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UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V
1990 N. CALIFORNIA BOULEVARD
SUITE 202, WALNUT CREEK PLAZA
WALNUT CREEK, CALIFORNIA 94596

April 9, 1981

Docket Nos. 50-460, 50-513

Washington Public Power Supply System
P. O. Box 968
3000 George Washington Way
Richland, Washington 99352

Attention: Mr. D. W. Mazur
Program Director, WNP-1/4

Gentlemen:

The enclosed Bulletin is forwarded for action. A written response is required.

In order to assist the NRC in evaluating the value/impact of each bulletin on licensees, it would be helpful if you would provide an estimate of the manpower expended in the review and preparation of the report(s) required by the bulletin. Please estimate separately the manpower associated with corrective actions necessary following identification of problems through the bulletin.

If you need additional information regarding this matter, please contact this office.

Sincerely,

R. H. Engelken
Director

Enclosure:
IE Bulletin 81-02
w/attachments

cc w/enclosures:
M. E. Witherspoon, WPPSS
G. C. Sorensen, WPPSS

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

DUPLICATE

April 9, 1981

IE Bulletin No. 81-02: FAILURE OF GATE TYPE VALVES TO CLOSE AGAINST DIFFERENTIAL PRESSURE

Description of Circumstances:

As a part of its pressurized water reactor (PWR) Safety and Relief Valve Testing Program, the Electric Power Research Institute (EPRI) conducted limited testing of a number of valves used on PWRs as power-operated relief valve (PORV) isolation or block valves. These tests indicate a number of cases in which certain of these valves failed to fully close under conditions that approximated those of their intended service (i.e., saturated steam at approximately 2,400 psi). The valves that failed to fully close are gate type motor-operated valves that may be used in various safety-related applications in addition to PORV block valves.

Background on EPRI Testing:

The proposed full-scale qualification testing of PORV block valves, with a completion date of July 1, 1982, was first provided to the utilities in a September 5, 1980, draft of NUREG-0737. The item was formally issued, with Commission approval, in NUREG-0737 on October 31, 1980.

The block valve qualification testing was proposed in NUREG-0737 primarily as an additional means of reducing the number of challenges to the emergency core cooling system and the safety valves during plant operation.

In anticipating a request for PWR block valve testing, EPRI decided to make provisions for the installation of block valves between the test steam source and the test PORV in July 1980 at the Marshall test facility. The Marshall test facility is a full-flow steam test facility owned by Duke Power Company. Test PORVs had been carefully selected, with close coordination between EPRI, its consultants and PWR utilities, to assure that PORVs representative of those in service or intended for service would be tested. However, for the block valves that have been tested concurrently, this selection process was not followed because an NRC block valve test program had not been formulated. Therefore, seven readily available valves were obtained and tested by EPRI, primarily to obtain some general baseline information on block valve closure capability.

For the block valves that were tested, EPRI had not established, at least at the time of testing, the population of plants, either operating or under construction, that might have a valve of the type needed for testing. In addition, it should be noted that the test conditions used at Marshall to date were only those that were determined to be applicable for steam testing of PORVs.