

PHILADELPHIA ELECTRIC COMPANY

NUCLEAR GROUP HEADQUARTERS

955-65 CHESTERBROOK BLVD.

WAYNE, PA 19087-5391

(215) 640-6000

October 2, 1992

NUCLEAR SERVICES DEPARTMENT

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  
Inservice Testing Program

- References:
- (1) Letter from G. J. Beck (PECo) to NRC dated October 8, 1991
  - (2) Letter from G. J. Beck (PECo) to NRC dated February 20, 1992
  - (3) Letter from G. J. Beck (PECo) to NRC dated May 14, 1992

Dear Sir:

In Reference (1), Philadelphia Electric Company (PECo) provided an updated, uncontrolled copy of Revision 2 of the second 10-year interval Inservice Testing (IST) Program for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. In References (2) and (3), PECo submitted additional changes to the IST Program.

The purpose of this letter is to submit a new Relief Request 10-VSR-3 and the associated Valve Table changes. This new Relief Request applies only to PBAPS Unit 2, and is being submitted for NRC approval prior to implementation.

Relief Request 10-VRR-3 requests relief from testing check valve CHK-2-10-029 individually and permits it to be tested as part of a pair with gate valve MO-2-10-032. These two valves, along with gate valve MO-2-10-033 are located on the Residual Heat Removal (RHR) head spray line. A simplified diagram of the valve configuration is provided as an enclosure to this letter. This configuration of having three valves in series, allows two of the valves to be tested as a pair, thereby constituting a single pressure isolation valve (PIV) barrier, while leaving the third valve to serve as the second PIV barrier. As described in the

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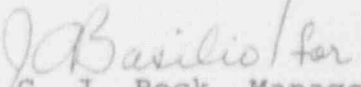
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"Basis for Relief" section of the enclosed Relief Request 10-VRR-3, allowing CHK-2-10-029 and MO-2-10-032 to be tested as a pair will eliminate the need to re-energize and stroke MO-2-10-032. This activity would disturb the disk-to-seat interface of the valve and could adversely affect its leak tight integrity. We have performed a 10CFR50.59 safety evaluation for this proposed Relief Request, and have concluded that it does not involve an unreviewed safety question.

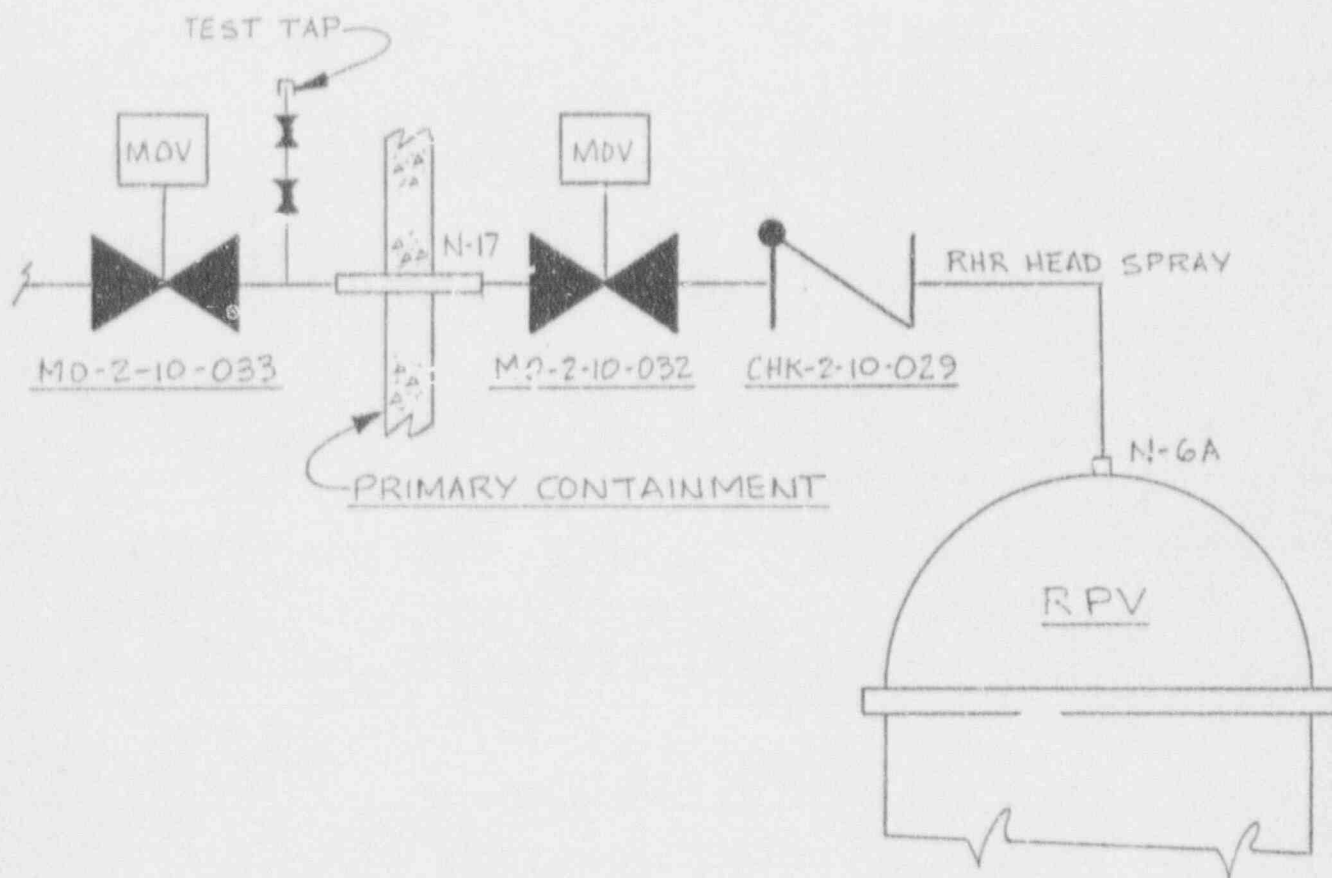
NRC approval of this Relief Request is requested by November 6, 1992. Approval by this date will ensure that start-up from the ongoing Unit 2 ninth refueling outage will not be delayed. If you have any questions regarding this request, please do not hesitate to contact us.

