

December 22, 2004

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) Docket No. 50-296
Tennessee Valley Authority)

**BROWNS FERRY NUCLEAR PLANT (BFN) - UNIT 3 - AMERICAN SOCIETY OF
MECHANICAL ENGINEERS (ASME) SECTION XI, SYSTEM PRESSURE TEST
PROGRAM - SUBMITTAL OF THIRD TEN-YEAR INTERVAL PROGRAM**

This letter submits the Third Ten-Year inspection interval System Pressure Test (SPT) Program for Unit 3 of the Browns Ferry Nuclear Plant. The Code of record for the Third Ten-Year Interval SPT Program is the 2001 Edition, 2003 Addenda of the ASME Boiler and Pressure Vessel Code, Section XI. The Third Ten-Year interval commences on November 19, 2005.

The applicable regulation, 10 CFR 50.55a(g), System Pressure Tests for ASME Code Class 1, 2, and 3 components of a water-cooled nuclear facility meet the requirements of ASME Section XI. In addition, 10 CFR 50.55a(g)(4)(ii) requires that the SPT Program be updated every 10 years to the latest NRC approved Edition and Addenda of Section XI, which is in effect 12 months prior to the start of the next 120-month inspection interval. The enclosed program update satisfies that requirement.

U.S. Nuclear Regulatory Commission
Page 2
December 22, 2004

The enclosure to this letter contains the updated BFN Unit 3 ASME Section XI SPT Program which conforms to the 2001 Edition, 2003 Addenda of the ASME Section XI Code. TVA has determined that there are no requests for relief required for the BFN Unit 3, Third Ten-Year interval SPT Program at this time.

TVA plans to submit the BFN Unit 3 Inservice Inspection Program for the Third Ten-Year Inspection Interval in separate correspondence at a later date.

There are no new regulatory commitments 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

cc: See Page 3

U.S. Nuclear Regulatory Commission
Page 3
December 22, 2004

cc (Via NRC Electronic Distribution)
Mr. Stephen J. Cahill, Branch Chief
U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303-8931

NRC Resident Inspector
Browns Ferry Nuclear Plant
10833 Shaw Road
Athens, Alabama 35611-6970

Ms. Eva A. Brown, Project Manager
U.S. Nuclear Regulatory Commission
One White Flint, North
(MS 08G9)
11555 Rockville Pike
Rockville, Maryland 20852-2739

Ms. Margaret Chernoff, Project Manager
U.S. Nuclear Regulatory Commission
One White Flint, North
(MS 08G9)
11555 Rockville Pike
Rockville, Maryland 20852-2739

U.S. Nuclear Regulatory Commission
Page 4
December 22, 2004

JWD:BAB

Enclosure

Cc (Enclosure):

A. S. Bhatnagar, LP 6A-C
Samuel Flood, PMB 2A-BFN
J. C. Fornicola, LP 6A-C
D. F. Helms, BR 4T-C
R. F. Marks, PAB 1C-BFN
R. G. Jones, NAB 1A-BFN
K. L. Krueger, POB 2C-BFN
J. R. Rupert, NAB 1A-BFN
K. W. Singer, LP 6A-C
M. D. Skaggs, PAB 1E-BFN
E. J. Vigluicci, ET 11A-K
NSRB Support, LP 5M-C
EDMS WT CA-K

S:\lic\submit\subs\BFN Unit 3 ASME Sec XI Third Interval SPT program.doc

ENCLOSURE

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNIT 3
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) ,
THIRD TEN-YEAR INSPECTION INTERVAL

SUBMITTAL OF SYSTEM PRESSURE TEST (SPT) PROGRAM

(SEE ATTACHED)

**SYSTEM PRESSURE TEST PROGRAM
FOR THE THIRD 10-YEAR INTERVAL**

**BROWNS FERRY NUCLEAR PLANT
UNIT 3**

INSERVICE PRESSURE TEST PROGRAM

Owner : Tennessee Valley Authority

Address of Corporate Office : Knoxville Office Complex
400 Commerce Avenue
Knoxville, Tennessee 37902

Name and Address of
Nuclear Power Plant : Browns Ferry Nuclear Plant
Post Office Box 2000
Decatur, Alabama 35609-2000

