

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

84 APR 12 A 8: 52 April 10, 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 30303

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 - FOURTH 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
BLN CEB 8205. This was followed by our interim reports dated July 2, and
November 17, 1982 and April 18, 1983. Enclosed is our fourth interim
report. We expect to submit our next report by October 12, 1984.

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

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 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)
FOURTH 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 Division of Engineering Design 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

Bellefonte "Alternate Criteria for Piping Analysis and Supports," No. CEB-76-11, has been revised to incorporate flange qualification procedures. Flanges on all new and previously completed problems are being evaluated by the Bellefonte Design Project for compliance to ASME Section III using CEB-76-11 and other procedures approved by CEB.