

400 Chestnut Street Tower II

July 14, 1981

WBRD-50-390/81-33
WBRD-50-391/81-32
WBRD-50-390/81-50
WBRD-50-391/81-48

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303



Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - IMPROPER CLASSIFICATION OF ERCW
SYSTEM PIPING AND COMPONENTS - WBRD-50-390/81-33, WBRD-50-391/81-32,
WBRD-50-390/81-50, WBRD-50-391/81-48 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
R. V. Crlenjak on March 24, 1981 in accordance with 10 CFR 50.55(e) as
NCR WBN NEB 8106. Our first interim report was submitted on April 24,
1981. Enclosed is our second interim report.

Related NCR 3116 R1 concerns improper classification of piping used in the
ERCW system because of the deficiency specified in WBN NEB 8106. Our next
report, which will address both of these NCR's, will be provided by
September 1, 1981. This supersedes the submittal date specified in my
letter to you dated July 6, 1981 on NCR 3116 R1.

If you have any questions, please get in touch with D. L. Lambert at
FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosure

cc: Mr. Victor Stello, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 -

IMPROPER CLASSIFICATION OF ERCW SYSTEM PIPING AND COMPONENTS

WBRD-50-390/81-33, WBRD-50-391/81-32, WBRD-50-390/81-50, WBRD-50-391/81-48

10 CFR 50.55(e)

SECOND INTERIM REPORT

Description of Deficiency

During the design review of the Watts Bar Essential Raw Cooling Water (ERCW) System, it was discovered that portions of the ERCW System (equipment coolers, air cooling units, etc.) may not have proper seismic specification. The chillers/coolers did not have a specific TVA classification. Watts Bar Design Criteria WB-DC-40-36.1, Revision 0, requires that the components discussed here be classified ANS Safety Class 2b and be Seismic Category I. These coolers are shown on TVA design drawings, 47W845 series, however, as TVA Class G, Seismic Category I(L) (limited Requirement) which permits functional failure but not failure such as to damage other safety equipment. These air cooling units serve essential safety-related equipment (e.g., RHR, SIS CSS pumps, etc.) required for accident mitigation.

Corrective Actions

TVA has reviewed the seismic test reports submitted by the vendors for each HVAC cooler, chiller and valve connected to the ERCW system and found that each component was seismically qualified in accordance with Watts Bar Design Criteria WB-DC-40-36.1. All components that have a primary safety function are certified as Seismic Category I in accordance with Design Criteria WB-DC-40-31.2, as specified in the contracts. Components with a secondary safety function are certified as seismic category I(L) in accordance with Design Criteria WB-DC-40-31.13, as specified in the contracts. All HVAC equipment connected to the ERCW system will maintain their pressure boundary during and after a safe shutdown earthquake.

TVA class G Seismic Category I(L) was an incorrect classification for these components. An Engineering Change Notice was written to revise the design drawing to show the correct seismic classification for the HVAC chillers/coolers and components.