

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

82 JUN 3 A 8:03
June 1, 1982

BLRD-50-438/82-35

BLRD-50-439/82-32

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:

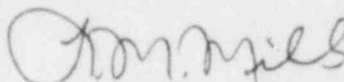
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - OPERATIONAL DEFECTS IN HIGH-PRESSURE INJECTION NOZZLES AND THERMAL SLEEVES - BLRD-50-438/82-35, BLRD-50-439/82-32 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Don Quick on April 29, 1982 in accordance with 10 CFR 50.55(e) as NCR BLN NEB 8206. Enclosed is our first interim report. We expect to submit our next report by July 28, 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

cc: Mr. James McFarland
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
OPERATIONAL DEFECTS IN HIGH-PRESSURE INJECTION NOZZLES AND THERMAL SLEEVES
NCR BLN NEB 8206
BLRD-50-438/82-35, BLRD-50-439/82-32
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

Recent inspections at several B&W operating plants revealed defects in the makeup/HPI nozzles and their thermal sleeves and in the makeup piping upstream of these nozzles. The nozzles are located on each reactor coolant cold leg between the reactor coolant pump and reactor vessel. The nozzles and sleeves are supplied by B&W under the Nuclear Steam Supply System (NSSS) contract. The defects include:

- . through-wall circumferential crack at the welded joint between the nozzle safe end and the first check valve upstream of the safe end
- . loose thermal sleeves
- . missing or worn thermal sleeve retaining buttons

The loose thermal sleeves and missing or worn retaining buttons remove the mechanical restraints which were designed to avoid exposing the nozzle and pipe to a thermal shock condition by preventing sleeve movement in the upstream direction.

Although the degraded components at the affected plants were the same, the resulting damage was not identical. Accordingly, B&W is investigating this concern to determine its cause and to determine if it has generic implications for other B&W plants, including Bellefonte. The Bellefonte nozzle configuration is similar to that at the affected plants except that it is a one-piece construction while the nozzles for the affected plants have a welded safe end. B&W has notified TVA of no similar potential deficiencies in the past for other Bellefonte NSSS nozzles. There are no implications for other TVA plants.

Interim Progress

TVA has forwarded the nonconformance report to B&W for corrective action. TVA has advised B&W that any necessary corrective action is to be implemented before plant startup.

TVA will report further information when a response is provided from B&W.