

UTAH REGION  
TENNESSEE VALLEY AUTHORITY  
ATLANTA, GEORGIA  
CHATTANOOGA, TENNESSEE 37401

400 Chesapeake Street Tower II

82 OCT 12 P12:40 October 7, 1982

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - RESPONSE TO VIOLATION  
50-438,50-439/82-23-02 - FAILURE TO DOCUMENT DEFICIENCY,  
50-438,50-439/82-23-03 - FAILURE TO FOLLOW PROCEDURES FOR PLANNING AND  
PERFORMING INSPECTIONS AND FOR CONTROLLING INSPECTION DOCUMENTATION, AND  
50-438,50-439/82-23-04 - INADEQUATE INVESTIGATION OF GENERIC ASPECTS AND  
FAILURE TO IDENTIFY CAUSE FOR SIGNIFICANT DEFICIENCIES

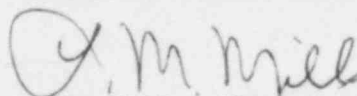
This is in response to R. C. Lewis' letter dated August 26, 1982, report numbers 50-438/82-23, 50-439/82-23, concerning activities at the Bellefonte Nuclear Plant which appeared to have been in violation of NRC regulations. The response to these violations has been delayed. This delay and request for extension was communicated to R. V. Crlenjak (NRC-OIE RII) by telephone on September 24, 1982. 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

  
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

RESPONSE TO SEVERITY LEVEL IV VIOLATION 50-438,50-439/82-23-02  
FAILURE TO DOCUMENT DEFICIENCY

Description of Deficiency

10 CFR 50, Appendix B, Criterion V, as implemented by FSAR section 17.1A.5, requires activities affecting quality be accomplished in accordance with prescribed procedures.

Contrary to the above, the licensee did not record a reported deficiency in accordance with their procedure. Procedure QCP-10.26, section 6.1, requires that deficiencies which render the condition of an item unacceptable or indeterminant be promptly recorded on a Quality Control Investigation Report (QCIR) when reported to engineering personnel. In accordance with QCP-10.26, Section 4.2, the QCIR is used by engineering personnel to document, disposition, and control known or suspected deficiencies. On March 4, 1982, engineering personnel were informed that locking devices on the valve stem guide locking nuts on the Main Steam Isolation Valves were not properly installed. Over four months later, on July 18, 1982, the deficiency still had not been recorded on a QCIR and the condition had not been evaluated or corrected.

Admission or Denial of the Alleged Violation

TVA denies the alleged violation. Bellefonte QCIR 13,146 was initiated on September 25, 1981 to document a condition adverse to quality that was identified by Hartsville Nonconformance Report (NCR) HNPA-163R1, which described the inadequate installation of locking devices on main steam isolation valve stem guide nuts. TVA does admit the QCIR was not written clearly in that the description of the deficiency stated the locking devices may not have been installed rather than the locking devices may have not been installed correctly. However, the Hartsville NCR was referenced on the QCIR and was written properly documenting the deficiency, and the responsible personnel were aware of the nature of the deficiency. TVA had previously established a need to disassemble the cited valves to perform cleanliness inspections of adjacent piping. Disassembly of these valves will require removal of the locking devices and upon reassembly the locking devices will be reinstalled correctly.

TVA revised QCIR 13,146 to clearly describe the condition adverse to quality by adding the word "correctly" and identifying the locking devices by mark number.

## ENCLOSURE

### BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 RESPONSE TO SEVERITY LEVEL IV VIOLATION 50-438,50-439/82-23-03 FAILURE TO FOLLOW PROCEDURES FOR PLANNING AND PERFORMING INSPECTIONS AND FOR CONTROLLING INSPECTION DOCUMENTATION

#### Description of Deficiency

10 CFR 50, Appendix B, Criterion V, as implemented by FSAR Section 17.1A.5, requires that activities affecting quality be prescribed by documented procedures and accomplished in accordance with those procedures.

