BWR OWNERS' GROUP

George J. Beck, Chairman (215) 640-6450

BWROG-90103 July 27, 1990 c/o Philadelphia Electric Company * 955-65 Chesterbrook Blvd., M/C 638-5 * Wayne, PA 19087-5691

Office of Nuclear Reactor Regulation United States Nuclear Regulatory Commission Washington, DC 20555

Attention: James E. Richardson, Director

Division of Engineering Technology

Subject: BWR OWNERS' GROUP SAFETY ASSESSMENT OF MOV

ISOLATION FUNCTION

Enclosure: Safety Assessment: Isolation Function of MOVs for HPCI

and RCIC Steam Supply Line and RWCU Water Supply Line,

dated July 1990.

Reference: BWR Survey Data on Motor-Operated Valves, Ltr G.J. Beck

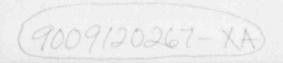
to L.B. Marsh, BWROG-9095, dated 7/6/90.

The reference letter provided additional Boiling Water Reactor (BWR) plant Motor-Operated Valve (MOV) data requested by the NRC in response to an expressed Staff concern about selected system MOV closure capability against design basis flow conditions. The Enclosure is a "safety assessment" of the isolation function of these MOVs documenting the adequate safety margin of BWR plants. This assessment shows that a significant safety concern does not exist, even if the system isolation MOVs may not have adequately sized actuators for maximum design basis conditions.

Based on leak-before-break considerations for the HPCI/RCIC/RWCU piping, it is not expected that system MOVs would ever be challenged at high flow design basis event conditions. With the effective leak detection and isolation systems, leaks would be isolated early at low flow conditions. Additionally, realistic consideration of expected plant and system response to postulated accident conditions would lead to the conclusion that there is a significantly high probability of successful valve closure. Even without successful valve closures for a postulated rupture in these lines, there is adequate safety margin in the Emergency Core Cooling Systems (ECCS) to handle the flow loss. The ECCS are designed for a much larger break.

BWR utilities are already in the process of addressing this MOV thrust issue as part of their response to GL 89-10, which is a longer term versus interim activity.

This letter has been endorsed by a substantial number of the members of the BWROG. However, it should not be interpreted as a commitment of any



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individual member to a specific course of action. Each member must formally endorse the BWROG position in order for that position to become the member's position.

If you have questions regarding this issue, contact the undersigned, Denver Atwood, Committee Chairman at (205) 877-7461, or Wendell Fiock, Committee Program Manager at (408) 925-1669.

Very truly yours,

Seorge J. Beck, Chairman

BWR Owners' Group

Enclosure EXEC1/GJB/rt

CC: BWROG Primary Representatives
BWROG MOV Committee
RD Binz IV, BWROG Vice Chairman
BWROG Executive Oversight Committee
SD Floyd, RRG Chairman
RR Galer, EPRI
EP Shankle, INPO
RL Simard, NUMARC
LB Marsh, NRC/NRR/MEB
WT Russell, NRC (RI)
TG Scarbrough, NRC (NRR/MEB)

C Caloway, NUMARC