

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street, Tower II

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WBRD-50-390/83-43  
WBRD-50-391/83-43

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - SUPPORT WELDS NOT INSPECTED OR DOCUMENTED -WBRD-50-390/83-43, WBRD-50-391/83-43 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Linda Watson on July 11, 1983 in accordance with 10 CFR 50.55(e) as NCR 4564R R1. Our first interim report was submitted on August 9, 1983. 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*  
L. M. Mills, Manager  
Nuclear Licensing

Enclosure

cc (Enclosure):

Mr. Richard C. DeYoung, Director  
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  
SUPPORT WELDS NOT INSPECTED OR DOCUMENTED  
NCR 4564R R1  
WBRD-50-390/83-43, WBRD-50-391/83-43  
10 CFR 50.55(e)  
FINAL REPORT

### Description of Deficiency

It has been found that some TVA series 47B001 typical supports have been fabricated and installed with welds which have not been inspected or documented. The affected welds were made on 47B001 supports used in vent, drain, and pressure tap applications on various safety-related systems. The affected welds, as shown on TVA drawing 47B001-3, are (1) 47B001-13, support to clamp weld; (2) 47B001-11, extension tube weld; (3) 47B001-10, Option 1 (bolted) support to clamp weld. The cause of this deficiency is that the Watts Bar Quality Control Procedure (WBNP-QCP) 4.10-2, "Piping Location Verification," for inspection of these supports does not require weld inspection or documentation. Due to the various applications of the 47B001 typical supports, it was assumed that these weld inspections were covered by other procedures as is the case in other 47B001 support applications.

### Safety Implications

The failure of an unidentified defective support weld could result in loss of the support and subsequently place an unanalyzed, unanticipated stress on the piping system during a design basis event (DBE). This could result in the loss of an essential safety-related system which, in turn, could adversely affect the safety of operations of the plant.

### Corrective Action

TVA has completed a review of the procedure governing other 47B001 support applications (instrument lines and ASME pressure boundary attachments) and has found no further programmatic deficiencies. It has also been determined that this deficiency is unique to the Watts Bar site procedure.

This deficiency has been investigated and a complete listing of 47B001 supports requiring weld inspection has been developed. The completion status of the documentation for all of the affected supports will be voided, and all of the uninspected welds will be inspected. Any welds found to be unacceptable will be documented and reworked on a case-by-case basis. All weld inspections will be documented on supplementary documentation per the revised quality control procedure WBNP-QCP-4.10-2.

As noted above, WBNP-QCP-4.10-2 has been revised to require inspection and documentation of the welds for safety-related 47B001 supports. This will prevent recurrence of this deficiency.

All corrective actions will be completed by November 30, 1983.