

March 2, 2006

Mr. Karl W. Singer  
Chief Nuclear Officer and  
Executive Vice President  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2 — REQUEST FOR  
ADDITIONAL INFORMATION REGARDING NOMINAL TRIP SETPOINTS  
(TAC NOS. MC4408 AND MC4409) (TVA-SQN-TS-02-01)

Dear Mr. Singer:

The U. S. Nuclear Regulatory Commission (NRC) staff is continuing its review of your application dated August 18, 2004, Technical Specification Change No. 02-01, Revision 1, Nominal Trip Setpoints for Reactor Protection System and Engineered Safety Features Instrumentation.

In a letter dated May 19, 2005 (ADAMS Accession Number: ML0512604640), the NRC staff requested additional information from Tennessee Valley Authority (TVA) as part of the interim approach adopted by the NRC to review license amendments related to setpoint methodology.

As a result of the NRC's updated approach to this issue, the request for additional information (RAI) originally contained in our letter dated May 19, 2005, is hereby withdrawn and replaced by the RAI enclosed in this letter.

Our letter dated May 19, 2005, also asked for the following three items:

1. An explicit regulatory commitment to adopt the final Technical Specification Task Force technical specification change to come into conformance with the existing understanding of the requirements of 10 CFR 50.36.
2. An explicit regulatory commitment to assess the operability of tested instrumentation based on the previous as-left instrument setting and accounting for the uncertainties associated with the test or calibration.
3. A revision to the technical specifications for the limiting safety system settings being changed by the license amendment request to incorporate a footnote that states:

The as-left instrument setting shall be returned to a setting within the tolerance band of the trip setpoint established to protect the safety limit.

These three items are likewise withdrawn and do not need to be addressed by TVA.

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Based upon discussions with your staff, we understand that you plan to respond to the enclosed RAI within 60 days of receipt of this letter. If you have any questions about this material, please contact me at (301) 415-1364.

Sincerely,

**/RA/**

Douglas V. Pickett, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

Enclosure: Request for Additional  
Information

cc w/enclosure: See next page

- 2 -

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Sincerely,

**/RA/**

Douglas V. Pickett, Senior Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
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cc w/enclosure: See next page

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Mr. Karl W. Singer  
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## **SEQUOYAH NUCLEAR PLANT**

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REQUEST FOR ADDITIONAL INFORMATION

SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

TECHNICAL SPECIFICATIONS CHANGES FOR NOMINAL TRIP SETPOINTS FOR

REACTOR PROTECTION SYSTEM AND ENGINEERED SAFETY FEATURES

INSTRUMENTATION

DOCKET NOS. 50-327 AND 50-328

1. Setpoint Calculation Methodology: Provide documentation (including sample calculations) of the methodology used for establishing the limiting nominal setpoint and the limiting acceptable values for the As-Found and As-Left setpoints as measured in periodic surveillance testing as described below. Indicate the related Analytical Limits and other limiting design values (and the sources of these values) for each setpoint.
2. Safety Limit (SL)-Related Determination: Provide a statement as to whether or not the setpoint is a limiting safety system setting for a variable on which a SL has been placed as discussed in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50.36(c)(ii)(A). Such setpoints are described as "SL-Related" in the discussions that follow. For each setpoint that you determined not to be SL-Related, explain the basis for this determination.
3. For setpoints that *are* determined to be SL-Related: The NRC letter to the Nuclear Energy Institute (NEI) Setpoint Methods Task Force (SMTF) dated September 7, 2005 (ADAMS Accession Number: ML052500004), describes Setpoint-Related TS (SRTS) that are acceptable to the NRC for instrument settings associated with SL-related setpoints. Specifically: Part "A" of the Enclosure to the letter provides limiting condition for operation (LCO) notes to be added to the TS, and Part "B" includes a check list of the information to be provided in the TS Bases related to the proposed TS changes.
  - a. Describe whether and how you plan to implement the SRTS suggested in the September 7, 2005, letter. If you do not plan to adopt the suggested SRTS, then explain how you will ensure compliance with 10 CFR 50.36 by addressing items 3b and 3c, below.
  - b. As-Found Setpoint Evaluation: Describe how surveillance test results and associated TS limits are used to establish operability of the safety system. Show that this evaluation is consistent with the assumptions and results of the setpoint calculation methodology. Discuss the plant corrective action processes (including plant procedures) for restoring channels to operable status when channels are determined to be "inoperable" or "operable but degraded." If the

ENCLOSURE

criteria for determining operability of the instrument being tested are located in a document other than the TS (e.g. plant test procedure), explain how the requirements of 10 CFR 50.36 are met.

- c. As-Left Setpoint Control: Describe the controls employed to ensure that the instrument setpoint is, upon completion of surveillance testing, consistent with the assumptions of the associated analyses. If the controls are located in a document other than the TS (e.g. plant test procedure) explain how the requirements of 10 CFR 50.36 are met.
4. For setpoints that are *not* determined to be SL-related setpoints in response to Question 2: Describe the measures to be taken to ensure that the associated instrument channel is capable of performing its specified safety functions in accordance with applicable design requirements and associated analyses. Include in your discussion information on the controls you employ to ensure that the As-Left trip setting after completion of periodic surveillance is consistent with your setpoint methodology. If the controls are located in a document other than the TS (e.g., plant test procedure), describe how it is ensured that the controls will be implemented to satisfy operability requirements.