

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

163C Chestnut Street Tower II

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October 16, 1985

WBRD-50-390/85-39

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

Dear Dr. Grace:

WATTS BAR NUCLEAR PLANT UNIT 1 - INADEQUATE SEPARATION OF TRAINED CABLES -
WBRD-50-390/85-39 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
Ai Ignatonis on September 18, 1985 in accordance with 10 CFR 50.55(e) as SCR
WBN MEB 8527. 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

J. A. Homer
J. W. Hufham, Manager
Licensing and Risk Protection

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
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1
INADEQUATE SEPARATION OF TRAINED CABLES
WBRD-50-390/85-39
SCR WBN MEB 8527
10 CFR 50.55(e)
FINAL REPORT

Description of Description

As a result of the 10 CFR 50, Appendix R, analysis for Watts Bar Nuclear Plant (WBN) unit 1, several safety-related "B-train" electrical cables were relocated into the area of room 737.0-A3. It was subsequently identified that the relocation of those cables resulted in an unacceptable interaction with an A-train auxiliary power system cable (1PL4975A). This is due to a separation distance of less than 20 feet between the A- and B-train cables.

TVA has determined that this deficiency is the result of an inadequate review of the various B-train cable relocations against the WBN auxiliary power system key diagram. TVA considers this inadequate review an isolated occurrence.

Safety Implications

A postulated, single-exposure fire in room 737.0-A3 could possibly result in the loss of redundant paths required for a safe shutdown of the plant. This could adversely affect the safety of operations of the plant.

Corrective Action

TVA will protect the A-train auxiliary power cable with a one-hour fire-rated barrier in room 737.0-A3. This will assure the protection of an alternate path for safe shutdown as required by 10 CFR 50, Appendix R. All design work associated with this item has been completed per engineering change notice (ECN) 5875. All necessary construction work will be completed for this item by November 1, 1985.

TVA will review all cables that were rerouted as a result of the WBN unit 1 Appendix R analysis against the auxiliary power system key diagram for compliance to 10 CFR 50, Appendix R, criteria. The results of this review will be documented as an engineering calculation and will be completed by October 25, 1985.