ATTACHMENT 2

PEACH BOTTOM ATOMIC POWER STATION
UNIT 2

Docket No. 50-277

License No. DPR-44

TECHNICAL SPECIFICATION CHANGE REQUEST
No. 94-05

List of Attached Pages

Unit 2

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LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS

3.7.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

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

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

where

La = 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 PBAPS Unit 2, refueling outage 10.

ATTACHMENT 3

PEACH BOTTOM ATOMIC POWER STATION
UNIT 2

Docket No. 50-277

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EXEMPTION REQUEST

Supporting Information: 5 Pages

Docket No. 50-277
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Exemption Request

An exemption from 10 CFR 50, Appendix J, section III.D.1.(a) is necessary due to a difference between the PBAPS, Unit 2 second Appendix J 10-year service period and the second 10-year plant inservice inspection interval.

10 CFR 50.54(o) requires that the primary reactor containments for water cooled power reactors shall be subject to the requirements set forth in 10 CFR 50, Appendix J. Section III.D.1.(a) of 10 CFR 50, Appendix J states, "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. The third test of each set shall be conducted when the plant is shutdown for the 10-year plant inservice inspections."

The difference between the 10-year plant inservice inspection interval and the 10 CFR 50, Appendix J 10-year service period is the result of a revision to the length of the second 10-year plant inservice inspection interval dates which was discussed in a letter from G. J. Beck (PECO Energy Company) to USNRC, dated February 25, 1991. Our February 25, 1991 letter established the revised second 10-year plant inservice inspection interval dates as September 19, 1986 to November 4, 1997. Therefore, we are proposing to re-align the Type A test service period with the 10-year inservice inspection interval by requesting an exemption to 10 CFR 50, Appendix J to extend the interval between the second and third Type A test by 24 months (i.e., the interval would be 66 months) and to extend the Appendix J 10-year service period.

The 10 CFR 50, Appendix J, requirement that the Type A tests be performed at approximately equal intervals would require the performance of a Type A test during the upcoming PBAPS, Unit 2 refueling outage 10 scheduled to begin September, 1994. 10 CFR 50, Appendix J, also requires that the third Type A test during the 10-year service period be conducted when the plant is shutdown for the 10-year plant inservice inspections. This would require the performance of another Type A test during the PBAPS, Unit 2 refueling outage 11 that is scheduled to begin in September, 1996, since this refueling outage 11 comes at the end of the 10-year inservice inspection interval. In order to avoid performing two consecutive Type A tests, PECO Energy Company is requesting a schedular exemption that would extend the PBAPS, Unit 2 Type A test interval such that the interval is not "approximately equal" to the first two Type A test intervals. This schedular exemption includes extending the Appendix J 10-year service period.

Performing the Type A test during two consecutive refueling outages to comply with 10 CFR 50, Appendix J would result in an unnecessary increase in personnel radiation exposure and increased cost by unnecessarily increasing the length of one of the affected refueling outages.

Justification for the Exemption

We are requesting a one-time (i.e., temporary) schedular exemption from 10 CFR 50, Appendix J, section III.D.1.(a) which establishes the periodic test schedule for Type A tests (i.e., Containment Integrated Leakage Rate Test (CILRT)), specifically, the 10 CFR 50, Appendix J requirement that three Type A tests be performed at approximately equal intervals during the 10-year service period.

The purpose of this requirement is to determine that the total leakage from primary containment does not exceed the maximum allowable leakage rate, La, as specified in the PBAPS, Units 2 and 3 Facility Operating License. This primary containment maximum allowable leakage rate provides an input assumption to the calculation required to ensure that the maximum potential offsite dose during a design basis accident does not result in a dose in excess of that specified in 10 CFR 100.

A review of activity-based failure mechanisms has determined that the potential from degradation due to activity based mechanisms is minimal.

Regarding the potential for primary containment degradation due to a time-based mechanism, we have concluded that the PBAPS Local Leak Rate Test (LLRT) program would identify most types of penetration leakage. The LLRT program involves measurement of leakage from Type B and Type C primary containment penetrations as defined in 10 CFR 50, Appendix J.

The 10 CFR 50, Appendix J, Type B tests are intended to detect local leaks and to measure leakage across pressure containing or leakage-limiting boundaries other than valves, such as containment penetrations incorporating resilient seals, gaskets, expansion bellows, flexible seal assemblies, door operating mechanism penetrations that are part of the containment system, doors, and hatches. 10 CFR 50, Appendix J, Type C testing is intended to measure reactor system primary containment isolation valve leakage rates. The frequency of the Type B and Type C testing is not being altered by the proposed TS change. The acceptance criterion for Type B and Type C leakage is 0.6 La (i.e., 0.3 % wt/day) which, when compared to the Type A test acceptance criterion of 0.75 La (i.e., 0.375 % wt/day), is a significant portion of the Type A test allowable leakage.

Finally, a review of previous PBAPS, Unit 2 CILRT results concluded that the only failure mechanism which has been detected during the past CILRTs is activity-based and that there is no indication of time-based failures that would not be identified during the performance of Type B and Type C tests. Therefore, we have concluded that the proposed extended test interval would not result in a non-detectable PBAPS, Unit 2 primary containment leakage rate in excess of the allowable value (i.e., 0.5% wt/day) established by the TS and 10CFR50, Appendix J.

