TENNESSEE VALLEY AUTHORITY

400 Chestnut Street Tower II

July 10, 1984

BLRD-50-438/84-14 BLRD-50-439/84-13

U.S. Nuclear Regulatory Commission Region II Attn: Mr. James P. O'Reilly, Regional Administrator 101 Mariet a Street, NW, Suite 2900 Atlanta, Georgia 30323

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - ADAPTOR KEYWAY ON 8-INCH BORG-WARNER GLOBE VALVES - BLRD-50-438/84-14, BLRD-50-439/84-13 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector P. E. Fredrickson on January 31, 1984 in accordance with 10 CFR 50.55(e) as NCR 2787. This was followed by our interim report dated February 29, 1984. Enclosed is our second interim report. We expect to submit our next report by October 26, 1984. We consider 10 CFR Part 21 applicable to this deficiency.

If you have any questions, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager Nuclear Licensing

Enclosure

oc: Mr. Richard C. DeYoung, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

8407250553 840710 PDR ADOCK 05000438 S PDR OFFICIAL GOPPE

ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
ADAPTOR KEYWAY ON 8-INCH BORG-WARNER GLOBE VALVES
BLRD-50-438/84-14, BLRD-50-439/84-13
NCR 2787
10 CFR 50.55(e)
SECOND INTERIM REPORT

Description of Deficiency

During reassembly of an 8-inch Borg-Warner (B-W), Van Nuys, California, motor-operated globe valve (TVA Mark No. 3BW0420-CR-11), the adaptor keyway was found to be 11/16 inch wide while the corresponding stem keyway was 1/2 inch wide. It is possible that the 3/16-inch slack in the keyway assembly may lead to misalignment of the shaft which could subsequently increase the load on the operating mechanism. A brief inspection of the other three valves with this TVA mark number has revealed that the wide keyway condition also exists in the additional valves. The valves with Mark No. 3BW0420-CR-11 are located in the essential raw cooling water (ERCW) system while similar type valves may be installed in the reactor building spray.

Interim Progress

B-W has determined the deficiency to be attributed to the duplication of a keyway design not compatible with these particular valves (i.e., the adaptor design specified a keyway dimension that was not compatible with the keyway dimension of the valve stem). B-W has also concluded that this is an isolated design error on the 8-inch B-W valves with the specified mark number; that is, no other B-W valves were affected. B-W is in the process of furnishing the required hardware and associated documentation.