

TENNESSEE VALLEY AUTHORITY REGION II
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

March 8, 1983 10 A.M. 23

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - RESPONSE TO VIOLATIONS
50-438,50-439/82-33-02, PLUG WELDING OF ELECTRICAL CONDUIT HANGER,
50-438/82-33-03, SPENT FUEL GATE GUIDES, 50-438,50-439/82-33-01,
OVERPRESSURIZATION OF THE CHEMICAL ADDITION AND BORON RECOVERY SYSTEM, AND
50-438/82-33-04, OPERATION OF SAFETY-RELATED EQUIPMENT

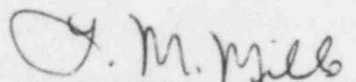
This is in response to R. C. Lewis' letter dated February 7, 1983, report numbers 50-438/82-33, 50-439/82-33, concerning activities at the Bellefonte Nuclear Plant which appeared to have been in violation of NRC regulations. Enclosed is our response to the citations.

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


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

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ENCLOSURE
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2

RESPONSE TO SEVERITY LEVEL IV VIOLATION 50-438, 50-439/82-33-02
PLUG WELDING OF ELECTRICAL CONDUIT HANGER

Description of Deficiency

10 CFR 50, Appendix B, Criterion IX and the accepted QA Program (TVA-TR75-1A, Revision 5) Section 17.1A.9 requires that "Measures shall be established to assure that special processes, including welding, heat treating, and nondestructive testing, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements."

Bellefonte's Quality Control Procedure BNP-QCP-10.13, Rev. 5 requires that all welding shall be performed using qualified detailed weld procedures.

Contrary to the above, on November 29, 1982, the resident inspector noted that the electric fabrication shop had altered seismic conduit hanger (FF-486-16-MK86 SN9) without proper authorization (Unit 1 and 2).

Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

Reason for the Violation

The violation occurred because the craft welder knowingly failed to follow procedure BNP-QCP-10.13, Weld Procedure Assignment, which requires that all welding shall be performed using qualified detail weld procedures. The welder had been informed of the requirement during welder orientation on April 22, 1982.

Corrective Action Taken and Results Achieved

QCIR 28102 and NCR 2110 were initiated to document the unauthorized welding. The subject hangers were rejected and replacements were fabricated as described by the disposition of the NCR.

Steps Taken to Avoid Further Violations

Disciplinary action was taken against the welder in the form of suspension. In addition, upon return from suspension, the welder was reinstructed in welder orientation on December 23, 1982.

Date of Full Compliance

TVA was in full compliance on January 24, 1983.

RESPONSE TO SEVERITY LEVEL IV VIOLATION 50-438/82-33-03
SPENT FUEL GATE GUIDES

Description of Deficiency

10 CFR 50, Appendix B, Criterion V and the accepted QA Program (TVA-TR75-1A, Revision 5) Section 17.1A.5 require that activities affecting quality be accomplished in accordance with procedures and drawings.

TVA's Quality Assurance Program Policy QAPP 3 Rev. 1 states in paragraph B.4 the following: "Work shall not be started on field changes by construction until receipt of oral (to be confirmed later in writing) or written authorization from the design group." TVA's Quality Assurance Procedure QAP 3.1 Rev. 6 states the following in part in paragraph 2.1.A: "FCRs shall be approved or authorized by the appropriate DPO representative prior to starting work. . .". Bellefonte Quality Control Procedure BNP-QCP-10.2 paragraph 6.3.5 states the following in part: "FCRs shall be approved by the appropriate Design Project Organization before construction pertinent to the change starts."

Contrary to the above, between October 8 and 15, 1982, the resident noted that the system engineer in the mechanical engineering unit had issued a work release to slot the spent fuel gate guides without receiving EN DES concurrence (FCR) as required by TVA's Procedures (Unit 1).

Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

Reason for the Violation

The violation occurred as the result of a misunderstanding between the responsible system engineer and his assistant. The system engineer discussed the problem with the appropriate design engineer and obtained informal concurrence to perform the modification. The assistant was directed to issue a work release and process the FCR; however, he understood the engineer to say that the FCR had been processed.

As a result, the FCR was never processed.

Corrective Action Taken and Results Achieved

QCIR 30810 was written to document the performance of the modification without FCR-EN DES approval. FCR M-4605 was written to obtain approval for the modification and add the change to the applicable drawing.

Steps Taken to Avoid Further Violations

All Mechanical Engineering Unit personnel were retrained in site QA procedure BNP-QCP-10.2, Drawing Control, by March 7, 1983.

Date of Full Compliance

TVA was in full compliance on March 1, 1983.

