

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

1630 Chestnut Street Tower II

July 29, 1985

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WBRD-50-390/85-21

WBRD-50-391/85-20

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 - ENVIRONMENTAL QUALIFICATION OF UNIT 2
EQUIPMENT NEEDED FOR UNIT 1 OPERATION - WBRD-50-390/85-21, WBRD-50-391/85-20 -
FINAL REPORT**

The subject deficiency was initially reported to NRC-OIE Inspector
Al Ignatonis on July 15, 1985 in accordance with 10 CFR 50.55(e) as NCR WBN
EEB 8521. 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. 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 UNITS 1 AND 2
ENVIRONMENTAL QUALIFICATION OF UNIT 2 EQUIPMENT NEEDED FOR UNIT 1 OPERATION
WBRD-50-390/85-21, WBRD-50-391/85-20
NCR WBN EEB 8521
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

During an environmental qualification program review of unit 2 equipment, TVA determined that while 53 electrical components (see Table 1) designated for unit 2 could have an effect on unit 1 operation, assurance of their environmental qualification was not being pursued to support the unit 1 operational schedule. As such, had this condition remained uncorrected, there could have been components required for unit 1 operation that were not qualified for the interim period of time between unit 1 and unit 2 operation.

This condition occurred because TVA failed to identify the unit 2 equipment required to safely shutdown unit 1 on the list of components developed under the Watts Bar Nuclear Plant (WBN) Environmental Qualification Program. The components were identified by the program but were not specified as required for unit 1 operation.

Safety Implications

Because certain unit 2 components have been identified as required for the safe shutdown of unit 1, their failure due to a lack of environmental qualification could have adversely affected safe unit 1 shutdown during certain types of design basis events.

Corrective Action

Table 1 lists the unit 2 equipment required for unit 1 operation and the qualification status or corrective action needed for each component to assure that the components will not adversely affect unit 1 operation. Any actions called for, such as replacement or locking valves in position, has been completed. Since the unit 2 devices affecting unit 1 have been identified and any needed corrections completed, no additional action is required to prevent a recurrence.

TABLE 1

<u>Device</u>	<u>Evaluation and Corrective Action</u>
2-FCO-30-22/ZS1	Essentially mild, no corrective action required
2-FCO-30-22/ZS2	Essentially mild, no corrective action required
2-FCO-30-22	Essentially mild, no corrective action required
2-FCO-30-109/ZS1	Essentially mild, no corrective action required
2-FCO-30-109/ZS2	Essentially mild, no corrective action required
2-FCO-30-109	Essentially mild, no corrective action required
2-TS-30-155	Qualified, no corrective action required
2-FSV-30-157B	Qualified, no corrective action required
2-HS-30-157B	Qualified, no corrective action required
2-FE-30-194	Replaced under engineering change notice (ECN) 3800
2-HS-30-194	Qualified, no corrective action required
2-TS-30-194A	Replaced under ECN 4063
2-TS-30-194B	Eliminated from design circuit; never installed
2-FE-30-195	Replaced under ECN 3800
2-HS-30-195	Qualified, no corrective action required
2-TS-30-195A	Replaced under ECN 4063
2-TS-30-195B	Eliminated from design circuit; never installed
2-FS-30-200	Removed under ECN 5704
2-HS-30-200	Qualified, no corrective action required
2-TS-30-200A	Replaced under ECN 5704
2-TS-30-200B	Eliminated from design circuit; never installed
2-FS-30-207	Removed under ECN 5704
2-HS-30-207	Qualified, no corrective action required
2-TS-30-207A	Replaced under ECN 5704
2-TS-30-207B	Eliminated from design circuit; never installed
2-MTR-30-194	Replaced under ECN 4126
2-MTR-30-195	Replaced under ECN 4126
2-MTR-30-200	Qualified, no corrective action required
2-MTR-30-207	Qualified, no corrective action required
2-MTR-30-157A	Qualified, no corrective action required
2-FSV-67-336	Qualified, no corrective action required
2-FSV-67-338	Qualified, no corrective action required
2-FSV-67-354	Qualified, no corrective action required
2-FSV-67-356	Qualified, no corrective action required
2-HS-70-51B	Qualified, no corrective action required
2-FCV-67-146	Qualified, no corrective action required
2-HS-67-146B	Qualified, no corrective action required
2-FSV-65-4	Functionally removed from system
2-FSV-65-5	Locked in position, required for safe unit 1 operation
2-FSV-65-7	Locked in position, required for safe unit 1 operation
2-FSV-65-9	Locked in position, required for safe unit 1 operation
2-FSV-65-29	Locked in position, required for safe unit 1 operation
2-FSV-65-50	Locked in position, required for safe unit 1 operation
2-FCV-67-127	Locked in position, required for safe unit 1 operation
2-FCV-67-128	Locked in position, required for safe unit 1 operation
2-FCV-67-147	Locked in position, required for safe unit 1 operation
2-FCV-67-81	Locked in position, required for safe unit 1 operation
2-FCV-67-82	Locked in position, required for safe unit 1 operation
2-FCV-67-223	Locked in position, required for safe unit 1 operation
2-FS-30-157	Essentially mild, no corrective action required
2-PX-67-158	Essentially mild, no corrective action required
2-TCV-67-158	Essentially mild, no corrective action required
2-PT-67-158	Essentially mild, no corrective action required