

REGION II
TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

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August 18, 1983

BLRD-50-438/83-37

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 UNIT 1 - OFFSET OF DUTCHMAN IN THE INCORE
MONITORING SYSTEM - BLRD-50-438/83-37 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
P. E. Fredrickson on May 16, 1983 in accordance with 10 CFR 50.55(e) as
NCR 2352. This was followed by our first interim report dated June 15,
1983. Enclosed is our second interim report. We expect to submit our next
report by October 26, 1983.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills

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
Atlanta, Georgia 30339

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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNIT 1
OFFSET OF DUTCHMAN IN THE INCORE MONITORING SYSTEM
BLRD-50-438/83-37
10 CFR 50.55(e)
NCR 2352
SECOND INTERIM REPORT

Description of Deficiency

The incore monitoring system (IMS) piping must be installed in precise lengths to assure proper positioning of the incore detector assemblies. The IMS pipe lengths are field adjusted by machining dutchman pipes to fit after the overall pipe lengths are gauged. The dutchmen for 9 of the 62 IMS pipes for unit 1 are offset relative to the longitudinal axis of the pipe runs. For six of the pipes, the offset exceeds the 1° limit in B&W's erection criteria by amounts ranging from 0°-11' to 1°-52'. The cause of these defects is poor workmanship during field installation. There have been no similar deficiencies in the past for Bellefonte and the unit 2 IMS piping has not yet been installed. There are no implications for other TVA plants.

Interim Progress

All of the piping in question passed a 0.502-inch diameter gauge test. Based on this information, B&W has advised TVA that the inside diameters of the pipes should be acceptable "as is," providing the insertion force, as tested with a dummy detector, does not exceed 25 pounds. TVA is presently evaluating B&W's response to determine if the acceptability of the pipes can be accomplished more readily by other means rather than the insertion force testing.