

TENNESSEE VALLEY AUTHORITY

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APR 20 1988

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of
Tennessee Valley Authority

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Docket Nos. 50-327
50-328

SEQUOYAH NUCLEAR PLANT (SQN) - NRC INSPECTION REPORT NOS. 50-327/87-18 AND
50-328/87-18 - SUPPLEMENTAL RESPONSE TO NOTICE OF VIOLATION NOS.
50-327/87-18-01 AND 50-328/87-18-01

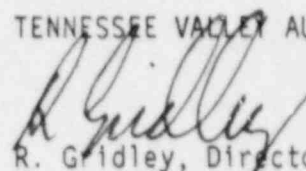
Enclosed is TVA's response to S. D. Ebnetter's letter to S. A. White dated
March 18, 1988, that requested resubmittal of the response for example 8 of
the Notice of Violation 50-327, AND 50-328/87-18-01.

Enclosure 1 provides TVA's resubmittal of the response to example 8.
Enclosure 2 contains a list of commitments contained in this submittal.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY


R. Gridley, Director
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Regulatory Affairs

Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

APR 20 1988

cc (Enclosures):

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ENCLOSURE 1

Violation 50-327, -028/87-18-01

"Criterion XI of 10 CFR 50 Appendix B, as implemented by TVA Nuclear Quality Assurance Manual (NQAM), Section 2.11, requires that a test program be established and conducted to assure that structures, systems and components will perform satisfactorily in service. In order to accomplish that goal, Criterion XI requires that the test program be performed in accordance with written test procedures which incorporate applicable requirements and acceptance limits; that the test procedures include provisions for assuring all test prerequisites have been met and adequate test instrumentation is available and used; and that the test results are documented and evaluated to assure that test requirements have been met.

Contrary to the above, the NRC inspectors identified cases in which the licensee failed to ensure that test procedures and instructions contained the necessary requirements, that tests were performed in accordance with procedure requirements, and that test results were properly documented and evaluated. These include the following examples (section numbers refer to the body of the report). . . ."

Example 8

"Work activities, including disassembly and reassembly of a bolted flange and other joints and cleanout of instrument tubing, were performed without work instructions, inspections, or second party verification of joint makeup (Section 5.a.5)."

NRC requested TVA to resubmit a response to example 8 and discuss ". . . long term corrective action and program improvement with regard to the extent with which you apply skill of the craft for work activities. . . ."

This request is based on their analysis as follows:

"However, we do not concur with your conclusion that removal and reinstallation of the bolted flange would not require any special work instructions or verification and would be within the skill of the craft. Sequoyah Maintenance Instruction (MI)-6.15, 'General Procedure, Tightening Bolted Joints,' is applicable to this installation and would provide for configuration and radiological controls and documentation of proper assembly. We note that the work request for performance of the verification disassembly/reassembly on the flanged joint specified the work to be done in accordance with MI-6.15. We also note that the joint was found to have a fastener (nut) missing, which resulted in the performance of additional inspections on the three other boric acid transfer pumps. In addition, we consider that the need for (or performance of) disassembly of instrument lines and maintenance/repair activities such as removal of line blockages should be formally documented. The fact that no 'special work instructions' are required or that craft personnel have the training or skills needed to perform an activity does not eliminate the necessity of controlling and documenting work activities on safety related hardware as required by 10 CFR 50, Appendix B. For example, removal of boric acid crystals on this contaminated system could require additional radiological controls and the lack of documentation for breaking of additional tubing joints would probably result in no post assembly leakage check."

TVA Response

Admission or Denial of the Alleged Violation

TVA admits the violation.

Reason for the Violation

As previously stated in TVA's response dated January 26, 1988, "... TVA researched maintenance activities on this system for work activities ongoing at the time of the inspector's observations. The results to date have not identified any activity that removed or installed this flange." TVA can only conclude that, at some time, unauthorized work was performed. In addition, during the performance of the work request to ensure proper installation and documentation, it was discovered that one fastener (nut) was missing. The reason for the missing nut was inappropriate work practices and inattention to detail during performance of work on this component.

