TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

1630 Chestnut Street Tower

October 17, 1985

WBRD-50-391/85-38

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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 2 - CONTAINMENT SPRAY PIPE SUPPORT DEFICIENCIES - WBRD-50-391/85-38 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Al Ignatonis on September 11, 1985 in accordance with 10 CFR 50.55(e) as NCR WBN 6260. A one-week delay for this submittal was discussed with Al Ignatonis on October 8, 1985. 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. Domer

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 2
CONTAINMENT SPRAY PIPE SUPPORT DEFICIENCIES
WBRD-50-391/85-38
NCR WBN 6260
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

Various deficiencies have been identified on 33 of 42 containment spray (CS) system pipe supports located in the Watts Bar Nuclear Plant (WBN) unit 2 steel containment vessel (SCV) dome. Deficiencies identified include incorrect plate sizes and bolt holes in hanger lugs. Additionally, discrepancies in ASME Code welds joining hanger lugs to the CS piping and instances of base metal damage were identified. Although not inspected, it is suspected that similar deficiencies will be found on the other 9 of 42 supports.

This deficiency was the result of an inadequate pipe support installation and inspection program at WBN during the time period prior to February 1980. Additionally, ASME Code welding on hanger lug to pipe joints performed in 1977 (when subject supports were installed) was not performed or inspected with adequate attention to detail. This condition, with the exception of ASME Code weld deficiencies, was previously identified in nonconformance report (NCR) 2019 (CDR 390/80-08-01, 391/80-05-01). Per the disposition of NCR 2019, all WBN pipe support installation acceptance documentation was declared null and void in February 1980. A program to reinspect all pipe supports at WBN and to rework and correct any noted deficiencies was then established. NCR 2019 was closed based upon that programmatic effort.

The support deficiencies identified by this NCR (WBN 6260) were identified as a result of the above-mentioned reinspection program. However, due to the nature of these deficiencies and the cost of rework, NCR WBN 6260 was issued in order to determine if the affected supports were adequate for use-as-is. TVA subsequently determined that the supports could not be used as is (see corrective action) and that repairs would be required per the original disposition of NCR 2019 as discussed above.

Safety Implications

The subject deficiencies could possibly result in a failure of the affected supports or of the CS piping attached to the SCV during a seismic event. This could adversely affect the safe operation of the plant.

Corrective Action

TVA will rework all affected supports to comply with the design configuration per engineering change notice (ECN) 5896. As a result of NCR 2019, TVA issued WBN Quality Control Procedures QCP-4.23-3, -4, -5, -6, -7, and -8. These procedures delineate new, more stringent criteria to be used in the installation, inspection, and acceptance of piping supports at WBN. They also reference those procedures and criteria to be used for performing and inspecting ASME Code lug attachment welds. No programmatic deficiencies of this nature have occurred since the QCP-4.23-series was issued.

All corrective actions for this item will be completed by December 15, 1985.