

**PECO ENERGY**

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Docket Nos. 50-277  
50-278

License Nos. DPR-44  
DPR-56

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

Subject: Peach Bottom Atomic Power Station, Units 2 and 3  
Response to Request for Additional Information  
Concerning Revision 2 to Relief Request No. GVRR-2  
to the Second Ten Year Interval of the Inservice  
Testing (IST) Program

- References:
1. Letter from G. A. Hunger, Jr. (PECO Energy Company) to U. S. Nuclear Regulatory Commission (USNRC), dated February 15, 1995
  2. Letter from J. W. Shea (USNRC) to G. A. Hunger, Jr. (PECO Energy Company), dated March 13, 1995
  3. Letter from G. A. Hunger, Jr. (PECO Energy Company) to USNRC, dated April 17, 1995
  4. Letter from J. F. Stolz (USNRC) to G. A. Hunger, Jr. (PECO Energy Company), dated July 7, 1995
  5. Letter from G. A. Hunger, Jr. (PECO Energy Company) to USNRC, dated July 14, 1995

Dear Sir:

The Inservice Testing Program (IST) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3 currently includes Revision 1 to Relief Request No. GVRR-2. In Reference 1, PECO Energy submitted a proposed Revision 2 to this relief request. A USNRC request for additional information and subsequent PECO Energy response were transmitted by References 2 and 3, respectively. In Reference 4, the USNRC denied Revision 2 to Relief Request No. GVRR-2. In Section 2.3 of the Safety Evaluation attached to Reference 4, the USNRC provided three general concerns associated with the denial. Reference 5 provided a modified version of Revision 2 to Relief Request No. GVRR-2, and addressed three USNRC concerns identified in the Safety Evaluation. The purpose of this letter is to respond to additional questions regarding Revision 2 to Relief Request No. GVRR-2. Each question is identified below, followed by PECO Energy's response:

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USNRC questions Nos. 1 and 2:

Discuss the hardship associated with testing excess flow check valves throughout the refueling outage. Please address as a minimum the following points in your discussion:

- a) reactor conditions required to perform testing
- b) time to perform each individual test
- c) unique system design
- d) justification for testing at the end of refueling outage

Provide a discussion to support extension of the refueling outage by up to two days if testing is continued to be performed during the refueling outage.

PECO Energy response:

The Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3 system design does not include test taps upstream of the Excess Flow Check Valves (EFCVs). For this reason, the EFCVs cannot be isolated and tested using another pressure source; reactor pressure is required to perform the testing. During refueling outages, the duration of time in which adequate reactor pressure is available is much shorter than the time it takes to test all of the EFCVs. This is based on past experience which has shown that the approximate duration for EFCV testing is 2 days.

A small number of tests (4 valves scheduled for 3R10) can be performed at the beginning of the outage just after shutdown during depressurization. This depressurization time is approximately 4 hours. The remainder of the tests must be performed at the end of the refueling outage when the reactor is again pressurized. This corresponds to the time when the vessel hydrostatic test is being performed. The scheduled hydrostatic test duration is driven by EFCV testing; EFCV testing is the critical path activity during the hydrostatic test. Based on past history and including contingencies for the complexity of test coordination activities, limit switch adjustments, and vessel depressurizations (see next paragraph), testing the remaining EFCVs during the hydrostatic test would add approximately 2 days to the refueling outage. This represents a significant financial hardship. Additionally, minimizing the hydrostatic test duration reduces the challenge to the reactor operator caused by manually controlling reactor pressure at near solid conditions for extended periods of time.

As a result of more efficient outage planning (i.e., shorter outages), decay heat levels during the hydrostatic test are higher than in the past. If the hydrostatic test was extended to test all remaining EFCVs, the vessel could require depressurization as many as 4 times to avoid exceeding the refuel mode bulk coolant temperature limit of 212 degrees F. This is an evolution which challenges the reactor operators and thermally cycles the reactor vessel and should be avoided if possible.

USNRC question No. 3:

Identify the valves that are currently scheduled to be tested during system outages when the reactor is at power.

PECO Energy response:

The 78 EFCVs (39/unit) currently scheduled to be tested during system outages when the reactor is at power are as follows:

XFC-2(3)-02-305A(B)	XFC-2(3)-02-007A(B)	XFC-2(3)-02-062A(B,C,D)
XFC-2(3)-02-023A(B,C,D)	XFC-2(3)-12-066A(B)	XFC-2(3)-12-80457L(H)*
XFC-2(3)-13-055A(B)	XFC-2(3)-14-031A(B)	XFC-2(3)-02-025
XFC-2(3)-02-031B(C,D,E,G,H,J,K,M,N,P,R,T,U,V,W)		XFC-2(3)-23-037A(B)

\*Pending Unit 3 modification installation, Unit 2 valves were installed during 2R10.

USNRC question No. 4:

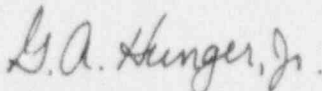
Document your justification for excluding excess flow check valves from the Appendix J program.

PECO Energy response:

The PBAPS, Units 2 and 3 Updated Final Safety Analysis Report (UFSAR) identifies valves which are tested in accordance with 10CFR50, Appendix J. EFCVs installed on small diameter instrument sensing lines are tested during the Integrated Leak Rate Test (Type A). This testing is performed in accordance with the guidance provided in the Standard Review Plan (NURF-0800), Section 6.2.6, "Containment Leakage Testing."

If you have any questions, please contact us.

Very truly yours,



G. A. Hunger, Jr.  
Director - Licensing

Enclosure

cc: T. T. Martin, Administrator, Region I, USNRC  
W. L. Schmidt, USNRC Senior Resident Inspector, PBAPS