

September 30, 1994

Docket No. 50-277

Mr. George A. Hunger, Jr.
Director-Licensing, MC 52A-5
PECO Energy Company
Nuclear Group Headquarters
Correspondence Control Desk
P.O. Box No. 195
Wayne, Pennsylvania 19087-0195

Dear Mr. Hunger:

SUBJECT: TYPE A CONTAINMENT INTERGRATED LEAKAGE RATE TEST INTERVAL, PEACH
BOTTOM ATOMIC POWER STATION, UNIT 2 (TAC NO. M89470)

The Commission has issued the enclosed Amendment No.196 to Facility Operating License No. DPR-44 for the Peach Bottom Atomic Power Station, Unit 2. This amendment consists of changes to the Technical Specifications (TS) in response to your application dated May 13, 1994, as supplemented by your letter dated August 28, 1994.

This amendment changes the TS by allowing the third Type A Containment Integrated Leakage Rate Test in the second 10-year service period to be conducted during refueling outage 11 scheduled for September 1996. This TS change is consistent with a one-time exemption from Appendix J to 10 CFR Part 50 that extends the 10-year service period and allows the three type A tests to be performed at intervals that are not approximately equal.

You are requested to inform the staff, in writing, when this amendment has been implemented. A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

/s/

Joseph W. Shea, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

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Enclosures:

1. Amendment No. 196 to License No. DPR-44
2. Safety Evaluation

cc w/enclosures:
See next page

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NAME	: MO'Brien	: JShea	: JShea/rb	: RBarrett	: R Weisman	: MThadani	:
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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in black ink, appearing to read "JWS", written over a horizontal line.

Joseph W. Shea, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 196 to License No. DPR-44
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. George A. Hunger, Jr.
PECO Energy Company

Peach Bottom Atomic Power Station,
Units 2 and 3

cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

PHILADELPHIA ELECTRIC COMPANY

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-277

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 196
License No. DPR-44

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Philadelphia Electric Company, et al. (the licensee) dated May 13, 1994, as supplemented by letter dated August 28, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I.
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health or safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. DPR-44 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 196, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Mohan C. Thadani, Acting Director
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 30, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 196

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised areas are indicated by marginal lines.

Remove

167

Insert

167

PBAPS

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS3.7.A Primary Containment (Cont'd.)4.7.A Primary Containment (Cont'd.)

L_{tm} = measured ILR at 25 psig (P_t)

L_{am} = measured ILR at 49.1 psig (P_a), and

$\frac{L_{tm}}{L_{am}} \leq 0.7$, otherwise

$L_t = L_a (P_t/P_a)^{1/2}$

where

L_a = 0.5 percent of the primary containment volume per 24 hours at 49.1 psig

P_a = peak accident pressure (psig)

P_t = appropriately measured test pressures (psig)

c. The ILRT's shall be performed at the following minimum frequency:

1. Prior to initial unit operation.
2. After the preoperational leakage rate tests, a set of three Type A tests shall be performed at approximately equal intervals during each 10 year service period.* These intervals may be extended up to eight months if necessary to coincide with refueling outage.

d. The allowable leakage rates, L_{tm} and L_{am} , shall be less than $0.75 L_t$ and $0.75 L_a$ for the reduced pressure tests and peak pressure tests, respectively.

* Except for third Type A test in the second 10 year service period, which will be performed during the PBAPS, Unit 2 refueling outage 11 currently scheduled for September 1996.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 196 TO FACILITY OPERATING LICENSE NO. DPR-44

PHILADELPHIA ELECTRIC COMPANY
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DELMARVA POWER AND LIGHT COMPANY
ATLANTIC CITY ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2

DOCKET NO. 50-277

1.0 INTRODUCTION

By letter dated May 13, 1994, as supplemented by letter dated August 28, 1994, the Philadelphia Electric Company (PECo, the licensee) submitted a request for changes to the Peach Bottom Atomic Power Station, Unit No. 2, Technical Specifications (TS). The requested changes would allow an extension of the second 10-year Type A Containment Integrated Leak Rate Test (CILRT) service period and an extended interval between the second and third Type A tests in the second 10-year period. The August 28, 1994 letter clarified the proposed TS wording and did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The existing TS Surveillance Requirement 4.7.A.2.c.2 states that "After the preoperational leakage rate tests, a set of three Type A tests shall be performed at approximately equal intervals during each 10-year service period." This one-time change would extend the Type A surveillance test service period, and increase the elapsed time since the last Type A test (April 1991). This extension will allow performing three CILRTs, instead of four CILRTs, within the second 10-year service period. The benefit of not performing the additional CILRT is a reduction in personnel radiation exposure. A dose saving will be realized from eliminating contamination, reducing exposure for venting and draining, and from setup and restoration of instrumentation required to perform the test. The TS change is implemented by the addition of a footnote to item 4.7.A.2.c.2 of the TS explaining the one-time extension.

The TS change could introduce the possibility that primary containment leakage in excess of the allowable value remain undetected during the proposed 24 month extension of the interval between the performance of the second and the third Type A test for the PBAPS Unit 2 primary containment. There are two types of mechanisms which could cause the degradation of the containment: (1) degradation due to a modification or maintenance activity on a component or system (i.e., activity-based), and (2) degradation resulting from a time-based failure mechanism. The licensee performed a review of the history of the PBAPS Unit 2 CILRT results to evaluate the risk of activity-based and time

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based degradation. This review identified only one activity-based component failure detected during past CILRTs which occurred in June 1985. The measured mass point and total time leakage rates measured for the June 1985 CILRT stabilized at approximately 0.70% wt/day, which failed to meet the TS and 10 CFR Part 50, Appendix J criterion of less than 0.375% wt/day (0.75 La). Following the completion of repairs, the CILRT was started again and passed with an as-left leakage of 0.0156% wt/day. The licensee determined that the test failure was primarily due to a packing leak on a torus vacuum relief valve. This and other packing leaks were not revealed by local leak rate testing because the packing was not included in the test boundary. After this test failure the licensee performed a plant modification to ensure that in the future the packing would be subjected to local leak rate test pressure. Block valves and/or test connections were also added to ensure that adequate local leak rate tests of containment isolation valves are performed.

The Type B and C test (Local Leak Rate Test (LLRT)) program also provides assurance that containment integrity has been maintained. LLRTs demonstrate operability of components and penetrations by measuring penetration and valve leakage. Additionally, there have been no modifications made to the plant that could adversely affect the test results.

Since the licensee has justified the leaktight integrity of the containment based on previous leakage test results, the staff concludes that a one-time extension beyond the maximum permitted test interval will not have a significant safety impact. Therefore, the staff concludes that the licensee's request of one-time extension of the 10-year service period and one-time extension of the test interval between consecutive CILRTs for the 2nd 10-year service period is acceptable.

The licensee proposed to implement the one time TS change by adding a footnote to TS 4.7.A.2.C.2 detailing the extended interval. By letter dated August 28, 1994, the licensee provided a clarification to the proposed footnote. The proposed footnote is acceptable to the staff.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no

public comment on such finding (59 FR 32235). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. Liu

Date: September 30, 1994