

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

FEB 03 1987

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Office of Nuclear Reactor Regulation  
Washington, D.C. 20555

Attention: Mr. B. J. Youngblood

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

RESPONSE TO NUCLEAR REGULATORY COMMISSION (NRC) EVALUATION OF THE SAFETY  
PARAMETER DISPLAY SYSTEM (SPDS) FOR WATTS BAR NUCLEAR PLANT (WBN) UNITS 1 AND  
2 - REFERENCE B. J. YOUNGBLOOD'S LETTER TO S. A. WHITE DATED JULY 30, 1986

The referenced letter requested additional testing of SPDS isolators and  
appropriate analysis to demonstrate the SPDS isolation is qualified for  
interfacing with safety-related systems or justification for not providing  
this information. In my September 30, 1986 letter to you, we stated that a  
response to these requests would be provided on or about January 31, 1987.  
This submittal meets this commitment.

We have retested the Robertshaw Isolation Amplifier, General Electric  
transmitter, and Westinghouse AR relays with the maximum credible fault  
applied to the output terminals as requested. Enclosed are the test results  
which show acceptable performance. Please note that for the General Electric  
transmitter very small negative spikes of approximately one to two millivolts  
and five milliseconds or less duration were observed as the output load was  
reconnected. These spikes have no effect on the ability of the transmitter to  
meet the isolation requirement.

At NRC's request we have conducted a key-word search of the special employee  
concerns database and have found no employee concern in the Employee Concerns  
Task Group Program concerning SPDS isolation devices.

If there are any questions on this topic, please get in touch with  
Bernard Gergos at (615) 365-8837.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*J. A. Homer*  
R. Gridley, Director  
Nuclear Safety and Licensing

Enclosure  
cc: See page 2)

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