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

February 14, 1983

WBRD-50-390/82-95
WBRD-50-391/82-91

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 - INADEQUATE QUALITY ASSURANCE PROGRAM FOR MASONRY BLOCK WORK - WBRD-50-390/82-95, WBRD-50-391/82-91 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector D. Quick on September 2, 1982 in accordance with 10 CFR 50.55(e) as Audit WB-C-82-08, #5. Interim reports were submitted on October 1, and December 9, 1982. Enclosed is our final report.

TVA no longer considers the subject condition to be adverse to the safe operation of the plant. Therefore, we will amend our records to delete the subject nonconformance as a 10 CFR 50.55(e) item.

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

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
INADEQUATE QUALITY ASSURANCE PROGRAM FOR MASONRY BLOCK WORK
AUDIT WB-C-82-08, #5
WBRD-50-390/82-95, WBRD-50-391/82-91
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

An internal TVA audit on the Quality Assurance Program for masonry work at Watts Bar has identified some apparent deficiencies in that program in two general areas. The first area concerns work performed in the 1975 to 1977 time period for which there are incomplete masonry inspection records and mortar cube data sheets and for which there are mortar cube data sheets which show the use of mortar in walls of the control building that do not meet the minimum compressive strength requirements of 1800 psi. The second area concerns the lack of mortar compressive strength requirements for work being performed by TVA forces.

Safety Implications

Analysis done by TVA design personnel in the areas where mortar did not meet the 1800 psi compressive stength minimum, and additional documentation found in the project concrete lab offices at Watts Bar concerning the mortar with incomplete inspection records and mortar cube data sheets has shown the affected masonry to be acceptable as is.

Concerning the lack of mortar compressive strength requirements for work done by TVA forces, TVA forces install non-reinforced walls which are used for shielding and these walls are not structural features. The mortar mix used on these type walls, as called out in Construction Specification G-21, exceeds the requirements of ASTM C-270, Type N mortar which is the type that was assumed in the masonry wall designs. Therefore, this condition does not constitute a safety concern.

Because this audit has not identified any items which could adversely affect the safe operation of the plant, TVA no longer considers this condition to be a 10 CFR 50.55(e) item.