Contrary to the above, the preparation of instructions which prescribed certain welding inspections, the performance of the inspections (examinations) in accordance with those instructions, and the control of the inspection records were not accomplished in accordance with the procedural requirements as described below:

1. Sequence control charts (SCCs), as described in procedure QCP 10.36, are instructions which prescribe the desired sequences of installation operations - including inspection operations. Procedure QCP-10.36 Section 6.1.2 requires that SSCs involving welding or weld inspection requirements that are not originated by the Welding Engineering Unit (WEU) be reviewed and approved by WEU personnel prior to issue, with the WEU reviewer's initials and the date being entered to signify the approval. SCCs 1NC-M223 and 2NC-M224 (for Bellefonte Nuclear Plant Units 1 and 2), which were originated by the Mechanical Engineering Unit but include welding and welding inspection requirements, were issued without the required WEU approval initials and dating. The subject SCCs provided requirements for installation of the pressurizer surge line.
2. Procedure QCP-10.36, Section 6.1.3, requires that SCCs be reviewed and initialed by QC group leaders. SCCs 1NC-M223 and 2NC-M224 were issued without QC initials signifying review.
3. Procedure QCP-10.36, Section 6.1.1, requires that SCC operations be performed in numerical sequence. Step 3 of SCC 1NC-M223 (Unit 1) was not performed in the intended sequence indicated and as a result easy access for required examinations on the ground inside diameter of a weld was lost.
4. Procedure QCP-10.7, section 5.3 requires that weld examination records received by the Quality Control Records Unit (QCRU) be filed such that they are readily retrievable. Reports for penetrant and visual examinations of a ground weld, required by Step 3 of SCC 2NC-M224 (Unit 2), had been completed and transferred to the QCRU but could not be located and replacement reports had to be prepared. The time elapsed between the original examinations and preparation of the replacement reports was over five months.

Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

Reasons for the Violation

The NRC inspector identified four areas of procedural deficiencies related to this violation. For reasons of clarity, these areas will be addressed separately.

1. The lack of concurrence initials and dates by WEU on the cited SCCs can be attributed to lack of knowledge by the individual responsible for the preparation of the SCCs and oversight by the individuals responsible for review and approval of the SCCs.
2. The lack of concurrence initials by the MEU QC group leader can again be attributed to lack of knowledge by the individual responsible for the preparation of the SCCs and oversight by the individuals responsible for review and approval of the SCCs.
3. An erroneous interpretation of the intent of the particular step of the MEU SCC 1NC-M223 in Unit 1, by the engineering representative resulted in the WEU SCC 1NC-W-002 not being implemented at the desired time. The MEU SCC 2NC-M-224 was previously interpreted correctly in Unit 2 and the WEU SCC 2NC-W-002 was implemented at the desired time. This erroneous interpretation of the SCC 1NC-M-223 was the cause of this portion of the violation.
4. Because of the large number of records that are received, reviewed, and filed by the QCRU, occasional misplacement of records does occur. The QCRU exerts every effort to maintain availability and retrievability of records at anytime. The cause for these records not being retrievable cannot be determined, however, the most plausible cause can be attributed to oversight and/or confusion on the part of personnel responsible for the receipt, review, and filing of such records.

Corrective Action Taken and Results Achieved

- 1&2 The preparation of the SCCs was properly coordinated between the WEU and the MEU as was determined through investigative interviews with those personnel involved and as was evidenced by the existence of the WEU SCC numbers referenced on the MEU SCCs. QCIR 25358 was written to identify the discrepancies involved with the lack of concurrence initials and dates on the subject SCCs. Disposition of the QCIR requires review and concurrence on the SCCs by WEU and MEU QC. The QCIR number will be referenced on the SCCs adjacent to the concurrence initials.

3. QCIR 19883 was written to document that WEU SCC 1NC-W-002 was not performed at the desired time. WEU SCC 1NC-W-002 was completed with all required examinations on the ground inside of the weld performed correctly and accepted.
4. Replacement reports have been prepared.

Steps Taken to Avoid Further Violations

The disposition of QCIR 25358 requires that all MEU engineering personnel be reinstructed on the requirements of BNP-QCP-10.36, Sequence Control Charts. In addition, the mechanical engineering unit supervisor has issued a memorandum emphasizing the importance of proper preparation and processing of SCCs. Regarding retrievability of records, the QCRU supervisor has issued a memorandum to all filing personnel of the importance in proper review and filing of QA documentation.

