TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

September 8, 1982

WBRD-50-390/82-18
WBRD-50-391/82-17

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 - HVAC REGISTER DAMAGE - WBRD-50-390/82-18, WBRD-50-391/82-17 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on January 25, 1982 in accordance with 10 CFR 50.55(e) as NCR 3884R. Interim reports were submitted on February 25, May 11 and August 5, 1982. Enclosed is our final report.

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

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
HVAC REGISTER DAMAGE
NCR 3884R
WBRD-50-390/82-18, WBRD-50-391/82-17
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

HVAC registers which are required to balance airflows throughout the plant have been damaged because of construction activities in the vicinity of the installed registers. The damage was caused by excessive dirt and/or physical damage to the registers. The pivot pins which hold the balancing gates in place have broken, rendering the gates inoperable. Subsequent investigation has revealed possible seismic deficiencies with these same registers. This is being handled separately under NCR WBN SWP 8217 which was reported to the NRC on April 27, 1982.

Safety Implications

Had the subject condition remained uncorrected, safety-related electrical equipment in the auxiliary and control buildings would not get the design airflow, possibly allowing overheating of the equipment and causing hotspots in the buildings which could potentially lead to equipment failure. This condition could adversely affect the safe operation of the plant.

Corrective Actions

TVA will install field-fabricated balancing devices to replace the inoperable registers (by removing the balancing damper on the back of each affected register and replacing it with a balancing gate mounted in the duct behind the grille). This work will be completed before balancing the system. TVA has determined that the existing procurement specifications were adequate.

TVA has issued instructions to delay installation of HVAC registers until the system is ready for balancing. The registers are to be stored as QA materials under existing site QA procedures.