

BEFORE THE

UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of

PHILADELPHIA ELECTRIC COMPANY

:
:
:

Docket Nos. 50-277
50-278

AMENDMENT TO

NOVEMBER 18, 1976

APPLICATION FOR AMENDMENT

OF

FACILITY OPERATING LICENSES

DPR-44 & DPR-56

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By letters dated August 13, 1976 (J. L. Hankins (PECo) to K. R. Goller (NRC)) and November 17, 1976 (J. L. Hankins (PECo) to K. R. Goller (NRC)), Philadelphia Electric Company requested certain exemptions from the requirements of 10 CFR 50, Appendix J. By letter dated November 18, 1976 (E. J. Bradley (PECo) to B. C. Rusche (NRC)), Philadelphia Electric Company submitted an Application for Amendment of Facility Operating

Licenses DPR-44 and DPR-56 to bring certain areas of the containment leakage testing program at Peach Bottom, as specified in Sections 3.7.A and 4.7.A of the Technical Specifications, into conformance with the requirements of 10 CFR 50, Appendix J, but which also reflected the exemptions from Appendix J as requested in the August 13, 1976 and November 17, 1976 letters.

By letter dated January 22, 1981 (R. W. Reid (NRC) to E. G. Bauer (PECo)), the NRC requested Philadelphia Electric Company to provide additional information concerning the August 13, 1976 request for certain exemptions from the requirements of 10 CFR 50, Appendix J. By letter dated May 15, 1981 (S. L. Daltroff (PECo) to J. F. Stolz (NRC)), Philadelphia Electric Company submitted an update of the information in the 1976 Application for Amendment as a result of a complete review of the containment isolation valves at Peach Bottom in response to the NRC's request for additional information.

Subsequently, on September 12, 1983, the NRC notified Philadelphia Electric Company by telephone of the results of the safety evaluations of the May 15, 1981, letter and other previously related submittals referenced herein and requested that Philadelphia Electric Company amend the 1976 Application for Amendment to incorporate the revised containment leakage testing program as submitted in the May 15, 1981 letter and to reflect the conclusions of the NRC's safety evaluations.

Accordingly, Philadelphia Electric Company, Licensee under Facility Operating Licenses DPR-44 and DPR-56 for Peach Bottom Atomic Power Station Unit No. 2 and Unit No. 3, respectively, hereby amends its Application of November 18, 1976, by deleting the proposed Technical Specification pages 167, 168, 169, 184, 184a, 185, 186, 187, 187a, 188 and 192 referred to in the November 18, 1976, Application and substituting therefor updated pages 167, 168, 169, 170, 184, 184a, 185, 186, 187, 187a, 188, and 192 and new pages 168a, 188a, and 192a which are attached hereto and incorporated herein by reference. Revised page 166 of the proposed Technical Specifications incorporated in the November 18, 1976, Application remains unchanged and is attached hereto as a matter of completeness and is incorporated herein by reference. Changes to the existing Technical Specifications or changes to the November 18, 1976, Amendment Application are indicated by a vertical bar in the margin of the attached pages. Changes to the existing Technical Specifications, which were proposed in the November 18, 1976, Application and remain unchanged by this amendment to the Amendment Application, are indicated by a double vertical bar in the margin of the attached pages.

A discussion of each of the proposed changes is set forth below.

- 1) The Licensee, in its November 18, 1976, Amendment Application proposed to determine the acceptability of an Integrated Leak Rate Test (ILRT) by correcting out of specification ILRT results with post-ILRT, Local Leak Rate Test (LLRT) values measured before and after repairs are made to identified excessive leakage paths, i.e. by subtracting the differential pre- and post-repair local leakage from the measured integrated leakage. The NRC safety evaluation concluded that this method of correcting ILRT test results is not conservative in that the majority of the pre-repair leakage may not be leakage out of the containment (e.g., valve packing leaks, body-to-bonnet leaks, etc. of valves inside containment) and if this leakage is subtracted from the measured integrated leakage rate, erroneous and non-conservative results occur.

In contrast, the NRC safety evaluation also concluded that an exemption from the requirements of Section III.A.1.(a) of 10 CFR 50, Appendix J, is acceptable provided the method used to correct the measured integrated leakage rate provides a conservative assessment of containment leakage. The Licensee proposes either of the following methods for correcting the measured containment integrated leakage rate which conforms to the alternative technique for meeting the

objectives of Section III.A.1.(a) as found acceptable by the NRC and provided in the safety evaluation.

