

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

James 'Randy' Douet
Site Vice President
Sequoyah Nuclear Plant

February 27, 2007

10 CFR 50.55a

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

Gentlemen:

In the Matter of)
Tennessee Valley Authority)

Docket No. 50-327

**SEQUOYAH NUCLEAR PLANT (SQN) UNIT 1 – COMMITMENT LETTER REGARDING
INSPECTION AND MITIGATION OF ALLOY 600/82/182 PRESSURIZER BUTT WELDS**

Reference: TVA letter to NRC dated January 31, 2007, "Sequoyah Nuclear Plant (SQN) Units 1 and 2 and Watts Bar Nuclear Plant (WBN) Unit 1 – Inspection and Mitigation of Alloy 600/82/182 Pressurizer Butt Welds"

In the reference letter, TVA provided commitments regarding actions taken or planned for inspecting or mitigating Alloy 600/82/182 pressurizer butt welds.

During a February 20, 2007, teleconference between representatives of the NRC and SQN site staff, NRC requested that the referenced submittal be superseded to include new commitments for SQN Unit 1. Accordingly, this letter is being provided to supersede the SQN Unit 1 information and commitments previously provided by TVA's January 31, 2007 letter.

Beginning on March 6, 2007, enhanced monitoring of the primary system leakage will commence for SQN Unit 1.

TVA will implement enhanced reactor coolant system (RCS) leakage monitoring for SQN Unit 1 as a temporary measure until all Alloy 600/82/182 butt weld locations on

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the pressurizer have been mitigated. The elements of an enhanced leakage monitoring program are provided below:

Perform daily (once per 24 hours) measurement of unidentified RCS leakage. Identification of unidentified RCS leakage rates equal to or greater than either of the following limits:

- A 0.1 gallon per minute (gpm) increase from one day to the next, sustained for 72 hours with at least 0.1 gpm not confirmed from sources other than the pressurizer nozzle welds.
- 0.25 gpm above the baseline sustained for 72 hours with at least 0.25 gpm not confirmed from sources other than the pressurizer nozzle welds.

Note: A baseline shall be established using RCS leakrate information collected during the first 7 days of Mode 1 full power operation after the most recent bare metal visual (BMV) examination of the pressurizer nozzle welds.

Unit Shutdown Action Level

Once the 72 hour sustained period is complete and leakrate is still elevated, place the unit in Mode 3 within 6 hours and Mode 5 within the next 36 hours and perform a BMV inspection of the unmitigated pressurizer surge, spray, safety- and relief-nozzle butt welds and safe-end butt welds containing Alloy 600/82/182 material.

The 72 hour sustained and subsequent shutdown time periods can be exited if the source of unidentified leakage can be shown to originate from a source other than the pressurizer or if a quantity of leakage can be assigned to a source other than the pressurizer and that quantity drops the unidentified RCS leakage below the appropriate threshold(s). If a post-shutdown inspection identifies a source of the unidentified RCS leakage to originate from a source other than the pressurizer, and when quantified reduces the unidentified leakage below the action levels, a pressurizer bare metal visual inspection will not be performed.

In addition to the enhanced leakage monitoring, TVA will implement the following reporting requirements:

- Report the inspection results of any unmitigated weld examinations within 60 days of unit restart.
- Report any corrective or mitigative actions taken within 60 days of unit restart.
- Report bare metal visual inspection results within 60 days of unit restart.

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TVA will notify NRC in writing before changes occur regarding the information contained in this letter. The commitments made by this letter are enclosed.

If there are any questions, please contact Glenn W. Morris at (423) 843-7170.

Sincerely,



Randy Douet
Site Vice President

Enclosure

cc (Enclosure):

U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303-8931

Mr. Brendan T. Moroney
Senior Project Manager
U.S. Nuclear Regulatory Commission
Mail Stop 08G-9a
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852-2739

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JRD:GWM:DVG:KTS

Enclosure

cc (Enclosure):

A. S. Bhatnagar, LP 6A-C
R. H. Bryan, BR 4X-C
L. S. Bryant, LP 6A-C
J. C. Fornicola, LP 6A-C
A. M. Hinson, EQB 2W-WBN
T. W. Johnson, SP 2B-C
K. R. Jones, OPS 4A-SQN
W. M. Justice, LP 4G-C
D. A. Kulisek, POB 2B-SQN
M. J. Lorek, MOB 2R-WBN
G. W. Morris, OPS 4C-SQN
W. J. Pierce, LP 4H-C
K. W. Singer, LP 6A-C
M. D. Skaggs, ADM 1V-WBN
J. D. Smith, ADM 1L-WBN
P. D. Swafford, LP 6A-C
E. J. Vigluicci, WT 6A-K
K. W. Whittenburg, SP 2B-C
EDMS, WT CA-K (L44 070131 007)

ENCLOSURE

LIST OF COMMITMENTS

1. TVA will complete mitigation of the SQN Unit 1 pressurizer butt welds by the end of Unit 1 Cycle 15 refueling outage (scheduled for fall 2007).
2. TVA will implement the following elements of an enhanced reactor coolant system (RCS) leakage monitoring program by March 6, 2007.

Perform daily (once per 24 hours) measurement of unidentified RCS leakage.

Identification of unidentified leakage rates equal to or greater than either of the following limits:

- A 0.1 gallon per minute (gpm) increase from one day to the next, sustained for 72 hours with at least 0.1 gpm not confirmed from sources other than the pressurizer nozzle welds.
- 0.25 gpm above the baseline sustained for 72 hours with at least 0.25 gpm not confirmed from sources other than the pressurizer nozzle welds.

Note: A baseline should be established using RCS leakrate information collected during the first 7 days of Mode 1 full power operation after the most recent bare metal visual (BMV) examination of the pressurizer nozzle welds.

Unit Shutdown Action Level

Once the 72 hour sustained period is complete and leak rate is still elevated, place the unit in Mode 3 within 6 hours and Mode 5 within the next 36 hours and perform a BMV inspection of the unmitigated pressurizer surge, spray, safety, and relief-nozzle butt welds, and safe-end butt welds containing Alloy 600/82/182 material.

The 72 hour sustained and subsequent shutdown time periods can be exited if the source of unidentified leakage can be shown to originate from a source other than the pressurizer or if a quantity of leakage can be assigned to a source other than the pressurizer and that quantity drops the unidentified RCS leakage below the appropriate threshold(s). If a post-shutdown inspection identifies a source of the unidentified RCS leakage to originate from a source other than the pressurizer, and when quantified reduces the unidentified leakage below the action levels, a pressurizer BMV inspection will not be performed.

ENCLOSURE

LIST OF COMMITMENTS (Continued)

3. The following reports will be provided to NRC:

- Report the inspection results of any unmitigated weld examinations within 60 days of unit restart.
- Report any corrective or mitigative actions taken within 60 days of unit restart.
- Report BMV inspection results within 60 days of unit restart.