

ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-95-20)

LIST OF AFFECTED PAGES

Unit 1

3/4 6-16a

Unit 2

3/4 6-16a

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. By verifying, that on recirculation flow, each pump develops a differential pressure of greater than or equal to 143 psid at greater than or equal to 4750 gpm when tested pursuant to Specification 4.0.5.
- c. At least once per 18 months during shutdown, by:
1. Verifying that each automatic valve in the flow path actuates to its correct position on a Containment Pressure High-High test signal.
 2. Verifying that each spray pump starts automatically on a Containment Pressure High-High test signal.
- d. At least once per years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

R84

4.6.2.1.2 Each RHR spray train shall be demonstrated OPERABLE:

- a. Per surveillance requirements 4.5.2.b.2 and 4.5.2.f.3;
- b. At least once per years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

R73

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. By verifying that on recirculation flow, each pump develops a differential pressure of greater than or equal to 143 psid at greater than or equal to 4750 gpm when tested pursuant to Specification 4.0.5.
- c. At least once per 18 months during shutdown, by:
 - 1. Verifying that each automatic valve in the flow path actuates to its correct position on a Containment Pressure High-High test signal.
 - 2. Verifying that each spray pump starts automatically on a Containment Pressure High-High test signal.
- d. At least once per years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

R71

4.6.2.1.2 Each RHR Spray train shall be demonstrated OPERABLE:

- a. Per surveillance requirements 4.5.2.b.2 and 4.5.2.f.3;
- b. At least once per years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

R61

ENCLOSURE 2

PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-95-20)

DESCRIPTION AND JUSTIFICATION

FOR THE CONTAINMENT SPRAY / RESIDUAL HEAT REMOVAL

(RHR) SYSTEMS NOZZLE SURVEILLANCE FREQUENCY REVISION

Description of Change

TVA proposes to modify the Sequoyah Nuclear Plant (SQN) Units 1 and 2 technical specifications (TSs) to revise Surveillance Requirements (SRs) 4.6.2.1.1.d and 4.6.2.1.2.b to extend the testing period from 5 to 10 years. This change is consistent with the guidance provided in Generic Letter (GL) 93-05.

Reason for Change

Performance of the spray nozzle surveillance requires draining of the piping leading to the spray header. Since a small amount of water may remain in the piping, there is a chance that this moisture may be ejected during the initial header pressurization through the nozzles. This could result in a contamination hazard. Another potential problem involves personnel safety. The test personnel manipulate the infrared camera from the top of the polar crane. The polar crane is over 100 feet from the reactor cavity floor. Additionally, this TS surveillance extension is estimated to save SQN approximately \$126,000 over the life of the plant.

Justification for Changes

The containment spray (CS) system is designed to prevent the containment pressure, during a large break loss-of-coolant accident, from exceeding its maximum design pressure. The CS system performs this function by spraying borated water through spray headers at the top of the containment building. The cooler spray water condenses the steam in the containment atmosphere. If additional cooling is needed, the RHR system contains two spray headers that can be aligned manually.

For the systems to operate correctly, the nozzles in the spray headers cannot be blocked. SQN presently tests these nozzles every five years using hot air. The purpose of this test is to identify any degradation of the spray headers that will prevent flow through the spray nozzles.

NUREG-1366 indicates that operating history was reviewed to determine the success of the surveillance tests performed at various plants. Of the many tests reviewed, only three tests indicated nozzle flow problems. These three problems were construction related and not due to header degradation. GL 93-05 further warns of other considerations if the piping used is carbon steel.

At SQN, there have been no problems identified during testing of nozzles for unobstructed flow; therefore, the proposed change is compatible with the operating experience discussed in NUREG-1366. Additionally, the proposed change is consistent with GL 93-05. CS subsystem piping that is in contact with borated water is austenitic stainless steel.

Environmental Impact Evaluation

The proposed change does not involve an unreviewed environmental question because operation of SQN Units 1 and 2 in accordance with this change would not:

1. Result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) as modified by NRC's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or decisions of the Atomic Safety and Licensing Board.
2. Result in a significant change in effluents or power levels.
3. Result in matters not previously reviewed in the licensing basis for SQN that may have a significant environmental impact.

ENCLOSURE 3

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-95-20)

DETERMINATION OF NO SIGNIFICANT HAZARDS

CONSIDERATION FOR THE CONTAINMENT SPRAY / RESIDUAL

HEAT REMOVAL (RHR) SYSTEMS NOZZLE SURVEILLANCE FREQUENCY REVISION

Significant Hazards Evaluation

TVA has evaluated the proposed technical specification (TS) change and has determined that it does not represent a significant hazards consideration based on criteria established in 10 CFR 50.92(c). Operation of Sequoyah Nuclear Plant (SQN) in accordance with the proposed amendment will not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

The TS change is consistent with the guidance provided in Generic Letter 93-05. Containment spray (CS) systems' header piping is stainless steel; therefore, corrosion will be negligible during the extended surveillance interval. Since the CS systems' headers are maintained dry, there is no mechanism that could cause blockage of the spray nozzles. Therefore, the nozzles in the CS systems will remain operable, during the 10-year surveillance interval, to mitigate the consequence of an accident previously evaluated. Additionally, clogging or blockage has not been observed during the 5-year surveillance tests that have been performed in the past at SQN. Testing the CS systems' nozzles at the proposed reduced frequency will not increase the probability of occurrence of a postulated accident or the consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any previously analyzed.

The proposed reduced frequency testing of the CS systems' nozzles does not change the manner in which these systems are operated. The reduced testing frequency of the spray nozzles does not generate any new accident precursors. Therefore, the possibility of a new or different kind of accident previously evaluated is not created by the proposed changes in surveillance frequency of the CS systems' nozzles.

3. Have a significant reduction in a margin of safety.

Reduced testing of the CS systems' nozzles does not change the way the systems are operated or the systems' operability requirements. In this application, any additional corrosion of stainless steel piping will be negligible during the extended surveillance interval. Since the CS systems are maintained dry, there is no additional mechanism that could cause blockage of the nozzles. Therefore, the proposed reduced testing frequency is adequate to ensure spray nozzle operability. The surveillance requirements do not affect the margin of safety since the operability requirements of both the CS systems remains unchanged. The existing safety analysis remains bounding. Therefore, there is no reduction in the margin of safety.