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.

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Dated: March 4, 1996

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