Corrective Steps That Have Been Taken

TVA has replaced the missing fastener (nut). In addition, inspections (as noted in your letter) were performed on the other three boric acid transfer pumps to ensure there were no fasteners missing. Management has stressed the importance of performing work by procedures and "attention to detail." TVA agrees that disassembly/reassembly of this flange, although considered "skill of the craft," should not have been performed without use of applicable procedures. This is evidenced by the use of MI-6.15 to perform the verification work.

TVA has reviewed the procedural requirements that existed during the time period when this violation was identified and has determined that these requirements were vague. SQM2 has been revised to provide positive controls over skill of the craft by replacing the word "should" with "shall." The revised procedural requirements in SQM2 are as follows:

"Maintenance activities which can be performed using the skills normally possessed by qualified maintenance personnel according to job classifications (journeyman, machinist, certified welder, etc.) may be considered 'skill-of-the-craft'. The planner and the cognizant responsible supervisor shall be responsible for determining if the maintenance activity falls within the 'skill-of-the-craft'."

The 'skill-of-the-craft' designation is included in this instruction to provide guidelines to the maintenance staff in determining the amount of detail needed for a particular task. Maintenance activities which involves 'skill-of-the-craft' do not require step-by-step details for the actual performance of the work. Several of the listed activities may require configuration control and QC inspection. Additional details such as material type or specifications, relay model number, and torque requirements shall be specified when required. These maintenance activities shall be performed and documented within the MR/WR requirements of this procedure.

Personnel performing maintenance activities as 'skill-of-the-craft' shall do so in strict compliance with the conditions and scope of the WR/MR. If during the performance of the activity it is determined that either the scope of the activity has increased or the conditions are not as expected, contact the responsible foreman for potential replanning. Additional planning requirements for 'skill-of-the-craft' maintenance activities are contained in section 9.3.3.

The planner shall document the work instructions on either the WR card or an MR form, depending on the type of equipment involved and the type of procedures referenced in the instructions.

MRs shall refer to approved instructions such as maintenance instructions unless the maintenance to be performed involves 'skill-of-the-craft.' For 'skill-of-the-craft' maintenance activities, the planner shall provide instructions to direct the craftsmen in the performance of the designated work. Also, the planner shall provide the level of planning needed to ensure that the work can be correctly completed while meeting all applicable site procedures. . . .

The planner shall provide sufficient information in the work instructions for activities considered within the 'skill-of-the-craft' so that the craft have effective guidance to work the job. The planner shall give special information such as torque values, clearances, alignment specifications, special inspection requirements, and part and lubrication specifications, if required. This special information listed on the MR shall be taken from controlled manuals (per AI-23), or controlled drawings (per AI-25), or approved Field Change Requests (FCRs) and Workplans (WPs) as specified in Step 9.3.3.7."

TVA considers the previously described procedural changes and the increased management attention adequate to resolve the concern involving skill-of-the-craft activities.

Corrective Steps That Will Be Taken to Avoid Further Violations

All craft personnel will be instructed to perform work in accordance with approved procedures, and the importance of attention to detail will continue to be stressed. This training will be conducted during the monthly safety meetings.

In addition to the above-stated actions, SQN plans to decrease the use of skill-of-the-craft. Management considers that adequate work details should be provided for each task performed either by use of a procedure or by adequately detailed information on a work request. This planned evolution will be phased in concurrently with the MI Enhancement Project detailed in our February 27, 1988 response to Inspection Report 50-327, -328/87-37. This is a long-term project with an expected completion date of February 1, 1992. Any further updates of this planned action to delete skill of the craft will be submitted concurrently with the MI Enhancement Project submittals.

Date When Full Compliance Will Be Achieved

TVA is in full compliance. Training will be completed by June 10, 1988.

Enclosure 2

1. Complete procedural compliance training of craft personnel by June 10, 1988.
2. Provide supplemental status on decreased use of skill of the craft concurrently with MI Enhancement Project submittal. Scheduled completion date is February 1, 1992