Date of Full Compliance

Full compliance will be achieved upon reinstruction of MEU personnel to the requirements of BNP-QCP-10.36 and upon closure of QCIR 25358, which TVA expects to complete by October 29, 1982.



RESPONSE TO SEVERITY LEVEL IV VIOLATION 50-438,50-439/82-23-04  
INADEQUATE INVESTIGATION OF GENERIC ASPECTS AND FAILURE TO IDENTIFY CAUSE  
FOR SIGNIFICANT DEFICIENCIES

Description of Deficiency

10 CFR 50, Appendix B, Criterion XVI, as implemented by FSAR Section 17.1A.16, requires establishment of measures to assure prompt identification and correction of nonconformances. For significant nonconformances it requires that the nonconformance, the cause of the nonconformance, and the corrective action taken be documented.

Contrary to the above, measures established did not assure prompt identification and correction of nonconformances and for significant nonconformances the causes were not documented, as described below:

1. The site procedures (measures) did not provide specific requirements, responsibilities or guidance for performance of evaluations to assure identification of generic nonconformance.
2. The site procedures did not specify responsibilities for documentation of the cause of nonconformance that had been determined to be significant.
3. A significant nonconformance involving welds of unacceptable size and quality on a revolving platform structure was documented on Nonconforming Condition Report (NCR) 1638 on October 27, 1981. No evaluation was made to determine whether the nonconformance was generic. As a result, additional nonconforming welds on other items from the same vendor were not promptly identified. The additional instances of nonconformance were identified and recorded on Quality Control Investigation Report 23178 on July 21, 1982.
4. Cause was not documented for nonconformances that were determined significant and dispositioned on completed NCRs 1638, 1312, 1315, 1350 and 3R1.

Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

Reasons for the Violation

1. The inadequacy of site procedures involving responsibilities or requirements for performing generic investigations of significant nonconformances was caused by the lack of adequate guidance in higher-tier TVA QA procedures.
2. The inadequacy of site procedures regarding responsibilities for documentation of cause for significant nonconformances is also attributed to the lack of adequate guidance in higher-tier TVA QA procedures.

3. The failure to perform a generic evaluation as a result of NCR 1638 is a result of insufficient higher-tier TVA procedures as discussed in item 1 above.
4. The failure to document cause of NCRs 1638, 1312, 1315, 1350, and 3R1 is a result of insufficient higher-tier TVA QA procedures as discussed in item 2 above.

#### Corrective Action Taken and Results Achieved

- 1&2. TVA's Division of Construction issued revisions on April 20, 1982, to CONST QAP 15.1, Control of Nonconformance Reports, and CONST QAP 16.1, Conditions Adverse to Quality. The revisions provide instructions and guidance involving determination and documentation of cause and generic implications for significant nonconformances. The revision incorporated a new nonconformance report form with directions for completion that clearly define the need for assignment of cause and evaluation for generic implications. BLN CONST is in the process of revising site procedure BNP-QCP-10.4, Nonconformance Reports, to implement the changes in CONST QAPs 15.1 and 16.1. QCIR 25716 was written to document the time lapse between QAP revision and site QCP revision.
3. NCR 1929 was initiated to identify the generic implication breakdown involved with NCRs 1463 and 1638, written against Johnson Machine Works. The disposition of NCR 1929 requires BLN CONST to inspect all Johnson Machine Works-supplied items at Bellefonte and report any conditions adverse to quality to TVA's Division of Engineering Design (EN DES) for evaluation and disposition.
4. NCRs 1312 and 3R1 have been evaluated for cause and the cause documented on revised final 50.55(e) reports to NRC Region II. The final 50.55(e) reports for NCRs 1315, 1638, and 1350 are being revised to adequately reflect cause.

#### Steps Taken to Avoid Further Violations

An OEDC program directive was issued by G. H. Kimmons, Manager of Engineering Design and Construction, on July 21, 1982, which addresses the identification and documentation of cause and generic implications for significant conditions adverse to quality. This new program directive has been included in the OEDC Program Requirements Manual, and will provide adequate guidance as part of the OEDC QA Program. Applicable aspects will be incorporated into site procedures during the revision process.

#### Date of Full Compliance

Submittal of revised final reports for NCRs 1315, 1638, and 1350, and the implementation of revised BNP-QCP-10.4 will be complete by November 19, 1982.