

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

84 NOV 27 1984
November 19, 1984

BLRD-50-438/84-05

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 PLANT UNIT 1 - LENGTH OF INCORE MONITCRING SYSTEM PIPING
AND GAUGE - BLRD-50-438/84-05 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
C. A. Julian on December 30, 1983 in accordance with 10 CFR 50.55(e) as
NCR 2684. This was followed by our interim reports dated January 26 and
June 28, 1984. Enclosed is our final report.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. A. Damer

for J. W. Hufham, Manager
Licensing and Regulations

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

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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNIT 1
LENGTH OF INCORE MONITORING SYSTEM PIPING AND GAUGE
BLRD-50-438/84-05
NCR 2684
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

All incore monitoring system piping for unit 1 was cut approximately 1-1/2 inches too long as a result of an error in establishing the length of the gauge used to measure each pipe. The cause of this deficiency was misinterpretation of lengths of the certified chain. The first foot is graduated in tenths of a foot and site engineering and QC personnel interpreted this as inches which resulted in this deficiency.

Safety Implications

The safety problem arises due to the use of the incore detectors to calibrate and position the excore detectors. The excore detectors are sensitive to position changes and are used in the control of safety-related equipment during an accident. Therefore, had this condition remained uncorrected, it could have adversely affected the safe operation of the plant.

Corrective Action

Based on the recommendations contained in Babcock and Wilcox's (B&W) letter No. D-5153 to TVA dated July 9, 1984, TVA decided to remeasure and rework all of the unit 1 incore monitoring system pipes to an acceptable length. No redesign is involved in this decision. Forty-five of the 62 pipes have been cut and reworked to an acceptable length. The remaining 17 pipes will be remeasured and reworked as necessary when they become accessible.

To prevent recurrence of this deficiency, a training session was held for all applicable instrumentation personnel. The importance of being totally familiar with equipment used in tests and measurements was emphasized to these personnel. Also, all future incore monitoring system pipe measurements are to be made in accordance with B&W's letter No. D-5153.

All corrective action for this deficiency will be completed by February 1, 1985.