

TENNESSEE VALLEY AUTHORITY

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SEP 06 1988

U.S. Nuclear Regulatory Commission
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Gentlemen:

In the Matter of) Docket Nos. 50-327
Tennessee Valley Authority) 50-328

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2 - NRC INSPECTION REPORT (IR)
NOS. 50-327, -328/88-26 - SUPPLEMENTAL RESPONSE TO NOTICE OF VIOLATION (NOV)

This supplemental response addresses the five examples of configuration control problems cited in IR 88-28 as requested by the letter transmitting that report. Also Joe Brady of your staff has requested that a review of two previous inspections (87-66 and 88-06) with a discussion as to the relationship of corrective action and root causes relative to the most recent inspections (88-26 and 88-28) be included. Enclosed is TVA's supplemental response to F. R. McCoy's letter to S. A. White dated June 17, 1988, that transmitted the subject NOV. Enclosure 1 contains SQN's response and corrective action to the five additional configuration control problems as described in NRC's IR 88-28. Enclosure 2 contains SQN's review and comparison of the configuration control problems described in previous NRC IRs.

If you have any questions concerning this submittal, please telephone M. A. Cooper at (615) 870-6549.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

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Enclosures
cc: See page 2

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ENCLOSURE 1

NRC cited SQN with four configuration control problems in the IR 88-26. The corrective action to correct the problems and prevent recurrence included a revision of Administrative Instruction (AI) 3, "Clearance Procedures," AI-30, "Nuclear Plant Conduct of Operations," and AI-58, "Maintaining Cognizance of Operation Status - Configuration Status Control," along with training of appropriate personnel. The additional five examples, as referenced in the IR 88-28, occurred in a very close timeframe and are of the same nature as those identified in IR 88-26. Specific corrective actions for the first events were being implemented, the broader root cause was being determined, and further corrective actions were identified during the time the five additional events occurred. The revision of AI-3, AI-30, and AI-58 to correct and control the 88-26 issues plus the training of personnel will also correct, control and prevent the recurrence of the additional five examples cited in IR 88-28. The examples, TVA's corrective actions and NRC's review and approval of results, are described in detail in IR 88-28. The following is a summary of the five additional examples and their specific corrective actions as outlined in a condition adverse to quality report (CAQR) (CAQR SQN880414), which was written to address the issue, correct the problems, and document the corrective action.

Example No. 1

Valve 2-HVC-70-661 on the component cooling water system (CCS) return from boric acid evaporator B was found misaligned while performing Surveillance Instruction (SI) 32.

Root Cause

Personnel allowed to manipulate valves did not fully understand the importance and effect of throttle valve position.

Corrective Action

Specialized training of personnel was initiated to address the importance of throttle valve positions and their function.

Example No. 2

Valves 2-67-680 and 0-67-551B were found out-of-position during performance of SI-682.

Root Cause

Personnel allowed to manipulate valves did not fully understand the importance and effect of throttle valve position.

Corrective Action

Specialized training of personnel was initiated to address the importance of throttle valve positions and their function.

Example No. 3

Valve 2-62-951 was misaligned and caused a spill (May 17, 1988) in the holdup tank (HUT) valve gallery.

Root Cause

The extension stem operator did not function properly; also, the valve did not have an operable valve position indicator.

Corrective Action

A preventative maintenance (PM) program was established for extension stem operators to improve reliability.

Example No. 4

Valve 2-62-945 was misaligned and caused a spill (May 18, 1988) in the HUT valve gallery.

Root Cause

The status board incorrectly indicated the valve 2-62-945 as being open. AI-58 allowed changes to the status board without accountability or traceability.

Corrective Action

AI-58 was revised to delete the status board for denoting configuration and require the use of a configuration log.

Example No. 5

Loss of unit 1 residual heat removal (RHR) suction May 23, 1988, resulted from personnel opening the wrong valve.

Root Cause

Miscommunication between the unit operator (UO) and assistant unit operator (AUO) during prejob briefing.

Corrective Action

AI-30 was revised to incorporate use of "READ-BACK CARDS" to be used by AUOs to record instructions. AI-58 was revised to fill out Appendix B1, "Configuration File Sheet," before valve manipulation.

ENCLOSURE 2

Multiple examples of configuration control problems, cited in IR 88-26 and IR 88-28, caused NRC to question the effectiveness of SQN's configuration control program and procedures. One question that was raised is the relationship of previous identified configuration control problems and the effectiveness of the associated corrective action to the recent examples identified in IRs 88-26 and 88-28. The root causes and corrective actions required for the IR 88-26 and 88-28 examples are addressed in TVA's July 14, 1988 initial response to violation 88-26-01, NRC IR 88-28, and enclosure 1 to this submittal.

Previous configuration control problems were identified in NRC inspections 87-66 and 88-06. During the October 1987 inspection (87-66), six examples indicated that Operations Section Letter Administrative (OSLA) 58 was inadequate and should be revised. OSLA-58 was revised and converted to AI-58 with the necessary provisions to correct the identified configuration control problems. Converting OSLA-58 to AI-58 also increased management's involvement. AI-58 was issued December 8, 1987. In January 1988 an NRC inspection (88-06) pointed out the need for specifying a minimum qualification level for individuals performing System Operating Instruction (SOI) checklist verifications; also, an "exception statement" in AI-58 needed clarification. AI-58 was revised accordingly on January 17, 1988.

In summary, SQN experienced configuration control problems in October 1987 and appropriate corrective action was taken in the issuance of a procedure (AI-58) to maintain cognizance of operating status and configuration control. In January 1988, an NRC inspection identified problems concerning second-party verification qualifications. As a result, AI-58 was revised to correct the problem. TVA's responses to these two NRC inspections (87-66 and 88-06) contain the detailed discussions of the items and their appropriate corrective actions.

In retrospect, the configuration problems identified in NRC's earlier inspections (87-66 and 88-06) were entirely different from those identified in 88-26 and 88-28. The configuration control problems identified in the earlier reports were corrected and recurrence control has been effective for those types of problems. The corrective actions for the earlier problems could not have prevented the events outlined in the 88-26 and 88-28 reports. Disregarding human error, SQN experienced four problems in October 1987, two in January 1988, one in April 1988, and one in May 1988. SQN is maintaining cognizance of operating status and configuration control, and the corrective actions implemented in response to problems have proven effective.