

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

April 8, 1981

Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555



Dear Mr. Schwencer:

In the Matter of the Application of)
Tennessee Valley Authority)

Docket Nos. 50-327

Pursuant to the Sequoyah Nuclear Plant (SNP) license condition, DPR-77 item 2.c.(24), concerning compliance with Regulatory Guide 1.97, Revision 2, TVA will provide a detailed schedule for compliance by June 30, 1981.

TVA initiated a detailed program of design evaluation for all of its nuclear plants in August 1979. This program has resulted in the upgrading of accident and status instruments to be used by control room operating personnel in assessment of plant and environs conditions. These improvements in instrumentation have been defined on the Sequoyah docket in TVA's responses to the requirements of each of the following: NUREG-0578, NUREG-0585, NUREG-0588, NUREG-0654, NUREG-0696, and NUREG-0737.

These instrumentation improvements related to Regulatory Guide 1.97 have been or will be incorporated into the SNP Final Safety Analysis Report (FSAR) and the SNP Radiological Emergency Plan.

The current Regulatory Guide 1.97 evaluation program for SNP is a four-step plan. The plan will:

- (1) Coalesce the requirements of the control room review (NUREG-0700), the radiological emergency program (NUREG-0696), the TMI-2 requirements (NUREG-0737), and the degraded core task force review;
- (2) Independently evaluate from first principles the requirement for type A, type B, type C, and type D variables;

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- (3) Evaluate the current design against Regulatory Guide 1.97; and
- (4) Determine feasibility of compliance with Regulatory Guide 1.97, Revision 2, including cost and schedule.

As a result of our Regulatory Guide 1.97 evaluation program, we have developed some general and specific concerns. We have been working with the staff to resolve these concerns. Generally, TVA is concerned that we are properly resolving the apparent conflicts in requirements of Regulatory Guide 1.97, Revision 2 and other NRC requirements. TVA finds that for the SNP there are some PWR variables for which we might see an exception to the provisions and schedules of the guide.

Some examples of our specific concerns about Regulatory Guide 1.97, Revision 2 requirements for SNP unit 1 are:

- (1) What are the upgrade requirements for qualification, isolation, ambiguity, and human factors? These requirements could extensively impact our schedule commitments already made.
- (2) What are the schedule requirements for implementation for core thermocouples, primary containment isolation valve position, primary coolant radiation monitors, and particulate and halogen radiation monitors considering the difficulties in procurement and technical feasibility?
- (3) What will the impact of a change in radiological source terms be? A potential change in source terms should be considered in the development and procurement actions.
- (4) What is the purpose for both the reactor coolant level and core exit extended range variable being category 1? These requirements for category 1 appear to impact the installation schedule.

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We will continue to work with the NRC staff to resolve the above concerns before our June 30, 1981 submittal.

If you have any questions, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills

L. M. Mills, Manager
Nuclear Regulation and Safety

Sworn to and subscribed before me
this 8th day of April 1981

Paulette H. White

Notary Public

My Commission Expires 9-5-84