TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

February 25, 1982 1

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WBRD-50-390/82-19 WBRD-50-391/82-18

U.S. Nuclear Regulatory Commission Region II Attn: Mr. James P. O'Reilly, Regional Administrator 101 Marietta Street, Suite 3100 Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - FAILURE OF LIMITORQUE MOTOR OPERATORS DURING VALVE CLOSURE - WBRD-50-390/82-19, WBRD-50-391/82-18 - FIRST_INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on January 26, 1982 in accordance with 10 CFR 50.55(e) as NCR 3793R1. Enclosed is our first interim report. We expect to submit our next report by April 20, 1982.

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 Regulation and Safety

Enclosure

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

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
FAILURE OF LIMITORQUE MOTOR OPERATORS DURING VALVE CLOSURE
WBRD-50-390/82-19, WBRD-50-391/82-18
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Condition

During operational testing of certain gate valves manufactured by Westinghouse Electromechanical Division, three Limitorque motor operators failed and rendered the valves inoperable. These valves are supplied by Westinghouse under the Watts Bar NSSS contract. All of the operators which failed are Limitorque model SB-00 units. The SB-00 design utilizes a floating drive sleeve restrained in the axial direction by belleville springs which are enclosed in a cast housing. This housing therefore receives the motor torque after the springs have compressed. On each of the failed operators, the housing fractured during valve closure which could cause the gate valve to leak or prevent the operator from being able to open the valve.

Interim Progress

Westinghouse is investigating the failures with Limitorque. TVA is awaiting corrective action from Westinghouse. TVA is also investigating whether this deficiency could affect BOP valves with SB-00 Limitorque motor operators at Watts Bar and other nuclear plants.