TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

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MAR 30 1988

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. 50-327/88-06 AND 50-328/88-06 - SYSTEM ALIGNMENT VERIFICATION FOR UNIT 2 HEATUP - RESPONSE TO VIOLATIONS

Enclosed is my response to Kenneth P. Barr's March 1, 1988 letter to S. A. White that transmitted a notice of three violations.

Enclosure 1 provides my response to the Notice of Violation. Enclosure 2 contains a list of commitments contained in this submittal. I do not recognize any other items described herein as commitments.

If you have any questions, please telephone M. R. Harding at (615) 870-6422.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley, Director
Nuclear Licensing and
Regulatory Affairs

Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

MAR 30 1988

cc (Enclosures):

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ENCLOSURE

RESPONSE TO NRC INSPECTION REPORT NOS.
50-327/88-06 AND 50-328/88-06
KENNETH P. BARR'S LETTER TO S. A. WHITE
DATED MARCH 1, 1988

Violation 50-327, -328/88-06-01

"A. Technical Specification (TS) 6.8.1 requires that procedures recommended in Appendix 'A' of Regulatory Guide 1.33, Revision 2, be established, implemented, and maintained. This includes administrative procedures. The requirements of TS 6.8.1 are implemented by Administrative Instruction AI-37 titled 'Independent Verification' and Administrative Instruction AI-58 titled 'Maintaining Cognizance of Operational Status - Configuration Status Control'.

Contrary to the above, prior to January 4, 1988, the licensee failed to adequately establish, implement, and maintain procedures for configuration control as follows:

1. The licensee failed to specify the minimum qualification level for individuals performing independent verification of SOI checklists as required by AI-37. This resulted in a failure to perform and document adequate training for all individuals performing SOI checklist verifications.

2. The licensee failed to implement the requirements in AI-58 for maintaining configuration control after SOI checklist completion, in that the documented positions in the configuration control system for instrument root valve 1-268A, and the breakers for post accident sampling valves on 120 V vital instrument power boards 2-III and 2-IV (breaker 17 on each board) disagreed with the actual positions.

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

Admission or Denial of the Alleged Violation

TVA admits the violation.

Reason for the Violation

The failure to specify the minimum qualification level for individuals performing system operating instruction (SOI) checklist verifications was the result of a misunderstanding of the requirements of Administrative Instruction (AI) 37, which states that "each plant section shall establish a minimum qualification level for individuals performing independent verification," and that these employees should be trained, certified, or qualified for the job requirements. Operations personnel believed that certification as a TVA assistant unit operator (AUO) satisfied these requirements and that additional documentation was not necessary. Consequently, AI-58, revision 0, which was a new procedure derived from OSLA-58, did not include specific training requirements for AUOs on loan from other sites or provisions to document this training.

The reason for the mispositioning of the Postaccident Sampling Facility (PASF) valve circuit breakers was determined to be personnel error in that the assistant shift supervisor/shift operator, who had closed the two breakers to allow performance of Surveillance Instruction (SI) 722.3, misinterpreted AI-58, section 2.2.2.1, and assumed that a configuration log entry was not required. AI-58 stated that, if a piece of equipment is controlled from the main control room control panels and had positive position indicators at the panel, its positioning does not have to be entered in the configuration log. The assistant shift engineer (ASE) thought that the valve position indicating lights, which came on when the breakers were closed, were positive indication of their position. However, the breakers are not controlled from the control room panel.

No reason could be determined for the mispositioning of instrument root valve 1-268A.

Corrective Steps That Have Been Taken

All employees who had participated in the independent verification of checklists were TVA-certified AUOs. Specific minimum qualification requirements were determined and formal training in the appropriate areas was conducted and documented for all involved employees.

AI-58 was revised to include the minimum qualification requirements for independent verification personnel. Additionally, this revision added a form that will be used to document completion of the required training for AUOs on loan from other sites.

The mispositioning of instrument root valve 1-268A was entered in the configuration log. When no reason could be found for the valve to be closed, it was returned to its normal position; and the configuration log entry was cleared.

The PASF valve circuit breakers were returned to their normal positions.

The requirements for placing an entry in the configuration log were clarified for the senior reactor operator (SRO) involved. To ensure that no others had the same misunderstanding, a letter was given to all shift supervisors directing them to ensure that all on-shift Operations employees had a clear understanding of the requirements of AI-58 concerning exceptions to configuration log entries. AI-58 was revised to clarify the exception statement. A letter was also sent to each shift supervisor, assistant shift supervisor, and unit operator (UO) relative to this revision. SI-722.3 was revised to require two-party independent verification when placing power on the PASF valve circuits and when opening the breakers at the conclusion of the test. Additionally, signs were placed at the unit 1 and unit 2 PASF valve breakers that state, "Before closing breaker to PASF valves, consider requirements of T.S. LCO 3.6.1.1 and configuration log entry."

