

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

April 18, 1984

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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:

BELLEFONTE NUCLEAR PLANT UNIT 1 - RESPONSE TO VIOLATIONS
50-438/83-05-01 - FAILURE TO TAKE EFFECTIVE CORRECTIVE ACTION FOR
EVALUATING WELDS ON CABLE TRAY SUPPORTS - 50-438/84-05-02 - FAILURE TO
FOLLOW PROCEDURE FOR EVALUATING REVISED DESIGN DRAWINGS

This letter is in response to R. C. Lewis' letter dated March 20, 1984,
report numbers 50-438/84-05, 50-439/84-05 concerning activities at the
Bellefonte Nuclear Plant which appeared to have been in violation of NRC
regulations. Enclosed is our response to the citations.

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

D S Kammer

D. S. Kammer
Nuclear Engineer

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
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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNIT 1
RESPONSE TO SEVERITY LEVEL IV VIOLATION
50-438/84-05-01
FAILURE TO TAKE EFFECTIVE CORRECTIVE ACTION FOR EVALUATING
WELDS ON CABLE TRAY SUPPORTS

Description of Deficiency

10 CFR 50, Appendix B, Criterion XVI and the accepted QA Program (TVA-TR-75-1A, Rev. 5) Section 17.1A.16, requires in part that measures be established to assure that conditions adverse to quality such as deficiencies, deviations, and nonconformances are promptly identified and corrected.

Contrary to the above, measures were not established to assure that conditions adverse to quality were promptly identified and corrected in that in a response to a licensee identified item, BLRD-50-438/82-66, 74 inaccessible welds (18 percent of total) on cable tray supports in an area of unit 1 were neither identified nor evaluated to see if the welds would have to be corrected.

TVA Response

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reason for the Violation

During the inspection of welds as a result of Nonconformance Report (NCR) 1894, several welds were identified as being inaccessible. An oversight was made during the evaluation of the NCR inspection data which was accumulated by inspection of 410 welds. An accelerated review was performed, and the inaccessible welds were inadvertently omitted from the list of potentially unacceptable welds on the NCR. The reason for this violation was the lack of attention by the Welding Engineering Unit during the review of data to ensure all unacceptable welds had been identified on the NCR.

3. Corrective Steps Taken and Results Achieved

NCR 3013 has been generated to address the inaccessible welds. TVA has inspected all accessible portions of all 74 welds by visual inspection. These welds have been only partly inspected due to their locations but no weld has received less than a 25-percent weld area review. All 74 welds are being evaluated by the Division of Engineering Design to determine if they are acceptable or if repair is required.

4. Corrective Steps Taken to Avoid Further Violations

All personnel in the Welding Engineering Unit associated with the evaluation or input of data on deficient welds will receive training on ensuring that adequate scope is included in addressing nonconformances.

5. Date When Full Compliance Will Be Achieved

TVA will be in full compliance on August 1, 1984.

BELLEFONTE NUCLEAR PLANT UNIT 1
RESPONSE TO SEVERITY LEVEL IV VIOLATION
50-438/84-05-02
FAILURE TO FOLLOW PROCEDURE FOR EVALUATING
REVISED DESIGN DRAWINGS

Description of Deficiency

10 CFR 50, Appendix B, Criterion V and the accepted QA program (TVA-TR-75-1A, Rev. 5) section 17.1A.5, requires in part that activities affecting quality shall be prescribed by procedures and shall be accomplished in accordance with these procedures. Bellefonte QCP-10.7, paragraph 6.1.11, states in part that the Responsible Engineering Unit evaluates revised design drawings to determine if changes are required to the existing records.

Contrary to the above, activities affecting quality were not accomplished in accordance with approved procedures in that three electrical cable tray supports had their configuration modified by a drawing revision but the previously finalized QC inspection records had not been invalidated as required by QCP-10.7.

TVA Response

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reasons for the Violation

At the time the cable tray support drawing revision was issued to modify the configuration, no guidance existed in BNP-QCP-10.7 to require the drawing review and invalidation of affected QC inspection records. The cable tray support drawing revisions were issued on August 23, 1982. The requirement in BNP-QCP-10.7, which was referenced in the violation, became effective on July 29, 1983. Procedural guidance for invalidation of QC records at the time of the drawing revisions was contained in BNP-QCP-10.6, R13, Work Releases, which was issued April 22, 1982. The procedure required the appropriate engineering units to list any QA records previously generated that were affected by rework, with the exception of weld records which were revised by the Automated Process Control (APC) program.

A total of 742 tray supports were within the scope of NCR 1894. Only 14 supports (MK 8D and 8C) required addition of stiffeners as part of the corrective action. The attachment to NCR 1894, which was provided by the Division of Engineering Design (EN DES) for corrective action, stated that a new or alternate weld symbol was added to the drawings for those supports requiring rework. The addition of stiffeners for the 14 MK 8D and 8C supports was not specifically addressed. The weld symbols for the MK 8D and 8C supports were revised, and the Division of Construction (CONST) mistakenly understood this to be the only rework required for the MK 8D and 8C supports.

The revised or alternate weld symbols contained in the cable tray support drawing revisions were reviewed and evaluated by CONST. All welds covered by the NCR which were considered insufficient, including the 14 welds involved with the MK 8D and 8C supports, had weld repair cards generated to rework and reinspect the support welds. The cards for the MK 8D and 8C supports were issued on September 1, 2 and 4, 1982.

TVA considers the cause of this violation to be an isolated, inadequate review of the drawing revisions, which resulted from an unclear communication of corrective action from EN DES to CONST. In addition, the QC record invalidation based on drawing configuration changes was not adequately defined in BNP-QCP-10.6 because affected records were only identified during preparation of the documentation to perform the rework.

3. Corrective Steps Taken and Results Achieved

NCR 2922 was initiated to document the incorrect cable tray support installation. All unit 1 cable tray supports, which were affected by NCR 1894 and subsequent drawing revisions, were reviewed and determined to be in compliance with the exception of the 14 MK 8D and 8C supports. These supports will be reworked to include the missing stiffeners by July 1, 1984.

4. Corrective Steps Taken to Avoid Further Violation

The requirement to review all drawing revisions for invalidation of QC inspections, which is currently in BNP-QCP-10.7, is considered adequate to prevent future items of noncompliance.

This improved system of evaluating drawings will require records to be invalidated upon issue and review of the revised drawings instead of waiting until preparation of the rework documentation. The requirements in BNP-QCP-10.6 regarding invalidation of QC documentation are no longer needed and have been removed.

5. Date when Full Compliance Will Be Achieved

TVA will be in full compliance by July 1, 1984.