

March 4, 1996

Mr. Oliver D. Kingsley, Jr.  
President, TVA Nuclear and  
Chief Nuclear Officer  
Tennessee Valley Authority  
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SUBJECT: ISSUANCE OF TECHNICAL SPECIFICATION AMENDMENTS FOR THE SEQUOYAH  
NUCLEAR PLANT, UNITS 1 AND 2 (TAC NOS. M94414 AND M94415) (TS 95-22)

Dear Mr. Kingsley:

The Commission has issued the enclosed Amendment No. 220 to Facility Operating License No. DPR-77 and Amendment No. 210 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are in response to your application dated January 4, 1996.

The amendments change the surveillance test frequency specified for the functional tests of the containment, fuel storage pool, and control room radiation monitors from monthly to quarterly.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by

David E. LaBarge, Sr. Project Manager  
Project Directorate II-3  
Division of Reactor Projects - I/I  
Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

- Enclosures: 1. Amendment No. 220 to License No. DPR-77
- 2. Amendment No. 210 to License No. DPR-79
- 3. Safety Evaluation

cc w/enclosures: See next page

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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-327

SEQUOYAH NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 220  
License No. DPR-77

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated January 4, 1996, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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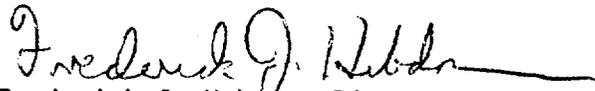
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-77 is hereby amended to read as follows:

**(2) Technical Specifications**

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.220 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance, to be implemented within 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director  
Project Directorate II-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

**Attachment:** Changes to the Technical  
Specifications

**Date of Issuance:** March 4, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 220

FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

3/4 3-35  
3/4 3-42

INSERT

3/4 3-35  
3/4 3-42

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
3. CONTAINMENT ISOLATION				
a. Phase "A" Isolation				
1) Manual	N.A.	N.A.	R	1, 2, 3, 4
2) From Safety Injection Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3, 4
b. Phase "B" Isolation				
1) Manual	N.A.	N.A.	R	1, 2, 3, 4
2) Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3, 4
3) Containment Pressure-- High-High	S	R	Q	1, 2, 3
c. Containment Ventilation Isolation				
1) Manual	N.A.	N.A.	R	1, 2, 3, 4
2) Automatic Isolation Logic	N.A.	N.A.	M(1)	1, 2, 3, 4
3) Containment Purge Air Exhaust Monitor Radio-activity-High	S	R	Q	1, 2, 3, 4

R51

R51

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>	
1. AREA MONITOR					R116
a. Fuel Storage Pool Area	S	R	Q	*	
2. PROCESS MONITORS					R116
a. Containment Purge Air Exhaust	S	R	Q	1, 2, 3, 4 & 6	
b. Containment					
i. Gaseous Activity RCS Leakage Detection	S	R	Q	1, 2, 3, & 4	
ii. Particulate Activity RCS Leakage Detection	S	R	Q	1, 2, 3, & 4	
c. Control Room Isolation	S	R	Q	ALL MODES	

\*With fuel in the storage pool or building.

|R116



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-328

SEQUOYAH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 210  
License No. DPR-79

- I. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Tennessee Valley Authority (the licensee) dated January 4, 1996, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

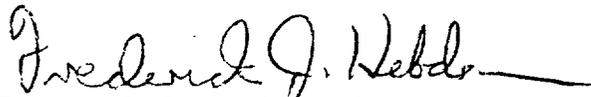
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-79 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 210, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance, to be implemented within 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director  
Project Directorate II-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: March 4, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 210