- A) When excessive leakage which will prevent satisfactory completion of the ILRT test is identified, these leakage paths may be isolated. Any isolated path must be capable of being tested by local leakage testing methods to ensure that any such leakage can be quantified. With the leakage paths so isolated, the ILRT will then be completed and the "as found" ILRT is declared a failure.

For each leakage path isolated during the ILRT, local leakage measurements are taken before and after repairs. With these local leakage rates measured, the results of the ILRT can then be corrected in order to satisfy the objectives of Section III.A.1.(a) of Appendix J. The ILRT results are corrected by adding the sum total of the before-repair local leakage rate values to the integrated leakage rate, measured with the leakage paths isolated, to determine the "as found" condition of primary containment. Likewise, the ILRT results are corrected by adding the sum total of the after-repair local leakage rate values to the integrated leakage rate, measured with the

leakage paths isolated, to determine the "as left" condition of primary containment.

- B) When an ILRT is completed but fails to meet the acceptance criteria as specified in Section 4.7.A.2.d of the Technical Specifications, the "as found" ILRT is declared a failure, any identified leakage paths are isolated (as long as they are capable of being local leak rate tested), and another ILRT is conducted with the leakage paths isolated.

Once repairs are made to those leakage paths, local leakage rates are measured. The "as left" condition of primary containment is then determined by adding the post-repair leakage rates to the ILRT leakage rate measured with the leakage paths isolated.

Accordingly, the Licensee, in response to the NRC's request, proposes to change the Surveillance Requirements of Section 4.7.A.2.e on page 168 of the existing Technical Specifications to reflect this alternative technique for meeting the objectives of Section III.A.1.(a) of 10 CFR 50, Appendix J as shown on page 168 and new page 168a of the proposed Technical Specifications.

- 2) The Licensee, in its November 18, 1976, Amendment Application, proposed to allow the two-year interval limit on valve and penetration testing to be extended up to six months in order to coincide with a refueling outage. The NRC safety evaluation concluded that there is no obvious rationale for extending the 2-year interval in order to coincide with a refueling outage since the requirements of Appendix J assume that a refueling outage occurs, on the average, approximately every 15 to 18 months, which is essentially at the midpoint between IRLT's, and that the two-year interval limit allows for the flexibility to plan for local leakage rate tests to coincide with refueling outages. In the unusual condition where more than 2 years elapse without a refueling outage, it is expected that an extended outage of some type will occur with which local leakage testing can be coordinated.

Accordingly, the Licensee, in response to the NRC's request, proposes to delete the changes to Section 4.7.A.2.f on pages 168 and 169 of the Technical Specifications as set forth in the November 18, 1976, Amendment Application so that the Technical Specifications will remain in conformance with the two-year interval limit on testing of valves and penetrations as required by 10 CFR 50, Appendix J.

Additionally, the Licensee proposes to add the phrase "but in no case at intervals greater than two years" to the second paragraph of Section 4.7.A.2.f, as shown on page 169 of the proposed Technical Specifications, to clarify that the two-year limit on testing applies to the Main Steam Isolation Valves (MSIV) as well.

- 3) Table 3.7.4 of the proposed Technical Specifications, submitted in the November 18, 1976, Amendment Application, lists testable containment isolation valves at Peach Bottom Units 2 and 3 along with comments regarding the testing of these valves. As mentioned previously, the Licensee's letter dated May 15, 1981, provided a complete review of the testable isolation valves at Peach Bottom which was performed subsequent to the November 18, 1976, Amendment Application in response to a request for more information from the NRC and included revisions to the notes and requests for exemptions from certain requirements of Appendix J.

