

ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-89-37)

LIST OF AFFECTED PAGES

Unit 1

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Unit 2

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3/4.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

3/4.5.1 ACCUMULATORS

COLD LEG INJECTION ACCUMULATORS

LIMITING CONDITION FOR OPERATION

3.5.1.1 Each cold leg injection accumulator shall be OPERABLE with:

- The isolation valve open,
- A contained borated water volume of between 7857 and 8071 gallons of borated water,
- Between 1900 and 2100 ppm of boron, and
- A nitrogen cover-pressure of between 385 and 447 psig.

APPLICABILITY: MODES 1, 2 and 3.*

ACTION:

- With one cold leg injection accumulator inoperable, except as a result of a closed isolation valve, restore the inoperable accumulator to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- With one cold leg injection accumulator inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in HOT STANDBY within one hour and be in HOT SHUTDOWN within the next 12 hours.

DO NOT TAKE
ANY ACTION
UNTIL
→

SURVEILLANCE REQUIREMENTS

4.5.1.1.1 Each cold leg injection accumulator shall be demonstrated OPERABLE:

- At least once per 12 hours by:
 - Verifying, by the absence of alarms or by measurement of levels and pressures, the contained borated water volume and nitrogen cover-pressure in the tanks, and
 - Verifying that each cold leg injection accumulator isolation valve is open.

R16

*Pressurizer pressure above 1000 psig.

SEQUOYAH - UNIT 1

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MAR 25 1982

Amendment No. 12

3/4.5 EMERGENCY CORE COOLING SYSTEMS

3/4.5.1 ACCUMULATORS

COLD LEG INJECTION ACCUMULATORS

LIMITING CONDITION FOR OPERATION

3.5.1.1 Each cold leg injection accumulator shall be OPERABLE with:

- a. The isolation valve open,
- b. A contained borated water volume of between 7857 and 8071 gallons of borated water,
- c. Between 1900 and 2100 ppm of boron, and
- d. A nitrogen cover-pressure of between 385 and 447 psig.

APPLICABILITY: MODES 1, 2 and 3.*

ACTION:

- a. With one cold leg injection accumulator inoperable, except as a result of a closed isolation valve, restore the inoperable accumulator to OPERABLE status within one hour or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With one cold leg injection accumulator inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in HOT STANDBY within one hour and be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.1.1.1 Each cold leg injection accumulator shall be demonstrated OPERABLE:

- a. At least once per 12 hours by:
 1. Verifying, by the absence of alarms or by measurement of levels and pressures, the contained borated water volume and nitrogen cover-pressure in the tanks, and
 2. Verifying that each cold leg injection accumulator isolation valve is open.

*Pressurizer pressure above 1000 psig.

SEQUOYAH - UNIT 2

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Attachment

- c. With less than two pressure or water level channels OPERABLE per accumulator, return the inoperable channel(s) to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- d. With less than one pressure or water level channel OPERABLE per accumulator, immediately declare the affected accumulator inoperable.

ENCLOSURE 2

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-89-37)

DESCRIPTION AND JUSTIFICATION FOR
ADDITION OF ACTION STATEMENTS FOR INOPERABLE
COLD LEG ACCUMULATOR LEVEL
AND PRESSURE MONITORING INSTRUMENTATION

ENCLOSURE 2

Description of Change

Tennessee Valley Authority proposes to modify the Sequoyah Nuclear Plant (SQN) Units 1 and 2 technical specifications (TSs) to add action statements to address the failure to meet surveillance requirement (SR) 4.5.1.1.2 for the cold leg accumulator TSs.

Reason for Change

TVA has reviewed TS 3.5.1.1 and has determined that the TS is not internally consistent in that it contains SRs for determining operability of the instruments used to monitor water level and pressure of each accumulator (SR 4.5.1.1.2) but provides no actions to be taken when the water level or pressure channels become inoperable.

The absence of action statements that address inoperability of the accumulator water level or pressure monitoring instrumentation requires the operator to interpret TSs 3.0.3 and 4.0.3 to determine if and what out-of-service times apply. Application of either of these TSs would lead to a response to an out-of-service monitoring instrument that is as restrictive as the response to an inoperable cold leg accumulator. This restrictive time period is insufficient to adequately plan, schedule, and effect repairs for monitoring equipment located inside lower containment. As a result, this condition would lead to unnecessary plant transients and plant shutdowns for the simple loss of redundancy in monitoring equipment. The loss of redundancy in monitoring equipment in no way affects the ability of the cold leg accumulator to perform its intended safety function.

Justification for Change

The addition of the proposed action statement c provides requirements that specifically address the loss of redundancy for the instrumentation used to monitor accumulator water level and pressure. The requirement to return the out-of-service instrument(s) to OPERABLE status within 30 days is consistent with the SR presently contained in TS 3.5.1.1 for determination of operability of the instrumentation channels. Thirty days is also a reasonable period of time to plan, schedule, and perform work inside lower containment. The thirty-day period is also appropriate for a Regulatory Guide 1.97, Category D2, variable. It should be noted that separate operability requirements are imposed on Regulatory Guide 1.97, Category A1, variables through TS 3.3.3.7, but no separate operability requirements are specified for the other categories of variables. With up to one water level and one pressure channel per accumulator out of service, operability of the accumulator is still ensured by performance of SR 4.5.1.1.1 at least once every 12 hours using the redundant instrument(s). The addition of the proposed action statement d provides requirements to declare the affected accumulator inoperable with the complete loss of monitoring for water level or pressure on an accumulator.

In summary, the addition of the proposed action statements will have no impact on the availability or operability of the cold leg accumulators. The addition of the proposed action statements also corrects an inappropriate TS that did not adequately distinguish between the equipment being monitored (the subject of the limiting condition for operation) and the equipment used to monitor. Correcting this problem will preclude possible plant shutdowns or transients caused solely by inoperable monitoring equipment.

Environmental Impact Evaluation

The proposed change request 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 the Staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any 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 UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-89-37)

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATIONS

ENCLOSURE 3

Significant Hazards Evaluation

TVA has evaluated the proposed 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 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 proposed change to add action statements to address the operability of monitoring instrumentation for the cold leg accumulator pressure and level instrument channels will have no effect on the operability or availability of the cold leg accumulators themselves. The proposed change corrects an inappropriate TS that did not adequately distinguish between the equipment being monitored and the equipment used to monitor. Correcting this problem will preclude possible plant shutdowns or transients caused solely by inoperable monitoring equipment. This change does not affect the probability or consequences of an accident previously evaluated.

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

The proposed change to add action statements to address the operability of monitoring instrumentation for the cold leg accumulator pressure and level instrument channels will have no effect on the operability or availability of the cold leg accumulators themselves. The proposed change corrects an inappropriate TS that did not adequately distinguish between the equipment being monitored and the equipment used to monitor. Correcting this problem will preclude possible plant shutdowns or transients caused solely by inoperable monitoring equipment. This change does not create the possibility of a new or different kind of accident from any previously analyzed.

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

The proposed change to add action statements to address the operability of monitoring instrumentation for the cold leg accumulator pressure and level instrument channels will have no effect on the operability or availability of the cold leg accumulators themselves. The proposed change corrects an inappropriate TS that did not adequately distinguish between the equipment being monitored and the equipment used to monitor. Correcting this problem will preclude possible plant shutdowns or transients caused solely by inoperable monitoring equipment. This change does not cause a reduction in any margin of safety.