

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

1630 Chestnut Street Tower II

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August 7, 1985

WBRD-50-390/85-22

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 - CONTAINMENT SPRAY PIPE SUPPORT IMPROPERLY
MOUNTED - WBRD-50-390/85-22 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
Al Ignatonis on July 12, 1985 in accordance with 10 CFR 50.55(e) as NCR WBN
CFP 8514. 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. Dome
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
CONTAINMENT SPRAY PIPE SUPPORTS IMPROPERLY MOUNTED
WBRD-50-390/85-22
NCR WBN CEB 8514
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

The baseplate for containment spray system (CS) support 72-ICS-R116 is attached to the wall of the shield building. The piping analysis requires that this support be attached to the auxiliary building.

This condition was discovered as a consequence of a field investigation to establish the support configuration and baseplate location for the corresponding unit 2 support. Upon comparison with the referenced unit 1 support 72-ICS-R116, the incorrect attachment to the shield building was observed.

The cause of this nonconformance was a random failure on the part of the designer and checker to ensure that the design configuration of the support conformed to the piping analysis design output.

Safety Implications

Failure to design the subject support in conformance with the piping analysis design output resulted in a support design that cannot sustain the load developed during a design basis seismic event. In addition, the loads on seven adjacent supports were increased. Consequently, CS piping could become overstressed during a seismic event and fail, thus compromising a primary safety system. This could be adverse to the safe operation of the plant.

Corrective Action

The subject support will be relocated to the auxiliary building wall to conform to the piping analysis. All pertinent design drawings have been revised and reissued under engineering change notice (ECN) 5779. TVA has scheduled the support rework to be completed by August 21, 1985. Since this deficiency is judged to be a random isolated event attributable to human error, no actions required to prevent recurrence are warranted.