

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

November 16, 1982

NRC REGION II  
ATLANTA, GEORGIA  
NOV 18 4 5: 20

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:

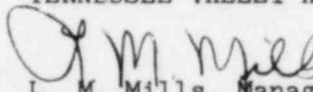
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - BABCOCK & WILCOX'S NONCONSERVATIVE ANALYSIS OF NEUTRON FLUX - NCR BLN NEB 8007 - SEVENTH INTERIM REPORT

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, March 30 and September 21, 1981, and February 22, April 27, and August 10, 1982. Enclosed is our seventh interim report. We consider 10 CFR Part 21 to be applicable to this deficiency. We expect to submit our next report by May 23, 1983.

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

Enclosure

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

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

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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)  
SEVENTH 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

TVA has directed B&W to proceed with their software solution analysis of the neutron flux problem via TVA letter PA-1144 dated July 21, 1982. TVA has also requested B&W to provide a sensitivity study which will quantify any impacts on plant operability because of the results of their analysis.

Once the analysis is complete, B&W will submit a report to TVA for review and approval. This is expected to be completed by April 1, 1983.

TVA will provide more information in the next report.