



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37384-2000

March 30, 2006

TVA-SQN-TS-05-11, R1

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 ) 50-328

**SEQUOYAH NUCLEAR PLANT (SQN) - UNITS 1 AND 2 - TECHNICAL SPECIFICATIONS (TS) CHANGE 05-11, "REVISION TO TECHNICAL SPECIFICATION TO SUPPORT THIRD 10-YEAR INTERVAL INSERVICE TEST (IST) PROGRAM," REVISION 1**

Reference: TVA letter to NRC dated December 19, 2005, "Sequoyah Nuclear Plant (SQN) - Units 1 And 2 - Technical Specifications (TS) Change 05-11, 'Revision To Technical Specification To Support Third 10-Year Interval Inservice Test (IST) Program'"

Pursuant to 10 CFR 50.90, Tennessee Valley Authority (TVA) is submitting two revised TS pages to supersede the pages previously provided in the referenced letter for SQN TS Change 05-11. The revision is necessary to address NRC concerns regarding Technical Specification Task Force (TSTF) 479, "Changes to Reflect Revision of 10 CFR 50.55a" and the application of the 25 percent extension to test frequencies greater than two years.

The Regulatory Safety Analysis, including the no significant hazard determination, and Environmental Considerations provided in the referenced letter are not affected by this revision; therefore, they are not included in this submittal.

A047

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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.

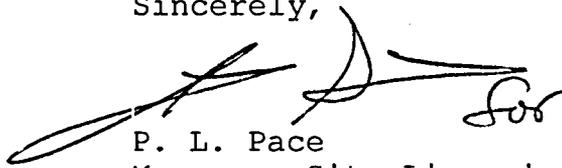
TVA continues to request approval of this TS change to support the June 1, 2006 start date of SQN's third 10-year IST program interval.

There are no commitments contained in this submittal.

If you have any questions about this change, please contact me at 843-7170 or Jim Smith at 843-6672.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 30th day of March, 2006.

Sincerely,

A handwritten signature in black ink, appearing to be 'P. L. Pace', with a stylized flourish at the end.

P. L. Pace  
Manager, Site Licensing and  
Industry Affairs

Enclosures:

1. TVA Evaluation of the Proposed Changes
2. Proposed Technical Specifications Change (mark-up)

cc: See page 3

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Enclosures

cc (Enclosures):

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## ENCLOSURE 1

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

#### 1.0 DESCRIPTION

This letter provides a revision to SQN Technical Specification (TS) Change 05-11 as originally submitted to NRC by TVA letter dated December 19, 2005. The original TS change contained a proposed change to SQN's inservice test (IST) program Surveillance Requirement (SR) 4.0.5.c that is based on Technical Specification Task Force (TSTF) 479, Revision 0, "Changes to Reflect Revision of 10 CFR 50.55a." One of the provisions in TSTF-479 provided a correction to the improved standard TS (NUREG-1431, Revision 3.1) regarding test frequencies in the IST program. The TSTF recognizes there may be non-standard test frequencies utilized in the IST program and applies the provisions of frequency extensions (i.e., SR 3.0.2) to IST program test frequencies. SQN TS Change 05-11 proposed a change to SR 4.0.5.c to adopt these TSTF provisions. NRC staff has expressed concern about applying frequency extensions to test frequencies in the IST program that are greater than two years. NRC staff has requested a change to TSTF-479 to revise the provision for applying SR 3.0.2 to IST test frequencies. The staff's requested revision to the TSTF will specify frequencies two years or less in the IST program. Based on the staff's position and the proposed revision to TSTF-479, TVA is submitting revised TS pages for both units to specify frequencies two years or less in the IST program. The revised TS pages supersede the pages previously provided by TVA's December 19, 2005 letter.

#### 2.0 PROPOSED CHANGE

TVA's proposed revision to TS Change 05-11 provides new language for SR 4.0.5.c. TVA's originally proposed SR 4.0.5.c and the proposed revision to SR 4.0.5.c are provided below:

TVA's originally proposed 4.0.5.c reads:

- c. "The provisions of SR 4.0.2 are applicable to the above required Frequencies and other normal and accelerated frequencies specified in the Inservice Testing Program for performing inservice testing activities."

The proposed revision to 4.0.5.c reads:

- c. "The provisions of SR 4.0.2 are applicable to the above required Frequencies and other normal and accelerated frequencies specified as **2 years or less** in the Inservice Testing Program for performing inservice testing activities."

In summary, TVA is submitting a revision to SQN TS Change 05-11 as previously provided by letter dated December 19, 2005. Two revised TS pages (one TS page for each unit) are provided and include a change in language that specifies test frequencies two years or less for application of SR 4.0.2. This change in language will provide consistency with the NRC staff recommended changes to TSTF-479.

### **3.0 BACKGROUND**

TSTF-479 is entitled "Changes to Reflect Revision of 10 CFR 50.55a." This TSTF was implemented into the improved standard TS in NUREG-1431, Revision 3.1, to provide consistency between the standard TS and the 10 CFR 50.55a(f) (4) for pumps and valves classified as American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3. By letter dated December 19, 2005, TVA submitted SQN TS Change 05-11 to adopt the provisions from TSTF-479 into the SQN TSs. A February 28, 2006 posting on the Excel website, indicates the industry and NRC have agreed to reconsider a change to TSTF-479 to address an NRC concern regarding the application of frequency extensions to the IST program. The proposed change to TSTF-479 will require SQN TS Change 05-11 be modified to incorporate the proposed TSTF change. Accordingly, TVA is submitting two revised TS pages to supersede TS pages previously provided by TS Change 05-11.

