

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

July 3, 1984

WBRD-50-390/84-33

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Dear Mr. O'Reilly:

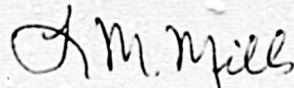
WATTS BAR NUCLEAR PLANT UNIT 1 - UNQUALIFIED LIMITORQUE VALVE OPERATOR -  
NUREG-0588 - WBRD-50-390/84-33- FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector P. E. Fredrickson on May 15, 1984 in accordance with 10 CFR 50.55(e) as NCR WBN NEB 8404. NRC Inspector P. E. Fredrickson was notified on June 7, 1984 concerning the subject deficiency, and a new submittal of July 9, 1984 was established. Enclosed is our final report.

If you have any questions, 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

840712031 : 40703  
PDR ADOCK : 5000390  
S PDR

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1  
UNQUALIFIED LIMITORQUE VALVE OPERATOR - NUREG-0588  
NCR WBN NEB 8404  
WBRD-50-390/84-33  
10 CFR 50.55(e)  
FINAL REPORT

Description of Deficiency

During TVA review of NRC Information Notice 83-72, it was discovered that the Limitorque operator on flow control valve 1-FCV-63-73 contained a Buchanan 0824 terminal block. This terminal block was listed as being unqualified in Information Notice 83-72.

Safety Implications

The subject valve operator performs a critical safety function that is required for safe operation of the plant. This normally closed valve must open to align the suction of the residual heat removal (RHR) pump to the containment sump for the recirculation mode of safety injection and must remain open during the recirculation mode. Since the terminal block is not qualified for the environment in which it is located, the terminal block could fail, which could cause maloperation of the valve and subsequently adversely affect the safe operation of the plant.

Corrective Action

The unqualified Buchanan 0824 terminal block is being replaced with a Curtis Type L block which is qualified. This work is being performed in accordance with Westinghouse field change notice (FCN) WATM-10706 and is scheduled to be complete by July 6, 1984. As a result of this Limitorque operator having the Buchanan 0824 terminal block, TVA inspected all WBN unit 1 Limitorque operators identified on our NUREG-0588 list for class 1E equipment. This inspection has now been completed at WBN unit 1, and the results showed that no other Limitorque operators contained the unqualified terminal block. As a function of our review of Information Notice 83-72, TVA will review and investigate our other nuclear plants (including WBN unit 2) for the unqualified Buchanan 0824 terminal blocks and write NCRs, if required, on a plant-specific basis.

For further information on TVA's corrective action related to the environmental qualification of electrical equipment per NUREG-0588 and 10 CFR 50.49, see the letter from L. M. Mills to J. P. O'Reilly (WBRD-50-390/81-66 and WBRD-50-391/81-62) dated December 15, 1983. This component was identified as being unqualified after the above letter was submitted and, therefore, was not specified in that previous report.