

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

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August 16, 1985

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Dr. J. Nelson Grace, Regional Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Dear Dr. Grace:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - RESPONSE TO DEVIATION 50-390/85-40-01  
AND VIOLATIONS 50-390/85-40-03 - FAILURE TO COMPLETE WORK REQUIRED BY A WORK  
RELEASE AND 390/85-40-04 - FAILURE TO PROCESS A FIELD CHANGE REQUEST

This is in response to R. D. Walker's letter dated July 19, 1985 report  
numbers 50-390/85-40 50-391/85-31 concerning activities at the Watts Bar  
Nuclear Plant which appeared to have been in violation of NRC regulations.  
Enclosed is our response to the citations.

A two week delay on submittal of the response to deviation 390/85-04-02  
described in enclosure 2 of the above mentioned report was discussed with NRC  
OIE Region II Inspector Al Ignatonis on August 16, 1985.

If you have any questions concerning this matter, please get in touch with  
R. H. Shell at FTS 858-2688.

To the best of my knowledge, I declare the statements contained herein are  
complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*J. A. Domer*

J. A. Domer, Chief  
Nuclear Licensing Branch

Enclosure

cc (Enclosure):

Mr. James Taylor, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Records Center  
Institute of Nuclear Power Operations  
1100 Circle 75 Parkway, Suite 1500  
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ENCLOSURE

WATTS BAR NUCLEAR PLANTS UNITS 1 AND 2  
RESPONSE TO DEVIATION 390/85-40-01

Deviation 390/85-40-01

Final Safety Analysis Report (FSAR) Section 8.3.2.1.1 includes a paragraph that specifies how tests and inspections will be conducted on the vital batteries. In that paragraph, TVA committed to perform battery service testing in accordance with the recommended procedure of section 5.6 of IEEE Standard 450-1975, Recommended Practice for Maintenance, Testing, and Replacement of Large Stationary Type Power Plan and Substation Lead Storage Batteries. IEEE Standards 450-1975 and 1980, specify that a service test is a special battery capacity test that is used to determine if the battery will meet the design load requirements of the connected load. The standard specifies that the initial conditions shall be described, omitting the requirements to perform an equalizer charge.

Contrain to the above, the inspector determined that on May 14, 1985, that Surveillance Instruction (SI) 8.22, Rev. 9, 125V DC Vital Battery Service Test, included the requirement to verify that the battery has had an equalizer charge completed three days to a week prior to the start of the test. As a result, these tests, when performed, would be conducted in a non-conservative manner since the most stringent test conditions would not be established.

TVA's Response

1. Admission or Denial of the Alleged Deviation

TVA agrees in part that the cited deviation occurred as stated. TVA takes exception to the referencing of IEEE Stanard 450-1980 as part of the deviation from an FSAR commitment. The WBN FSAR at present commits WBN to the 1975 version of the standard only.

2. Reasons for the Deviations

The plant instruction to perform battery service tests was not in compliance with IEEE Standard 450-1975. The plant instruction did not implement the correct IEEE 450-1975 requirement regarding the intent of when to perform the service test in relation to the equalizing charge in order to give the most stringent test conditions.

3. Correction Actions Taken and the Results Achieved

SI 8.22 was revised to delete the initial conditions of verifying that an equalizing charge had been performed to properly reflect the requirements of IEEE 450-1975.

4. Correction Actions Taken to Avoid Further Deviations

TVA will revise the WBN FSAR to show IEEE 450-1980 to be our new standard of record because of its clearer language than the 1975 edition. This should help to avoid further misinterpretations of the IEEE-450 standard.

5. Date When Full Compliance Will Be Achieved

SI-8.22 was revised on June 13, 1985. TVA is now in full compliance with IEEE 450-1975.

3. Corrective Steps Taken and Results Achieved

Nonconformance report (NCR) 6130 was initiated to resolve this deficiency. The abandoned support steel from the original hanger, 1-68-295, will be removed by the Office of Nuclear Power (NUC PR) Modification Group. This work will be accomplished on workplan No. 5317.

4. Corrective Steps Taken to Avoid Further Noncompliance

TVA considers this to be an isolated occurrence since system walkdowns prior to transfer will normally identify outstanding work items similar to this deficient condition. The personnel responsible for this deficiency are no longer employed by TVA. Since the time of this occurrence, January 1981-February 1982, the requirements for documentation of outstanding work items have been strengthened in WBN QCI 1.30, revision 9, "Control of Work on Transferred Systems and Untransferred Systems Behind Unit 1 Security." Requirements for the completion, and sign off of the work release have also been strengthened in WBN-QCP-1.07, revision 11, "Work Release." This strengthening has been accomplished by the addition of termination date for work releases, which is 90 days from the date of issuance.

