TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

NOV 03 1989

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) - SEISMIC DESIGN CONSIDERATION FOR CERTAIN SAFETY-RELATED VERTICAL STEEL TANKS (NRC REQUEST FOR INFORMATION) (TAC NOS. 73097/73098)

Reference: Letter from NRC to TVA dated June 27, 1989, requesting information on the subject tanks

This is in response to NRC's June 27, 1989, request for information on the safety significance of above-ground, vertical liquid storage tanks related to the consideration of tank flexibility, specifically, the Condensate Storage Tank and the Refueling Water Storage Tank.

For WBN, the Auxiliary Feedwater (AFW) System is normally aligned to a non-safety grade, condensate quality water supply from the condensate storage tanks. In the event that low suction pressure occurs in any of the AFW pump supply lines, safety grade 1E powered pressure switches automatically align the pump to the safety grade essential raw cooling water (ERCW) supply. The ERCW is not used, except in emergencies when the condensate supply is not available. Since the ERCW provides a safety-grade water supply, the condensate storage tank is not required to be seismically qualified or safety-related and, therefore, does not require the seismic design consideration requested in the referenced letter.

The Refueling Water Storage Tank is safety-related seismic category I, and the original analysis did consider tank wall flexibility.

When the referenced letter was received, an analysis was already underway by Bechtel to upgrade the current analysis utilizing current soil structure interaction techniques. This analysis is being done as part of the WBN Seismic Assessment Program effort. Responses to the questions raised by NRC regarding the structural and functional integrity of tanks during postulated earthquake events will be prepared as part of this effort. TVA will provide NRC by January 31, 1990, with the results of the analysis and how items a through i of the referenced letter were considered.

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Commitments made in this submittal, which will be identified in TVA's commitment tracking systems, are summarized in the enclosure. Please direct any questions regarding this submittal to T. W. Horning, WBN Site Licensing, at (615) 365-3381.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

Manager, Nuclear Licensing
and Regulatory Affairs

Enclosure
cc (Enclosure):

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ENCLOSURE

COMMITMENTS

- TVA will provide NRC by January 31, 1990, with the results of the Refueling Water Storage Tank wall flexibility analysis and how items a through i of the referenced letter were considered.

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