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

SEP 2 6 1995

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) - DETAILED CONTROL ROOM DESIGN (DCRDR) SPECIAL PROGRAM

The purpose of this letter is to notify NRC of TVA's reassessment for Human Engineering Discrepancy (HED) 151 from Category 1, "Safety Significant," to Category 4, "Non-Safety Related." The enclosure provides a brief history and justification for the category change.

If you have any questions, please contact P. L. Pace at (423)_365-1824.

Sincerely,

au R. R. Baron

Nuclear Assurance and Licensing Manager (Acting)

Enclosure cc: See page 2



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cc (Enclosure): NRC Resident Inspector Watts Bar Nuclear Plant Rt. 2, Box 700 Spring City, Tennessee 37381

> Mr. P. S. Tam, Senior Project Manager U.S. Nuclear Regulatory Commission One White Flint North 11555 Rockville Pike Rockville, Maryland 20852

U.S. Nuclear Regulatory Commission Region II 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30323

ENCLOSURE

BACKGROUND INFORMATION

NRC's letter to TVA dated June 22, 1995, provided Supplemental Safety Evaluation Report (SSER) 15. Included in SSER 15 was NRC's review of Human Factors Engineering activities. The SSER summarized the safety significant human engineering discrepancies (HED's) for which the corrective actions had not been fully implemented at the time of the NRC site audit on March 28-30, 1995. Included in the summary was HED 151 which was associated with the Eberline radiation monitoring for the condenser vacuum pump exhaust. The original DCRDR team identified this HED as safety significant (Category 1) in October 1987. Various design changes, including some outside the DCRDR Special Program scope, have occurred since the original evaluation that has caused this HED category to be reconsidered. As a result, the HED has been changed to nonsafety significant (Category 4).

CATEGORY CHANGE JUSTIFICATION

At the time of the original review, the Eberline system monitored the Shield Building vent radiation and the condenser vacuum pump exhaust radiation levels. This information was also to be used in determining the radiation release rate for the plant. The previous safety significance (Category 1) was based on the fact that the Eberline system was the only operator interface for the subject parameters and this interface was not operator friendly. For example, the Eberline keyboard was located too high on the panel, there was not a paper take-up reel for the Eberline data recording, and there were miscellaneous program interruptions with the Eberline monitoring function. However, since the original evaluation, design changes have significantly reduced the importance of the Eberline system operator interface. These changes are summarized as follows:

- The Shield Building vent parameters have been removed from the Eberline system and placed on separate hardware with conventional interfaces in the Main Control Room.
- A data line has been installed between the Eberline system and the Emergency Response Facility Data System (ERFDS) computer so that the condenser vacuum pump exhaust radiation level will be available on the ERFDS. The primary operator interface for this data is now the ERFDS. The ERFDS operator interface is superior to the Eberline system interface because the ERFDS interface is located in the primary operating area, operator familiarity is much greater with the ERFDS interface, and the ERFDS screen displays have been developed using human engineering principles.
- All the parameters needed to calculate the WBN radiation release rate have been routed to ERFDS and the release rate is calculated and available for display on ERFDS.

Although the category has been changed for HED 151, the previously documented corrective actions for this HED remain unchanged.