

October 22, 2003

10 CFR 50.55a

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Stop: OWFN, P1-35  
Washington, D.C. 20555-0001

Gentlemen:

In the Matter of                         )  
Tennessee Valley Authority         )

Docket No. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT 1 - AMERICAN SOCIETY OF  
MECHANICAL ENGINEERS (ASME) SECTION XI SYSTEM PRESSURE TEST  
(SPT) PROGRAM - NOTIFICATION OF CODE UPDATE FOR THE REMAINDER  
(THIRD PERIOD) OF THE FIRST TEN-YEAR INSPECTION INTERVAL

Subject to NRC approval, 10 CFR 50.55a(g)(4)(iv) permits the use of portions of subsequent editions and addenda of ASME Section XI Code which have been incorporated by reference in 10 CFR 50.55a(b), for inservice examination of components and system pressure tests. In accordance with those provisions, TVA is adopting applicable portions of a later ASME Code, the 1995 Edition through the 1996 Addenda of ASME Section XI, for the BFN Unit 1 System Pressure Test (SPT) Program, and requests NRC approval of this change. This request applies for the remainder of the BFN Unit 1 first Ten-Year Inspection Interval.

TVA requests approval of the Code update to make the BFN Unit 1 SPT Program consistent with the BFN Unit 2 SPT Program. TVA adopted the 1995 Edition through the 1996 Addenda of ASME Section XI for the BFN Unit 2 SPT Program in its February 5, 2001 update of the Unit 2 Inservice Inspection and SPT Program for the third Ten-year inspection interval. BFN Unit 1 is currently shut down, and in the third period of its first Ten-year inspection interval, which ends one year following restart of the unit.

TVA has decided not to credit any BFN Unit 1 SPTs completed to date during the current inspection period. All subsequent Third Period SPTs will be conducted per the 1995 Edition through the 1996 Addenda with the additional hold time

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requirements adopted for BFN Unit 2, and described in the February 5, 2001 Unit 2 Program update. These additional hold times, being applied to Unit 1, are quoted from the Unit 2 program:

"In addition to the requirements prescribed in the ASME Boiler and Pressure Vessel Code, 1995 Edition through the 1996 Addenda, BFN will institute additional test condition holding time provisions similar to those described in IWA-5213 of the 1989 Edition of the Code and clarified as follows. Section IWA-5211 and Table IWA-5210-1 of the 1989 Edition provided test descriptions and cross-referenced Code Class test requirements. BFN will use those general definitions and that logic to implement the additional test condition holding time provisions.

For the purposes of these additional hold time provisions the system leakage test as described in IWA-5211(a) 1995 Edition/1996 Addendum will be broken into categories as described in IWA-5211(a), (b), and (c) and IWA-5213(a), (b), and (c) of the 1989 Edition. These hold time requirements are from the 1989 Edition and will be in addition to the 1995 Edition/1996 Addendum Code requirements.

Class 1 system leakage tests will follow IWA-5213(a).

Class 2 system leakage tests for standby systems will follow IWA-5213(b).

Class 2 system leakage tests for in service systems will follow IWA-5213(c).

Class 3 system leakage tests for standby systems will follow IWA-5213(b).

Class 3 system leakage tests for in service systems will follow IWA-5213(c).

Note: System hydrostatic and pneumatic test hold time requirements are almost identical in both subject editions of the Code. System hydrostatic and

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pneumatic tests will follow the requirements of the 1995 Edition/1996 Addendum of the Code."

The first Ten-Year Inspection Interval for BFN Unit 1 is currently in its Third Period and will end one year following restart of the unit. The ASME Code Section XI currently in effect for the BFN Unit 1 SPT Program is the 1974 Edition, Summer 1975 Addenda, with portions of the 1980 Edition, Winter 1981 Addenda. This change to the later Code for the SPT Program will bring the program into general agreement with the Unit 1 Inservice Inspection (ISI) and Repair/Replacement programs which have already been updated to the 1995 Edition through the 1996 Addenda of the ASME Code Section XI. This change should simplify NRC's administrative functions concerning BFN Unit 1, and provide consistency in the application of ASME Code Section XI requirements.

The following list identifies approved Code Cases and Requests for Relief (RFRs) affecting the Unit 1 SPT Program that will remain in effect for the remainder of this current Interval for BFN Unit 1:

Code Cases:

N-416-1  
N-416-2  
N-437  
N-479  
N-495  
N-498-1  
N-498-4  
N-522  
N-566-1

Requests For Relief (RFR):

H-3           (Approved February 14, 1989)  
H-12          (Approved February 14, 1989)  
H-13          (Approved September 19, 1989)

With the adoption of the 1995 Edition/1996 Addenda of Section XI, Code Cases N-437, N-479, and N-495, and RFRs H-3, H-12, and H-13 become obsolete and unnecessary since they address either hydrostatic testing at elevated pressures or other pressure testing details that have been incorporated into the 1995 Edition/1996 Addenda. Under the later Code, the

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hydrostatic tests at elevated pressures have been replaced with inservice leakage tests at system nominal operating pressures. However, for accountability purposes, the obsolete RFRs and Code Cases will remain in the BFN Unit 1 SPT Program since they are applicable to the First and Second Periods of the First Interval.

By letter dated September 26, 2003, TVA requested that NRC approve its adoption of a later edition of the ASME Code, Section XI for qualification of VT-2 (visual) examination personnel. Specifically, TVA is adopting the 1998 Edition of the ASME Section XI Code, Subarticle IWA-2316, for observation of leakage during system leakage and hydrostatic tests for BFN Units 1, 2, and 3. Subject to NRC approval, TVA will adopt these alternative VT-2 qualification requirements for personnel performing system leakage and hydrostatic test examinations for BFN Unit 1. A detailed pressure testing schedule for BFN Unit 1 has not yet been developed.

TVA requests NRC review and approval of this code change by April 22, 2004, to support continuing BFN Unit 1 restart activities. Additional Unit 1 requests for relief may be forthcoming as our evaluation of the BFN Unit 1 SPT Program continues, and to bring the BFN Unit 1 SPT program into closer alignment with the BFN Unit 2 SPT Program.

There are no new commitments contained in this letter. If you have any questions, please contact me at (256) 729-2636.

Sincerely,

Original signed by:

T. E. Abney  
Manager of Licensing  
and Industry Affairs

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DTL:MJB:BAB

cc: A. S. Bhatnagar, PAB 1E-BFN  
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R. G. Jones, NAB 1A-BFN  
J. E. Maddox, LP 6A-C  
R. F. Marks, PAB 1C-BFN  
D. C. Olcsvary, LP 6A-C  
J. R. Rupert, NAB 1A-BFN  
K. W. Singer, LP 6A-C  
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