

May 19, 2005

Mr. Karl W. Singer
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 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. As described in the staff's letter to the Nuclear Energy Institute dated March 31, 2005 (Agencywide Documents and Access Management Systems accession No. ML050910433), the NRC staff has adopted an interim approach in its review of licensing amendment requests. In this regard, the staff will be requesting additional information in the form of the enclosed Revised Method 3 Request for Additional Information and 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.

K. Singer

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If you believe you have previously provided information on the docket that satisfies the enclosed request for additional information, please provide the appropriate reference.

Sincerely,

/RA/

Douglas V. Pickett, Senior Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

Enclosure: As stated

cc w/enclosure: See next page

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Mr. Karl W. Singer
Tennessee Valley Authority

SEQUOYAH NUCLEAR PLANT

cc:

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REVISED METHOD 3 REQUEST FOR ADDITIONAL INFORMATION

The Sequoyah Nuclear Power Plant (SQN), Units 1 and 2, Technical Specifications (TSs) define Limiting Safety System Settings (LSSS) as an allowable value (AV). During reviews of proposed license amendments that contain changes to LSSS setpoints, the U. S. Nuclear Regulatory Commission (NRC) staff identified concerns regarding the method used by some licensees to determine the AVs identified in the TSs. AVs are identified in the TS as LSSS to provide acceptance criteria for determination of instrument channel operability during periodic surveillance testing. The NRC staff's concern relates to one of the three methods for determining the AV as described in the Instrument Society of America (ISA) recommended practice ISA-RP67.04-1994, Part II, "Methodologies for Determination of Setpoints for Nuclear Safety-Related Instrumentation."

The NRC staff has determined that to ensure a plant will operate in accordance with the assumptions upon which the plant safety analyses have been based, additional information is required regardless of the methodology used to establish LSSS values in TSs. Details about the NRC staff's concerns are available on the NRC's public website under ADAMS Accession Numbers ML041690604, ML041810346, and ML050670025.¹

In order for the NRC staff to assess the acceptability of your license amendment request related to this issue, the staff requests the following additional information:

1. Discuss the setpoint methodology used at SQN to establish AVs associated with LSSS setpoints.
2. Regardless of the methodology used, the NRC staff has the following questions regarding the use of the methodology at SQN:
 - a. Discuss how the methodology and controls you have in place ensure that the analytical limit (AL) associated with an LSSS will not be exceeded (the AL is a surrogate that ensures the safety limits will not be exceeded). Include in your discussion information on the controls you employ to ensure the trip setpoint established after completing periodic surveillances satisfies your methodology. If the controls are located in a document other than the TSs, discuss how those controls satisfy the requirements of 10 CFR 50.36.
 - b. Discuss how the TS surveillances ensure the operability of the instrument channel. This should include a discussion on how the surveillance test results relate to the TS AV and describe how these are used to determine the operability of the instrument channel. If the requirements for determining operability of the LSSS instrument being tested are in a document other than the TS (e.g., plant test procedure), discuss how this meets the requirements of 10 CFR 50.36.

¹ To access the document, go to www.nrc.gov, click on "Electronic Reading Room," then "Documents in ADAMS," then "Web-Based Access," then "Begin ADAMS Search," then "Advanced Search," and enter the accession number into the Accession Number box near the top of the page. Click on the "Search" button near the bottom of the page. You will need to select "Image File" on the search results page to view the document. NOTE: You will need Adobe Acrobat Reader to open this file.

Enclosure