

TENNESSEE VALLEY AUTHORITY

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DEC 26 1989

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
NOS. 50-327, 328/89-16 - REVISED CORRECTIVE ACTION FOR NOTICE OF VIOLATION
(NOV) 50-327, 328/89-16-02

Reference: TVA's response to NRC dated July 20, 1989, "Sequoyah Nuclear Plant
(SQN) Units 1 and 2 - NRC Inspection Report Nos. 50-327, 328/89-16 -
Response to Notice of Violation (NOV) 50-327, 328/89-16-02"

Part of the corrective action taken by TVA in the referenced NOV response was a
revision to Surveillance Instruction (SI) 137.2, "Reactor Coolant System Water
Inventory," to require one of the following actions if the unidentified leakage
calculated during reactor coolant system (RCS) leakage surveillance is
determined to be negative:

1. Additional data will be taken (or repeat that test) and the unidentified leakage will be recalculated.
2. The total leakage (identified and unidentified) will be classified as unidentified and subject to the unidentified leakage acceptance criterion.

The SI-137.2 revision also specified that if a trend of negative leakages is identified, Systems Engineering will be notified to investigate possible sources of non-RCS inleakage.

In a leak-tight RCS, occasional calculation of small, negative unidentified leakage is to be expected. To appropriately allow for such occurrences, SI-137.2 has been revised again to specify the following steps:

1. If after two hours of data collection the unidentified leakage is calculated to be negative, then the calculations will be reperformed using a minimum of one hour of additional data. (At the user's discretion, any 2-hour block of data can be used as long as test prerequisites are maintained.)
2. Unidentified leakages as low as -0.10 gallon per minute (gal/min) can be tolerated and included in the test results.
3. If unidentified leakage is less than -0.10 gal/min, the test will continue until an acceptable leakage (greater than or equal to -0.10 gal/min) is calculated or until the test must be aborted.

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4. If an unidentified leakage greater than or equal to -0.10 gal/min cannot be obtained, or if four consecutive SI-137.2 packages indicate negative unidentified leakage, an investigation will be performed by Systems Engineering and Operations to determine the source of non-RCS inleakage.

The above revisions to SI-137.2 were implemented on October 5, 1989, after discussing the changes with Paul Burnett, of NRC Region II, who conducted Inspection 50-327, 328/89-16.

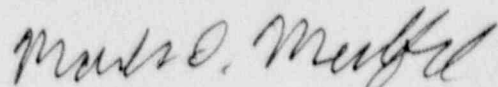
One additional change has also been made to SI-137.2. The measured value of RCS total leakage reflects any real RCS outleakage through volume control tank or pressurizer level changes. Conversely, the measured value of identified leakage reflects the result of both RCS leakage into tanks and any RCS inleakage through tank level changes such as in the reactor coolant drain tank. The calculated unidentified leakage is simply the difference between the total and identified leakages. In some cases, RCS inleakage can cause calculated identified leakage to exceed total leakage, thereby resulting in negative unidentified leakage. Thus, negative unidentified leakage may indicate the existence of RCS inleakage which, in sufficient magnitude, could possibly hinder the recognition of excessive RCS outleakage. To preclude this possibility, the following action was added to SI-137.2 on November 30, 1989.

5. If unidentified leakage remains less than or equal to -0.10 gal/min, satisfaction of technical specification surveillance requirements will depend on the amount of total RCS leakage. If total RCS leakage is less than or equal to 1.0 gal/min, then surveillance requirements have been met, and the SI package can be closed out. However, if total RCS leakage is greater than 1.0 gal/min, then the SI package must be aborted or remain open until either unidentified leakage is greater than or equal to -0.1 gal/min or total RCS leakage is less than or equal to 1.0 gal/min. The provisions of Technical Specification 4.0.3 are applicable if the SI package is not completed on time.

If you have any questions concerning this submittal, please telephone M. A. Cooper at (615) 843-6651.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



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