October 23, 2008

TVA-SQN-TS-08-04 10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

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

SEQUOYAH NUCLEAR PLANT (SQN) - UNITS 1 AND 2 - TECHNICAL SPECIFICATIONS (TS) CHANGE 08-04 "REMOVAL OF MAIN STEAM VALVE ISOLATION TIMES"

Pursuant to 10 CFR 50.90, Tennessee Valley Authority (TVA) is submitting a request for a TS change (TS-08-04) to Licenses DPR-77 and DPR-79 for SQN Units 1 and 2.

The requested change is a partial adoption of Technical Specification Task Force Change Traveler No. 491 (TSTF-491), Revision 2, "Removal of Main Steam and Feedwater Valve Isolation Times." The proposed change only revises TS 3.7.1.5 "Main Steam Line Isolation Valves," by relocating the main steam isolation valve closure time from Surveillance Requirement (SR) 4.7.1.5.1 to the Bases. The proposed amendment deviates from TSTF-491 in that the current SQN TS 3.7.1.6 "Main Feedwater Isolation, Regulating, and Bypass Valves," and associated surveillance requirements do not include the main feedwater valve closure times, and thus, TSTF-491 changes to TS 3.7.1.6 are not applicable to the SQN TSs. The availability of this TS improvement was announced in the Federal Register on December 29, 2006, as part of the consolidated line item improvement process (CLIIP).

Enclosure 1 provides a description of the proposed change, the requested confirmation of applicability, and plant-specific verifications. Enclosure 2 provides the existing TS pages marked up to show the proposed change. Enclosure 3 provides revised (clean) TS pages. Enclosure 4 provides the existing TS Bases pages marked up to show the proposed change. Enclosure 5 provides revised (clean) Bases pages.

In accordance with 10 CFR 50.91(b)(1), TVA is sending a copy of this letter and enclosures to the Tennessee State Department of Public Health.

TVA does not have specific schedule needs for this proposed change and processing can be pursued as appropriate. TVA requests that the implementation of the revised TS change be within 60 days of NRC approval.

There are no commitments associated with this submittal. If you have any questions about this change, please contact me at 843-7170 or Rusty Proffitt at 843-6651.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 23rd day of October, 2008.

Sincerely,

James D. Smith
Manager, Site Licensing and
Industry Affairs

Enclosures:
1. Description and Assessment
2. Proposed TS Change 08-04 Marked Pages
3. Proposed TS Change 08-04 Revised Pages
4. Proposed TS Change 08-04 Bases Marked Pages
5. Proposed TS Change 08-04 Bases Revised Pages

cc: See page 3

Enclosures
cc (Enclosures):

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ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN)
UNITS 1 AND 2

Description and Assessment

1.0 DESCRIPTION

This evaluation supports a request to amend Operating Licenses DPR-77 and DPR-79 for SQN Units 1 and 2.

The proposed amendment would modify technical specifications (TS) by removing the specific isolation time for the main steam isolation valves from the associated TS Surveillance Requirement (SR) 4.7.1.5.1 to the Bases.

The changes are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) TSTF-491 Revision 2. The availability of this TS improvement was published in the Federal Register on December 29, 2006, as part of the consolidated line item improvement process (CLIIP).

2.0 ASSESSMENT

2.1 Applicability of TSTF-491, and Published Safety Evaluation

TVA has reviewed TSTF-491 and the safety evaluation (SE) published December 29, 2006, as part of the CLIIP. TVA has concluded that the information in TSTF-491, as well as the SE prepared by the NRC staff, are applicable to SQN Units 1 and 2, and justify this amendment for the incorporation of the changes to TS 3.7.1.5 “Main Steam Line Isolation Valves.”

2.2 Optional Changes and Variations

TVA is proposing a partial adoption of the TS changes described in TSTF-491 and the NRC staff’s model SE dated October 5, 2005. In adopting this TSTF, only the main steam isolation valve (MSIV) closure times are being relocated to the Bases. TS 3.7.1.6 “Main Feedwater Isolation, Regulating, And Bypass Valves,” will not be changed because closure times are not contained in the SRs. Main feedwater valve closure times are established by the plant transient and accident analysis and are verified in accordance with the inservice testing program requirements consistent with SR 4.0.5.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Determination

TVA has reviewed the proposed no significant hazards consideration determination (NSHCD) published in the Federal Register on October 5, 2006, as part of the CLIIP. TVA has concluded that the proposed NSHCD presented in the Federal Register notice is applicable to SQN and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

3.2 Verification and Commitments

As discussed in the notice of availability published in the Federal Register on December 29, 2006, for this TS improvement, plant-specific verifications were performed as follows:

This license amendment proposes a TS and Bases change that is consistent with TSTF-491. The license amendment will include a change to SR 4.7.1.5.1 to replace the MSIV closure time of 5 seconds to "within limits." The Bases for 3/4.7.1.5 "Main Steam Line Isolation Valves" is being changed to specify a closure time of 5 seconds. Changes to the Bases are subject to the 10 CFR 50.59 process. Furthermore, the MSIVs are subject to periodic testing and acceptance criteria in accordance with the Inservice Testing (IST) Program. The IST Program includes specific reference value baseline operating times for valves that are not subject to arbitrary changes.

In addition, TVA has proposed TS Bases consistent with TSTF-491 which provide guidance and details on how to implement the new requirements. Finally, TVA has a Bases Control Program consistent with Section 5.5 of the standard TS (STS).

4.0 ENVIRONMENTAL EVALUATION

The amendment change requirements with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment adopting TSTF-491, Revision 2, involves no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that TSTF-491, Revision 2, involves no significant hazards considerations, and there has been no public comment on the finding in Federal Register Notice 71 FR 193, October 5, 2006. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 REFERENCES

1. TSTF-491, Revision 2, "Removal of Main Steam and Main Feedwater Valve Isolation Times from Technical Specifications."
2. NRC Model Safety Evaluation Report.

