

TENNESSEE VALLEY AUTHORITY

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March 14, 1986

WBRD-50-391/86-29

U.S. Nuclear Regulatory Commission
Region II
Attention: Dr. J. Nelson Grace, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Dr. Grace:

WATTS BAR NUCLEAR PLANT UNIT 2 - FAILURE TO TEST CIRCUIT BREAKERS -
WBRD-50-391/86-29 - INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Bob Carroll on February 13, 1986 in accordance with 10 CFR 50.55(e) as SCR WBN 6583-S. Enclosed is our interim report. We expect to provide our next report on or about July 30, 1986.

If there are any questions, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. A. Domes
R. L. Gridley
Manager of Licensing

Enclosure

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

Records Center (Enclosure)
Institute of Nuclear Power Operations
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ENCLOSURE

**WATTS BAR NUCLEAR PLANT UNIT 2
FAILURE TO TEST CIRCUIT BREAKERS
WBRD-50-391/86-29
SCR WBN 6583-S
10 CFR 50.55(e)
INTERIM REPORT**

Description of Deficiency

Revision 2 to Watts Bar Nuclear Plant (WBN) Quality Control Test Procedure (QCT) 3.6, issued on July 26, 1982, deleted standard test 6-05 (Circuit Breaker Test). WBN QCT-3.06, "Testing of Molded Case Circuit Breakers", was issued on June 26, 1985. During the interim, construction testing was apparently not performed on installed circuit breakers. However, WBN SAR sections 8.3.1 and 8.3.2.1.1 identify that vital AC and DC electrical system components will be tested prior to placing the system into operation.

Safety Implications

Circuit breakers do receive factory tests. However, dust, airborne oxides and lubrication migration during the interim from the time of manufacture to plant startup could increase friction in trip mechanisms, modify timing characteristics and possibly, prevent breaker operation. The failure to test installed circuit breakers to ensure their proper operation could possibly result in their failure to perform as required during plant operation. This could degrade the protection capability for containment electrical penetration circuits and associated class 1E circuits of concern, and could possibly cause a trip of an entire class 1E electrical distribution board if the circuit breaker nearest a fault failed to interrupt the fault. This condition could adversely affect the safety of operations of the plant.

Interim Progress

TVA is in the process of evaluating this deficiency. This evaluation includes a review of Regulatory Guide 1.68, as it pertains to testing of circuit breakers, in order to clarify circuit breaker testing requirements. Corrective action will be determined after the review. TVA is also evaluating the applicability of this deficiency to WBN Unit 1.

TVA will provide the next report on this item to the NRC on or about July 30, 1986.