

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

February 22, 1982

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USNRC REGION II
ATLANTA, GEORGIA

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - BABCOCK & WILCOX'S NONCONSERVATIVE ANALYSIS OF NEUTRON FLUX - NCR BLN NEB 8007 - FOURTH INTERIM REPORT

On November 5, 1980, R. W. Wright, NRC-OIE Region II, was informed that the subject nonconformance was determined to be reportable in accordance with 10 CFR 50.55(e). This was followed by our interim reports dated December 3, 1980 and March 30 and September 21, 1981. Enclosed is our fourth interim report. We consider 10 CFR Part 21 to be applicable to this deficiency. We expect to submit our next report by April 27, 1982.

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 Regulation and Safety

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. James McFarland (Enclosure)
Senior Project Manager
Babcock & Wilcox Company
P.O. Box 1260
Lynchburg, Virginia 24505



ENCLOSURE
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
BABCOCK AND WILCOX'S (B&W) NONCONSERVATIVE ANALYSIS OF NEUTRON FLUX
NCR BLN NEB 8007
10 CFR 50.55(e)
FOURTH INTERIM REPORT

Description of Deficiency

B&W's measurement errors assumed in determining Reactor Protection System (RPS) setpoints may be nonconservative under specific plant conditions. These errors may allow operation outside the established safety limits in certain design basis events.

The events of concern are: small overcooling and small steam line break; large steam line break in containment; and the rod ejection accident.

Interim Progress

B&W has proposed both a hardware resolution and a software resolution to the subject deficiency. TVA is reviewing the two options.