5. Date When Full Compliance Will Be Achieved

The original support, 1-68-295, will be removed by NUC PR Modifications Group by August 30, 1985.

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
RESPONSE TO SEVERITY LEVEL IV VIOLATION  
390/85-40-03  
FAILURE TO COMPLETE WORK REQUIRED BY A WORK RELEASE

Severity Level IV Violation - 50-390/85-40-03

10 CFR 50, Appendix B, Criterion V, as implemented by TVA's Quality Assurance Topical Report TVA-TR-75-1A, revision 8, paragraph 17.1.5, requires that activities affecting quality shall be accomplished in accordance with documented procedures. Quality Control Instruction (QCI) 1.07, revision 11, "Work Release," previously identified as Quality Control Procedure (QCP) 1.7, requires a steel cutting release to document satisfactory completion of the required work for hanger removal.

Contrary to the above, the Office of Construction (OC) personnel failed to accomplish work activities in accordance with QCP 1.7 in that work release No. 3976 which was written to remove a hanger (engineered support No. 1-68-295), was improperly voided without the work actually being performed. The preceding condition resulted in two supports (one correct and one incorrect) identified by the same engineered support number being installed in unit 1 containment. Subsequently, a safety-related instrument cable was attached to the incorrect and improperly installed support.

TVA's Response

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reason for Violation

This violation is a result of failure to follow procedure WBN-QCP-1.7, "Work Release," in that work release No. 3976 for removal of hanger 1-68-295 was voided without this work either being performed or placed on an outstanding work item list (OWIL). During the installation of support 1-68-295, it was determined that there were interferences from routing of smaller piping. Steel Cutting Work Release No. 3976 was written for removal of the subject support on January 5, 1981. This release was voided February 25, 1982, stating work was not performed. Due to the time elapsed since the occurrence of this deficiency and due to the fact that the engineer involved is no longer employed by TVA, no definitive explanation can be provided for the improper voiding of work release No. 3976. The subsequent walkdown of the system for transfer failed to identify the two structures installed with the same hanger identified. This was due to the location of the two supports. The original support is located above the permanent support and vision was obstructed from below when the system walkdown occurred.

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
RESPONSE TO SEVERITY LEVEL V VIOLATION  
390/85-40-04  
FAILURE TO PROCESS A FIELD CHANGE REQUEST

Severity Level V Violation - 390/85-40-04

10 CFR 50, Appendix B, Criterion V as implemented by TVA's QA Topical Report, TVA-TR-75-1A, Rev. 8, paragraph 17.2.5 requires that activities affecting quality shall be accomplished in accordance with documented procedures. The modifications and additions instructions, MAI-16, Rev. 6, "Removal, Installation, and Inspection of Seismic Supports," requires that changes to engineered supports shall be requested on a Field Change Request (FCR) and by a variance sheet

Contrary to the above, the Office of Nuclear Power personnel failed to prepare a FCR and a variance sheet in accordance with MAI-16 for attachment of a safety-related instrument cable to an installed support.

TVA's Response

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reasons for the Violation

Failure of plant personnel to follow procedures. Further investigation also indicated a need to define more clearly procedural requirements.

3. Correction Actions Taken and the Results Achieved

- a. FCR Numbers NP940, NP950, NP951, NP952, NP953, NP955, NP956, and variances were written to show attachment points of an electrical instrument cable and conduit to engineered support number 1-68-295.
- b. Workplan 5317 was written to install an electrical instrument cable and conduit to engineered support number 1-68-295. This workplan will also remove the hanger assembly that should have been removed when engineered support number 1-68-295 was initially installed.
- c. The failure to correctly follow plant procedures was discussed with the employee involved.
- d. A correction action report WB-CAR-85-29 was written by the modifications organization when this deviation was initially identified.

4. Correction Actions Taken to Avoid Further Violations

- a. MAI-13 and MAI-16 will be revised to more clearly define the requirements for preparing FCR's and variance sheets.
- b. Retrain modifications personnel to implement the new procedures.

5. Date When Full Compliance will be Acheived

- a. MAI-13 and MAI-16 will be revised and modifications employees trained on implementing the new procedures by August 15, 1985.
- b. Workplat 5317 will be field completed by August 30, 1985.