### **4.0 TECHNICAL ANALYSIS**

By letter dated December 19, 2005, TVA submitted TS Change 05-11 for SQN to update the improved standard TS 4.0.5 to reflect changes in 10 CFR 50.55a. The need to update TSs to reflect changes to 10 CFR 50.55a is recognized by the Nuclear Industry in TSTF-479, Revision 0. TVA TS Change 05-11 is based on TSTF-479 and provides reference to ASME Code for SQN's IST program that are consistent with the code requirements referenced in 10 CFR 50.55a(f) (4).

One of the provisions in TSTF-479 provided a correction to the improved standard TS (NUREG-1431, Revision 3.1) regarding the IST program. A provision in the TSTF recognizes there may be non-standard test frequencies utilized in the IST program and applies the provisions of SR 3.0.2 to IST program

test frequencies for frequency extensions. SQN TS Change 05-11 proposed a change to SR 4.0.5.c to adopt these TSTF provisions. NRC staff has expressed concern about applying frequency extensions to test frequencies in the IST program that may be greater than two years. NRC staff has requested a change to TSTF-479 to revise the provision for applying SR 3.0.2 to IST test frequencies. The requested TSTF revision would specify frequencies two years or less in the IST program. Based on the staff's position regarding TSTF-479, TVA is submitting revised TS pages for both units to specify frequencies two years or less in the IST program. The revised TS pages supersede the pages previously provided in TVA's December 19, 2005 letter.

## 5.0 REFERENCES

1. 10 CFR 50.55a(f), "*Inservice testing requirements.*"
2. American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants, 2001 Edition through 2003 Addenda.
3. Technical Specification Task Force TSTF 479, Revision 0, "*Changes to Reflect Revision of 10 CFR 50.55a.*"

ENCLOSURE 2

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

Revised Technical Specification Pages

I. AFFECTED PAGE LIST

Unit 1

3/4 0-3

Unit 2

3/4 0-3

II. MARKED PAGES

See attached.

APPLICABILITY

SURVEILLANCE REQUIREMENTS (Continued)

4.0.5 (Continued)

- a. Provisions that inservice testing of ASME Code Class 1, 2 and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a;
- b. The provisions of SR 4.0.2 are applicable to the frequencies for performing inservice inspection activities;
- c. Inspection of each reactor coolant pump flywheel per the recommendation of Regulation Position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975 or in lieu of Position c.4.b(1) and c.4.b(2), a qualified in-place ultrasonic examination over the volume from the inner bore of the flywheel to the circle one-half of the outer radius or a surface examination (magnetic particle and/or liquid penetrant) of exposed surfaces of the removed flywheels may be conducted at 20-year intervals (the provisions of SR 4.0.2 are not applicable); and
- d. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirement of any TS.

Inservice Testing Program

the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code)

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components including applicable supports. The program shall include the following:

- a. Provisions that inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a;
- b. Testing Frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

OM

ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice testing activities

applicable to the ASME OM Code

Required frequencies for performing inservice testing activities

- Weekly
- Monthly
- Quarterly or every 3 months
- Semiannually or every 6 months
- Every 9 months
- Yearly or annually
- Biennially or every 2 years

- At least once per 7 days
- At least once per 31 days
- At least once per 92 days
- At least once per 184 days
- At least once per 276 days
- At least once per 366 days
- At least once per 731 days

and other normal and accelerated frequencies specified as 2 years or less in the Inservice Testing Program

- c. The provisions of SR 4.0.2 are applicable to the above required Frequencies for performing inservice testing activities;
- d. The provisions of SR 4.0.3 are applicable to inservice testing and activities; and
- e. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any TS.

OM

APPLICABILITY

SURVEILLANCE REQUIREMENTS (Continued)

4.0.5 (Continued)

- a. Provisions that inservice testing of ASME Code Class 1, 2 and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a;
- b. The provisions of SR 4.0.2 are applicable to the frequencies for performing inservice inspection activities;
- c. Inspection of each reactor coolant pump flywheel per the recommendation of Regulation Position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975 or in lieu of Position c.4.b(1) and c.4.b(2), a qualified in-place ultrasonic examination over the volume from the inner bore of the flywheel to the circle one-half of the outer radius or a surface examination (magnetic particle and/or liquid penetrant) of exposed surfaces of the removed flywheels may be conducted at 20-year intervals (the provisions of SR 4.0.2 are not applicable); and
- d. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirement of any TS.

the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code)

Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components including applicable supports. The program shall include the following:

- a. Provisions that inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with ~~Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a;~~
- b. Testing frequencies ~~specified in section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:~~

OM

~~ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice testing activities~~

- Weekly
- Monthly
- Quarterly or every 3 months
- Semiannually or every 6 months
- Every 9 months
- Yearly or annually
- Biennially or every 2 years

applicable to the ASME OM Code

Required frequencies for performing inservice testing activities

- At least once per 7 days
- At least once per 31 days
- At least once per 92 days
- At least once per 184 days
- At least once per 276 days
- At least once per 366 days
- At least once per 731 days

and other normal and accelerated frequencies specified as 2 years or less in the Inservice Test Program

- c. The provisions of SR 4.0.2 are applicable to the above required Frequencies for performing inservice testing activities;
- d. The provisions of SR 4.0.3 are applicable to inservice testing and activities; and
- e. Nothing in the ~~ASME Boiler and Pressure Vessel Code~~ shall be construed to supersede the requirements of any TS.

OM