



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

MAY 23 1994

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

Gentlemen:

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

WATTS BAR NUCLEAR PLANT (WBN) - LICENSING SUMMARY REPORT FOR EAGLE-21  
PROCESS PROTECTION SYSTEM AND RELATED DESIGN CHANGES (TAC M81063)

This letter submits WCAP-13462, Revision 1, "Summary Report - Process Protection System Eagle 21 Upgrade, NSLB, MSS and TTD Implementation - Watts Bar Units 1 and 2," to assist in the NRC staff review of WBN's Eagle-21 process protection system. WCAP-13462 is a topical report prepared by Westinghouse Electric Corporation to summarize design and analysis information that is pertinent to the licensability of Eagle-21 and its microprocessor-based, digital electronics. WCAP-13462 also describes several design changes that affect reactor protection and control functions at WBN and that were installed concurrently with the Eagle-21 system. These additional changes include new steam line break (NSLB) protection features, a median signal selector (MSS) for steam generator (SG) level control, and trip time delay (TTD) for the low-low SG level reactor trip.

Most of the information in WCAP-13462 has already been submitted for NRC review in other documents such as amendments to WBN's Final Safety Analysis Report (FSAR) and various technical reports describing particular aspects of Eagle-21 design, evaluation, and testing. These detailed technical reports are identified as references in WCAP-13462 and are the principal licensing basis of the Eagle-21 system, along with relevant portions of the FSAR. WCAP-13462 is not intended to be used as a design document. Rather, it is intended to provide a broad management overview of the engineering design and evaluation work that has been done to

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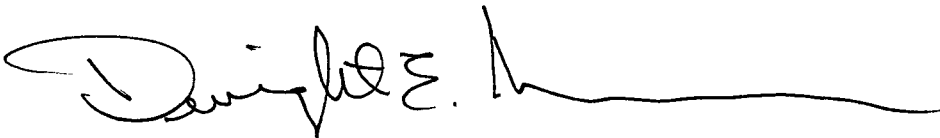
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support WBN's Eagle-21 system and associated changes to reactor protection and control instrumentation.

If you have any questions about the information provided in this letter, please telephone John Vorees at (615) 365-8819.

Sincerely,



Dwight E. Nunn  
Vice President  
New Plant Completion

Enclosure

cc (Enclosure):

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ENCLOSURE

WCAP-13462 Revision 1

SUMMARY REPORT  
PROCESS PROTECTION SYSTEM EAGLE 21 UPGRADE.  
NSLB, MSS AND TTD IMPLEMENTATION  
WATTS BAR UNITS 1 AND 2