July 10, 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

Distribution: Docket File PUBLIC SQN Rdg. File B. Boger J. Zwolinski

J. Johnson, RII OGC ACRS

# SUBJECT: REVIEW OF UPDATE 12 TO FINAL SAFETY ANALYSIS REPORT - SEQUOYAH NUCLEAR PLANT (SQN), UNITS 1 AND 2 (TAC NO. M98971)

Dear Mr. Kingsley:

The Tennessee Valley Authority (TVA) forwarded Amendment 12 to the SQN Updated Final Safety Analysis Report (UFSAR) by letter dated December 6, 1996, as required by 10 CFR 50.71(e). Our review of the amendment to the UFSAR indicates that a number of tables, figures, and system descriptions have been removed from the UFSAR (see enclosure). The purpose of this letter is to notify you of the items noted by our review, including those that require additional review by the staff.

The UFSAR revision generally included (1) addition or deletion of information regarding structures, systems, or components (SSC) that have been added or removed from the plant, (2) correction of typographical errors, (3) relocation of information related to the fire protection system from the FSAR to the Fire Protection Report issued in August 1966, (4) changes to the sequences in various operating procedures, (5) changes to various plant parameters and/or assumptions as supported by reanalyses, and (6) removal of certain information with no apparent change to the physical plant. The last category of changes will require onsite followup of the changes that do not appear justified (or consistent with Draft NUREG-1606, Staff Position III.N.4). The followup review at the Sequoyah site is tentatively scheduled for the week of July 14.

Sincerely,

Original signed by Ronald W. Hernan, Sr. Project Manager Project Directorate II-3 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

NRC FILE GENTER GOPY

DFOI

Docket Nos. 50-327 and 50-328

Enclosure: As stated

cc w/enclosure: See next page

DOCUMENT	NAME :	G:\	SON	UFSARREV.	ITR
0000110111	11731124 4	<b>NO</b> 4 1	0011	NY 1 NY 1 1 1 1 1 1 1 1 1 1	3

TO GET a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	PDI1-3/PM PDII	-3/LA	PDII-3/		
NAME	RHernan Cont BC1a	yton	FHebdon	pon pon	
DATE	7/9/97 7/0	1 /97	7/10	/97	

9707140106 970710 PDR ADOCK 05000327 PDR PDR

1.4

OFFICIAL RECORD COPY

Mr. Oliver D. Kingsley, Jr. Tennessee Valley Authority

#### cc:

Mr. O. J. Zeringue, Sr. Vice President Nuclear Operations Tennessee Valley Authority 6A Lookout Place 1101 Market Street Chattanooga, TN 37402-2801

Mr. Jack A. Bailey, Vice President Ingineering & Technical Services Tennessee Valley Authority 6A Lookout Place 1101 Market Street Chattanooga, TN 37402-2801

Mr. R. J. Adney, Site Vice President Sequoyah Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Soddy Daisy, TN 37379

General Counsel Tennessee Valley Authority ET 10H 400 West Summit Hill Drive Knoxville, TN 37902

Mr. Raul R. Baron, General Manager Nuclear Assurance and Licensing Tennessee Valley Authority 4J Blue Ridge 1101 Market Street Chattanooga, TN 37402-2801

Mr. Pedro Salas, Manager Licensing and Industry Affairs Tennessee Valley Authority 4J Blue Ridge 1101 Market Street Chattanooga, TN 37402-2801

Mr. Ralph H. Shell, Manager Licensing and Industry Affairs Sequoyah Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Soddy Daisy, TN 37379

## SEQUOYAH NUCLEAR PLANT

Mr. J. T. Herron, Plant Manager Sequoyah Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Soddy Daisy, TN 37379

Regional Administrator U.S. Nuclear Regulatory Commission Region II 61 Forsyth Street, SW., Suite 23T85 Atlanta, GA 30303-3415

Mr. Melvin C. Shannon Senior Resident Inspector Sequoyah Nuclear Plant U.S. Nuclear Regulatory Commission 2600 Igou Ferry Road Soddy Daisy, TN 37379

Mr. Michael H. Mobley, Director Division of Radiological Health 3rd Floor, L and C Annex 401 Church Street Nashville, TN 37243-1532

County Executive Hamilton County Courthouse Chattanooga, TN 37402-2801

# SEQUOYAH UPDATED FINAL SAFETY ANALYSIS REPORT (UFSAR) - AMENDMENT 12

## IMPROVEMENTS

1. Removed details of fire protection system, including drawings and references to FSAR drawings and figures. UFSAR now references the Fire Protection report issued in August 1996, which contains the same level of detail.

