TENNESSEE VALLEY AUTHORITY CHATTANOOGA, TENNESSEE 37401 6N 38A Lookout Place DEC 22 1989 U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555 Gentlemen: In the Matter of Docket Nos. 50-327 Tennessee Valley Authority 50-328 SEQUOYAH NUCLEAR PLANT (SQN) - NRC INSPECTION REPORT NOS. 50-327/89-19 AND 50-328/89-19 - NOTICE OF VIOLATION 89-19-07 Enclosed is TVA's response to B. D. Liaw's letter to O. D. Kingsley, Jr., dated December 4, 1989, which transmitted evaluations and conclusions of TVA's previous response to the subject notice of violation. Enclosure 1 provides TVA's revised response to Notice of Violation 89-19-07, and Enclosure 2 provides information regarding the "lack of procedures issue" as requested by NRC's December 4, 1989, letter.

If you have any questions concerning this submittal, please telephone M. A. Cooper at (615) 843-6651.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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Mark O. Medford, Vice President Nuclear Technology and Licensing

Enclosures cc: See page 2

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cc (Enclosures):

Ms. S. C. Black, Assistant Director for Projects TVA Projects Division U.S. Nuclear Regulatory Commission One White Flint, North 11555 Rockville Pike Rockville, Maryland 20852

Mr. B. A. Wilson, Assistant Director for Inspection Programs
TVA Projects Division
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

NRC Resident Inspector Sequoyah Nuclear Plant 2600 Igou Ferry Road Soddy Daisy, Tennessee 37379

ENCLOSURE 1

RESPONSE TO NRC INSPECTION REPORT NOS. 50-327/89-19 AND 50-328/89-19 B. D. LIAM'S LETTER TO O. D. KINGSLEY, JR., DATED DECEMBER 4, 1989

Violation 50-327, 328/89-19-07

"B. Technical Specification 3.0.1 states that upon failure to meet a Limiting Condition for Operation, the associated Action requirements shall be met. Technical Specification 3.3.1 states that as a minimum, the reactor trip system instrumentation channels and interlocks of Table 3.3-1 shall be operable with response times as shown in Table 3.3-2. Action Statement 2, of TS 3.3.1, states that with the number of operable channels one less than the total number of channels, startup and power operation may proceed provided conditions 2a through 2d are met.

Action 2d states that the quadrant power tilt ratio (QPTR), as indicated by the remaining three detectors, shall be verified consistent with the normalized symmetric power distribution obtained by using the movable incore detectors in the four pairs of symmetric thimble locations at least once per 12 hours when thermal power is greater than 75% of rated thermal power.

On July 22, 1989, the Unit 1 reactor trip system power range channel N43 failed. The licensee entered Action Statement 2.d.

Contrary to the above, the licensee failed to reduce power to less than or equal to 75% of rated thermal power to meet Action Statement 2.d when an incore flux map to verify the QPTR could not be completed within the 12 hours required by Action Statement 2.d.

This is a Severity Level IV violation (Supplement I)."

Admission or Denial of the Alleged Violation

TVA admits the violation.

Reason for the Violation

On July 22, 1989, at 0258 Eastern daylight time (EDT), power range excore Detector N-43 on Unit 1 failed during operation and was declared inoperable. Limiting Condition for Operation (LCO) 3.3.1.1 was entered, which required, in part, that the QPTR be monitored with the remaining three excore detectors and be verified consistent with a normalized symmetric power distribution using the moveable incore detectors at least once every 12 hours. At 1458, after failing to meet the LCO 3.3.1.1, Action Statement 2.d requirement, despite extensive efforts to perform the required surveillance test, LCO 3.0.3 was entered. The surveillance test was subsequently completed, and LCO 3.0.3 was exited at 1930 EDT.

The root cause of the untimely completion of the required surveillance test was an inadequate procedure, as discussed in TVA's previous response dated October 2, 1989.

Additional detailed information concerning this event is contained in that submittal of October 2, 1989, and in Licensee Event Report (LER) 327/89022.

At the time of the event, TVA considered the entry into LCO 3.0.3 appropriate. The Operations Superintendent entered LCO 3.0.3 as the 12-hour time limit for LCO 3.3.1.1, Action Statement 2.d was exceeded. Once entry into LCO 3.0.3 was made, TVA management considered compliance with the time limits defined by this specification to be proper. This philosophy has since been reconsidered as described below.

Corrective Steps That Have Been Taken and Results Achieved

As a result of recent events involving interpretations of technical specifications (TSs), the Site Director has met with key site personnel to stress the importance of literal compliance and the escalation process to ensure timely resolution of questionable situations. Additional training is being provided to licensed personnel during ongoing Weeks 5 and 6 of annual requalification training to reemphasize TS compliance from both compliance and safety standpoints.

TS Change 89-36 was sent to NRC on October 5, 1989, to clarify possible ambiguous language between redundant requirements in TS 3.2.4 and Action 2 of TS 3.3.1.1.

Additional corrective actions associated with issues surrounding the event are addressed in LER 327/89022 dated August 21, 1989.

Corrective Steps That Will Be Taken to Avoid Further Violations

TVA recognizes the serious nature of entry into and operation in LCO 3.0.3. TVA has reviewed the guidance provided in NRC's letter dated December 4, 1989, and has taken action that is intended to ensure appropriate and consistent application of LCO 3.0.3. This guidance has been provided to licensed personnel as follows:

- When it is determined that compliance with action statements will not be achieved within the specified timeframe, initiate necessary actions to meet the condition of applicability and/or other provisions contained in the LCO action statements to preclude entry into LCO 3.0.3.
- 2. If, after the above determination is made, inadequate time remains and an entry into LCO 3.0.3 is mandated, then immediate actions will be taken to exit LCO 3.0.3, i.e., actions to meet conditions of applicability and/or other provisions contained in LCO action statements.
- If entry into LCO 3.0.3 becomes unavoidable and no provisions or conditions of applicability are contained in the initiating LCO, TVA will comply with the time requirements as defined in the TS LCO 3.0.3.

Date When Full Compliance Will Be Achieved

TVA is in full compliance.

NRC requested in the cover letter additional information regarding procedures to perform certain action statements. NRC noted that they, "expect that procedures would be in place to allow the operators the full range of options permitted to meet the action statements in the Technical Specifications. The lack of procedures to carry out Technical Specification actions can unnecessarily challenge the operators. The staff would like to be informed of your actions with respect to this issue."

Licensee Response

TVA performed a review of TS action statements to determine if procedures existed for those action statements that require procedure control for implementation. An initial screening of the action statements identified 26 specific items that required more detailed evaluation. The following is a summary of the findings and recommendations.

- Five items were determined to require no further action.
- Seven items involved recalibration of trip setpoints to allow continued plant operation at the highest available power level. The procedures for these recalibration activities are directly affected by the upgrade to the Eagle 21 protection set. The alternate option of power reduction below the applicability requirements is always available.
- Six TS enhancements were identified. One change has been submitted to NRC, and the others will be considered for prioritization in the overall TS change process. The existing TSs are consistent with the NRC standard TSs.
- Six procedure enhancements were identified to issue conditional surveillance instructions rather than the use of operator logs or to provide additional details regarding compliance with administrative reporting requirements.
- Two actions involved procedure revisions to incorporate technical guidance. The first involved backup sampling methods for inoperable high-range radiation monitors. The second involved flood mode shutdown margin calculations for the Stage I and Stage II flood protection plan. These actions are expected to be completed by the end of January 1990.

None of these items represents any concerns with the capability to safely operate the plant in accordance with the TSs.