

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

DEC 30 1987

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

Gentlemen:

In the Matter of  
Tennessee Valley Authority

)  
)

Docket Nos. 50-327  
50-328

SEQUOYAH NUCLEAR PLANT (SQN) - NRC INSPECTION REPORT NOS. 50-327/87-37 AND  
50-328/87-37 - REVISED RESPONSE TO NOTICE OF VIOLATION (NOV) 50-328/87-37-01

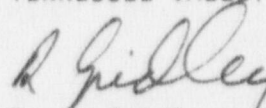
Enclosed is a revised response to NOV 50-328/87-37-01 dated October 9, 1987.  
Item 2 of the enclosure has been revised to reflect the following.

During an investigation of NOV 50-328/87-37-01 in preparation of a response, a misinterpretation of personnel interviews resulted in an inaccurate statement being made in paragraph two of the response. The original response indicated that the craftsmen working on valve 2-FCV-63-005 had failed to get Quality Control (QC) verification on the type of lubricant used because the appropriate signature blanks had been marked "N/A." In fact, the craftsmen applied the lubricant to the valve packing to facilitate easier installation of the packing into the stuffing box and were not performing procedure steps of valve stem lubrication as specified in MI-11.4.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY



R. L. Gridley, Director  
Nuclear Licensing and  
Regulatory Affairs

Enclosure  
cc: See page 2

BB01040533 871230  
PDR ADOCK 05000327  
Q DCD

IED 1  
11

U.S. Nuclear Regulatory Commission

DEC 30 1987

cc (Enclosure):

Mr. K. P. Barr, Acting Assistant Director  
for Inspection Programs  
TVA Projects Division  
Office of Special Projects  
U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Mr. G. G. Zech, Assistant Director  
for Projects  
TVA Projects Division  
Office of Special Projects  
U.S. Nuclear Regulatory Commission  
Mail Stop 7E23  
7920 Norfolk Avenue  
Bethesda, Maryland 20814

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

## ENCLOSURE

### Violation 50-328/87-37-01

"Technical Specification 6.8.1 requires that written procedures be implemented covering the applicable procedures recommended in Appendix 'A' of Regulatory Guide 1.33, Revision 2, February 1978. Appendix 'A' of Regulatory Guide 1.33 states that maintenance that can affect the performance of safety-related equipment should be performed in accordance with documented instructions. Work Requests (WRs) B297733 and B230619 provide the instructions for repacking valves 2-VLV-070-680 and 2-FCV-063-0005, respectively. The repacking steps are in both cases specified in MI-11.4, Maintenance of CSSC Valves, Rev. 19. MI-11.4 requires that the inside diameter of the stuffing box and the outside diameter of the stem or shaft be measured and that the dimensions obtained be verified within  $\pm 1/64$  inch of the packing ring dimensions. This requirement is contained in steps 6.10.9.2 and 6.10.9.3 for valves with graphite packing such as 2-VLV-070-680 (WR B297733) and in step 6.10.6.2 and 6.10.6.3 for valves with split ring packing such as 2-FCV-63-0005 (WR B230619). MI-11.4 also requires, in step 6.9.2, that a Quality Control (QC) inspector verify the lubricant type if a valve stem is lubricated during maintenance.

Contrary to the above, the licensee failed to follow WRs B297733 and B230619 in that the stuffing box dimensions were not obtained and verified to be within  $\pm 1/64$  inch of the packing ring dimensions as required by MI-11.4. In addition, during the performance of WR B230619, a lubricant was applied to the stem of valve 2-FCV-63-005. The type of lubricant used was not verified by QC as required by MI-11.4.

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

#### 1. Admission or Denial of the Violation

TVA admits the violation occurred as stated.

#### 2. Reason for the Violation

The above-cited examples of this violation relating to the failure to take stuffing box dimensions occurred because of a misinterpretation of the procedural requirements contained in Maintenance Instruction (MI)-11.4. The craftsmen involved were estimating the  $\pm 1/64$ -inch tolerance instead of obtaining an exact measurement. This was being accomplished by a physical comparison of the old packing to the new and/or installing the packing in the valve to determine a proper fit. The craftsmen's practice in this case was somewhat justified in that the procedure (MI-11.4) provided no place for recording this measurement as would be expected if a measurement was to be taken.



With regard to the use of lubrication, this example also occurred because of a misinterpretation of the work instruction. The craftsmen considered the application of lubricant to the packing and stem for packing installation to be within their skill and did not consider this to be in violation of the procedure. In fact, the correct lubrication was used. The craftsmen applied the lubricant to the valve packing to facilitate easier installation of the packing into the stuffing box but were not performing procedure steps of valve stem lubrication.

3. Corrective Steps Taken and Results Achieved

Upon identification of the cited examples of failure to follow procedures, meetings were held with the craft and management personnel involved to ascertain the reason for the noncompliance. Subsequently, condition adverse to quality report SQP871274 was initiated to document and track corrective action. An evaluation of the valves' condition as a result of the maintenance performed on them was conducted to ensure that they had not been adversely affected. It was determined that the valves were not adversely affected, and they are acceptable as is.

4. Corrective Steps to be Taken to Prevent Recurrence

To prevent future misinterpretation, SQN conducted briefings with the craftsmen performing this type of work to emphasize procedural adherence, prejob reviews, and specifically the requirements of MI-11.4 with regard to packing. This was completed on November 13, 1987. Additionally, SQN conducted briefings with the maintenance planners with regard to the planning aspects of MI-11.4. These briefings were completed on November 17, 1987.

With regard to the procedural requirements for installing valve packing, SQN evaluated the current packing and lubrication practices for potential generic problems and revised MI-11.4 to clarify the procedural requirements for packing size verification. This was completed on November 7, 1987.

5. Date When Full Compliance Will be Achieved

SQN is now in full compliance.