

PECO Energy Corlipany 965 Chesterbrook Boulevard Wayne, PA 19087-5691

NRC GL 96-06

May 27, 1997

Docket Nos. 50-277 50-278 50-352 50-353

License Nos. DPR-44 DPR-56 NPF-39 NPF-85

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555-0001

Subject: Peach Bottom Atomic Power Station, Units 2 and 3 Limerick Generating Station, Units 1 and 2 Follow-up Response to NRC Generic Letter 96-06 "Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions."

Reference: Letter from PECO Energy to NRC dated February 10, 1997

Gentlemen:

By letter dated February 10, 1997 PECO Energy Company submitted a 120 day required response for Peach Bottom Atomic Power Station, Units 2 and 3, and Limerick Generating Station, Units 1 and 2, stipulated in NRC Generic Letter (GL) 96-06, "Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions." In our 120 day response PECO Energy committed to provide the NRC with our determination of the final solutions which will address the susceptible components or systems identified in the 120 day response. This letter provides PECO Energy's present course of action.

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GL 96-06, under the Backfit Discussion, states that the issues described were considered compliance backfits, specifically, compliance to USAS B31.1 or the American Society of Mechanical Engineers (ASME) Code for piping design. The industry has not agreed with the NRC staff's reasons for the requested actions and the basis for invoking the compliance exception. Inquiries have been made to the ASME Code Committee and the results are pending. If the results show that the NRC's interpretation is incorrect, PECO Energy may support an initiative to challenge this compliance exception determination.

PECO Energy has reviewed the likelihood of a containment breach due to the overpressurization described in GL 96-06 for PBAPS and LGS. The results of that effort concluded that the event of such an overpressurization resulting in a containment breach was not likely. The NRC previously addressed overpressurization (March 1989), and the NRC staff's conclusion can be found in NUREG-0933 "A Prioritization of Generic Safety Issues: Main Report and Supplements", Safety Issue 150, revision 1. The NRC staff's conclusion states that "The estimated public risk associated with overpressurization of containment penetrations was not significant." PECO Energy also investigated the likelihood of a Technical Specifications required manual shutdown resulting from the failure of a relief valve installed to prevent overpressurization as compared to the probability of the overpressurization event described in GL 96-06. The investigation showed that the installation of the relief valves would incrementally increase risk due to the risk associated with any plant shutdowns.

Attachment 1 to this letter provides a description of potential physical changes which will provide over-pressurization protection for PBAPS and LGS and a tentative schedule for their completion. However, this is not to be construed as our final disposition regarding GL 96-06.

This letter is being submitted under affirmation, and the required affidavit is enclosed.

If you have any questions regarding this submittal, please contact us.

Very truly yours,

D. J. Helles /Fur

G. A. Hunger, Jr. Director - Licensing

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CC: H. J. Miller, Administrator, Region I, USNRC
W. L. Schmidt, USNRC Senior Resident Inspector, PBAPS
N. S. Perry, USNRC Senior Resident Inspector, LGS
R. R. Janati, Pa Bureau of Radiation Protection

COUNTY OF CHESTER

J. B. Cotton, being first duly sworn, deposes and says: that he is Vice President of PECO Energy Company, the Applicant herein; that he has read the enclosed follow-up response to NRC Generic Letter 96-06 "Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions," for Peach Bottom Atomic Power Station, Units 2 and 3, Facility Operating License Nos. DPR-44 and DPR-56, and Limerick Generating Station, Units 1 and Unit 2, Facility Operating License Nos. NFF-39 and NPF-85, 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.

John B Cotton

Subscribed and sworn to before me this Arday of May 1997.

