

400 Chestnut Street Tower II

April 28, 1980

Director of Nuclear Reactor Regulation  
 Attention: Mr. L. S. Rubenstein, Acting Chief  
 Light Water Reactors Branch No. 4  
 Division of Project Management  
 U.S. Nuclear Regulatory Commission  
 Washington, DC 20555

Dear Mr. Rubenstein:

In the Matter of the Application of                    )           Docket Nos. 50-327  
 Tennessee Valley Authority                            )           50-328

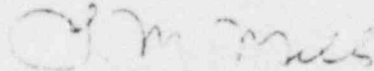
Reference: Letter from D. F. Ross, Jr., to All Pending Operating  
 License Applicants of Nuclear Steam Supply Systems  
 Designed by Westinghouse and Combustion Engineering  
 dated March 10, 1980

In the referenced letter, TVA was instructed to respond in four specific areas regarding the Auxiliary Feedwater (AFW) System at Sequoyah Nuclear Plant (SNP). Enclosure 1 provides an evaluation of the SNP AFW system which shows how the requirements of Standard Review Plan 10.4.9 and Branch Technical Position ASB-10-1 are met. Enclosure 2 is a reliability study of the SNP AFW system prepared by Kaman Sciences Corporation under contract to TVA. The remaining two items were answered in a letter from L. M. Mills to L. S. Rubenstein dated January 25, 1980, in which TVA responded to NRC short and long-term recommendations regarding the AFW system and the questions regarding the design basis for AFW system flow requirements.

If you have any questions, please get in touch with M. J. Burzynski at FTS 854-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager  
 Nuclear Regulation and Safety

Enclosures (5)

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## ENCLOSURE 1

### SEQUOYAH NUCLEAR PLANT AUXILIARY FEEDWATER SYSTEM COMPARISON TO SRP 10.4.9 AND BTP ASB 10-1

The following comments evaluate the Sequoyah auxiliary feedwater (AFW) system with respect to the acceptance criteria of SRP 10.4.9. The numbering corresponds to part II of SRP 10.4.9. Each requirement of SRP 10.4.9 has been previously addressed in the Sequoyah FSAR or in previous responses to NRC questions. Reference will be made to this existing material as appropriate.

1. GDC1 - See FSAR section 10.4.7.2.2.
2. GDC4 - See FSAR section 10.4.7.2.2.
3. GDC5 - See FSAR section 10.4.7.2.2.
4. GDC19 - See the entire FSAR section 10.4.7.2 and the responses to questions Q5.28 and Q5.28A.
5. GDC44
  - (a) Same as number 4 above.
  - (b) See FSAR sections 10.4.7.2.1, 10.4.7.2.2, and 10.4.7.2.3.
  - (c) The only nonessential portion of the AFW is the condensate supply which is isolated from the remainder of the system by check valves. All components required to maintain the essential functions of the AFW, including isolation of disabled equipment, are self-actuated, automatic, or operable from the main control room. This information is included in FSAR sections 10.4.7.2.1, 10.4.7.2.2, and 10.4.7.2.3, but not explicitly stated. These statements are made here for clarification.
6. GDC45 - See FSAR section 10.4.7.2.4.
7. GDC46 - See FSAR sections 10.4.7.2.4 and 14.1, FSAR Table 14.1-1 (page 14.1-83) and STS section 3/4.7.1.
8. RG 1.25 - System components were classified in accordance with the draft version of ANS 18.2 issued August 1970. A point-by-point comparison with RG 1.26 quality groups shows no significant differences for the AFW. See FSAR section 10.4.7.2.3, 3.2.2, Figure 10.4-19, Tables 3.2-2, 3.2-4, and 3.2-4a.
9. RG 1.29 - See FSAR sections 10.4.7.2.1 and 3.9.2.5.1.

10. RG 1.62 - See FSAR section 10.4.7.2.5.
11. RG 1.102 - See FSAR section 2.4A.
12. RG 1.117 - See FSAR sections 10.4.7.2.2 and 3.5 and FSAR question Q3.27.
13. BTP ASB 3-1 and MEB 3-1 - See TVA Report No. 72-22.
14. BTP ASB 10-1 - The AFW meets all requirements of this BTP as described in FSAR section 10.4.7 with one exception. Each AFW train cannot supply any combination of steam generators. Diverse means are provided to supply AFW to any steam generator. The steam-driven AFW pump delivers AFW to all four steam generators. Train A of the motor-driven supply delivers AFW to steam generators 1 and 2. Train B of the motor-driven supply delivers AFW to steam generators 3 and 4.