

JAN 14 1994

Docket Nos. 50-277
50-278

PECO Energy
ATTN: Mr. G. Rainey
Vice President PECO Energy
Peach Bottom Atomic Power Station
RD 1, Box 108
Delta, PA 17314

Dear Mr. Rainey:

SUBJECT: COMBINED INSPECTION REPORT NOS. 50-277/93-24 AND 50-278/93-24

This refers to your December 29, 1993 correspondence, in response to our November 22, 1993 letter.

Thank you for informing us of the corrective and preventive actions documented in your letter. These actions will be examined during a future inspection of your licensed program.

Your cooperation with us is appreciated.

Sincerely,

ORIGINAL SIGNED BY
EDWARD C. WENZINGER

Edward C. Wenzinger, Chief
Projects Branch 2
Division of Reactor Projects

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JAN 14 1994

Mr. G. Rainey

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cc:

D.M. Smith, Senior Vice President
J. Doering, Chairman, Nuclear Review Board
G. Cranston, General Manager, Nuclear Engineering Division
G. Edwards, Plant Manager, Peach Bottom Atomic Power Station
A. J. Wasong, Manager, Experience Assessment
G. A. Hunger, Jr., Manager, Licensing Section
J.W. Durham, Sr., Senior Vice President and General Counsel

cc w/cy of licensee's ltr:

C. Schaefer, External Operations - Nuclear, Delmarva Power & Light Co.
B.W. Gorman, Manager-External Affairs, Public Service Electric & Gas Co.
J. A. Isabella, Director, Generation Projects Department, Atlantic Electric
R. McLean, Power Plant Siting, Nuclear Evaluations
J.H. Walter, Chief Engineer, Public Service of Maryland
R. Ochs, Maryland Safe Energy Coalition
D. Poulson, Secretary of Harford County Council
TMI - Alert (TMIA)
Public Document Room (PDR)
Local Public document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
Commonwealth of Pennsylvania

bcc w/cy of licensee's ltr:

Region I Docket Room (with concurrences)
E. Wenzinger, DRP
C. Anderson, DRP
C. Miller, PDI-2, NRR
J. Shea, NRR

RI:DRP

C/A
CAnderson
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RI:DRP

EWenzinger
01/14/94

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PEACH BOTTOM—THE POWER OF EXCELLENCE

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION

R. D. 1, Box 208

Delta, Pennsylvania 17314

(717) 456-7014

December 29, 1993

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

Dear Sir:

Subject: Peach Bottom Atomic Power Station Units 2 & 3
 Response to Notice of Violation (Combined Inspection
 Report No. 50-277/93-24 & 50-278/93-24)

In response to your letter dated November 22, 1993, which transmitted the Notice of Violation in the referenced inspection report, we submit the attached response. The subject inspection concerns a routine residents' safety inspection that was conducted September 14 through October 30, 1993.

If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

G. R. Rainey
 G. R. Rainey
 Vice President

GRR:RKS:bah
 Attachments

cc: R. A. Burricelli, Public Service Electric & Gas
 W. P. Dornsife, Commonwealth of Pennsylvania
 W. L. Schmidt, Senior Resident Inspector, US NRC
 T. T. Martin, Administrator, Region I, US NRC
 R. I. McLean, State of Maryland
 H. C. Schwemm, Atlantic Electric
 C. D. Schaefer, DelMarVa Power

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Response to Notice of Violation
93-24-02

Technical Specification 6.8.1 requires that written procedures and policies be established and implemented that meet the requirements of Sections 5.1 and 5.3 of ANSI N18.7-1972. ANSI 18.7-1972, Section 5.1.2 requires that procedures be followed, the requirements for use be prescribed in writing, and that rules be established that provide methods by which temporary changes to approved procedures can be made. The following example of failure to adhere to these requirements was identified:

Administrative Procedure A-4.2, "Station Qualified Reviewer Program," Revision 1, Section 7.1.4, requires that the station qualified reviewers (SQR) shall review the package for technical accuracy and adherence to quality program requirements. The Nuclear Quality Assurance Plan, Surveillance Testing Section 11.4 requires that shift operations personnel shall have overall control of the tests affecting plant operations, to assure that testing systems do not adversely affect the safe operation of the plant.

Contrary to the above, on October 19, 1993, a Station Qualified Reviewer did not perform an adequate technical review of a temporary change to routine test procedure, RT X013 210.3, "Reactor Core Isolation Cooling (RCIC) Overspeed Trip Test." Further, Operation's Personnel did not exercise control of the test by running the RCIC system with steam while a piping breach existed. As a result, an inadvertent release of radioactive contamination into the Unit 3 reactor building occurred.

This is a Severity Level IV Violation (Supplement I).