Based on the above technical justification, we request a one-time exemption of the requirements of 10 CFR 50, Appendix J, section III.D.1.(a), in accordance with two of the criteria of 10 CFR 50.12.

The NRC may, upon application, grant exemptions from the requirements of 10 CFR 50, where special circumstances are present. 10 CFR 50.12(a)(2)(ii) defines such a circumstance where, "Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule..." The underlying purpose of 10 CFR 50, Appendix J, section III.D.1.(a) is to establish and maintain a level of confidence that any primary containment leakage, during a hypothetical design basis accident, will remain less than or equal to the maximum allowable value, La, established by 10 CFR 50, Appendix J, by performing periodic Type A testing. Compliance with 10 CFR 50, Appendix J would require PECO Energy Company to perform a Type A test during two consecutive refueling outages at PBAPS, Unit 2. This is not necessary to achieve the underlying purpose of the rule, as explained in the above technical justification. The technical justification supports the conclusion that the requested schedular exemption to extend the PBAPS, Unit 2 third Type A test by 24 months will maintain the same level of confidence that any PBAPS, Unit 2 primary containment leakage will remain less than or equal to the maximum allowable leakage rate value, La, during the proposed one-time extension.

10 CFR 50.12(a)(2)(iii) states the NRC may grant exemptions from requirements of 10 CFR 50 where, "Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated..." The current PBAPS, Unit 2 Type A test schedule established by 10 CFR 50, Appendix J, section III.D.1.(a) will require that the Type A test be performed during two consecutive PBAPS, Unit 2 refueling outages. This current test schedule will result in unnecessary additional personnel radiation exposure in order to perform the test and unnecessary costs associated with an increase in the refueling outage length of two days.

Information Supporting an Environmental Assessment

With respect to the requested exemption for PBAPS, Unit 2, the following information is provided to support an Environmental Assessment.

Identification of Proposed Action

The proposed action is to grant an exemption from 10 CFR 50, Appendix J, section III.D.1.(a) which requires a set of three Type A tests (i.e., Containment Integrated Leakage Rate Test (CILRT)) to be performed at approximately equal intervals during each 10-year service period and specifies that the third test of each set shall be conducted when the plant is shutdown for the performance of the 10-year plant inservice inspection. This one-

time exemption would allow the third, PBAPS, Unit 2 Type A test to be performed during PBAPS, Unit 2 refueling outage 11 scheduled to begin in September, 1996, approximately 66 months after the last PBAPS, Unit 2 CILRT test, thereby coinciding with the 10-year plant inservice inspection refueling outage. Furthermore, this one-time exemption would result in the third Type A test not being performed at an interval approximately equal to previous intervals during the 10-year service period, and the Appendix J 10-year service period would be extended. Without the exemption, the PBAPS, Unit 2 third Type A test would be required to be performed during the PBAPS, Unit 2 refueling outage 10 scheduled to start September, 1994, and during the PBAPS, Unit 2 refueling outage 11, scheduled to begin in September, 1996, to coincide with the 10-year inservice inspection refueling outage.

The Need for the Proposed Action

The requested exemption is needed because the requirements of 10 CFR 50, Appendix J, and the current PBAPS, Unit 2 refueling outage schedule would require that the 10 CFR 50, Appendix J, Type A test be performed during two consecutive refueling outages. There is a difference between the 10 CFR 50, Appendix J 10-year service period and the 10-year plant inservice inspection interval for PBAPS, Unit 2. Without this exemption, the 10 CFR 50, Appendix J, Type A test would be required to be performed during the PBAPS, Unit 2 refueling outage 10 scheduled to begin in September, 1994, at an interval approximately equal to the previous PBAPS, Unit 2 Type A test intervals and during the PBAPS, Unit 2 refueling outage 11 scheduled to begin September, 1996, in order to coincide with the second 10-year inservice inspection refueling outage.

Environmental Impacts of the Proposed Action

The requested exemption would not significantly increase the probability of exceeding the maximum allowable value of expected primary containment leakage (i.e., La, established by 10 CFR 50, Appendix J), during a hypothetical design basis accident, therefore, the primary containment integrity would be maintained. Although the requirements in 10 CFR 50, Appendix J, section III.D.1.(a) state that three Type A tests shall be performed in each 10-year service period and at approximately equal intervals during that service period, we have concluded that performing the third Type A test of the 10-year service period approximately 66 months after the second Type A test would meet the underlying purpose of the rule and that any primary containment leakage during a hypothetical design basis accident will remain less than the maximum allowable leakage rate value, La, established by 10 CFR 50, Appendix J.

Alternative to the Proposed Action

Since we have concluded that there is no significant environmental impacts associated with the requested exemption, any alternatives would have either no or greater environmental impact.

Alternative Use of Resources

This proposed exemption does not involve the use of any resources not previously considered.

Information Supporting a Finding of No Significant Impact

We have concluded, based on the preceding environmental assessment, that the proposed action will not have a significant effect on the quality of the human environment, therefore, an environmental impact statement for the requested exemption would not be required.