

IEB 80-13

**PECO ENERGY**

PECO Energy Company  
Nuclear Group Headquarters  
965 Chesterbrook Boulevard  
Wayne, PA 19087-5691

June 13, 1995

Docket No. 50-278  
License No. DPR-56

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

Subject: Peach Bottom Atomic Power Station, Unit 3  
Action Plan for Core Spray In-Vessel Piping

- References: 1) Letter from G.A. Hunger, Jr. to U.S. Nuclear Regulatory Commission dated November 5, 1993
- 2) Letter from G.A. Hunger, Jr. to U.S. Nuclear Regulatory Commission dated November 10, 1993
- 3) Letter from G.A. Hunger, Jr. to U.S. Nuclear Regulatory Commission dated December 8, 1993

Dear Sir:

This letter provides a clarification regarding our intent to perform a volumetric analysis on the crack indication found during the Fall 1993 refueling outage (3R09) in the 172.5° azimuth Core Spray downcomer of Peach Bottom Atomic Power Station Unit 3, and our action plan for inspecting and analyzing the crack indication during the upcoming September 1995 refueling outage (3R10). In reference letter 1, PECO Energy provided the NRC with details of the crack indication. Reference letter 2 provided additional details of the crack indication. In reference letter 3, PECO Energy Company committed to determining the ultimate resolution of this issue prior to returning to operation from the next refueling outage (i.e., September 1995, 3R10.)

When the indication of a crack was discovered during the 3R09, IE Bulletin 80-13 required visual examination, PECO Energy performed an analysis to show Unit 3 could return to power and operate safely until 3R10. Analysis of the crack determined the downcomer piping would continue to pass sufficient coolant flow to the core with a 360° through wall crack in the pipe sleeve. In our December 8, 1993 letter, PECO Energy stated that a volumetric analysis (i.e., ultrasonic inspection) may be used to fully characterize the crack indication. A volumetric

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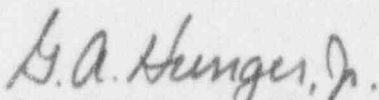
analysis would eliminate conservatism (i.e., 360° through wall assumption) from our existing evaluation by providing an accurate measurement of the depth of the crack. However, because the pipe sleeve is schedule 40 pipe, we would have to assume in our analysis that the slightest surface crack detected by visual examination would propagate through the entire sleeve wall during a future operating cycle. Therefore, PECO Energy has elected to forego a volumetric analysis, and is prepared to perform the IE Bulletin 80-13 required visual inspection of the crack, and maintain the existing conservatism in the analysis.

PECO Energy has developed an action plan for inspecting and analyzing the crack indication during the upcoming refueling outage. In accordance with this plan, PECO Energy Company is designing, and will be prepared to install a mechanical clamp which will restrain the downcomer piping at the crack location. The clamp will be designed to prevent separation of the downcomer pipe; however, we believe that it will not be necessary to install the clamp. During the 3R10 September 1995 refueling outage, the crack indication will be visually inspected, as required by IE Bulletin 80-13, and compared to the previous inspection. We expect that this inspection and comparison will verify that the existing analysis is bounding and justifies continued operation. If this expectation is verified during the refueling outage, PECO Energy will defer installing the clamp. Deferring installation of the clamp will allow the crack repair to be considered in an overall core spray piping and vessel internal inspection and maintenance program. If any future inspection determines the crack growth rate to exceed predicted margins, or the integrity of the downcomer pipe to be suspect, the appropriate repair will be installed.

To implement this action plan and minimize the impact on our refueling outage, we are requesting that the NRC review our existing analysis, and approve deferring installation of a clamp, with the condition that crack growth rate and joint structural integrity remain within predicted margins identified in reference letter 2. PECO Energy will provide the results of our inspection prior to returning to operation from the September 1995 refuel outage; however, your conditional approval of deferring repairs will allow us to better plan and schedule our outage. Accordingly, we request your feedback by August 1, 1995.

If you have any questions please feel free to contact us.

Very truly yours,



G.A. Hunger, Jr., Director  
Licensing Section

cc: T. T. Martin, Administrator, Region I, USNRC  
W. L. Schmidt, USNRC Senior Resident Inspector, PBAPS  
R. R. Janati, Commonwealth of Pennsylvania