

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

July 3, 1984

WBRD-50-390/84-24

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Mr. O'Reilly:

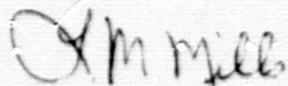
WATTS BAR NUCLEAR PLANT UNIT 1 - INSTRUMENT LINE MOVEMENT DATA ON
DRAWINGS DOES NOT MATCH ANALYSIS - WBRD-50-390/84-24 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
Bob Carroll on April 18, 1984 in accordance with 10 CFR 50.55(e) as
NCR WBN EEB 8412. Our first interim report was submitted on May 18, 1984.
Enclosed is our final report.

If you have any questions, please get in touch with R. H. Shell at
FTS 858-2588.

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

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1
INSTRUMENT LINE MOVEMENT DATA ON DRAWINGS DOES NOT MATCH ANALYSIS
NCR WBN EEB 8412
WBRD-50-390/84-24
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

Movement data for various safety-related piping systems at Watts Bar Nuclear Plant (WBN), as tabulated on TVA WBN drawing series 47A600-does not agree with corresponding data from rigorous analysis. The 47A600 drawing series is used to determine the flexibility and support requirements for instrument lines.

TVA has determined that the assignable cause for this deficiency is that engineering change notices (ECNs) involving rigorous reanalysis have not been coordinated through TVA's Watts Bar Design Project (WBP) Instrumentation and Controls (I&C) group. The WBP I&C group has responsibility for the 47A600 drawing series. Thus, results of the rigorous analysis were not squadchecked to the WBP I&C group.

Safety Implications

Incorrect movement data used in the design/location of instrument line typical supports could result in an inadequate installation. This could result in a loss of the affected safety-related instrument lines due to larger than anticipated movement. This could adversely affect the safe operation of the plant.

Corrective Action

TVA issued ECN 4802 and has revised the 47A600 drawing series to reflect the current rigorous analyses information. These drawings were compared to the as-built configuration of instrument line typical supports in the field. All supports which do not agree with the new drawings will be modified. All corrective action required for this item will be completed by July 12, 1984.

To prevent recurrence of this deficiency, all affected engineering personnel were informed of the requirements of two applicable TVA engineering design (EN DES) engineering procedures (EPs). EN DES-EP 4.02, "Engineering Change Notices (ECNs) Before Licensing - Handling," requires that all ECNs be coordinated with all affected groups. EN DES-EP 4.04, "Squadcheck Process," requires that drawings be squadchecked to all affected groups. This action was accomplished by formal memorandum dated May 22, 1984.