Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

August 28, 2009

10 CFR 50.4
10 CFR 50.55a(a)(3)

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

Sequoyah Nuclear Plant, Unit 1
Facility Operating License No. DPR-77
NRC Docket No. 50-327

Subject: **American Society of Mechanical Engineers Inservice Inspection Program Relief Request 1-ISI-34**

Reference: Letter from TVA to the NRC, "Unit 1 Cycle 16 90-Day Inservice Inspection Summary Report," dated July 24, 2009

In accordance with 10 CFR 50.55a(a)(3)(i), the Tennessee Valley Authority (TVA) requests the Nuclear Regulatory Commission's (NRC's) approval of an alternative to the requirements of the 2001 Edition through the 2003 Addenda of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI for the Sequoyah Nuclear Plant Unit 1 third inservice inspection interval.

During preparation of the referenced Unit 1 Cycle 16 90-Day Inservice Inspection Summary Report, it was discovered the scheduled 1st period Examination Category B-B component was inadvertently removed from the examination scope. This issue was documented in TVA's Corrective Action Program. As a result, a relief request as described in the Enclosure is proposed to provide an alternative schedule for the performance of this examination.

TVA requests approval of this alternative by July 31, 2010, to allow sufficient time to revise the affected inservice inspection plan prior to the September, 2010, cycle 17 refueling outage.

A-047
NRR

There are no new regulatory commitments included in this submittal. If you have any questions concerning this information, please contact Kevin Casey at (423) 751-8523.

Respectfully,

R. M. Krich
Vice President
Nuclear Licensing

Enclosure: Relief Request No. 1-ISI-34

cc (Enclosure):

Regional Administrator – Region II

NRC Senior Resident Inspector – Sequoyah Nuclear Plant

ENCLOSURE

Tennessee Valley Authority
Sequoyah Nuclear Plant, Unit 1
Third 10-Year Interval
Relief Request No. 1-ISI-34

I. COMPONENTS

The affected components at the Sequoyah Nuclear Plant, Unit 1 (SQN U1) are the Steam Generator and Pressurizer Class 1 welds. The Examination Category and Item Numbers are from the American Society of Mechanical Engineers (ASME) Section XI, 2001 Edition through 2003 Addenda (the Code) and are listed below:

Exam Category	Item Number	Description
B-B	B2.11	Pressurizer Shell to Head Circumferential
B-B	B2.12	Pressurizer Shell to Head Longitudinal
B-B	B2.40	Steam Generator Tubesheet to Head Weld

II. CODE REQUIREMENTS

SQN U1 follows Inspection Program B requirements of IWA-2432 for scheduling of inspection intervals and inspection periods. IWA-2430 requires that inservice examinations and system pressure tests required by IWB, IWC, IWD, IWE and inservice examination and tests of IWF to be completed during each of the inspection intervals for the service lifetime of the plant.

Specific Code requirement for which relief is requested:

IWA-2430(d)(3) allows for the portion of an inspection period to be reduced or extended by as much as one year to enable an inspection to coincide with a plant outage.

III. PROPOSED ALTERNATIVE

Pursuant to 10 CFR 50.55a(a)(3)(i), the Tennessee Valley Authority (TVA) proposes an alternative to the requirement of IWA-2430(d)(3) that the inspection period may only be extended/reduced by a maximum of one year. TVA proposes the first inspection period of the third inspection interval be extended by a total of 16.5 months, the Code allowed one year plus an additional 4.5 months, in order to complete scheduled examinations in Examination Category B-B. In addition, the second period was scheduled for only three years instead of the four years stipulated by Table IWB-2412-1 in order to re-capture the one year extension used in a previous interval. This alternative will result in an additional decrease beyond the one year reduction of an additional 16.5 months. The third inspection period will be un-affected and the third Inspection Interval will end as originally scheduled on May 31, 2015.

This schedule will result in the first inspection period ending and the second inspection period starting in the SQN U1 cycle 17 outage for Examination Category B-B welds. Weld examinations for Examination Category B-B welds will be completed for both periods in the SQN U1 cycle 17 outage; however, these examinations will be for different components and no examination will be credited for both periods.

IV. BASIS FOR PROPOSED ALTERNATIVE

Background

SQN Units 1 and 2 are currently in their third inspection interval and are on concurrent intervals. The original third inspection interval and associated inspection period dates for SQN U1 are:

Third Interval:	June 1, 2006 to May 31, 2015
1st Period:	June 1, 2006 to May 31, 2009
2nd Period:	June 1, 2009 to May 31, 2012
3rd Period:	June 1, 2012 to May 31, 2015

The third 10-year inspection interval was reduced by one-year as allowed by IWA-2430(d)(1) in order to maintain the original pattern of intervals.

This request does not alter the third inspection interval start and end dates as described above and in SQN procedure 0-SI-DXI-000-114.3, "ASME Section XI ISI/NDE Progam Unit 1 and Unit 2." The inspection period dates would be revised to the following schedule for SQN U1, Examination Category B-B only:

Third Interval:	June 1, 2006 to May 31, 2015
1st Period:	June 1, 2006 to October 12, 2010
2nd Period:	October 13, 2010 to May 31, 2012
3rd Period:	June 1, 2012 to May 31, 2015

The sequence/dates for other Examination Categories are included in SQN procedure 0-SI-DXI-000-114.3 and will meet the provisions in Table IWB-2412-1 and IWA-2430. This alternative does not impact other requirements such as third party inspection required by ASME Section XI.

Justification of Alternative

Table IWB-2412-1 of the Code currently requires that inspection intervals be divided into three inspection periods of a duration of three years, four years, and three years, respectively, with allowable modifications as specified in IWA-2430. This proposed alternative does not go beyond the five years allowed by the Code for the second inspection period, four year period plus one-year extension. The first inspection period of SQN U1's third inspection interval for Examination Category B-B will be slightly over four and one-third years in length, well within the five years allowed as compared with an extended second inspection period.

A total of five welds are being examined under Examination Category B-B for the inspection interval under the proposed alternative schedule, these welds will be re-examined at approximately 10-years from their previous examination, as shown in the Table below.

Weld ID	Exam Cat/Item No.	2nd Interval Exam Date	3rd Interval Exam Schedule Date
PZR WP-1	B-B/B2.11	11/04/2001	10/2010 (2nd Period)
PZR WP-5	B-B/B2.11	04/01/2003	10/2013 (3rd Period)
PZR WP-6	B-B/B2.12	11/03/2001	10/2010 (2nd Period)
PZR WP-9	B-B/B2.12	04/01/2003	10/2013 (3rd Period)
SG RSGW-A2	B-B/B2.40	09/27/2002 (PSI)	10/2010 (1st period)

The second inspection interval examinations were performed with satisfactory results for each of the welds listed above. Note the Steam Generator (SG) PSI exam was performed due to steam generator replacement. The scheduled 3rd Interval SG exam will be performed on or before October 12, 2010.

Conclusion

In summary, the proposed alternative provides an equivalent level of quality and safety and does not deviate from the inspection interval schedule or the approximate 10-year elapsed time between examinations.

V. IMPLEMENTATION SCHEDULE

This relief request will be implemented during the third inspection interval for SQN U1 Examination Category B-B.