

January 13, 2006

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 LICENSE AMENDMENT
REQUEST TO REVISE TECHNICAL SPECIFICATIONS FOR LOSS OF
POWER DIESEL GENERATOR START INSTRUMENTATION
(TAC NOS. MC4584 AND MC4585)

Dear Mr. Singer:

By letter dated September 30, 2004 (ADAMS No. ML042860054), Tennessee Valley Authority requested a license amendment for the Sequoyah Nuclear Plant, Units 1 and 2 technical specifications (TVA-SQN-TS-04-01). The proposed changes request the relocation of the loss of power instrumentation for emergency diesel generators to a new limiting condition for operation (LCO), replace the setpoint and allowable values for the auxiliary feedwater loss of power start function by referring to the new proposed LCO, and add new allowable values consistent with Standard Technical Specification Change Traveler TSTF-365.

In order for the Nuclear Regulatory Commission to complete its review of these reports, we have identified the enclosed request for additional information (RAI). Based on discussions with your staff, we understand that you intend to respond to this RAI by approximately February 17, 2006.

Please feel free to contact me at 301-415-1364, if you have any questions.

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: As stated

cc w/enclosure: See next page

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NRR-088

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Mr. Karl W. Singer
Tennessee Valley Authority

SEQUOYAH NUCLEAR PLANT

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REQUEST FOR ADDITIONAL INFORMATION
LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATIONS
FOR LOSS OF POWER DIESEL GENERATOR START INSTRUMENTATION
TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

The license amendment request (LAR) proposes the addition of new upper limit allowable values for 6.9 kv Shutdown Board - Loss of Voltage - Voltage Sensors and 6.9 kv Shutdown Board - Degraded Voltage - Voltage Sensors in Technical Specification (TS) 3.3.3.11, Table 3.3-14 consistent with Standard Technical Specification Traveler TSTF-365 and the addition of a lower allowable value for the 6.9 kv Shutdown Board - Degraded Voltage - Diesel Generator Start and Load Shed Timer in TS 3.3.3.11, Table 3.3-14.

In recent public communications available on the Nuclear Regulatory Commission's (NRC) public website, ADAMS Nos. ML052500004, ML050870008 and ML051660447, the NRC staff has identified a concern on the use of allowable values as limits that are used in TSs to satisfy the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36, "Technical Specifications." The NRC staff has been working with the Nuclear Energy Institute's Setpoint Methods Task Force to address these concerns.

To assess the acceptability of your LAR related to this issue, the NRC staff requests the following additional information:

1. Describe the instrumentation setpoint methodology used at Sequoyah for establishing TS limits. This discussion should include acceptable as found band, acceptable as left band, setting tolerance, and reset criteria used to determine the acceptability of the instrumentation.
2. For the allowable values to be added, clarify whether it is a Limiting Safety System Setting (LSSS) as discussed in 10 CFR 50.36(c)(ii)(A). If you determined that it is not, explain why not.

The NRC staff will generally use the following criteria to determine whether the allowable values being changed fall within the scope of this LSSS issue or not:

- (a) Instrument allowable values and setpoints for TS functions in the Reactor Protection (Trip) System.
- (b) Instrument allowable values and setpoints for TS functions that protect a safety limit (SL) (whether or not the Bases designates the function as an LSSS).

ENCLOSURE

- (c) Allowable values and setpoints that are not in instrumentation LCOs but whose function protects an SL (whether or not the Bases designate the function as an LSSS).
3. As required by 10 CFR 50.36(c)(ii)(A), if it is determined that the automatic safety system does not function as required, the licensee shall take appropriate action. Describe how the surveillance test results and the associated TS limits as determined by the plant setpoint methodology are used to establish the operability of the safety system. Include a discussion of plant processes for evaluating channels identified to be operable but degraded. If the requirements for determining operability of the instrumentation being tested are located in a document other than the TSs (e.g., plant test procedure), discuss how the requirements of 10 CFR 50.36 are met.
 4. As required by 10 CFR 50.36(c)(ii)(A), an LSSS be so chosen that automatic protective action will correct the abnormal situation before an SL is exceeded. Discuss how TS limits established by the plant setpoint methodology will ensure that the SL will not be exceeded. Include in your discussion information on the controls you employ to ensure that the as left trip setting after completing periodic surveillance, is consistent with your setpoint methodology. If the controls are located in a document other than the TSs (e.g., plant test procedure), discuss how those controls satisfy the requirements of 10 CFR Part 50.36.
 5. For setpoints that are not defined as LSSS in response to question 2, discuss what measures have been taken to ensure that it is capable of performing its specified safety functions. Include in your discussion information on the controls you employ to ensure that the as left trip setting after completing periodic surveillance, is consistent with your setpoint methodology. If the controls are located in a document other than the TSs (e.g., plant test procedure), discuss how those controls satisfy operability requirements.