



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

March 4, 1993

Mr. S. D. Ebner
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323-2711

In the Matter of
Tennessee Valley Authority

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Docket Nos. 50-327
50-328

SEQUOYAH NUCLEAR PLANT (SQN) - CORRECTIVE ACTIONS BEING TAKEN RELATIVE TO
EROSION/CORROSION AND OVERVOLTAGE CONDITIONS

TVA has initiated a comprehensive review of the events associated with the March 1, 1993, pipe rupture at SQN Unit 2. At the conclusion of the review, TVA will know the full impact of the rupture on equipment in the plant, the cause of the rupture, why our programs did not detect the degraded condition before the rupture, and what hardware and programmatic actions need to be taken to fully correct the identified problems and ensure that they will not recur. In broad scope, aspects of this review were discussed in a telephone conference between TVA and the NRC staff on March 2, 1993.

The results of this review will be folded into both near-term and long-term actions involving pipe inspection programs at SQN and, as appropriate, at TVA's other plants. The specific actions that TVA will complete before restart of its SQN units are noted below:

1. A complete review of the events that led to and impacts resulting from the manual reactor trip of Unit 2 on March 1, 1993, will be performed. This review will include the following elements:
 - . A complete technical evaluation of the piping failure mechanism will be performed.
 - . Field measurements of critical elements of piping and fittings susceptible to erosion/corrosion will be conducted to assess the status of steam system piping. The critical elements will be identified through CHEC-MATE analyses, review of experience data, and engineering judgement.

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The erosion/corrosion program will be reviewed to identify administration and technical program weaknesses. In this regard, the review will take into consideration Inspection Report No. 50-327, 328/93-04, to provide additional insight with regard to programmatic weaknesses. A third-party assessment of the program will be performed to supplement TVA's review.

An engineering evaluation will be performed to address the overvoltage condition that was experienced on March 1, 1993. Additional testing and inspection will be performed on selected electromechanical and solid-state devices to identify potential damage.

Plant equipment in the vicinity of the ruptured pipe will be evaluated to assess impact.

2. From the review noted above, the following corrective actions will be implemented:

Repair or replacement of all such piping and other hardware adversely impacted by the rupture or that were identified as needing repair during the technical evaluations will be completed. Permanent repairs will be completed on steam system piping and fittings where temporary Furmanite repairs have been made as a result of erosion/corrosion effects.

Equipment problems associated with the overvoltage condition on components/systems that are needed for safe plant operation will be corrected.

A schedule for the correction of the programmatic weaknesses in the erosion/corrosion program will be developed to ensure that the problems identified in the review noted above will not recur.

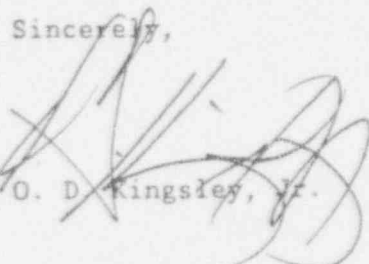
TVA will discuss its detailed plans and actions to address these issues with the NRC resident inspectors to ensure that all NRC staff concerns are resolved. Additionally, TVA will meet with NRC before restart at a mutually agreed upon time and location to discuss the actions taken relative to support restart of the units.

Also, insight gained from the evaluation of the weaknesses in the implementation of the erosion/corrosion program will be used to evaluate the effectiveness of other programs that may directly affect the safe operation of the units.

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If you would like to discuss these issues before our meeting noted above,
please contact me at (615) 751-4770.

Sincerely,



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