

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

1630 Chestnut Street Tower II

September 4, 1985

SEP 9 4 30

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 -
REVISED 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. Our final report was submitted on July 29, 1985. Enclosed is our
revised 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
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
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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
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10 CFR 50.55(e)
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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 shut down 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 | Mild environment, no corrective action required |
| 2-FCO-30-22/ZS2 | Mild environment, no corrective action required |
| 2-FCO-30-22 | Mild environment, no corrective action required |
| 2-FCO-30-109/ZS1 | Mild environment, no corrective action required |
| 2-FCO-30-109/ZS2 | Mild environment, no corrective action required |
| 2-FCO-30-109 | Mild environment, 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 | Mild environment, no corrective action required |
| 2-PX-67-158 | Mild environment, no corrective action required |
| 2-TCV-67-158 | Mild environment, no corrective action required |
| 2-PT-67-158 | Mild environment, no corrective action required |