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MAY 31 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) - RESPONSE TO GENERIC LETTER 88-17, LOSS OF DECAY HEAT REMOVAL - UPDATE

Reference: Letter from TVA to NRC dated February 2, 1989, "TVA's 90-Day Response to Generic Letter 88-17, Loss of Decay Heat Removal For the Sequoyah and Watts Bar Nuclear Plants"

By the reference, TVA committed to studying several methods of monitoring different parameters required by the subject generic letter. Enclosure 1 provides TVA's current plans for monitoring these parameters at WBN. Enclosure 2 provides a list of acronyms used in this letter. As stated in the reference, TVA will implement the program to address the GL 88-17 requirements for mid-loop operation by fuel load. No additional commitments are made in this submittal.

If there are any questions concerning this submittal, please telephone T. W. Horning at (615) 365-3381.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

M J Ray fa

Manager, Nuclear Licensing
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Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

MAY 31 1989

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ENCLOSURE 1

UPDATE OF THE WATTS BAR NUCLE PLANT (WBN) RESPONSE TO
NRC GENERIC LETTER 88-17

TVA will design and install hardware modifications before WBN fuel load to address the requirements of GL 88-17 for monitoring RCS temperature, RV level, and RHR System performance during mid-loop operation. The following provides TVA's current plans with regard to these requirements.

Item 3 of GL 88-17, "Expeditious Actions," requires at least two independent, continuous temperature indications that are representative of the core exit conditions whenever the RCS is in mid-loop condition and the RV head is located on the top of the RV.

TVA's previous response to this item stated that abnormal temperature indications would be monitored by two incore thermocouples and would be visibly and audibly alarmed in the MCR, and the options for providing this information were still under consideration. TVA's current plan is to display this information on the plant computer or some other centrally located display in the control room (subject to approval by the CRDR team).

Item 4 of the GL, "Expeditious Actions," requires at least two independent, continuous RCS water level indications whenever the RCS is in a reduced inventory condition. TVA's previous response to this item stated that five methods were being considered at WBN for the RCS level monitoring system. The current plan for implementation is for WBN to use the following monitoring systems to meet the requirements of item 4:

- Wide Range Level Indication - The present decision is to use the RVLIS. The range of indication will be from above the vessel flange to near the bottom of the hot leg.

- Narrow Range Level Indication - TVA has not yet decided which option to utilize for narrow range level indication. The effective range of the indication will encompass the inside diameter of the hot leg pipe.

- Backup Indication - A sight gauge will be utilized as a backup level indication method for both the narrow and wide range indications. The range of the sight gauge will be from above the vessel flange to below the hot leg.

Item 1, part C of GL 88-17, "Programmed Enhancements," requires reliable indication of parameters that describe the state of the RCS and the performance of systems normally used to cool the RCS for both normal and accident conditions. At a minimum, the capability of continuously monitoring DHR system performance whenever a DHR system is being used for cooling the RCS is to be provided in the control room.

TVA's previous response to this item stated that four parameters were under consideration at WBN to monitor the RHR system performance, but that a final decision had not been made. The current plan for implementation is for WBN to use the following parameters to meet the requirements of item 1, part C:

- RHR pump discharge flow
- RHR pump discharge pressure
- RHR pump motor current (backup)

NOTE: Currently, all monitoring systems listed above (except for the sight gauge and the RHR pump motor current) are planned to be displayed on the plant computer or some other centrally located display (subject to approval by the CRDR team).

ENCLOSURE 2

LIST OF ACRONYMS AND ABBREVIATIONS USED

CRDR	Control Room Design Review
DHR	Decay Heat Removal
GL	Generic Letter
MCR	Main Control Room
NRC	Nuclear Regulatory Commission
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RV	Reactor Vessel
RVLIS	Reactor Vessel Level Indication System
WBN	Watts Bar Nuclear Plant