

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

January 12, 1983

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 ) Docket Nos. 50-327  
Tennessee Valley Authority ) 50-328

A response to item 2.1.1 of NUREG-0578 was submitted to NRC by my December 10, 1980 letter to A. Schwencer. This item was subsequently incorporated into NUREG-0737 as item II.E.3.1, Emergency Power Supply for Pressurizer Heaters. Enclosed is our revised response to item II.E.3.1 to clarify the emergency power supply for pressurizer heaters.

If you have any questions concerning this matter, please get in touch with J. E. Wills at FTS 858-2683.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*L. M. Mills*  
L. M. Mills, Manager  
Nuclear Licensing

Sworn to and subscribed before me  
this 12<sup>th</sup> day of January 1983

*Paulette H. White*  
Notary Public  
My Commission Expires 9-5-84

Enclosure

cc: U.S. Nuclear Regulatory Commission (Enclosure)  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

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PDR ADOCK 050C0327  
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ENCLOSURE

Sequoyah Nuclear Plant

Revised Response to NUREG 0737, II.E.3.1

The following design and administrative control features have been implemented to satisfy the staff position:

1. The pressurizer heaters are powered and controlled from Class 1E power sources (see FSAR Figures 8.3-10, 8.3-11, 8.3-12, and 8.3-13).
2. The motive and control power interfaces with the emergency buses are qualified in accordance with safety grade requirements. (i.e., each of these interfaces is protected by safety grade circuit breakers or fuses.)
3. All pressurizer heater banks are automatically shed from the offsite and onsite power sources upon the occurrence of a safety injection actuation signal (SIS).
4. The redundant capability for providing power to each bank of heaters is shown below.

Power Train	Heater Banks
1A-A	1A-A, 1D
1B-B	1B-B, 1C
2A-A	2A-A, 2D
2B-B	2B-B, 2C

The offsite and onsite power sources have sufficient capacity to supply the pressurizer heaters.

5. If offsite power is available, the SIS is reset, and the water level in the pressurizer has recovered backup heater bank 1C is given a permissive to operate. Under this scenario, if the process automatic control switch is reset, backup heater banks 1A-A, 1B-B are given a permissive to operate.
6. In the event of a loss of offsite power with the SIS reset and the process automatic control switch reset two backup heater banks (1A-A, 1B-B) are given a permissive to operate 90 seconds after emergency power becomes available. The other backup heater bank (1C) and the control bank (1D) would not come on automatically but may be manually activated if the blackout relays are reset.
7. The required operator actions are specified in the Sequoyah Emergency operating instructions. If there is a loss of offsite power; the operator has ammeters and voltmeters available to monitor the diesel generator's loading.