

Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381

John H. Garrity Vice President, Watts Bar Nuclear Plant

SEP 2 0 1991

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

Gentlemen:

In the Matter of the Application of) Docket Nos. 50-390 Tennessee Valley Authority) 50-391

WATTS BAR NUCLEAR PLANT (WBN) UNITS 1 AND 2 - SUPPLEMENTAL RESPONSE TO NRC AUDIT ISSUE ON CATEGORY 1(L) PIPING VERIFICATION (TAC NOS. 79717 AND 80346)

Reference: TVA letter to USNRC Document Control Desk, December 18, 1990, Documentation of Resolutions to NRC Open Issues - WBN Final Safety Analysis Report (FSAR), Amendment 64

The referenced correspondence formally documented the TVA Category 1(L) verification methodology. NRC review of this information is currently in progress. As a result of recent discussions with the staff, the following criteria changes are being implemented for the WBN Category 1(L) piping verification effort:

Pressure Boundary Retention Piping

Compliance with the following additional load case is required. Pr + DW + SSE(I) $<2.4~S_h$

Where: Pr = Pressure Stress

DW = Stress due to dead weight

SSE(I) = Safe Shutdown Earthquake Inertia Stress

 S_h = Allowable Stress

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Pipe Support Acceptance Criteria

The following have been revised:

1. Acceptance bolt stresses are the <u>lesser</u> of 0.75 $\rm S_u$ and the minimum specified $\rm S_v$.

Where: S_y = Yield Stress S_u = Ultimate Stress

- 2. Load sharing is not permitted.
- 3. For expansion anchors, the bolt design capacity utilizes a minimum factor of safety of 3.0 on the nominal ultimate capacities which are presented in TVA Civil Design Standard DS-C1.7.1, "General Design Information Anchorage to Concrete." Bolt capacities are adjusted in accordance with DS-C1.7.1 to account for variances to installation requirements and design considerations such as bolt spacing and edge distance.

The purpose of this submittal is to transmit this information for formal staff review. Documentation of these program attributes should serve to resolve this FSAR Amendment 64 open issue (TAC Nos. 79717 and 80346).

No FSAR text changes are associated with this submittal. Additionally, no new commitments are contained in this response.

If you have any questions, please telephone P. L. Pace at (615) 365-1824.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

John H. Garrity

cc: See page 3

U.S. Nuclear Regulatory Commission

cc: NRC Resident Inspector
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