

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

May 30, 1984

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

Dear Ms. Adensam:

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

Please refer to (1) my letter to L. S. Rubenstein dated April 9, 1980 which provided information on the Sequoyah Nuclear Plant (SQN) unit 1 low power test program as requested by Supplement No. 1 to the SQN Safety Evaluation Report (NUREG-0011), and (2) H. R. Denton's letter to H. G. Parris dated July 10, 1980, which issued Amendment No. 4 to License No. DPR-77 (SQN unit 1) concerning the subject low power test program.

TVA plans to perform one type of natural circulation test several times during the Watts Bar Nuclear Plant (WBN) unit 1 startup test program for operator training.

The applicability of the Technical Specification (TS) safety limit, figure 2.1-1 of the TS, should be waived during performance of the natural circulation tests. This figure is based on four reactor coolant pumps in operation. During performance of the tests, no reactor coolant pumps will be in operation.

During performance of the tests, the overpower and overtemperature delta-T trip functions will be considered inoperable. These trip functions obtain temperature inputs from sensors located in the resistance temperature detector bypass loops. During natural circulation, the bypass loop flow will be extremely low causing the temperature indication to be in error and the response time characteristics to be slowed. The TS requirement 2.2.1, items 7 and 8, should be waived during performance of these tests.

TVA plans to isolate the Upper Head Injection (UHI) system during performance of these tests. This will be done to prevent inadvertent actuation of the system and the potential for economic damage to the reactor internals. The UHI system provides borated water to mitigate the consequences of a large loss of coolant accident. Evaluations done for the SQN natural circulation test program established that this system provides little or no benefit for accidents involving low power or decay heat levels. TS requirement 3.5.1.2 should be waived during performance of these tests.

Boo!  
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Director of Nuclear Reactor Regulation

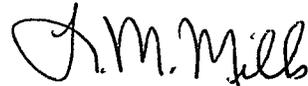
May 30, 1984

Please ensure that the WBN unit 1 low power license contains the requested exemptions to the TS for the purpose of performing the natural circulation tests. By the previously referenced amendment to the SQN license, NRC granted similar exemptions that were requested by TVA.

If you have any questions concerning this matter, please get in touch with D. B. Ellis at FTS 858-2681.

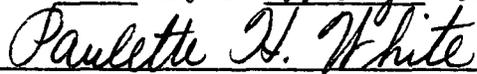
Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager  
Nuclear Licensing

Sworn to and subscribed before me  
this 30<sup>th</sup> day of May 1984



Notary Public

My Commission Expires 9-5-84

cc: U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly Administrator  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303