

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

September 21, 1983

USNRC REGION 2
ATLANTA, GEORGIA

83 SEP 27 P2:42

WBRD-50-390/83-05
WBRD-50-391/83-05

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

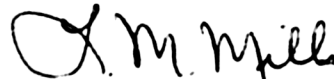
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - INCORRECT USE OF CATEGORY I(L)
SUPPORTS ON PIPES NEAR WATER CHILLERS - WBRD-50-390/83-05,
WBRD-50-391/83-05 - THIRD INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
A. K. Hardin on January 17, 1983 in accordance with 10 CFR 50.55(e) as
NCR WBN SWP 8265. Interim reports were submitted on February 16 and May 9,
1983. Enclosed is our third interim report. We expect to submit our next
report on or about October 17, 1983.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, 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
INCORRECT USE OF CATEGORY I(L) SUPPORTS ON PIPES
NEAR WATER CHILLERS
NCR WBN SWP 8265
WBRD-50-390/83-05, WBRD-50-391/83-05
10 CFR 50.55(e)
THIRD INTERIM REPORT

Description of Deficiency

Piping for the primary water makeup, high pressure fire protection, and demineralized water systems, shown on TVA drawing 47W491-6, in the vicinity of main control room water chillers A-A and B-B and shutdown board room water chillers A-A and B-B have been supported by Category I(L) supports for position retention. The piping in the vicinity of this equipment should have been supported by Category I(L) supports for pressure boundary integrity and position retention. These water chillers are safety-related equipment. TVA Electrical Design Standard DS-E1.3.1, "Protection of Electrical Equipment that is Susceptible to Failure from Fluid Spray and Condensation," requires that water lines not be routed over safety-related electrical equipment or that measures be taken to prevent damages to safety-related electrical equipment where water lines are routed above.

Interim Progress

To protect the subject chillers against water spray, shielding structures are being designed, and junction boxes, control panels, and conduit/cable entries, etc., are being sealed. This work is being done under engineering change notice (ECN) 3837.

Investigation into the generic implications of the subject deficiency are continuing. The following actions have been taken:

1. A list identifying all IEEE class 1E electrical equipment located in areas where piping has been supported for position retention only has been generated.
2. A task force has been organized to oversee all efforts relating to the generic implications of this NCR. This task force consists of a field evaluation team and representatives of various support design branches and design project disciplines.
3. The field evaluation team, under the direction of the task force, has performed a walk-through inspection of all equipment on the list mentioned in (1) above with consideration for its location relative to noncritical piping supported for deadload retention only. The task force will evaluate the results of this inspection and determine if water spray protection is needed for any class 1E equipment. If protection is

required, the task force will determine the appropriate corrective action. Possible corrective measures may consist of sealing equipment enclosures by gaskets and caulking, shielding by sheet metal barriers, or support of piping for pressure boundary integrity and position retention.

4. Drawing series 47W200 beginning with sheet 100 will be issued to indicate areas where piping is supported for position retention only and to list all safety-related equipment in these areas.