RESPONSE TO SEVERITY LEVEL IV VIOLATION, 50-438,50-439/82-33-01
OVERPRESSURIZATION OF THE CHEMICAL
ADDITION AND BORON RECOVERY SYSTEM

Description of Deficiency

10 CFR 50, Appendix B, Criterion V and the accepted QA Program (TVA-TR75-1A, Revision 5) Section 17.A.5 require that activities affecting quality be accomplished in accordance with procedures and drawings. Bellefonte Quality Control Procedure BNP-QCP-10.26 Rev. 4, paragraph 6.5 states the following: "If the concern is deemed to be a reportable nonconformance, the ACE initiates appropriate action through the engineering unit supervisor and unit personnel for generation of a Nonconforming Condition Report (NCR) per BNP-QCP-10.4. (NOTE: the time period from the identification of a deficiency until the Construction Engineer's determination of significance on reportable nonconformances should not exceed eight (8) calendar days). If the final disposition of the QCIR is to initiate a NCR then the QCIR may be completed at this time per paragraph 6.9." On October 11 and 30, 1982, the Chemical Addition and Boron Recovery System was overpressurized. Both instances are reportable nonconformances.

Contrary to the above, activities affecting quality were not accomplished in accordance with procedures in that NCRs were not generated for both overpressurization instances, as required by BNP-QCP-10.26, until after they were identified by the resident inspector on November 18, 1982.

Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

Reason for the Violation

The first overpressurization occurred on October 11, 1982. QCIR 26345 was initiated on October 14, 1982, the unit supervisor reviewed the QCIR and determined it to be non-significant.

The second overpressurization occurred on October 30, 1982. QCIR 27270 was initiated on November 3, 1982. The assistant construction engineer reviewed the QCIR and determined it to be non-significant.

Both QCIRs were dispositioned to initiate an NCR. The responsible individual considered the eight (8) calendar day time to be invalid because of this non-significant determination and did not take immediate steps to process the NCRs.

Corrective Action Taken and Results Achieved

NCR 2080 was initiated on November 12, 1982 to document the first overpressurization and was determined non-significant. NCR 2089 was initiated on November 19, 1982 and was determined to be significant due to the repeated nature of the nonconformance in addition to the initiation of stop work order SW008 on the same day.

Steps Taken to Avoid Further Violations

Based on the evaluation of flushing overpressurizations during the investigation of stop work order SW008, all future overpressurizations which occur during flushing operations that exceed the hydrostatic test pressure of the applicable portion of the affected system will be considered potentially significant conditions adverse to quality and processed accordingly.

Date of Full Compliance

TVA was in full compliance on November 19, 1982.

RESPONSE TO SEVERITY LEVEL IV VIOLATION 50-438/82-33-04 OPERATION OF SAFETY-RELATED EQUIPMENT

Description of Deficiency

10 CFR 50, Appendix B, Criterion V and the accepted QA Program (TVA-TR75-1A, Revision 5) Section 17.1A.5 require that activities affecting quality be accomplished in accordance with procedures and drawings. Also, paragraph 4.6 of ANSI N45.2.8-1975, committed to by the licensee, stated the following in part:

"Temporary use of equipment or facilities to which this standard applies that are to become part of the completed project may be desirable. Authorization of such usage shall be as provided for in the contract or by written approval from the responsible organization. Such temporary use shall not subject the equipment or system to conditions for which they were not designed.

The temporary use authorization shall include: (1) conditions of use or operation; (2) maintenance requirements; and (3) inspections and tests as required to maintain operability and quality during period of temporary use of the item. When temporary use is completed, conditions of temporary use shall be evaluated to verify that the permanent plant equipment continues to satisfy the specified requirements."

Contrary to the above, between November 5 and 12, 1982, and on October 8, 1982, the resident noted that safety-related components, specifically several Essential Raw Cooling Water pumps and Borated Water Recirculation Pump 1A, in temporary use, were being operated without an approved TVA procedure or operation (Unit 1).

Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

Reason for the Violation

The violation occurred because TVA did not have a QA procedure to govern the operation of safety-related equipment on a temporary basis.

Corrective Action Taken and Results Achieved

BNP-QCP-9.5, Construction Operating Instruction (COI), was issued on December 17, 1982 to provide a method to be used when COIs are required during the interval between the completion of construction testing and the eventual transfer of the component to the Division of Nuclear Power.

Steps Taken to Avoid Further Violations

All future operation of safety-related components that is within the scope of BNP-QCP-9.5 will require initiation of an approved COI.

Date of Full Compliance

TVA was in full compliance on December 17, 1982.