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J. L. Wilson  
Vice President, Sequoyah Nuclear Plant

November 16, 1992

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

Gentlemen:

|                            |   |                    |
|----------------------------|---|--------------------|
| In the Matter of           | ) | Docket Nos. 50-327 |
| Tennessee Valley Authority | ) | 50-328             |

SEQUOYAH NUCLEAR PLANT (SQN) - FIRE PROTECTION IMPROVEMENT PLAN PERIODIC STATUS REPORT

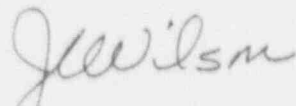
A working meeting between TVA and NRC was held at SQN on August 19, 1991, to discuss the self-identified problems in SQN's fire protection program and the improvement plan efforts initiated by TVA. As a result of this meeting, TVA agreed to submit periodic status reports to inform NRC on the progress of efforts made in conjunction with the improvement plan.

The most recent status report identifying progress achieved and areas needing further action is included as Enclosure 1. Changes to the improvement plan are identified in Enclosure 2.

The scheduled completion date for Phase III is October 1, 1993, with the majority of the items expected to be finished near the end of the period. The status reporting period after this report will be changed to semiannual in conjunction with the currently scheduled completion dates.

If you have any questions concerning this submittal, please telephone M. A. Cooper at (615) 843-8924.

Sincerely,

  
J. L. Wilson

Enclosures  
cc: See page 2

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Enclosures

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ENCLOSURE 1

FIRE PROTECTION IMPROVEMENT PLAN - STATUS FOR PERIOD ENDING OCTOBER 1, 1992

Phase I - Phase I is Complete

Phase II - Phase II is Complete

- 2-1 Perform an independent Fire Protection assessment to assess that actions taken in Phase I are properly implemented and effective.

Status: This item was previously stated as complete.

- 2-2 Implement revised specification G-40 requirement to show the cable routing leg using document change authorization sketches with required zones and tolerances called out. If a walkdown is required, coordinate with the fire hazard analysis (FHA) walkdown.

Status: This item was previously stated as complete.

- 2-3 Ensure that the Sequoyah Nuclear Plant (SQN) fire protection design and site-specific implementing instruction (for design) adequately reflect design criteria and general engineering specifications issued from corporate Nuclear Engineering.

Status: This item was previously rescheduled for Phase III (refer to Item 3-9).

- 2-4 Review the SQN Q-List versus respective engineering drawings to ensure that all fire protection components are correctly classified.

Status: This item was previously stated as complete.

- 2-5 Evaluate system modifications to enable performance of a main drain test and to assist in the draining of the system following actuation.

Status: The evaluation has been completed, and no additional modifications on the high pressure fire protection (HPFP) system were necessary to enable the main drain test to be performed correctly. The configuration is adequate to perform the draining process after the system is actuated.

- 2-6 Incorporate safety function position statements into a controlled QA record, and ensure that they are updated on a periodic basis.

Status: This item is complete.

- 2-7 Recheck and/or revise Calculation SQN-CSS-023 to ensure that interactions are adequately and consistently dispositioned.

Status: This item was previously stated as complete.

- 2-8 Complete Appendix R analysis of the turbine trip logic.

Status: This item was previously stated as complete.

- 2-9 Review a valid sample of design change notices (DCNs), evaluate the need to perform field walkdowns for Appendix R considerations on all DCNs, and establish future policy.

Status: This item was previously statused as complete.

- 2-10 Perform the plant walkdown procedure to update the FHA.

Status: This item was previously rescheduled to Phase III (refer to Item 3-5).

- 2-11 Develop a program and train Modification personnel in basic Appendix R requirements.

Status: This item was previously statused as complete.

- 2-12 Revise O-SI-SFT-026-002.0 to incorporate the following:

- a. The demands of all of the standpipe and sprinkler systems should be identified and documented.
- b. The commitments and requirements for operation of the system with a single impairment and the type of impairment and any requirements for feed via the two 8-inch supply headers should be identified and documented.
- c. The acceptance criteria should be based upon the flow and pressure required at various points in the system and not upon a single point.
- d. Other items to be considered for this revision are the trending of data to identify degradation, use of "alert" values to identify an adverse trend, and possibilities for flow testing of each sprinkler and standpipe system to accurately quantify the flows and pressures at various locations.

Status: This item is complete.

- 2-13 Revise the prefire plans into a prefire plan manual to add and clarify information.

Status: This item is complete.

- 2-14 Upgrade the preventive maintenance (PM) program for fire protection related hardware.

Status: The preventive maintenance program has been updated for the hydraulic suppression system (i.e., System No. 26). The carbon dioxide (CO<sub>2</sub>) (System No. 39) components are being incorporated into the upgraded PM program as part of Phase III (refer to Item 3-10).

- 2-15 Review fire protection design documentation (i.e., compartmentation drawings, and general design criteria) for accuracy and completeness.

Status: This item was previously combined with Item 2-3 and will be completed in Phase III (refer to Item 3-9).