<u>Comment:</u> This change appears to be acceptable because TVA has committed to update the Fire Protection Report as part of the UFSAR updates.

 Separate drawings for Units 1 and 2 were inserted in place of one drawing covering both units where system details are different in each unit (e.g., Auxiliary Feedwater System).

Comment: An improvement to the UFSAR.

 The level of design information on the spent fuel pool and fuel loading details were greatly expanded.

Comment: An improvement to the UFSAR.

 Changed the sequence of drawing a bubble and starting a reactor coolant pump (RCP) during plant heatup (Section 5.1).

<u>Comment:</u> This change was made to resolve a conflict between UFSAR Sections 5.1 and 5.5.7.2.2.

 Improved the discussion on boron injection during plant cooldown (Section 5.1).

Comment: An improvement to the UFSAR.

6. Added Section 5.5.2.3.3 on secondary boric acid treatment.

<u>Comment:</u> An improvement to the UFSAR.

### FOLLOWUP ITEMS

The following changes will require followup review of the supporting 10 CFR 50.59 evaluations by the NRR Project Manager:

- 1. Removed Table 3.5.2-1, Sheets 2 and 3, "Missile Characteristics."
- 2. The RCS lithium vs boron curve (Figure 5.2.3-1) was removed.
- 3. Deleted details of RCP vibration monitoring system (p. 5.5-1).
- Changed some assumptions and parameter values in the containment pressure calculation (pp. 6.2-23, 24). It is not clear why this was changed.

ENCLOSURE

- 5. Deleted four steamline break case assumptions (pp. 6.2-53, 54) with no apparent justification.
- Design flow rates and pump head design ratings were deleted for the containment spray system and RHR system (pp. 6.2-78, 80, 81, 82) with no apparent justification.
- 7. Removed Table 6.2.4-1 in its entirety (157 pages). This table contains virtually all design information on all 157 containment penetrations including configuration, piping diagram, leak rate test requirements, pipe sizes, type of valve actuators, valve positions in various modes, and valve closure times.
- Removed design information and all reference to the heat tracing systems for the ECCS and Boric Acid Systems (pp. 6.3-10 and 9.3-31).
- The minimum operating pressure for the cold leg injection accumulators was reduced from 615 psig to 600.3 psig (Table 6.3.2-1).
- 10. The pump and valve inservice testing program has been removed from the UFSAR and placed in separate pump and valve testing program basis documents (pp. 6.8-1 through 6.8-5 and Appendices 6.8A through 6.8E).

## NPC GUIDANCE UNDER DEVELOPMENT

Notice of availability and request for comment for Draft NUREG-1606 was published in the <u>Federal Register</u> on May 7, 1997. Staff Position II.N.4 in the NUREG states, in part, the following:

The staff recognizes that there is no established policy or guidance with respect to removal of information from the FSAR not associated with changes to the facility or procedures. The staff position is that licensees may not remove material from safety analysis reports unless the material is changed as a direct result of a change to the facility ... or procedures made in accordance with 10 CFR 50.59 or 10 CFR 50.90. In Part 2 of the Millstone lessons-learned task group report, questions about the need to issue guidance that clearly identifies the types of information that should be in the SAR (or added as part of the updating process) are being considered This review may result in determinations about what information (if any) that is presently in the SAR is not needed, and therefore, whether there is a need for a process to allow deletion of information.

The <u>Federal Register</u> notice that incorporated 10 CFR 50.71(e), requiring periodic updates of the FSAR (45 FR 30614) stated, in part, the following:

Since the format of the FSAR is not covered by regulation, the rule does not specify a particular format. ... The format to be used for the FSAR revisions is the option of the licensee, but the Commission expects that the format will probably be the same as the format of the original FSAR. ... The level of detail in the updated FSAR should be at least the same as originally provided.