

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

December 21, 1983

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 UNITS 1 AND 2 - RESPONSE TO VIOLATION  
50-438/83-27-01, 50-439/83-27-01 - FAILURE TO FOLLOW PROCEDURES FOR HANGER  
INSPECTIONS

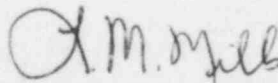
This is in response to D. M. Verrelli's letter dated November 23, 1983  
report numbers 50-438/83-27, 50-439/83-27 concerning activities at  
the Bellefonte Nuclear Plant which appeared to have been in violation of  
NRC regulations. Enclosed is our response to the citations.

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

Records Center (Enclosure)  
Institute of Nuclear Power Operations  
1100 Circle 75 Parkway, Suite 1500  
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## ENCLOSURE

### BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 RESPONSE TO SEVERITY LEVEL V VIOLATION 50-438/83-27-01, 50-439/83-27-01 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 prescribed by documented procedures and drawings and be accomplished in accordance with these procedures and drawings. Bellefonte QCP-7.5 and QCP-6.17 provide the procedures and acceptance criteria for welding and dimensional inspections of hangers.

Contrary to the above, between October 18-21, 1983, activities affecting quality were not being accomplished in accordance with documented procedures and drawings in that a reinspection of seven 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

##### 1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated. TVA would like to address the violation in two parts with respect to welding inspection (a), and hanger dimensional inspection (b).

##### 2. Reasons for the Violation

- (a) Hanger 1NS-MPHG-0039, weld "I" - Since the location of the cold lap and slag pocket was the end of the fillet weld at the "toe" of the start/stop point of the weld, the inspector did not consider this to be a significant condition during the reinspection required by NCR 1203, which had been generated to document and correct undersized fillet welds.

Hanger 1NS-MPHG-0076 welds "D" and "F" - This condition is attributed to failure of the craftsman and inspector to abide by the weld size requirements as specified on the drawing.

- (b) Pipe support ONM-MPHG-0618, Sh. 2 was inaccurately measured by Hanger QC personnel due to the failure to establish an accurate and consistent method to perform this measurement within the confines of the required 1/16" tolerance. The improper size spacer on support ONM-MPHG-0035 was the result of an isolated inspector error in assuring proper spacer size.

### 3. Corrective Steps Taken and Results Achieved

- (a) Quality Control Investigation Reports (QCIRs) 36,871 and 36,872 were generated to document this problem. These welds will be repaired to meet present requirements.

In addition, TVA has identified the need to evaluate welds performed during the time period that the cited welds were made. These welds have been identified under the scope of NCRs 1888 and 1968 reported to the NRC as CDRs BLRD-50-438/82-49 and BLRD-50-439/82-44. The results of TVA's evaluation will be provided by the above 50.55(e) report.

- (b) QCIRs 36,873 and 36,874 were generated to document and resolve the concerns on hangers ONM-MPHG-0618, sheet 2, and ONM-MPHG-0035.

Approximately 490 supports requiring the same size clamp spacers as support ONM-MPHG-0035 had been installed and inspected. To determine if a similar problem existed, fifty supports were reinspected for proper spacer dimension. Two discrepancies were found, and these have been documented by separate QCIRs (37,010, 37,011). Based upon this investigation, it does not appear to be a generic problem. It should be further noted that support performance would not have been impaired by the noncomplying spacers.

Approximately 700 trapeze supports had been installed in similar configuration to ONM-MPHG-0618, Sh. 2. Ninety-nine supports were reinspected for proper center-line dimensions. Nine discrepancies were found and have been documented by separate NCRs (2604-2612). The discrepancies found would not have impaired the performance of the supports in that the change in loading on the support rods was two percent or less of the design capacity. Due to the extremely conservative nature of the design, the performance of these supports was not impaired.

### 4. Corrective Steps Taken to Avoid Further Violations

- (a) Recurrence control has previously been stated under 50.55(e) item BLRD 50-438/82-49 and BLRD 50-438/82-44, but it should be acknowledged that TVA has strengthened its training program, and provided needed inspection tools and gauges to both the craftsman and the inspector. The results of this have been illustrated by the favorable results found by Welding Quality Control during its random survey of craft training effectiveness, inspector training effectiveness and work performance by the inspector.
- (b) Training sessions will be conducted to reemphasize the proper inspection of clamp spacers and the allowable tolerance. A consistent, accurate method to measure the distance between pipes and support rods will be developed. Inspectors will be trained. This will provide a consistent method of making the measurements for the site Hanger QC Unit.

5. Date When Full Compliance Will Be Achieved

The cited welds will be corrected by June 27, 1984.

- (a) Additional corrective action will be completed with resolution and close-out of 50.55(e) items BLRD 50-438/82-49 and BLRD 50-439/82-44.
- (b) Inspectors will be retrained by February 17, 1984.