February 14, 2003

Mr. J. A. Scalice
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 — REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING TECHNICAL SPECIFICATION (TS) CHANGE REQUEST NO. 02-06, "INCREASE CONDENSATE STORAGE TANK MINIMUM VOLUME" (TAC NOS. MB7205 AND MB7206)

Dear Mr. Scalice:

In the letter dated November 15, 2002, the Tennessee Valley Authority submitted a proposed revision for Sequoyah Nuclear Plant, Units 1 and 2, TS 3.7.1.3, "Condensate Storage Water." This change would revise Limiting Condition for Operation of TS 3.7.1.3 by increasing the required minimum amount of stored water from 190,000 gallons to 240,000 gallons.

As a result of our review, the Nuclear Regulatory Commission (NRC) staff has determined that additional information is necessary to continue the review. The RAI is included in the enclosure.

The NRC staff discussed the attached RAI with your staff, in a conference call on February 10, 2003. A draft version of the RAI was transmitted to you via electronic mail on January 31, 2003, prior to the conference call. Mr. Smith agreed to respond to the attached RAI by February 28, 2003.

Please have your staff contact me at (301) 415-1055, if there are any questions regarding the attached RAI.

Sincerely,

/RA/

Raj K. Anand, Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-327 and 50-328

Enclosure: Request for Additional Information

cc w/enclosure: See next page

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Executive Vice President
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6A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 — REQUEST FOR ADDITIONAL INFORMATION REGARDING TECHNICAL SPECIFICATION (TS) CHANGE REQUEST NO. 02-06, "INCREASE CONDENSATE STORAGE TANK (CST) MINIMUM VOLUME" (TAC NOS. MB7205 AND MB67206)

Dear Mr. Scalice:

In the letter dated November 15, 2002, the Tennessee Valley Authority submitted a proposed revision for Sequoyah Nuclear Plant, Units 1 and 2, TS 3.7.1.3, "Condensate Storage Water." This change would revise Limiting Condition for Operation of TS 3.7.1.3 by increasing the required minimum amount of stored water from 190,000 gallons to 240,000 gallons.

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Raj K. Anand, Project Manager, Section 2
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REQUEST FOR ADDITIONAL INFORMATION

INCREASE CONDENSATE STORAGE TANK MINIMUM VOLUME

SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

1. In a conference call on February 10, 2003, you stated that the required condensate storage tank (CST) water volume is based upon the same cooldown curve as in your original analysis. Since the plant conditions changed such as increased auxiliary feedwater (AFW) temperature, increased steam generator (SG) metal volume, and a new decay heat standard, please address the following comments/questions.

   A. Provide an analysis to show that the cooldown curve is applicable to the new plant conditions considering the requirements of Branch Technical Position RSB 5-1.

   B. Compare the calculated CST water level determined using the methods above to the steady state analysis results as described in your report. Verify that your proposed CST water volume is acceptable for the plant cooldown.

2. In Section 2.3, "Main Feedwater Line Piping" (page 14), you state, "Only the volume of main feedwater piping from the entry-point of the AFW line is considered in calculations leading to the CST water volume requirement." Only considering the volume from the entry-point of the AFW line would neglect any water volume upstream of this entry point. How much water volume is upstream of this entry point that could mix with the AFW?

3. Page E1-1 of your submittal, states that the minimum CST water volume of 190,000 gallons will be increased to 240,000 gallons. You then state that this value reflects the minimum amount of feedwater required to assist in SG recovery of Unit 1, including a 12,000 margin. Given the net positive suction head requirements for the AFW pumps, vortexing, switchover level instrument uncertainty, level of the CST suction nozzle, et cetera, how many gallons of the CST are unuseable? How do you account for the unuseable volume in your calculations?

4. How do you consider AFW pump heat and reactor coolant pump coastdown work in your CST volume requirement calculations? If they are not considered, why is this acceptable?

Enclosure

cc:
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