TENNESSEE VALLEY AUTHORITY

CHATTANOOGA. TENNESSEE 37401 400 Chestnut Street Tower II

December 3, 1981



Director of Nuclear Reactor Regulation Attention: Ms. E. Adensam, Chief Licensing Branch No. 4 Division of Licensing U.S. Nuclear Regulatory Commission Washington, DC 20555

Dear Ms. Adensam:

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

Enclosed for NRC review is TVA's response to question 40.94 concerning monitoring of the diesel generator engine cooling system at Watts Bar Nuclear Plant. This response will be included in Amendment 46 of the Final Safety Analysis Report.

If you have any questions concerning this matter, please get in touch with D. P. Ormsby at FTS 858-2682.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Wisenburg Μ.

Nuclear Engineer

Sworn to and subscribed before me this <u>3</u> day of <u>Clember</u> 1981 <u>Paulette</u> <u>Notary Public</u> My Commission Expires 9-5-84

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Enclosure

PDR An Equal Opportunity Employer

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 TVA RESPONSE TO QUESTION 40.94

040.94 <u>Question</u>:

(9.5.5)

Describe the instrumentation, controls, sensors and alarms provided for monitoring of the diesel engine cooling water system and describe their function. Discuss the testing necessary to maintain and assure a highly reliable instrumentation, controls, sensors, and alarm system, and where the alarms are annunciated. Identify the temperature, pressure, level, and flow (where applicable) sensors which alert the operator when these parameters exceed the ranges recommended by the engine manufacturer and describe what operator actions are required during alarm conditions to prevent harmful effects to the diesel engine. Discuss the systems interlocks provided. (SRP 9.5.5., Part III, Item 1c).

Response:

The diesel engine jacket water temperature is monitored and high temperature $(195^{\circ}F)$ is alarmed on panel O-M-26 in the MCR and panel O-L-4 in the Auxiliary Control Room. During nonaccident conditions, the engine will shut down if the water jacket temperature increases to $205^{\circ}F$. There are no other interlocks on this system. Engine water level is monitored locally with low standby and low operating water level alarmed locally. Low engine water pressure is monitored when engine is running and low water pressure is alarmed locally. No immediate operator action is required. These instruments will be tested and calibrated every 18 months.