- 2-16 Recommend to SQN plant management the permanent Fire Protection organization requirements for SQN, based on program needs and requirements.

Status: This item is complete. Recommendations, based on program needs and requirements, have been presented to plant management for evaluation. The recommendations are currently under advisement by SQN plant management. The interim organization will remain in effect until recommendations are acted upon.

- 2-17 Complete the remaining procedure reviews.

Status: This item is complete.

- 2-18 Evaluate the flows at diesel generator building hose stations and determine corrective actions.

Status: The evaluation of the flows at the diesel generator building hose stations has been completed, and deficiencies have been resolved.

Phase III - Targeted Completion Date October 1, 1993

- 3-1 Perform an independent Fire Protection assessment to assess that the actions taken in Phase II are properly implemented and effective.

Status: Phase II items have been completed. The Site Quality organization performed a Fire Protection audit (SQA-92209) in July 1992, in which several items described in Phase II were evaluated. The evaluation indicated that adequate corrective actions had been taken on those items that had been closed. Items statused as open were not evaluated in the audit. Evaluations of remaining items will be documented in subsequent HPFP Improvement Plan Status Reports.

- 3-2 Issue a revised fire hazard analysis (FHA).

Status: An engineering firm has been contracted to perform this task. The expected completion date is in July 1993. This item will be completed in conjunction with the penetration seal documentation effort.

- 3-3 Perform a life-cycle analysis on HPFP components and provide replacement recommendations.

Status: The life-cycle analysis on HPFP components and replacement recommendations will be accomplished in conjunction with Project Control Number (PCN) 607. This project is an upgrade of the HPFP system involving a potable water makeup system with diesel-driven fire pumps tied into the HPFP supply lines. The life-cycle analysis will be incorporated as design input for the HPFP upgrade project (see Item 4-4).

- 3-4 The Fire Protection manager is to review previous commitment items for effectiveness and completeness to ensure that the improvement program has adequately addressed and implemented proposed corrective actions. This item will be accomplished in conjunction with the independent assessment described in Item 3-1.

Status: This item has not been started.

- 3-5 Perform a plant walkdown procedure to update FHA.

Status: An engineering firm has been contracted and is in the process of performing the walkdowns. The expected completion date for the FHA and penetration seal data base revisions (Item 3-8) is July 1993.

- 3-6 Evaluate the necessity of field verification of the FHA and establish methods as appropriate before issuance of the FHA.

Status: The FHA is to be field-verified by the walkdown as described in Item 3-5. The means to keep this document current will be incorporated into the revised FHA before issuance.

- 3-7 Issue a design package for Project Control No. 607, "Revise the Fire Protection System."

Status: This item is now scheduled to be completed in Phase IV (refer to Item 4-4).

- 3-8 Complete an evaluation of the mechanical and electrical fire barrier penetration seals in accordance with the guidelines in Information Notice No. 88-04.

Status: This evaluation will be combined with the plant walkdown effort as described in Item 3-5. The expected completion date is July 1993.

- 3-9 Ensure that the SQN fire protection design and site-specific implementing instruction (for design) adequately reflect design criteria and general engineering specifications issued from corporate Nuclear Engineering.

Status: This item is 10 percent complete. After complete scoping of this item and review of ongoing activities, it has been determined that this item will be completed in April 1993.

- 3-10 Upgrade the Preventive Maintenance (PM) Program for the fire protection hardware in System No. 39, "CO<sub>2</sub> Storage, Fire Protection and Purging System."

Status: This item is approximately 30 percent complete. System No. 39 was not included in Fire Protection Improvement Plan Item 2-14 (Item 2-14 reviewed System No. 26 only).

Phase IV -- Targeted Completion December 1, 1994

- 4-1 Perform an independent Fire Protection assessment to assess that actions taken in Phase III are properly implemented and effective.

Status: This item has not been started; awaiting completion of Phase III.

- 4-2 Complete an evaluation of the mechanical and electrical fire barrier penetration seals in accordance with the guidelines established in NRC inspection and enforcement notice evaluations.

Status: This item has been rescheduled to be completed during Phase III (refer to Item 3-8).

- 4-3 Issue the remaining updated design documentation to support final compilation into the SQN fire protection report, and establish a process to maintain documentation current.

Status: Compilation of design material and documentation is in progress. Current design control processes are considered adequate to maintain the documentation current.

- 4-4 Issue a design package for Project Control No. 607.

Status: This item is scheduled to be completed December 31, 1993.

ENCLOSURE 2

CHANGES TO THE FIRE PROTECTION IMPROVEMENT PLAN

Phase III

- 3-10 This item is added to include System No. 39 in the upgrade of the preventive maintenance program for the fire protection hardware in System No. 39, "CO<sub>2</sub> Storage, Fire Protection and Purging System."

Status: This item is approximately 30 percent complete. System No. 39 was not included in Fire Protection Improvement Plan Item 2-14 (Item 2-14 reviewed System No. 26 only.)