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN)
UNITS 1 AND 2

PROPOSED TECHNICAL SPECIFICATION CHANGE 08-04
MARKED PAGES

I. AFFECTED PAGE LIST

Unit 1

3/4 7-10

Unit 2

3/4 7-10

II. MARKED PAGES

See Attached

PLANT SYSTEMS

MAIN STEAM LINE ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.5 Four main steam line isolation valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3

ACTION:

MODE 1 - With one main steam line isolation valve inoperable, POWER OPERATION may continue provided the inoperable valve is restored to OPERABLE status within 4 hours;

Otherwise, be in MODE 2 within the next 6 hours.

MODES 2 and 3 - With one or more main steam line isolation valves inoperable, subsequent operation in MODES 2 or 3 may proceed provided:

a. The isolation valve is restored to OPERABLE status or closed within 4 hours;

b. The inoperable isolation valve is verified closed once per 7 days;

c. Separate entry into this action is allowed for each isolation valve.

Otherwise, be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.5.1 Each main steam line isolation valve shall be demonstrated OPERABLE by verifying full closure within ~~5 seconds~~ when tested pursuant to Specification 4.0.5.

4.7.1.5.2 At least once per 18 months, verify each main steam isolation valve closes on an actual or simulated automatic actuation signal.

limits

PLANT SYSTEMS

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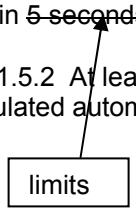

ENCLOSURE 3

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN)
UNITS 1 AND 2

PROPOSED TECHNICAL SPECIFICATION CHANGE 08-04
REVISED PAGES

I. AFFECTED PAGE LIST

Unit 1

3/4 7-10

Unit 2

3/4 7-10

II. REVISED PAGES

See Attached

PLANT SYSTEMS

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PLANT SYSTEMS

MAIN STEAM LINE ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

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SURVEILLANCE REQUIREMENTS

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ENCLOSURE 4

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN)
UNITS 1 AND 2

PROPOSED TECHNICAL SPECIFICATION CHANGE 08-04
TS BASES MARKED PAGES

I. AFFECTED PAGE LIST

Unit 1

B 3/4 7-3

Unit 2

B 3/4 7-3

II. MARKED PAGES

See Attached

3/4.7.1.4 ACTIVITY

The limitations on secondary system specific activity ensure that the resultant off-site radiation dose will be limited to a small fraction of 10 CFR Part 100 limits in the event of a steam line rupture. This dose also includes the effects of a coincident 1.0 GPM primary to secondary tube leak in the steam generator of the affected steam line. These values are consistent with the assumptions used in the accident analyses.

3/4.7.1.5 MAIN STEAM LINE ISOLATION VALVES

The OPERABILITY of the main steam line isolation valves ensures that no more than one steam generator will blowdown in the event of a steam line rupture. This restriction is required to 1) minimize the positive reactivity effects of the Reactor Coolant System cooldown associated with the blowdown, and 2) limit the pressure rise within containment in the event the steam line rupture occurs within containment. The OPERABILITY of the main steam isolation valves within the closure ~~times of the surveillance requirements are~~ consistent with the assumptions used in the accident analyses.

Surveillance Requirement 4.7.1.5.1 verifies the closure time is in accordance with the Inservice Testing Program.

time of 5 seconds is

3/4.7.1.6 MAIN FEEDWATER ISOLATION, REGULATING, AND BYPASS VALVES

Isolation of the main feedwater (MFW) system is provided when required to mitigate the consequences of a steam line break, feedwater line break, excessive feedwater flow, and loss of normal feedwater (and station blackout) accident. Redundant isolation capability is provided on each feedwater line consisting of the feedwater isolation valve (MFIV) and the main feedwater regulating valve (MFRV) and its associated bypass valve. The safety function of these valves is fulfilled when closed or isolated by a closed manual isolation valve. Therefore, the feedwater isolation function may be considered OPERABLE if its respective valves are OPERABLE, if they are maintained in a closed and deactivated position, or if isolated by a closed manual valve. The 72-hour completion time to either restore, close, or isolate an inoperable valve takes into account the redundancy afforded by the remaining OPERABLE valves and the low probability of an event occurring that would require isolation of the MFW flow paths during this time period. The 8-hour completion time for two inoperable valves in one flow path takes into account the potential for no redundant system to perform the required safety function and a reasonable duration to close or isolate the flow path. Although the steam generator can be isolated with the failure of two valves in parallel, the double failure could be an indication of a common mode failure and should be treated the same as the loss of the isolation function. The 7-day frequency to verify that an inoperable valve is closed or isolated is reasonable based on valve status indications available in the control room, and other administrative controls to ensure the valves are closed or isolated.

3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

This specification is deleted.

3/4.7.1.4 ACTIVITY

The limitations on secondary system specific activity ensure that the resultant off-site radiation dose will be limited to a small fraction of 10 CFR Part l00 limits in the event of a steam line rupture. This dose also includes the effects of a coincident l.0 GPM primary to secondary tube leak in the steam generator of the affected steam line. These values are consistent with the assumptions used in the accident analyses.

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3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

This specification is deleted.

ENCLOSURE 5

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN)
UNITS 1 AND 2

PROPOSED TECHNICAL SPECIFICATION CHANGE 08-04
TS BASES REVISED PAGES

I. AFFECTED PAGE LIST

Unit 1

B 3/4 7-3

Unit 2

B 3/4 7-3

II. MARKED PAGES

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