

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

February 28, 1986

WBRD-50-390/86-14

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 UNIT 1 - DISCREPANCIES INVOLVING QUALITY ASSURANCE
CONDUIT SUPPORTS - EMPLOYEE CONCERNS IN-85-458-006 AND IN-85-119-006
WBRD-50-390/86-14 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Steve Weise on December 9, 1985 in accordance with 10 CFR 50.55(e) as NCR WBN 6463. Our first interim report was submitted on January 24, 1986. Enclosed is our second interim report. We expect to submit our next report on or about June 6, 1986.

Delay in submittal of this report was discussed with Bob Carroll on February 4, 1986.

If there are any questions, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. L. Gridley
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)
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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNIT 1
DISCREPANCIES INVOLVING QUALITY ASSURANCE CONDUIT SUPPORTS
EMPLOYEE CONCERNS IN-85-458-006 AND IN-85-119-006
WBRD-50-390/86-14
MCR WBN 6463
10 CFR 50.55(e)
SECOND INTERIM REPORT

Description of Deficiency

A physical walkdown and reinspection of selected conduit supports was requested by investigators of the Quality Technology Corporation's (QTC) Employee Response Team as the result of the employee concerns referenced. The inspection, performed on the auxiliary and reactor building conduit and cable trays, revealed several discrepancies involving safety-related supports. The discrepancies noted in this deficiency have been compiled into groups A through F below. (See attached sheet for specific items in each group.)

- Group A - The items listed in this group are installed supports which deviate from the issued drawing and do not have approved field change requests (FCRs) and/or variances. Therefore, these supports have unknown/undocumented structural capacity or factors of safety.
- Group B - The items listed in this group have not been tagged with their identifying numbers; however, supports were located from the design drawings.
- Group C - Each item listed in this group has been documented with the different type of typical support than which it was installed.
- Group D - The items listed in this group have specific miscellaneous problems. Discrepancies are noted on attachment.
- Group E - The items listed in this group are still documented in a computer printout but cannot be located in the plant.
- Group F - The items listed in this group have been deleted from printout but are still used in the plant. They also have miscellaneous problems.

The root causes of these discrepancies are errors and procedure misinterpretations by craft, engineering, and inspection personnel.

Safety Implications

Various supports listed have unknown or undocumented structural capacity or factors of safety. Worst-case loadings on supports could result in concrete anchorage failure and subsequent failure of the conduits. Cables within these conduits could be damaged, thus rendering safety-related systems inoperable. These conditions could adversely affect the safe operations of the plant due to the inability of systems, components, or structures to perform their intended design functions.

Interim Progress

TVA is continuing the evaluation of the discrepancies identified in this deficiency. Preliminary investigations have revealed that the original inspections of the supports were performed during a timeframe of 1978 through 1984 with the majority being inspected and documented from 1978 to 1979. Later program changes may have resulted in documentation errors. It was also noted that some supports originally identified were unit 2 supports with documentation still open. These supports were deleted from the attached listing.

Corrective action includes issuing FCRs and/or variances on supports that are not installed per the typical drawing series, and reworking and reinspecting any supports that are not in compliance with the applicable specifications, notes, and issued support drawings. Support types and locations will be verified and documentation will be corrected.

Any further corrective actions and actions to prevent recurrence will be discussed in our next report which will be provided to NRC on or about June 6, 1986.

ATTACHMENT

Group A 1-CSP-293-3243/5 (also D)
0-CSP-292-3944/9
0-CSP-292-3545/3 (also D)
0-CSP-292-3972/1
0-CSP-292-3767/Z (also D)
0-CSP-292-3550/3
1-JB-292-2668 (also B)
0-CSP-292-3736/2

Group B 0-CSP-292-3932/0
0-JB-292-1547-A (also C)
1-JB-292-3241
1-JB-292-2668 (also A)
1-JB-292-5370
1-JB-293-305-G
1-JB-293-585
1-JB-293-798
1-JB-293-598
1-JB-293-522-A
1-JB-293-1003
1-JB-293-3131 (also D)

Group C 1-CSP-293-3174/X
0-CSP-292-3922/7
0-JB-293-1547-A (also B)

Group D 1-CSP-293-0329/X - Two hole strap loose on support.
1-CSP-293-3243/8 - Anchor needs grouting.
1-CSP-293-3243/5 - Bolt protruding and two hole straps overlap each other (also A).
0-CSP-292-3930/2 - Box is a 47A056-114 typical with abandoned anchors. Anchors drilled inside box as a 47A056-101 typical.
0-CSP-292-3767/Z - This support carries a 6" conduit; 47A056-55 typical does not allow anything over 5" conduit.
1-JB-292-132B - Holes reamed out in junction box (JB) cover and screwed in at an angle.
0-CSP-292-3545/3 - Weld splatter.
1-JB-293-3131 - Missing bolt, loose bolt, unacceptable bolt (also B).
0-CSP-292-1541/42 - Anchors need grouting.

First support from 1-JB-293-1003 on conduit 1R-2062, 47A056-66 typical not identified.

First support from 1-JB-293-522-A on conduit 1-VO-1215-A and 1-VC-1220-A not identified.

Group 0-CSP-292-3915/9
E 0-CSP-292-3941/0
0-CSP-292-3944/5
0-CSP-292-3693/1

Group 0-CSP-292-3944/3 - Anchor needs grouting, needs FCR and/or variances.
F 0-CSP-292-3928/5 - Documented wrong type of support, anchors need
grouting, identified with two different tags, need
FCR and/or variance.
0-CSP-292-3360/1 - Need FCR and/or variance.
0-CSP-292-3935/9 - Documented wrong type support, insufficient welds,
support below this not identified, two-hole straps
overlap each other.
0-CSP-292-3887/4 - Anchors need grouting.