

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

July 19, 1982

BLRD-50-438/82-45  
BLRD-50-439/82-41

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:

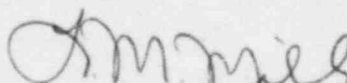
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - B&W DESIGN OF REACTOR COOLANT  
SYSTEM SUPPORTS AND RESTRAINTS - BLRD-50-438/82-45, BLRD-50-439/82-41  
FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector  
R. V. Crlenjak on June 18, 1982 in accordance with 10 CFR 50.55(e) as  
NCR BLN BLP 8220. Enclosed is our first interim report. We expect  
to submit our next report by September 27, 1982. We consider  
10 CFR Part 21 applicable to this deficiency.

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, DC 20555

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

ENCLOSURE  
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2  
B&W DESIGN OF REACTOR COOLANT SYSTEM SUPPORTS AND RESTRAINTS  
10 CFR 50.55(e)  
NCR BLN BLP 8220  
BLRD-50-438/82-45, BLRD-50-439/82-41  
FIRST INTERIM REPORT

Description of Deficiency

The Babcock & Wilcox (B&W) design of the Reactor Coolant System (RCS) supports and restraints was based on an erroneous assumption at the B&W-TVA interface. The B&W stress report for the RCS supports and restraints assumes that the TVA-supplied embedments are of equivalent strength to the B&W-designed attachments (FY = 50 ksi). TVA-supplied embedments are of lesser strength (FY = 36 ksi). Thus, welds and shear bars at the interface points are potentially undersized and overstressed.

There have been no similar deficiencies in the past for B&W-designed supports and restraints.

Interim Progress

TVA has notified B&W of the subject nonconforming condition and is awaiting B&W's recommended corrective actions.