As requested in the conclusions of the NRC's safety evaluation of the testable isolation valves, the Licensee proposes to replace the valve testing program as presented in Table 3.7.4 on pages 185, 186, 187, 187a and 188 of the November 18, 1976, Amendment Application with the revised valve testing program set forth in the

Licensee's May 15, 1981, letter as shown in Table 3.7.4 on revised pages 185, 186, 187, 187a, 188, and new page 188a of the proposed Technical Specifications. The proposed Table 3.7.4 reflects revisions to the existing Table 3.7.4 submitted subsequent to the May 15, 1981, letter via an Application for Amendment dated December 15, 1982, and approved by Amendment No. 90 for both Units 2 and 3 dated March 1, 1983. Likewise, the proposed Table 3.7.4 reflects the addition of testable isolation valves on penetration number 47 as the result of modifications performed subsequent to the May 15, 1981 letter. Additionally, the Licensee proposes to delete Note (7) on page 188 of the Notes for Tables 3.7.2 through 3.7.4 and as referred to in the Notes for Penetration No. N-2 on page 184 of Table 3.7.2 on the basis of the unclarity of the note and the confusion produced in regards to the testing frequency of air locks. Air locks will be tested in accordance with the criteria as specified in 10 CFR 50, Appendix J, Section III.D.2.(b).

- 4) The Licensee, in its May 15, 1981, letter concerning testable isolation valves at Peach Bottom, proposed to allow reverse direction testing of gate valves MO-14-70, "Torus Water Clean-Up Pump Suction from Suppression Pool", MO-23-58, "High Pressure Coolant Injection Pump

Suction from Suppression Pool", and MO-13-41, "Reactor Core Isolation Cooling Pump Suction from Suppression Pool". The NRC safety evaluation concluded that Appendix J does not require local leakage rate testing of these valves since the valves are water covered throughout the post-accident period and they are not relied upon to prevent the escape of containment air.

Accordingly, the Licensee, based on the conclusion of the NRC safety evaluation, proposes to delete gate valves MO-14-70, MO-23-58, and MO-13-41 as testable isolation valves from Table 3.7.4 on page 187 of the existing Technical Specifications as shown on revised page 187a of the proposed Technical Specifications.

- 5) The Licensee, in its May 15, 1981, letter, proposed to allow reverse direction testing of the manual globe valves on penetrations N-32C, N-32D, and N-218C. The NRC safety evaluation concluded that an exemption from local leakage rate testing of these valves is acceptable since the testing of these valves during an Integrated Leakage Rate Test is sufficient to meet the objectives of Appendix J. However, the Licensee intends to continue local leak rate testing of these valves, only, in the reverse direction.

Accordingly, the Licensee proposes to include the manual globe valves on penetrations N-32C, N-32D, and N-218C as testable isolation valves on Table 3.7.4 as shown on revised pages 186 and 187a of the proposed Technical Specifications.

- 6) The Licensee, in its May 15, 1981 letter, requested an exemption from Local Leak Rate Testing of a group of water-covered torus isolation valves which are located in turbine exhaust lines from the HPCI and RCIC turbines, pump suction lines to the Core Spray pumps and various minimum flow recirculation lines or other recirculation/vent lines from the RHR, HPCI, RCIC and Core Spray Systems. The NRC safety evaluation concluded that since these isolation valves are water sealed throughout the post-accident period by suppression pool water, they are not containment isolation valves as defined by Appendix J and therefore do not require local leak rate testing.

Accordingly, the Licensee, based on the conclusion of the NRC safety evaluation, proposes to exclude those torus isolation valves as identified under Exemption D of the Licensee's May 15, 1981 letter from Table 3.7.4 of the proposed Technical Specifications.

- 7) The Licensee, in its May 15, 1981 letter, requested an exemption from local leak rate testing of the individual isolation valves in the Control Rod Drive (CRD) insert and withdraw lines to the CRD hydraulic control units. The NRC safety evaluation concluded that Appendix J does not require local leak rate testing of these valves since the insert and withdraw lines represent closed systems with regard to containment atmosphere and are constantly under water pressure from reactor vessel liquid level at reactor vessel pressure.

Accordingly, the Licensee, based on the conclusion of the NRC safety evaluation, proposes to exclude the isolation valves in the CRD insert and withdraw lines to the hydraulic control units as identified in the Licensee's May 15, 1981 letter from Table 3.7.4 of the proposed Technical Specifications.

- 8) Section 4.7.A.2 of the Technical Specifications sets forth the surveillance requirements for primary containment and in particular, concerns the Integrated Leak Rate Testing program at Peach Bottom Atomic Power Station. In specific, Section 4.7.A.2.b on page 167 defines the term Pa as the peak accident pressure with units of "psia". The Licensee proposes to change the units of Pa from "psia" to "psig" in order to conform

with the units for Pa as specified in 10 CFR 50, Appendix J, Section II.I. and to remain consistent with the units of the peak accident pressure as indicated throughout 4.7.A.2 of the Technical Specifications.

