TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

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FEB 11 1987

WBRD-50-390/87-02
WBRD-50-391/87-02

10 CFR 50.55(e)

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Attention: Dr. J. Nelson Grace

WATTS BAR NUCLEAR (WBN) PLANT UNITS 1 AND 2 - UNQUALIFIED AIR CONDITIONING SYSTEM VALVES - WBRD-50-390/87-02, WBRD-50-391/87-02 - INTERIM REPORT

The subject deficiency was initially reported to NRC-Region II Inspector Gordon Hunegs on January 12, 1987 in accordance with 10 CFR 50.55(e) as NCR W-492-P-S. Enclosed is our interim report. We expect to submit our next report on or about August 30, 1987. We consider 10 CFR Part 21 potentially applicable to this deficiency.

If there are any questions, please get in touch with R. D. Schulz at (615) 365-8527.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley, Director
Nuclear Safety and Licensing

Enclosure
cc: See page 2

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U.S. Nuclear Regulatory Commission

FEB 11 1987

cc (Enclosure):
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ENCLOSURE
WATTS BAR NUCLEAR PLANT
UNITS 1 AND 2
UNQUALIFIED AIR CONDITIONING SYSTEM VALVES
SCR W-492-P-S
10 CFR 50.55(e)
INTERIM REPORT

DESCRIPTION OF DEFICIENCY

During a routine reorder of spare parts for Essential Raw Cooling Water (ERCW) System valves furnished by METREX (Glendora, California), by way of DUNHAM-BUSH (West Hartford, Connecticut, water chiller vendor), two different drawings were discovered with two different material compositions specified for the valve bodies. These valves are used as temperature control valves for the main control room and electrical board room chillers. After a review of the contract files (83119-2 and 83153-1) and discussions with plant maintenance personnel, it was identified that although the contract specification did not designate either the type diaphragm actuator or the valve body material requirements, there was correspondence to TVA from DUNHAM-BUSH which specified that METREX would furnish double diaphragm, cast steel body valves. It has since been determined that the originally supplied valves were in fact cast iron. In addition, the seismic report submitted by DUNHAM-BUSH for these valves is not clear as to which type valve (i.e., cast steel or cast iron) was evaluated for seismic qualification. Contract specifications required seismic qualification for the valves.

No other systems at WBN have been identified that utilize this type METREX valve.

SAFETY IMPLICATIONS

Due to the uncertainty about the applicability of the seismic report for these valves, the main control room and electrical board room air conditioning systems may not meet the appropriate seismic requirements. In addition, the operability of the ERCW system could be degraded due to a valve failure during a seismic event that could result in a loss of ERCW pressure boundary integrity. These conditions could adversely affect the ability to safely shut down the reactor and maintain a safe shutdown mode after a design basis seismic event. Therefore, the safe operation of the plant could be adversely affected.

INTERIM PROGRESS

TVA is evaluating the condition and the most likely plan of corrective action will be replacement of the valves with cast steel bodied valves. To complete the root cause determination, TVA is evaluating contract administration and coordination by TVA and by DUNHAM-BUSH in ensuring that the seismic report was properly documented and the valves were delivered as approved.

Final corrective action will be determined upon completion of TVA's investigation and will be provided in our final report to NRC on or about August 30, 1987.