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Notary Public



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## ATTACHMENT 1

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## PEACH BOTTOM ATOMIC POWER STATION UNITS 2 and 3 Docket Nos. 50-277 50-278 License Nos. DPR-44 DPR-56

## LIMERICK GENERATING STATION UNITS 1 AND 2 Docket Nos. 50-352 50-353 License Nos. NPF-39 NPF-85

## Generic Letter 96-06 FOLLOW-UP TO SUMMARY REPORT

"Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions"

3 pages attached

Attachment 1 May 27, 1997

## PLANNED PHYSICAL CHANGES SUMMARY FOLLOW-UP TO PECC 120 DAY RESPONSE TO GL 96-06

PECO Energy Company's 120 day response to Generic Letter 96-06 identified one penetration pair (i.e., two penetrations and piping common to both) per unit at Limerick Generating Station and three individual penetrations and three penetration pairs per unit at Peach Bottom Atomic Power Station that are potentially susceptible to thermally induced pressurization. Although the penetrations are considered operable, the planned physical changes discussed below will ensure protection against the postulated thermally induced pressurization. These planned physical changes include the addition of a total of one (1) relief valve on each unit at the Limerick Generating Station, and six (6) relief valves on each unit at the Peach Bottom Atomic Power Station.

The following discussion of planned physical changes in no way constitute any commitment to implementation.

#### Limerick Generating Station Penetration Pair X-23 & X-24

This penetration pair contains the Reactor Enclosure Cooling Water (RECW) supply and return to the Recirculation Pump motor oil and seal coolers. This single penetration pair provides non-safety related cooling water to both recirculation pumps. One 3/4 inch thermal relief valve per unit will be installed. The relief valve will be installed on an existing test connection located near the return penetration. The installation located inside the drywell will protect the penetration and be in compliance with ASME Section III. The relief valve's setpoint will be based on ASME Code for faulted conditions to protect the most susceptible component of the penetration. Limerick Unit 1 installation is planned for the next Refuel Outage (1R07) currently scheduled for April 1998. The design is based on walkdowns performed during the recent Unit 2 outage. The new relief valve will be located in the drywell. Installation during the refuel outage will ensure material and manpower availability and allow for minor adjustments to piping routing because of differences between Unit 1 and Unit 2. Limerick Unit 2 installation is planned for the next Refuel Outage (2R05) currently scheduled for April 1999. The design is based on walkdowns performed during the recent Unit 2 outage. The new relief valve will be located in the drywell. Installation during the 2R05 refuel cutage is consistent with PECO's 120 day response based on the Unit's operational status and the safety significance of the work. Installation during the refuel outage will ensure material and manpower availability.

#### Peach Bottom Atomic Power Station Penetration Pair N-23 & N-24

This penetration pair contains the Reactor Building Closed Cooling Water (RBCCW) supply and return to the Recirculation Pump motor oil and seal coolers. This single penetration pair provides non-safety related cooling water to both recirculation pumps. One ¾ inch thermal relief valve per unit will be installed. The relief valve will be installed on a new test connection located near the return penetration. The installation located inside the drywell will protect the penetration and be in compliance with ANSI

B31.1 Code. The relief valve's setpoint will be based on ANSI Code for faulted conditions to protect the most susceptible component of the penetration.

**Peach Bottom Unit 2** installation is planned for the next Refuel Outage (2R12) currently scheduled for October 1998. The design will be based on walkdowns performed during the upcoming Unit 3 outage. The new relief valve will be located in the drywell. Installation during the refuel outage will ensure material and manpower availability and allow for minor adjustments to piping routing because of differences between Unit 2 and Unit 3.

**Peach Bottom Unit 3** installation is planned for Refuel Outage (3R12) currently scheduled for October 1999. The design will be based on walkdowns performed during the upcoming Unit 3 refuel outage. The new relief valve will be located in the drywell. Installation during the 3R12 refuel outage is consistent with PECO's 120 day response based on the Unit's operational status and the safety significance of the work. Installation during the refuel outage will ensure material and manpower availability.