Background

On October 19, 1993, station personnel were scheduled to perform routine test (RT)-X-013-210-3, "Reactor Core Isolation Cooling (RCIC) Overspeed Trip Test". A master clearance was in effect on the RCIC system that had been specifically written to allow for turbine overspeed testing. During preparation for the overspeed test, however, it was identified that the auxiliary steam to RCIC was blocked by another clearance. While the clearance issue was being resolved, maintenance personnel entered the RCIC room and removed a 12 foot section of the RCIC drain line that did not meet minimum wall thickness requirements. The drain line was removed in response to a noncompliance report (NCR) and associated work order that were not part of the RCIC overspeed test. This work had been added to the outage by the scope control committee and was controlled under a one tag sub-clearance which was attached to the RCIC master clearance. When station personnel returned to the room and began system line-up verification, the missing drain line was identified. The potential to exhaust steam through the removed drain line during the overspeed test was recognized and a temporary change (TC) was initiated on the RCIC overspeed test. The purpose of the TC was to fail closed RCIC steamline drain air operated valves (AO)-35 and AO-34 to isolate this removed line and prevent auxiliary steam from entering the RCIC room. The TC was reviewed and approved and the RCIC overspeed test was performed satisfactory. During restoration of the RCIC steamline drain valves, however, a puff of residual steam exhausted from the section of cut drain line into the RCIC room. This exhaust was auxiliary steam that had become trapped between motor operated valves (MO)-131 and MO-16 following the completion of overspeed testing.

Reasons for the Violation

A lack of proper work coordination and control allowed potentially incompatible work activities to be conducted simultaneously. This unnecessarily challenged the clearance and tagging process and the worker understanding of the impact of applying auxiliary steam to the RCIC system.

The use of the master clearance to protect the maintenance personnel replacing the drain line was inappropriate since it did not fully isolate the workers from the auxiliary steam system, a potential energy source. The protection that was provided by the master clearance was compromised when a normally removed spool piece which connects auxiliary steam to the RCIC system was installed to support overspeed testing. The fact that the spool piece is normally removed contributed to the failure to account for auxiliary steam as a potential energy source.

The use of a TC to provide worker protection when the potential to exhaust steam into the RCIC room through the cut drain line was inappropriate. The TC allowed for the test to continue and was used to compensate for an inadequate clearance. Although the use of a TC in this manner was not specifically prohibited by procedure, use of the TC allowed worker protection to be removed before the steamline drain line replacement was completed. In contrast, a revision to the clearance would have prevented the trapped auxiliary steam from being released until after the drain line was reassembled because the clearance would not have been removed until the work was completed.

Finally, neither the system manager or the TC reviewers realized the potential for a pocket of pressurized steam to exist in the RCIC system following the overspeed test. Therefore, they did not recognize that the TC created the potential to release auxiliary steam into the RCIC room through the cut drain line following restoration of the drain valves.

Corrective Steps That Have Been Taken and the Results Achieved

Performance Enhancement Program (PEP) investigation #I000410 was initiated to evaluate the causes of this incident and to develop corrective actions to prevent recurrence.

Following the event, the Senior Manager Operations emphasized to shift management personnel that work must be performed in a controlled manner and that standards should not be compromised to complete work when inadequate plans are recognized. Additionally, he stated that shift management should ensure that systems are ready to be tested before testing is initiated.

The Outage Shift Manager coached the System Manager and Shift Supervisor involved with the temporary change on the importance of maintaining a questioning attitude and the need to "call a time out" when evolutions don't proceed according to the plan.

Corrective Steps That Will Be Taken to Avoid Further Violations

This event will be included in the 3R09 outage lessons learned to heighten awareness of the importance to properly coordinate work activities. Additionally, this event will be reviewed in a future Regualification Week for Operations Management. This event will be used to emphasize the expectations that clearance and tagging issues require thorough evaluation and review, especially during outage work when off normal line-ups may be more prevalent. These actions will be completed by June 30, 1994.

Overspeed tests for RCIC, High Pressure Coolant Injection (HPCI) and Reactor Feed Pump Turbines (RFPTs) will be reviewed and revised to include a prerequisite to evaluate in progress work orders on the associated turbine. This prerequisite will support system readiness for testing and will enhance precautions for personnel safety. These actions will be completed by March 1, 1994.

Administrative Procedure A-3, "Temporary Changes to Procedures" will be revised to prohibit TC's to procedures that could circumvent the clearance and tagging process when the applied clearance appears less than adequate. Additionally, the Temporary Change Screening Matrix will be revised to prevent the use of a TC in this manner. This revision will be completed by January 31, 1994.

The Clearance and Tagging Manual will be evaluated to include specific guidance on the tagging of auxiliary steam to RCIC, HPCI and RFPTs during outage and non-outage conditions. In addition, master clearances for RCIC, HPCI and RFPTs in future outages will be evaluated to include danger tags on the auxiliary steam lines until turbine work has been completed. These actions will be completed by September 1, 1994.

Date When Full Compliance Was Achieved

Full compliance was achieved October 19, 1993, after inadequacies of the temporary change to the RCIC overspeed test were identified and corrective actions were initiated.