TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401 400 Chestnut Street Tower II

84 007 12 Botober 100, 1984

BLRD-50-438/82-42 BLRD-50-439/82-38

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 UNITS 1 AND 2 - EVALUATION OF FLANGE JOINTS - BLRD-50-438/82-42, BLRD-50-439/82-38 - FIFTH INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on June 1, 1982 in accordance with 10 CFR 50.55(e) as NCR BUN CEB 8205. This was followed by our interim reports dated July 2 and November 17, 1982, April 18, 1983 and April 10, 1984. Enclosed is our fifth interim report. We expect to submit our next report by May 31, 1985.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager Nuclear Licensing

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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 UNITS 1 AND 2
EVALUATION OF FLANGE JOINTS

NCR BLN CEB 8205
BLRD-50-438/82-42, BLRD-50-439/82-38

10 CFR 50.55(e)
FIFTH INTERIM REPORT

Description of Deficiency

Flanged joints for ANS Safety Class 2 and 3 alternate analysis piping systems were not qualified in accordance with the ASME Boiler and Pressure Vessel Code, section III, paragraph NC-3647. This piping was analyzed using TVA's Office of Engineering (OE) Civil Engineering Support Branch (CEB) Report CEB-76-11. However, this report does not delineate guidelines or methods for flange design verification. Also, TVA design criteria WB-DC-40-31.7 does not address flange qualification. Flanged joints are used in a number of safety-related systems such as the Essential Raw Cooling Water System and the Component Cooling Water System.

Interim Progress

TVA has identified all previously completed alternate analyses which contain flanges. OE is still evaluating those flanges for compliance to ASME Code Section III using CEB-76-11 and other procedures approved by TVA. CEB-76-11 has been revised to incorporate flange qualification procedures.