July 30, 1997

Mr. Oliver D. Kingsley, Jr.
President, TVA Nuclear and
Chief Nuclear Officer
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: ISSUANCE OF CORRECTED TECHNICAL SPECIFICATION PAGES FOR THE SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2 (TAC NOS. M98626 AND M98627)(TS 97-01)

Dear Mr. Kingsley:

The Commission issued Amendment No. 225 to Facility Operating License No. DPR-77 and Amendment No. 216 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively, on July 1, 1997. The amendments change the Technical Specifications (TS) by raising the allowable U-235 enrichment of fuel stored in the new fuel pit storage racks from 4.5 to 5.0 weight percent.

At the staff's request, a sentence was added to TS 5.6.1.2, page 5-5a for each unit by a supplement dated June 26, 1997. The sentence reads, "The cells shown as empty cells in Figure 5.6-4 shall have physical barriers installed to ensure that inadvertent loading of fuel assemblies into these locations does not occur." When this sentence was added, the following sentence, "The remaining storage cells must remain empty (contain no fuel assemblies)," should have been removed. It was clearly not the staff's intent to allow no fuel to be installed in the new fuel pit.

This letter transmits corrected pages 5-5a for Units 1 and 2 TS.

Sincerely,

/S/
Ronald W. Hernan, Senior Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

Enclosures: As stated

cc w/enclosures: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Enclosures: As stated

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5.6 FUEL STORAGE R171

each other and from the inner Region 3 cells by at least one (1) Region 2 spent fuel assembly (i.e., fuel of 50 MWD/KgU burnup or equivalent).

2. Region 1 fuel assemblies located along the wide water-gaps** between storage modules must be isolated from each other and from the inner Region 3 cells by at least one (1) Region 2 spent fuel assembly (i.e., fuel of 50 MWD/KgU assembly average burnup or equivalent).

3. Region 1 fuel assemblies located along the narrow water-gaps** between storage modules must be isolated from each other by at least two (2) Region 2 spent fuel assemblies and from the inner Region 3 cells by at least one (1) Region 2 spent fuel assembly (i.e., fuel of 50 MWD/KgU assembly average burnup or equivalent).

4. A checkerboard pattern of fresh fuel and empty cells may be used throughout any storage module, or internal to any storage module in lieu of Region 3 fuel as shown in Figure 5.6-2.

Figure 5.6-1 shows a typical arrangement of regions. Figure 5.6-2 illustrates internal module checkerboarding of fresh fuel with empty cells in a portion of the fuel pool. Figure 5.6-3 illustrates the two burnup-enrichment equations (5.6.1.1.c.2 and 5.6.1.1.c.3) in graphical form.

e. Only spent fuel meeting the Region 3 burnup requirements shall be stored in any module in the cask loading area of the cask pit.

CRITICALITY - NEW FUEL

5.6.1.2 The new fuel pit storage racks are designed for fuel enriched to 5.0 weight percent U-235 and shall be maintained with the arrangement of 146 storage locations shown in Figure 5.6-4. The cells shown as empty cells in Figure 5.6-4 shall have physical barriers installed to ensure that inadvertent loading of fuel assemblies into these locations does not occur. This configuration ensures k_{eff} will remain less than or equal to 0.95 when flooded with unborated water and less than or equal to 0.98 under optimum moderation conditions. R229

DRAINAGE

5.6.2 The spent fuel pit is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 722 ft.

**The nominal gap (2-1/8 inches) running in the E-W direction between the adjacent modules is referred to as the "wide gap." The N-S direction gap (1.5 inch) is referred to as the "narrow gap."

5.6 FUEL STORAGE R216

each other and from the inner Region 3 cells by at least one (1) Region 2 spent fuel assembly (i.e., fuel of 50 MWD/KgU burnup or equivalent).

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DRAINAGE

5.6.2 The spent fuel pit is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 722 ft.

**The nominal gap (2-1/8 inches) running in the E-W direction between the adjacent modules is referred to as the "wide gap." The N-S direction gap (1.5 inch) is referred to as the "narrow gap."