

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

June 20, 1983

BLRD-50-439/81-20

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:

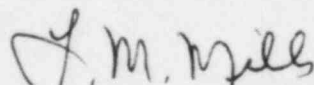
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - DECAY HEAT REMOVAL VALVE
DEFICIENCY - BLRD-50-439/81-20 - REVISED FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. W. Wright on February 12, 1982 in accordance with 10 CFR 50.55(e) as NCR 1315. This was followed by our final report dated March 13, 1981. A commitment was made in TVA's second supplemental response to violation 50-438, 50-439/82-23-04, dated December 17, 1982 to revise the final report on NCR 1315. Enclosed is our revised final report. 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, D.C. 20555

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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USNRC REGION II
ATLANTA, GEORGIA

ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
DECAY HEAT REMOVAL VALVE DEFICIENCY
NCR 1315
BLRD-50-439/81-20
10 CFR 50.55(e)
REVISED FINAL REPORT

Description of Deficiency

The control valve for the decay heat cooler outlet, supplied by ACF Industries, Inc., WKM Valve Division, Houston, Texas to B&W for use in the Decay Heat Removal System, was determined to be deficient. The deficiency resulted from the lower stem, valve plug, and lock pin being mismachined. This mismachining results in the failure of the lock pin to stay in place during normal operation of this valve. As stated in their letter to TVA dated March 9, 1983, B&W has attributed the cause of this nonconformance to some form of human error, either failure to follow procedures or improper execution of procedures.

Safety Implications

The failure of this valve could result in the failure of the Decay Heat Removal System, which would allow the reactor core to be inadequately cooled, thus affecting the safe operations of the plant.

Corrective Actions

The lower stem valve plug and lock pin has been replaced in the 2DH-HV3B valve.

The three other WKM valves supplied by B&W to TVA were disassembled and inspected and found to be correctly machined.

Since this NCR occurrence, WKM has sold the control valve design to a company that is not qualified as a nuclear industry supplier. Therefore, action to prevent recurrence is no longer feasible nor warranted.