Corrective Steps That Will Be Taken to Avoid Further Violations

The AI-58 revision should be sufficient to prevent further violations relative to the qualification of independent verification personnel.

The corrective actions taken with respect to the PASF valve breakers are considered adequate to prevent recurrence of similar violations.

The mispositioning of instrument root valve 1-268A is considered an isolated event, and no further corrective actions are anticipated.

Date When Full Compliance Will Be Achieved

All corrective actions were completed by February 12, 1988.

Violation 50-327, -328/88-06-02

"B. 10 CFR 50, Appendix B, Criterion XVI states that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. The Nuclear Quality Assurance Manual (NQAM), the accepted QA Program (TCA-TR75-1A), and Administrative Instruction AI-12 titled 'Adverse Conditions and Corrective Actions' implements these requirements.

Contrary to the above, prior to January 4, 1988, the licensee failed to adequately identify and correct SOI checklist deficiencies in that numerous SOI checklists were found to have significant deficiencies after the licensee had completed corrective action for similar deficiencies and had restarted the system alignment program using those checklists. As a result, the status of numerous pieces of equipment had to be reverified to ensure that their positions were adequate for mode change.

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

Admission or Denial of the Alleged Violation

TVA admits the violation.

Reason for the Violation

This violation was the result of a lack of attention to detail in that the inconsistencies in the use of terminology that existed in the power availability checklists were not recognized as being a problem during the Operations Section Letters Administrative (OSLA) 107, appendix B, validation process.

Corrective Steps That Have Been Taken

All power availability checklists contained in AI-58, appendix A, were reviewed to identify any devices whose required position could, in any way, be misinterpreted.

SROs determined the correct position for each component identified in this review and corrected the checklists accordingly.

Valve alignments, performed by the AUOs, field verified and documented the positions of all components identified by the review using the corrected checklists. No discrepancies were discovered.

A revision to General Operating Instruction (GOI) 6 was issued that added a definition section for electrical devices.

Corrective Steps That Will Be Taken to Avoid Further Violations

All AI-58, appendix A, power availability checklists, which were determined to be ambiguous, are being permanently revised to indicate the required breaker positions consistent with terminology defined by GOI-6.

Date When Full Compliance Will Be Achieved

The AI-58, appendix A, power availability checklist revisions will be completed by March 31, 1988.

Violation 50-327, -328/88-06-03

"C. 10 CFR 50, Appendix B, Criterion V as implemented by the Nuclear Quality Assurance Manual (NQAM), Part I, Section 2.5, Revision 1, states that 'Activities affecting Quality shall be prescribed by documented instructions, procedures, or drawings and shall be accomplished in accordance with these instructions, procedures, or drawings.'

Contrary to the above, prior to January 6, 1988, the licensee failed to establish or implement instructions, procedures, or drawings that would have prevented the storage of loose conductive material within safety related electrical boards. Specifically, loose spare fuses were found stored within 480 Volt safety-related diesel generator auxiliary board 2A1-A which could have rendered the panel inoperable during a seismic event. Subsequent electrical board inspections by the licensee identified numerous additional significant examples of loose conductive material storage within safety-related electrical boards.

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

Admission or Denial of the Alleged Violation

TVA admits the violation.

Reason for the Violation

The storage of spare fuses in 1E electrical panels was the result of Operations employees' failure to realize that these fuses could jeopardize the seismic qualification of the panels.

The other loose material that was found in the 1E panels and appeared to be left from maintenance or modifications work was the result of management inattention in that established housekeeping requirements were not stressed or enforced.

Corrective Steps That Have Been Taken

The fuses, which were stored in the 480-V diesel generator electrical compartment, were immediately removed. Operations employees were informed, during shift briefings, that it was unacceptable to store spare or tagged fuses in electrical panels.

An information letter was sent to all Operations shift supervisors, assistant shift supervisors, and UOs informing them that spare fuses were not to be stored in electrical panels and that AI-3 was being revised to disallow placing tagged fuses inside electrical panels. The letter also stated that, when racking out 6.9-kV circuit breakers, their control fuses and their fuse blocks should not be left inside the compartment.

An inspection of all 1E electrical panels was completed on January 16, 1988, and all loose materials were removed.

The importance of strictly maintaining housekeeping requirements was stressed to Maintenance and Modifications employees by management.

Corrective Steps That Will Be Taken to Avoid Further Violations

All corrective actions have been completed and are considered adequate to prevent further violations.

Date When Full Compliance Will Be Achieved

All corrective actions have been completed.

ENCLOSURE 2

List of Commitments

1. All AI-58, appendix A, power availability checklists, which were determined to be ambiguous, will be permanently revised to indicate the required breaker positions consistent with GOI-6 defined terminology by March 31, 1988.