SAFETY EVALUATION BY THE OFFICE OF

NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 3 TO LICENSE DPR-77

TENNESSEE VALLEY AUTHORITY

INTRODUCTION

By letter dated March 28, 1980, the Tennessee Valley Authority (TVA) proposed changes to the Technical Specifications for Sequoyah Unit 1 dealing with the surveillance requirements for taking radioactive liquid and gaseous samples. We have evaluated these changes.

One change was proposed to install a continuous composite sampler and flow monitor on the condensate demineralizer regenerant effluent line to replace the present program which required compositing batch samples from the non-reclaimable waste tank and the high crud tanks to obtain a representive sample of those potentially radioactive releases.

A second change was proposed to specify the allowable time for taking remedial action when iodine or particulate samplers are inoperative. A third change was proposed to specify when gas samplers of the containment atmosphere were required prior to operating the purge fans. These changes were necessary to clarify sampling frequency for the gaseous effluent monitoring program.

In addition to the above proposed changes the licensee has agreed to include the continuous composite sampler and flow monitor on the condensate demineralizer regenerant effluent line in the effluent monitoring instrumentation section of the Technical Specifications.

ENVIRONMENTAL CONSIDERATION

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR Section 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

EVALUATION

The proposed change to the Sequoyah Technical Specifications for the continuous composite sampler and flow monitor involves the installation of a device to take samples from the effluent line rather than taking routine samples from the non-reclaimable waste tank and high crud tanks on a batch basis and compositing

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these samples for the post-release analysis. The change will not alter the liquid effluent sampling requiste or the continuous monitoring and control provisions, but will provide a continuous representive sample of all condensate demineralizer regenerant waste released. We find the change is an improvement on taking samples, that the sampling by instrumentation method is permitted by the Standard Technical Specifications and the proposed changes to Tables 3.3-12, 4.3-8 and 4.11-1 on pages 3/4 3-70A, 3/4 3-72A, 3/4 11-2A and 3/4 11-4 as enclosed, are acceptable.

The proposed change to ACTION 36 to Table 3.3-13 of the present tecnnical specification would specify a time period of 4 hours to complete the installation of auxiliary sampling equipment for the collection of radioiodines or particulate materials in gaseous effluents whenever the routine sampling equipment is inoperable. We find that this period is reasonable for this remedial action and is within the scope of other prompt actions specified in the Standard Technical Specifications, and therefore, is acceptable as written.

The proposed change to footnote(i) to Table 4.11-2 of the present technical specifications would define the time for taking gaseous samples from the containment atmosphere prior to venting or purging. The present Standard Technical Specifications intended that an initial sample be taken prior to shutdown purging of the containment in order to open containment prior to each purge during reactor operation. In the present technical specifications, the footnote(i) required sampling based on each purge fan operation. The licensee has requested additional operational flexibility to start and stop the purge fans during open containment without the requirement for additional samples. We find this proposal acceptable, and the NRC staff suggested clarifying modifications with the agreement of the licensee, for this change.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

DATE:
July 1, 1980