structures, or components were inoperable during test performance which contributed to this event.

Description of the Event

On July 26, 2000, a 24 month Technical Specification surveillance was performed on the "B" Drywell Wide Range Pressure recorder (EIIIS: IP) in the main control room. The surveillance provides an incremented air test pressure signal of 52.5 psig to the transmitter. When the maximum test pressure was achieved it was noted that the recorder pen for the "B" Drywell Wide Range Pressure indicated 0 psig. The "B" Drywell Wide Range Pressure recorder was declared inoperable.

Further investigation revealed that in September of 1999, maintenance was performed on the "B" Drywell Wide Range Pressure recorder in order to replace the recorder paper drive motor. This particular recorder has three pens; one for wide range indication, one for narrow range indication, and one which is not used. The pen that is not in use is electrically disconnected from the recorder.

During planning for the maintenance, which was performed in September, 1999, it was determined that the recorder paper drive motor could be removed without removing the three pen servo leads at the recorder. However, during removal of the drive motor, several leads were disturbed and became disconnected. The technician immediately recognized that leads were inadvertently disconnected and addressed the technical manual for guidance in reconnecting the disconnected leads. The leads were reconnected in accordance with the guidance in the technical manual.

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

The guidance in the technical manual incorrectly directed the technician to connect the lead for the "B" Drywell Wide Range Pressure indication to the pen which is normally not in service, instead of its normal location. Since the pen that is normally not in service is electrically disconnected from the recorder, it would not have responded to an increase in Drywell pressure.

Additional post maintenance testing was conducted as a result of leads becoming disconnected. The test equipment used provided a simulated milliamp signal to all pen servos, simultaneously, causing all pens to respond, including the pen that is not normally connected. Since the post maintenance test did not insert a signal from the transmitter to the individual pen, the improper connection of leads was not identified. The post maintenance test was completed and the instrument was declared operable.

The Drywell Wide Range Pressure indication was inoperable from September 28, 1999 to July 26, 2000. Technical Specification 3.3.3.1, Post Accident Monitoring (PAM) Instrumentation, Action "A" requires a single inoperable Drywell wide range pressure indicator to be restored to operable status within 30 days. If not restored within 30 days, Technical Specifications requires submitting a report to the NRC outlining preplanned alternate monitoring methods, the cause of the inoperability, and plans for restoring inoperable channels. Neither of these actions was performed during the period that the leads were not correctly connected, which placed the plant in a condition not allowed by Technical Specifications.

Cause of the Event

Human error was the primary cause of this event. Specifically, the technician inadvertently disconnected leads to the recorder pens while removing the drive motor. Two additional causal factors contributed to this event. The technical manual guidance for reconnecting leads was inaccurate and did not reflect the actual plant configuration. Also, the post maintenance test selected by the technician did not adequately assess whether or not the leads to the pen servos were correctly connected.

Analysis of the Event

This event had minimal impact on plant safety and core damage frequency. Even though the "B" Drywell Wide Range Pressure indication was inoperable for greater than the allowable outage time in Technical Specifications, redundant indication was available via the "A" Drywell Wide Range Pressure recorder and the "A" and "B" Safety Parameter Display System (SPDS).

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

In the event of a design basis accident, adequate indications were available in the main control room to allow the control room operators to evaluate plant conditions and take appropriate actions as directed by the Emergency Operating Procedures. Additionally, the Drywell Wide Range Pressure recorder provides indication for monitoring only. There are no mitigating system initiation signals associated with this indication.

Based on a PSA evaluation, there was no effect on core damage frequency as a result of this event. This event did not result in a safety system functional failure.

Corrective Actions

The recorder was repaired and the following additional corrective actions were taken as a result of this event:

- The individual involved in the maintenance was counseled about the importance of attention to detail and being aware of surroundings while working on sensitive or Technical Specification related equipment. Also, the technician was coached on the importance of selecting an adequate post maintenance test following corrective maintenance.
- The Technical Manual is being changed to reflect the actual configuration of the plant. Similar plant recorders will be audited to determine if other technical manual configuration issues exist.
- All other Drywell Wide Range indications on Unit 2 and Unit 3 were verified to be operable.

Previous Events

No previous events were identified where incorrectly restoring leads to a recorder caused the plant to be outside the Limiting Condition for Operation and the allowed outage time identified in Technical Specifications.