

**TENNESSEE VALLEY AUTHORITY**

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

US MAR 19 AID: 49  
March 14, 1986

WBRD-50-390/86-08  
WBRD-50-391/86-07

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 UNITS 1 AND 2 - EFFECTS OF TORNADO DEPRESSURIZATION ON CLASS 1E EQUIPMENT - WBRD-50-390/86-08, WBRD-50-391/86-07 - SECOND INTERIM REPORT**

The subject deficiency was initially reported to NRC-OIE Inspector Al Ignatonis on December 18, 1985 in accordance with 10 CFR 50.55(e) as SCR WBN EEB 8563. Our first interim report was submitted on January 15, 1986. Enclosed is our second interim report. We expect to provide our next report on or about June 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. Damer*  
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  
1100 Circle 75 Parkway, Suite 1500  
Atlanta, Georgia 30339

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
EFFECTS OF TORNADO DEPRESSURIZATION ON CLASS 1E EQUIPMENT  
WBRD-50-390/86-08, WBRD-50-391/86-07

SCR WBN EEB 8563

10 CFR 50.55(e)

SECOND INTERIM REPORT

Description of Deficiency

A condition has been identified for Watts Bar Nuclear Plant (WBN) in which TVA does not have adequate assurance that essential electrical equipment is fully protected in areas of the plant which are subject to tornado depressurization. This condition was identified as a result of a review for generic implications performed for a similar condition which was identified at Bellefonte Nuclear Plant (BLN) on nonconformance report (NCR) BLN NEB 8409.

Safety Implications

The inability of nonqualified equipment or enclosures to vent during a tornado depressurization/repressurization event could produce secondary damage or missiles. This could result in damage to and/or failure of inadequately protected safety-related equipment. This could adversely affect the safety of operations of the plant.

Interim Progress

TVA has initiated a study to evaluate components and equipment which are installed in areas of WBN that are subject to tornado induced pressure changes. This study includes specific analyses by TVA's architectural, electrical, civil, mechanical and nuclear engineering organizations. Non-class 1E equipment and components are being evaluated to determine if they can withstand a tornado depressurization event and to identify those components which might impact Class 1E equipment by generation of secondary missiles due to failure. The Class 1E equipment in affected areas is to be evaluated for the effects of secondary missiles as well as depressurization. Necessary equipment or structural modifications will be identified as a result of the study.

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