



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37379-2000

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May 3, 1993

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 No. 50-327

SEQUOYAH NUCLEAR PLANT (SQN) - REACTOR VESSEL (RV) NOZZLE EXAMINATION
SCOPE AND TECHNIQUE FOR UNIT 1

- References:
1. NRC letter to TVA dated April 16, 1993, "Reactor Vessel Nozzle Supplemental Inspections - Sequoyah Nuclear Plant Units 1 and 2 (TAC Nos. M85308 and M85309)"
 2. TVA letter to NRC dated April 1, 1993, "Sequoyah Nuclear Plant (SQN) - Additional Information for Technical Specification (TS) Change 92-16, Deletion of TS Surveillance Requirement (SR) 4.4.10.b - Supplemental Exam of Reactor Vessel Nozzles"

The purpose of this letter is to provide further information to NRC regarding the current scope and technique that are being used to examine SQN's Unit 1 RV nozzles during the Unit 1 Cycle 6 (U1C6) refueling outage. In Reference 2, TVA submitted a description of the nozzle cold crack inspections that would be performed during the U1C6 refueling outage and requested that NRC provide confirmation that the scope and technique would be acceptable. During a subsequent telephone conference on April 8, 1993, TVA agreed to examine the area of all underclad crack indications that were recorded during the 1980 Unit 1 nozzle examinations. TVA noted that the scope of this examination coverage would go beyond the technical specification (TS) requirement.

In Reference 1, NRC indicated that the ultrasonic detection and sizing technique (demonstrated at Southwest Research Institute [SWRI] on March 23, 1993) was satisfactory for inspection of the Unit 1 reactor

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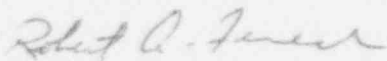
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vessel nozzles in accordance with the TS requirements. NRC also stated that, "This technique would be used to detect and characterize (type, depth, length and orientation) any indications found."

TVA is currently in the process of performing the RV nozzle exams on Unit 1. As stated in an April 21, 1993, telephone conference with NRC, TVA will include in the examination coverage all 61 indications from the 1980 Unit 1 examinations. From these 61 indications, TVA will characterize (i.e., size) 33 underclad cold crack indications if detected, using the SWRI technique. The remaining 28 indications will be characterized if detected and if their amplitude reading is greater than 20 percent of the distance-amplitude correction (DAC). Any new indications (characterized as flaws) that are discovered during the nozzle examinations will be sized if their amplitude reading is greater than 20 percent of the DAC. Please note that Westinghouse Electric Corporation has recently clarified the 1980 nozzle examination data at TVA's request. It was confirmed that there were 33 underclad cold cracks, 23 underclad reheat cracks, and 5 innocuous indications for a total of 61 indications. These numbers update the data previously provided by TS Change 92-16 dated January 8, 1993.

Please direct questions concerning this issue to D. V. Goodin at (615) 843-7734.

Sincerely,



Robert A. Fenech

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