- 9) Page 170 of the Technical Specification was revised to accommodate the redistribution of material as a result of the increase in the content of the surveillance requirements under the proposed Technical Specification 4.7.A.2.e on page 168 and new page 168a attached hereto. Also, page 170 was revised to correct a typographical error under Section 3.7.A.3.a of the existing Technical Specifications in that the word "Expect" was changed to "Except" in order to clarify that the initial statement is intended to identify that the Limiting Condition for Operation (LCO) in Section 3.7.A.3.b is an exception to the LCO as set forth in Section 3.7.A.3.a.

Page 184a of the Technical Specifications as proposed in the November 18, 1976 Amendment Application was revised to correct a typographical error on the Testable Penetration listed under Penetration Number N-12 on Table 3.7.3 of the Technical Specifications. "RHRS" was changed to "RHR" in order to clarify that there is no RHRS system at Peach Bottom and that there is only one

RHR system on each unit. Penetration No. N-12 applies to the "RHR Shutdown Pump Supply".

- 10) The Licensee proposes to revise the Bases for Sections 3.7.A and 4.7.A on page 192 of the Technical Specifications to reflect the principles for those areas of containment integrated leak rate testing and local leak rate testing which are not in direct conformance with the requirements of 10 CFR 50, Appendix J, but which were found to be acceptable in the conclusions of the NRC safety evaluation and to delete those areas which are no longer applicable as shown on revised page 192 and new page 192a of the proposed Technical Specifications. New page 192a is included to accommodate the redistribution of material of the proposed changes to page 192.

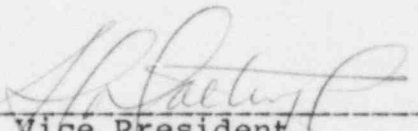
The proposed changes revise the containment leakage testing program to conform with the requirements of 10 CFR 50, Appendix J or the conclusions of the NRC's safety evaluations regarding the exemptions previously requested in the Licensee's August 13, 1976, November 17, 1976, and May 15, 1981, letters. Since the proposed changes have acceptability for the issue clearly identified by an NRC position, and since the proposed changes do not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated,

or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety, the Licensee has concluded that the amendment requests do not involve a significant hazards consideration.

The Plant Operation Review Committee and the Nuclear Review Board (off-site safety review committee) have reviewed the proposed changes to the Technical Specifications and have concluded that they do not involve an unreviewed safety question or a significant hazard consideration and will not endanger the health and safety of the public.

Respectfully submitted,
PHILADELPHIA ELECTRIC COMPANY

By


Vice President

COMMONWEALTH OF PENNSYLVANIA

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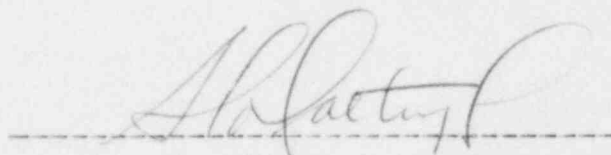
COUNTY OF PHILADELPHIA

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ss.

S. L. Daltroff, being first duly sworn, deposes and says:


That he is Vice President of Philadelphia Electric Company, the Applicant herein; that he has read the foregoing Amendment to Application for Amendment of Facility Operating Licenses and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.



Subscribed and sworn to

before me this 13th day

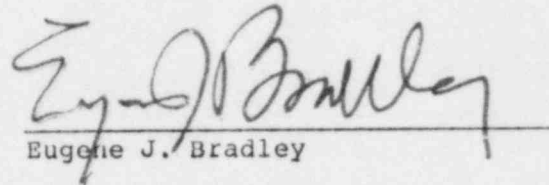
of April, 1984


Notary Public

PATRICIA A. JONES
Notary Public, Phila., Phila. Co.
My Commission Expires Oct. 13, 1986

CERTIFICATE OF SERVICE

I certify that service of the foregoing Amendment was made upon the Commonwealth of Pennsylvania, by mailing a copy thereof, via first-class mail, to Thomas R. Gerusky, Director, Bureau of Radiological Protection, P. O. Box 2063, Harrisburg, PA 17120, all this 19th day of April, 1984.

A handwritten signature in dark ink, appearing to read "Eugene J. Bradley", is written over a horizontal line.

Attorney for
Philadelphia Electric Company