# Peach Bottom Atomic Power Station Penetration Pairs N-53 & N-56 and N-54 & N-55

These penetration pairs contain the Drywell Chilled Water System (DCWS) supply and return to the Drywell Area Cooling Coils, Recirculation Pump Motor Air Coolers and the Drywell Equipment Sump Cooler. One penetration pair provides non-safety related cooling water to the 'A' loop coolers, while the other penetration pair provides non-safety related cooling water to the 'B' loop coolers. One <sup>3</sup>/<sub>4</sub> inch thermal relief valve will be installed on each loop of each unit. The relief valve will be installed on a new test connection located near the return penetration. The installation located inside the drywell will protect the penetration and be in compliance with ANSI Code. The relief valve's setpoint will be based on ANSI Code for faulted conditions to protect the most susceptible component of the penetration.

**Peach Bottom Unit 2** installation is planned for the next Refuel Outage (2R12) currently scheduled for October 1998. The design will be based on walkdowns performed during the upcoming Unit 3 outage. The new relief valves will be located in the drywell. Installation during the refuel outage will ensure material and manpower availability and allow for minor adjustments to piping routing because of differences between Unit 2 and Unit 3.

**Peach Bottom Unit 3** installation is planned for Refuel Outage (3R12) currently scheduled for October 1999. The design will be based on walkdowns performed during the upcoming Unit 3 refuel outage. The new relief valves will be located in the drywell. Installation during the 3R12 refuel outage is consistent with PECO's 120 day response based on the Unit's operational status and the safety significance of the work. Installation during the refuel outage will ensure material and manpower availability.

### Peach Bottom Atomic Power Station Penetrations N-18 and N-19

Penetrations N-18 and N-19 are for the Floor Drain and Equipment Drain pump out lines. These lines are considered identical for this issue. One ¾ inch thermal rules valve will be installed in the Floor Drain pump discharge line and another in the Equipment Drain pump discharge line on each unit. The relief valves will be installed on existing test connections located near the penetration. The installation located inside the drywell will protect the penetration and be in compliance with ANSI Code. The relief valves' setpoint will be based on ANSI Code for faulted conditions to protect the most susceptible component of the penetration.

**Peach Bottom Unit 2** installation is planned for the next Refuel Outage (2R12) currently scheduled for October 1998. The design will be based on walkdowns performed during the upcoming Unit 3 outage. The new relief valves will be located in the drywell. Installation during the refuel outage will ensure material and manpower availability and allow for minor adjustments to piping routing because of differences between Unit 2 and Unit 3.

**Peach Bottom Unit 3** installation is planned for Refuel Outage (3R12) currently scheduled for October 1999. The design will be based on walkdowns performed during the upcoming Unit 3 refuel outage. The new relief valves will be located in the drywell. Installation during the 3R12 refuel outage is consistent with PECO's 120 day response based on the Unit's operational status and the safety significance of the work. Installation during the refuel outage will ensure material and manpower availability.

#### Peach Bottom Atomic Power Station Penetration N-12

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This penetration contains the Shutdown Cooling Letdown line of the Residual Heat Removal system. One ¾ inch thermal relief valve per unit will be installed on the downstream side of the inboard primary containment isolation valve. The installation located inside the drywell will protect the penetration and be in compliance with ANSI B31.1Code. The relief valve's setpoint will be based on ANSI Code for faulted conditions to protect the most susceptible component of the penetration.

**Peach Bottom Unit 2** installation is planned for the next Refuel Outage (2R12) currently scheduled for October 1998. The design will be based on walkdowns performed during the upcoming Unit 3 outage. The new relief valve will be located in the drywell. Installation during the refuel outage will ensure material and manpower availability and allow for minor adjustments to piping routing because of differences between Unit 2 and Unit 3.

**Peach Bottom Unit 3** installation is planned for Refuel Outage (3R12) currently scheduled for October 1999. The design will be based on walkdowns performed during the upcoming Unit 3 refuel outage. The new relief valve will be located in the drywell. Installation during the 3R12 refuel outage is consistent with PECO's 120 day response based on the Unit's operational status and the safety significance of the work. Installation during the refuel outage will ensure material and manpower availability.