

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street, Room 501

2 FEB 3
January 29, 1982

WBRD-50-390/81-85
WBRD-50-391/81-78

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

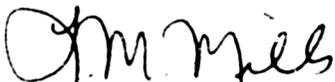
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - DRAWING CONTROL -
WBRD-50-390/81-85, WBRD-50-391/81-78 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on September 24, 1981 in accordance with 10 CFR 50.55(e) as NCR's WB-G-81-05 and W-58-P. Our first interim report was submitted on October 26, 1981. 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 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
DRAWING CONTROL
WBRD-50-390/81-85, WBRD-50-391/81-78
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

TVA's Quality Assurance Program policy requires that a program shall be established, documented, and executed to provide assurance that documents including revisions thereto which prescribe activities affecting quality are controlled. Further, provisions shall be established, delineated, and executed to preclude the use of obsolete or superseded documents. Contrary to the above, the auditors compared the revision level of 60 TVA Division of Engineering Design (EN DES) drawings with the current revision level as identified on the Document Distribution Center Ledger Cards and found that 7 of these drawings were superseded by later revisions.

In addition, NCR W-58-P addresses the timeliness of "as-constructed" drawing update and the accuracy of "as-constructed" drawings.

The time span involved in updating drawings is attributed to difficulties encountered in obtaining reproducible drawings and in the time required by engineers in marking drawings to indicate "as-constructed" configuration.

Occasional inaccuracies in markings depicting configuration on "as-constructed" drawings are attributed to inexperience on the part of some engineering personnel and to the requirement that this activity be performed in a very short time interval before transfer of the system.

Safety Implications

TVA does not believe that the quality of any safety-related feature of the plant has been compromised by out-of-revision drawings being in the field because all current inspection records involving inspections to a drawing have the revision level of the drawing recorded on the record. Before any system is transferred to TVA's Division of Nuclear Power, the system has been inspected to the latest drawing revision level.

The deficiency involving the "as-constructed" drawing control program could have resulted in the construction of certain features of the plant which would not properly interface with related equipment and therefore not operate properly. If this was undetected in preoperational testing, the safety of the plant may have been adversely affected.

Corrective Action

The discrepancies identified in the subject deficiency were caused as follows. One drawing was in distribution cycle for update, three drawings were for documentation only and were not used for inspections, and two drawings were distributed but not in the required folders. All engineering and inspection drawings have been reviewed by the Document Control Center and discrepancies corrected since this time. Distribution ledger cards are being replaced by an IBM System 3 computer that will list assigned drawings by individual to facilitate drawing control.

Training in the requirements of the document control procedure for drawings was held on September 4 and September 22, 1981. Print Room personnel are delivering prints twice weekly and instructing receiving clerks to supersede drawings at the time revisions are delivered. Print Room personnel are removing drawing title blocks of drawings that have been superseded in engineering and inspection units at time of delivery. Also copies of the reprographics distribution form received from EN DES are being distributed to inspection units for processing, before drawing distribution, to assure that inspections are to the latest revision. These actions will correct this deficiency and ensure that it will not recur.

All drawings on the System Configuration Control Drawing Lists and connection drawings ("as-constructed" drawings) are being updated immediately. This will correct this deficiency and prevent its recurrence.

Regarding the accuracy of "as-constructed" drawings, all known drawing errors have been corrected. The Construction Engineer's Office has determined that additional training was required to correct this deficiency. Training of all personnel involved in the preparation of "as-constructed" drawings has been completed.