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

May 15, 1980

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT - INFRACTION 50-438, 50-439/80-04-01 - FAILURE TO PROVIDE APPROPRIATE ACCEPTANCE CRITERIA IN INSPECTION PROCEDURES AND INFRACTION 50-438/80-04-02 - FAILURE TO FOLLOW PROCEDURE FOR CAPPING AND SEALING DURING PIPING SYSTEM FABRICATION

This is in response to C. E. Murphy's letter dated April 23, 1980, RII:WPK 50-438/80-04, 50-439/80-04, 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 D. L. Lambert at FTS 854-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure
cc: Mr. Victor Stello, Jr., Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
RESPONSE TO NRC INFRACTION
FAILURE TO PROVIDE APPROPRIATE ACCEPTANCE CRITERIA IN INSPECTION PROCEDURES

Infraction 50-438/50-439/80-04-01

As required by 10 CFR Appendix B, Criterion V, and as implemented by Tennessee Valley Authority (TVA) Final Safety Analysis Report, Section 17.1A.5, "Activities affecting quality shall be prescribed by . . . procedures . . . Procedures shall include appropriate quantitative . . . acceptance criteria." The ASME Boiler and Pressure Vessel Code, Section III, Figure ND-4427-1 requires socket weld flange-to-pipe fillet weld leg size to be 1.4 times the nominal pipe wall thickness minimum.

Contrary to the above, on March 19, 1980, TVA Quality Control Procedure BNP-QCP-7.5, Revision 3, with addendum 3, "Visual Examination of Welds" paragraph 7.2.5, requires fillet leg size for all socket welded joints to be 1.25 times the nominal pipe wall thickness. This allowed four safety related socket weld flange-to-pipe fillet welded joints to be accepted with fillet weld leg size less than 1.4 times the nominal pipe wall thickness.

Corrective Action Taken and Results Achieved

BNP-QCP-7.5 now reflects ASME code requirements for socket weld flange-to-pipe fillet weld leg size being 1.4 times the nominal pipe wall thickness minimum.

Steps Taken to Avoid Further Recurrence

To allow for implementation of changes required by revisions in process specifications in a more timely manner, the format of site quality control procedures has been changed so that process specifications are now integral to the quality control procedures.

Date of Full Compliance

Bellefonte is in full compliance. Procedural changes were completed on May 7, 1980. The concern on welds made before this procedural change has been documented to NRC Region II OIE Office as TVA nonconformance report 1188 and will be reported as such. Complete documentation of corrective actions will be handled under 10 CFR 50.55(e) reports on this NCR.

ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNIT 1
RESPONSE TO NRC INFRACTION
FAILURE TO FOLLOW PROCEDURE FOR CAPPING AND SEALING
DURING PIPING SYSTEM FABRICATION

Infraction 50-438/80-04-02

As required by 10 CFR 50 Appendix B, Criterion V and as implemented by Tennessee Valley Authority (TVA) Final Safety Analysis Report, Section 17.1A.5, "Activities affecting quality shall be prescribed by . . . procedures . . . and shall be accomplished in accordance with those . . . procedures." TVA procedure MEU-SOP-605, Revision 1, "Cleanliness Control During Piping System Fabrications," requires the mechanical engineering unit to perform surveillance to ensure openings on piping and equipment are sealed or capped.

Contrary to the above, on March 20, 1980, seven safety related piping systems and four safety related valve assemblies were noted in Unit 1 with either no pipe seals or damaged pipe seals.

Corrective Action Taken and Results Achieved

Documented surveillance to ensure openings on piping and equipment are sealed or capped has been increased from monthly to weekly. This will be documented in procedure change to MEU-SOP-605. Deficiencies noted on these weekly surveillances are being tabulated to give project management an indication of areas requiring additional attention.

Plastic caps to increase durability of end closures have been ordered. Vertical openings looking up are now being closed with a more rugged closure.

Steps Taken to Avoid Further Recurrence

The procedural requirements and the importance of maintaining end closures on piping and equipment are being reemphasized to construction employees. Weekly documented surveillances and tabulated results of these inspections will identify if further corrective action is required.

Date of Full Compliance

Bellefonte Nuclear Plant will be in compliance with the established requirements by July 15, 1980.