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

84 SEP 7 P2:34

August 31, 1984

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANTS UNITS 1 AND 2 - RESPONSE TO VIOLATION BLRD-50-438/84-12-01, BLRD-50-439/84-12-01- FAILURE TO FOLLOW PROCEDURES FOR HANGER INSPECTIONS

This is in response to D. M. Verrelli's letter dated July 18, 1984, report numbers 50-438/84-12, 50-439/84-12 concerning activities at the Bellefonte Nuclear Plant which appeared to have been in violation of NRC regulations. Enclosed is our response to the citation. A two-week delay concerning the submittal of this response was discussed with Inspector C. A. Julian on August 17, 1984.

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

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

D. L. Lambert

D. L. Lambert, Supervisor
Special Projects

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
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

ENCLOSURE

BELLEFONTE NUCLEAR PLANT
RESPONSE TO SEVERITY LEVEL V VIOLATION
50-438/84-12-01, 50-439/84-12-01
FAILURE TO FOLLOW PROCEDURES FOR HANGER INSPECTIONS

Description of Deficiency

10 CFR 50, Appendix B, Criterion V, as implemented by Bellefonte FSAR Section 17, paragraph 17.1A.5, requires that activities affecting quality be accomplished in accordance with documented procedures. Bellefonte quality control procedures (QCP) 7.5 and 6.17 provide the procedures and acceptance criteria for welding and dimensional inspections of hangers.

Contrary to the above, activities affecting quality were not being accomplished in accordance with QCP-7.5 and QCP-6.17 in that a reinspection of fourteen hangers revealed two hangers did not meet the documented welding acceptance criteria, and two other hangers did not meet the documented dimensional inspection criteria.

TVA Response

Admission or Denial of the Alleged Violation

1. TVA admits the violation occurred as stated. The violation is addressed in two parts: welding inspection (A) and hanger dimensional inspection (B). An additional improperly installed hanger was identified in inspection report 50-438/84-13 and 50-439/84-13. The scope of this response will include the additional hanger.

Part (A)

2. Reason for the Violation

   TVA has determined that the unacceptable welds are attributable to two conditions: (1) welders and inspectors were not equipped with the inspection tools and gauges required to confirm adequate weld size, and (2) welding quality control inspectors were inadequately trained in the requisite visual quality control examination techniques.

3. Corrective Steps Taken and Results Achieved

   The disposition of the cited welds was documented on February 3, 1984, under nonconformance report (NCR) 1968 (also identified as construction deficiency report BLRD-50-438/82-49, BLRD-50-439/82-44) The scope of the NCR includes all welds fabricated and inspected during the time between May 1, 1980, and July 1, 1981, as were the cited welds. Corrective actions will include reinspection of the welds and rework where necessary. Details of the corrective actions taken will be included in the next 10 CFR 50.55(e) report which is scheduled for December 20, 1985.

4. Corrective Steps Taken to Avoid Further Violations

TVA has provided weld inspection tools and gauges to both welders and inspectors. In addition, all welding quality control inspectors were certified in visual welding examination techniques between September and October of 1981. Results of visual inspection audits being performed on a continuing basis in accordance with Standard Operating Procedure (SOP) 716 (implemented May 14, 1981) have indicated that inspectors are accurately performing civil and mechanical weld inspections properly.

5. Date When Full Compliance Will Be Achieved

Corrective actions on this item will be completed in accordance with the schedule established with respect to the 10 CFR 50.55(e) report.

Part (B)

2. Reasons for the Violation

Two basic types of discrepancies were identified in this section. Investigation results have indicated that both type discrepancies are of an isolated nature. The first type involves a unique sliding support configuration which is used on a limited basis. The inadequate clearance which existed between the support and adjacent structure could have been undetected or incorrectly calculated during the inspection process.

The second type consists of supports which utilize sway type members (e.g., struts, rods and snubbers). The tolerances allowed for the sway angle are strict, which could result in errors during inspection calculations. A review of hanger quality control postinspection audit results for the period from July 1983 to July 1984 indicates that only 4 of 211 reinspected supports exhibited errors involving sway angle tolerances. The actual cause of either type discrepancy cannot be specifically attributed to improper inspection or postinspection movement. Construction activity adjacent to nonrigid supports could cause small movements relative to pipe or building location which would shift the components outside the allowable tolerance.

3. Corrective Steps Taken and Results Achieved

NCRs 3245, 3246, and 3285 were initiated to document the incorrect installations. Corrective action will consist of minor configuration rework to bring the supports within allowable tolerances.

4. Corrective Steps Taken to Avoid Further Violations

To support the TVA conclusion that sliding support discrepancies are isolated, all sliding supports which have received quality control inspection have been identified and reinspected to verify acceptability. Seventy-two sliding supports were reinspected. One support was found to have insufficient clearance from an adjacent pipe; however, the pipe had been installed after the final inspection of the sliding support and had not yet been inspected by piping quality control inspectors. Consequently, TVA considers the installation cited in the violation to be an isolated case. However, to minimize the possibility of future deficiencies, hanger quality control personnel have been instructed to be aware of the unique configuration during future inspections.

TVA considers the sway angle discrepancies to be isolated based on the postinspection audit results. However, directions have been provided to hanger quality control personnel to monitor previous sway angle inspections during future adjacent inspections and normal surveillance. To prevent recurrence of any postinspection movement, a memorandum will be provided to appropriate engineering, quality control, and craft personnel from the project manager to reemphasize the necessity to maintain the integrity of permanent equipment which is susceptible to postinspection damage.

5. Date When Full Compliance will be Achieved

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