

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

January 7, 1981

Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Schwencer:

In the Matter of the Application of) Docket No. 50-328
Tennessee Valley Authority)

As required by NUREG-0737, Clarification of TMI Action Plan Requirements, enclosed are responses to the following items for Sequoyah Nuclear Plant unit 2.

I.C.6 - Verify Correct Performance of Operating Activities

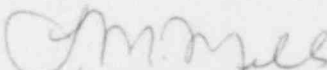
II.E.4.2 - Containment Isolation Dependability

II.K.3.1 and II.K.3.2 - Auto PORV Isolation and Failure Report

If you have any questions, please get in touch with D. L. Lambert at FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager
Nuclear Regulation and Safety

Sworn to and subscribed before me
this 7th day of Jan. 1981

Bryant M. Lowery
Notary Public

My Commission Expires 4/4/82

Enclosure

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ENCLOSURE

SEQUOYAH NUCLEAR PLANT UNIT 2
RESPONSE TO TASK ACTION PLAN ITEMS

- I.C.6 - Verify Correct Performance of Operating Activities
- II.E.4.2 - Containment Isolation Dependability
- II.K.3.1 AND II.K.3.2 - Auto PORV Isolation and Failure Report

I.C.6 - Verify Correct Performance of Operating Activities

TVA Response - Current plant administrative procedures require:

- (a) All essential safety systems and component alignment be verified before unit startup.
- (b) Changes in the alignment of any safety system component be recorded on a system status sheet.
- (c) Shift employees being relieved communicate information on any abnormal plant condition including temporary conditions.
- (d) System operability be demonstrated before system is returned to service, and
- (e) Approval by the shift supervisor or his representative before the performance of any activity on safety related plant equipment, or any activity that may affect safety-related plant equipment. The shift supervisor or his representative is notified when an activity authorized to be performed on safety-related plant equipment is completed or a change occurs in the scope of the activity.

Plant operating instructions require completion of a startup checklist before unit startup. This checklist is used to verify correct alignment of all safety systems. In addition, alignment of critical systems is reviewed each shift. Anytime a critical component is changed from its normal position or condition, a system status sheet is completed and placed in a system status folder. Panel checklists are reviewed each shift to verify proper panel alignment exists for all safety systems.

Sequoyah is continuing its review of plant instructions to incorporate second verification of system alignment where needed. It is TVA's opinion that this verification function can be performed adequately by an assistant operator (AUO) and that the use of licensed unit operators is not necessary. The AUO has sufficient training and familiarity with plant systems to ensure correct system alignment, and this policy will allow the licensed operator to remain in the control room.

TVA will complete the review of plant instructions and make any necessary changes by February 15, 1981.

II.E.4.2 - Containment Isolation Dependability

TVA Response - TVA has met or will meet the scheduled dates for all items of this requirement. Discussion with the NRC on part 6 of this requirement will continue until a satisfactory resolution has been reached. Attached is our submittal for the containment pressure setpoint study.

ATTACHMENT

Containment Pressure Setpoint

The Sequoyah containment pressure high setpoint is required to be less than or equal to 1.54 psig by Technical Specification 3.3.2.1, "Engineering Safety Feature Actuation System Instrumentation." It is more than 1 psig above the highest primary containment internal pressure allowed by Technical Specification 3.6.1.4, "Containment Internal Pressure," however, TVA believes that the present containment pressure high setpoint is adequate. The reasons are stated below.

The containment pressure high channel actuates safety injection, turbine trip, and feedwater isolation. Phase "A" containment isolation is actuated from the safety injection logic. Reducing the containment pressure high setpoint increases the potential not only for inadvertent containment isolation but also inadvertent safety injection and feedwater isolation.

Adequate protection is already provided to prevent the release of radioactive materials following an accident. Phase "A" isolation, which includes containment ventilation isolation, is initiated by diverse signals, including all safety injection actuation channels including low pressurizer pressure, high gaseous or particulate activity in containment, and high activity in the purge air exhaust.

The containment pressure high and high-high setpoints and low pressurizer pressure setpoints are reached almost immediately in large loss of coolant accidents (LOCA). Lowering the containment pressure high setpoint will not provide any additional safety margin to the accident analyses because of the speed at which the containment pressure rises for large LOCA's.

Two cases for small LOCA's are considered: those for which the charging system can maintain reactor coolant system inventory and those that cannot. In the first case, core uncover will not occur and the radioactivity released is limited to the material contained in the coolant. Containment vent isolation will occur. The setpoint for the ventilation isolation signals are set to prevent releases exceeding 10 CFR Part 20 limits (normal release limits). Lowering the containment pressure high setpoint will not provide any significant additional safety margin.

In the second case, safety injection will always occur much sooner than core uncover. Since phase "A" isolation occurs on safety injection, radioactivity releases prior to isolation are limited to material contained in the coolant. Containment vent isolation will occur. Lowering the containment pressure high setpoint will not provide any significant additional safety margins.

TVA believes that the present containment pressure high setpoint of 1.54 psig is adequate. Reduction of this setpoint would provide no significant additional safety margin. Instead, it would increase the potential for inadvertent containment isolation and safety injection.

II.K.3.1 and II.K.3.2 - Auto PORV Isolation and Failure Report

TVA Response - The Westinghouse owners' group is in the process of developing a report (including historical valve failure rate data and documentation of actions taken since the TMI-2 event to decrease the probability of a stuck-open PORV) to address the NRC concerns on this item. However, due to the time consuming process of data gathering, breakdown, and evaluation, this report is scheduled for submittal to the NRC on March 1, 1981.