ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-93-19)

LIST OF AFFECTED PAGES

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Unit 2

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5.3 REACTOR CORE

FUEL ASSEMBLIES

5.3.1 The reactor core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4. Each fuel rod shall have a nominal active fuel length of 144 inches. The initial core loading shall have a maximum enrichment of 3.15 weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum enrichment of 5.0 weight percent U-235. R49 R148

SEE INSERT 1

CONTROL ROD ASSEMBLIES

5.3.2 The reactor core shall contain 53 full length and no part length control rod assemblies. The full length control rod assemblies shall contain a nominal 142 inches of absorber material. The nominal values of absorber material shall be 80 percent silver, 15 percent indium and 5 percent cadmium. All control rods shall be clad with stainless steel tubing.

5.4 REACTOR COOLANT SYSTEM

DESIGN PRESSURE AND TEMPERATURE

5.4.1 The reactor coolant system is designed and shall be maintained:

a. In accordance with the code requirements specified in Section 5.2 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,

b. For a pressure of 2485 psig, and

c. For a temperature of 650°F, except for the pressurizer which is 680°F.

VOLUME

5.4.2 The total water and steam volume of the reactor coolant system is 12,612 ± 100 cubic feet at a nominal T_{avg} of 525°F.

5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown on Figure 5.1-1.

Insert 1

FUEL ASSEMBLIES

5.3.1 The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of zircaloy clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with NRC-approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff-approved codes and methods, and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions.

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SEE INSERT 2

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ENCLOSURE 2

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-93-19)

DESCRIPTION AND JUSTIFICATION FOR

THE SUBSTITUTION OF FILLER RODS FOR

FUEL RODS AS SPECIFIED IN

GENERIC LETTER 90-02, SUPPLEMENT 1

Description of Change

TVA proposes to modify the Sequoyah Nuclear Plant (SQN) Units 1 and 2 technical specifications (TSs) to revise Section 5.3.1, "Fuel Assemblies," in accordance with the guidance of Generic Letter 90-02, Supplement 1. This change will permit the substitution of zirconium alloy or stainless steel filler rods for fuel rods in fuel assemblies.

Reason for Change

This change will allow the substitution of filler rods for fuel rods in fuel assemblies. The change is desired to permit the timely removal of fuel rods that are found to be leaking or are determined to be the probable source of future leaks.

Justification for Change

The requirements for fuel assemblies specify the quantity of fuel assemblies and the number of fuel rods per assembly. Flexibility to deviate from the number of fuel rods is desirable to permit timely removal of fuel rods that are found to be leaking during a refueling outage or are determined to be the probable sources of future leakage. This improvement in SQN's fuel performance program will provide for reductions in future occupational radiation exposure and plant radiological releases.

As stated in Generic Letter 90-02, Supplement 1, the substitution of filler rods for fuel rods is acceptable when justified by an NRC-approved methodology that has been explicitly approved in a written safety evaluation, or a plant-specific TS basis. The NRC-approved methodology will demonstrate that existing design limits and safety analyses criteria are met in advance of the next operating cycle.

Environmental Impact Evaluation

The proposed change request does not involve an unreviewed environmental question because operation of SQN Units 1 and 2 in accordance with this change would not:

1. Result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) as modified by NRC's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or decisions of the Atomic Safety and Licensing Board.

2. Result in a significant change in effluents or power levels.

3. Result in matters not previously reviewed in the licensing basis for SQN that may have a significant environmental impact.

Enclosure 3

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-93-19)

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

Significant Hazards Evaluation

TVA has evaluated the proposed technical specification change and has determined that it does not represent a significant hazards consideration based on criteria established in 10 CFR 50.92(c). Operation of Sequoyah Nuclear Plant (SQN) in accordance with the proposed amendment will not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

   The substitution of filler rods will be justified using NRC-approved methodology. This methodology will demonstrate that the existing design limits and safety analyses criteria are met. Therefore, the proposed change does not increase the consequences of an accident previously analyzed.

2. Create the possibility of a new or different kind of accident from any previously analyzed.

   The proposed change involves the substitution of filler rods for fuel rods. This substitution requires the utilization of NRC-approved methodology. This methodology will ensure that the specific analyses will not cause any new or different kind of accident from that previously analyzed.

3. Involve a significant reduction in a margin of safety.

   The substitution of filler rods for fuel rods would result in less active fuel in the core. Therefore, the amounts of radiological effluents that may be released offsite would not increase. The NRC-approved methodology by which any reanalyses would be performed already accounts for the affects on grid strength or the mass, stiffness, and fundamental frequency of the fuel assembly during seismic and loss-of-cooling accident conditions. Thus, the margin of safety is not reduced when substituting filler rods for fuel rods.