FACILITY OPERATING LICENSE NO. DPR-79

DOCKET NO. 50-328

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

3/4 3-35  
3/4 3-43

INSERT

3/4 3-35  
3/4 3-43

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
3. CONTAINMENT ISOLATION				
a. Phase "A" Isolation				
1) Manual	N.A.	N.A.	R	1, 2, 3, 4
2) From Safety Injection Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3, 4
b. Phase "B" Isolation				
1) Manual	N.A.	N.A.	R	1, 2, 3, 4
2) Automatic Actuation Logic	N.A.	N.A.	M(1)	1, 2, 3, 4
3) Containment Pressure-- High-High	S	R	Q	1, 2, 3
c. Containment Ventilation Isolation				
1) Manual	N.A.	N.A.	R	1, 2, 3, 4
2) Automatic Isolation Logic	N.A.	N.A.	M(1)	1, 2, 3, 4
3) Containment Purge Air Exhaust Monitor Radio- activity-High	S	R	Q	1, 2, 3, 4

R39

R39

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>	
1. AREA MONITOR					R102
a. Fuel Storage Pool Area	S	R	Q	*	
2. PROCESS MONITORS					R102
a. Containment Purge Air Exhaust	S	R	Q	1, 2, 3, 4 & 6	
b. Containment					
i. Gaseous Activity					
RCS Leakage Detection	S	R	Q	1, 2, 3, & 4	
ii. Particulate Activity					
RCS Leakage Detection	S	R	Q	1, 2, 3 & 4	
c. Control Room Isolation	S	R	Q	ALL MODES	
					R102

\*With fuel in the storage pool or building.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 220 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 210 TO FACILITY OPERATING LICENSE NO. DPR-79

TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

1.0 INTRODUCTION

By application dated January 4, 1996, the Tennessee Valley Authority (the licensee) proposed an amendment to the Technical Specifications (TS) for Sequoyah Nuclear Plant, Units 1 and 2. The request would change the surveillance test frequency specified in TS Table 4.3-2, Item 3.c.3, and Table 4.3-3, Items 1.a, 2.a, 2.b.i, 2.b.ii, and 2.c for the functional tests of the containment, fuel storage pool, and control room radiation monitors from monthly to quarterly.

Guidance for the proposed changes was provided in Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation."

2.0 EVALUATION

According to the licensee's TS, a channel functional test is the injection of a simulated signal into the channel as close to the sensor as practicable to verify operability, including alarm and/or trip functions.

The specific radiation monitors affected by the proposed change to the functional test frequency are the Containment Purge Air Exhaust Monitors, the Spent Fuel Storage Pool Area Radiation Monitor, the Containment Gaseous and Particulate Activity monitors for reactor coolant system (RCS) leakage detection, and the Control Room Isolation Radiation Monitor System. They are safety-related radiation monitors that are designed to isolate their respective areas in the event airborne radioactivity exceeds allowable levels. In addition, the containment gaseous and particulate activity monitors are designed to trend the containment airborne activity in the upper and lower levels of the containment for RCS leakage detection, as described in Regulatory Guide 1.45, "Reactor Coolant Pressure Boundary Leakage Detection Systems." These functions are not affected by the proposed amendment.

The licensee has reviewed past calibration test data for these radiation monitors and determined that the functional tests do not normally identify failures. The licensee also reviewed the results of functional tests that are performed quarterly on similar monitors and resulting work requests. Data from these tests have not indicated results that were different from the monthly data. As pointed out in GL 93-05, performing the functional tests on

a monthly basis for these monitors results in removal of each instrument from service for significant periods of time. Therefore, decreasing the test frequency from monthly to quarterly will reduce the number of times a monitor is removed from service and increase its availability to perform its design function.

Channel checks of each monitor will continue to be performed every shift. According to the licensee's TS, a channel check is the qualitative assessment of channel behavior during operation by observation. This determination includes comparison of the channel indication and/or status with other indications and/or status derived from independent instrumentation channels measuring the same parameter. These channel checks, combined with failure alarms, will allow an inoperable monitor to be detected promptly.

Therefore, since the proposed change will increase the availability of the radiation monitors without a significant decrease in their reliability, it is consistent with the guidance provided in both GL 93-05 and the Westinghouse Standard TS, the staff has determined that the change is acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Tennessee State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes the surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR 3503). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

### 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: David E. LaBarge

Dated: March 4, 1996

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

cc:

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