Sincerely,

  
G. J. Beck, Manager  
Licensing Section

cc: T. T. Martin, Administrator, Region I, USNRC  
J. J. Lyash, USNRC Senior Resident Inspector, PBAPS

Peach Bottom Atomic Power Station, Units 2 and 3  
 Simplified Diagram for IST  
 Relief Request 10-VRR-3



RELIEF REQUEST NO. 10-VRR-3, REVISION 0

System: Residual Head Removal (RHR) Head Spray

Valve(s): CHK-2-10-029 P&ID M-361 Sheet 1 (G-3)  
MO-2-10-032 P&ID M-361 Sheet 1 (G-3)

Category: A/C [CHK-2-10-029]  
A [MO-2-10-032]

Function: CHK-2-10-029 Pressure isolation valve.  
MO-2-10-032 Pressure isolation valve; primary containment  
isolation valve.

Testing Requirement(s): ASME Section XI Leak Test per IWV-3423.

Basis for Relief:

The valves listed above, along with gate valve MO-2-10-033 are located in the RHR head spray line on Unit 2. The RHR head spray has no safety function and no credit for its use has been taken in any accident or transient analysis or the emergency operating procedures and is not part of the plant Technical Specifications. Because head spray is not used, gate valves MO-2-10-032 and MO-2-10-033 have been administratively locked closed and de-energized as noted in P&ID M-361 Sheet 1. Although the head spray is not used, the piping penetrates primary containment and communicates directly with the reactor pressure vessel; therefore, the valves must be tested in accordance with ASME Section XI and 10CFR50 Appendix J Type C. Gate valve MO-2-10-033 is not affected by this relief request but is included to help clarify the head spray configuration.

Check valve CHK-2-10-029 and gate valve MO-2-10-033 are the two pressure isolation valves (PIVs) for this head spray line and are tested in accordance with ASME Section XI IWV-3423. Gate valves MO-2-10-032 and MO-2-10-033 are the primary containment isolation valves (PCIVs) for head spray penetration N-17 and are tested in accordance with 10CFR50 Appendix J Type C requirements. All three of these valves are normally closed and do not change position to perform their intended safety function and are therefore considered passive components.

Check valve CHK-2-10-029 is located between nozzle N-6A and gate valve MO-2-10-032 and checks flow from the RPV in the direction of the gate valve. Per the requirements of IWV-3423, this check valve must be tested with the pressure differential in the same direction as when the valve is performing its intended function. Since there are no test taps between check valve CHK-2-10-029 and gate valve MO-2-10-032, gate valve MO-2-10-032 must be re-energized and opened and a test tap downstream used to measure the check valve leakage.

Periodically re-energizing and stroking gate valve MO-2-10-032 is not practical because each time the valve is stroked, the disk-to-seat interface is disturbed. This activity has the potential to adversely affect the leak tight integrity of the valve.

Instead of re-energizing and stroking gate valve MO-2-10-032, the gate valve and check valve will be leak tested in series and the valve pair will be considered a single pressure boundary. This valve pair will constitute one of the two independent PIV barriers for the RHR head spray line and MO-2-10-033 will still be considered the second PIV in this line.

RELIEF REQUEST NO. 10-VRR-3, REVISION 0

Alternate Testing:

Check valve CHK-2-10-029 and gate valve MO-2-10-032 will be leak tested as a pair. Both valves in the pair will be considered inoperable if testing indicates leakage through the valves exceeds the limits specified in the respective surveillance test.

This valve pair will constitute a single PIV boundary; and gate valve MO-2-10-033 is the second PIV boundary in the RHR head spray line. Each of these PIV boundaries will be tested individually to assure its leak tight integrity. Therefore, this alternate test method complies with the intent of Generic Letter 87-06 because there are two independent barriers between a high-low pressure interface, and these barriers are periodically tested to verify their leak tight integrity.

SPEC. W-710

VALVE TABLE

DATE: 09/30/92

1ST TABLE - VALVES  
PEACH BOTTOM ATOMIC POWER STATION - UNIT 2 & COMMON

SYSTEM: 10 RESIDUAL HEAT REMOVAL

VALVE NUMBER	P&ID	COORD	VALVE CAT.	ACT/ PAS	SIZE	VALVE TYPE	ACT. TYPE	POSITION			APP. J TYPE C	TEST FREQUENCY (DIRECTION)	VRR/VCS NUMBER	REMARKS
								ARM	SAF	FAL				
CHK-2-10-029	M-361 (SHT 1)	G-3	A, C	P	6	CK	SL	C	C	-	N	LP-T	10-VRR-3	PENT. H-17 PRES ISOLATION VALVE
MO-2-10-032	M-361 (SHT 1)	G-3	A	P	6	GT	MO	C	C	A1	Y	LP-T, LJ-T	GVR-1, 10-VRR-3	PENT. H-17 PRES ISOLATION VALVE