Applicable Nuclear Units : Browns Ferry Nuclear Plant
Unit 3

Commercial Operation Date : March 1, 1977

TABLE OF CONTENTS

- 1.0 STATEMENT OF APPLICABILITY
- 2.0 PURPOSE
- 3.0 INSPECTION INTERVAL AND INSPECTION PERIODS
- 4.0 CODE OF RECORD
- 5.0 REQUESTS FOR RELIEF
- 6.0 TENTATIVE SYSTEM PRESSURE TEST SCHEDULE

1.0 STATEMENT OF APPLICABILITY

This program outlines the requirements for performing American Society of Mechanical Engineers (ASME), Boiler and Pressure Vessel Code, Section XI system pressure tests during the third 10-year inspection interval for Browns Ferry Nuclear Plant (BFN) Unit 3 systems which are classified ASME Code Class 1, 2 or 3 or equivalent, and contain water, steam or radioactive waste (other than radioactive waste management system).

Pressure tests will be performed in accordance with the ASME Section XI editions, addenda, and cases, NRC approved requests for relief and additional provisions specified below or provisions approved by the NRC at a later date. Details concerning performance of system pressure tests are not part of this program description, but are contained in plant surveillance instructions. Performance of pressure tests required because of Repair/Replacement activities will be prescribed and controlled by the work documents performing the Repair/Replacement work. Pressure testing of Class MC components, following Repair/Replacement work, will be performed under 10 CFR 50, Appendix J as prescribed in Section IWE.

The requirements of this program are applicable during the third 10-year inspection interval which begins on November 19, 2005.

2.0 PURPOSE

This program is designed to meet the requirements of Section XI of the ASME Boiler and Pressure Vessel Code which pertain to the inservice pressure testing of pressure retaining code class 1, 2 and 3 components, and pressure testing required following Repair/Replacement activities, at BFN during the third 10-year inspection interval. Compliance with Section XI of the ASME Boiler and Pressure Vessel Code is required by Part 50 of Title 10 of the Code of Federal Regulations.

3.0 INSPECTION INTERVAL AND INSPECTION PERIODS

The third 10-year inspection interval for BFN Unit 3 begins on November 19, 2005. The third 10-year inspection interval will end in November, 2015, and will be divided into three inspection periods, three years, four years and three years respectively. The dates of the three inspection periods are:

First inspection period	-	November 19, 2005 to November 18, 2008
Second inspection period	-	November 19, 2008 to November 18, 2012
Third inspection period	-	November 19, 2012 to November 18, 2015

4.0 CODES OF RECORD

4.1 PRIMARY CODE EDITION

This inservice system pressure test program is prepared to meet the requirements of Section XI of the ASME Boiler and Pressure Vessel Code, 2001 Edition, 2003 Addenda.

4.2 ADOPTED PORTIONS OF LATER EDITIONS AND ADDENDA

None.

4.3 ADOPTED ASME SECTION XI CODE CASES (as approved by NRC Regulatory Guide 1.147)

Code Case N-566-2 - Corrective Actions for Leakage Identified at bolted Connections – for systems containing boron for the purpose of controlling reactivity.

5.0 REQUESTS FOR RELIEF

None.

6.0 TENTATIVE SYSTEM PRESSURE TEST SCHEDULE

**TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN), UNIT 3**

SYSTEM DESCRIPTION	CODE CLASS	UNIT 3 FUEL CYCLE					
		12	13	14	15	16	17
Reactor Recirculation (Primary System)	1	L ¹	L ¹	L ¹	L ¹	L ^{1,4}	L ⁵
Small Bore Primary System Piping	2		L		L	L	
Main Steam System	2		L		L	L	
Fuel Pool Cooling	3		L		L	L	
Standby Liquid Control	2		L		L	L	
Core Spray	2		L	L ²		L	
Residual Heat Removal – Shutdown Cooling	2		L		L	L	
Residual Heat Removal – Injection Loops	2		L	L ²		L	
High Pressure Coolant Injection	2		L		L		L ³
Reactor Core Isolation Cooling	2		L		L		L ³
RHR Service Water	3		L	L ²		L	
Emergency Equipment Cooling Water	3		L		L		L ³

LEGEND: L - System leakage test {IWA-5211(a)}

Notes:

¹ – At the end of the cycle refueling outage, prior to startup

² - After 11/19/2008

³ - Before 11/18/2015

⁴ - All Class 1 pressure retaining components {IWB-5222(b)}

⁵ – U3C17 refueling outage will fall within the following 10 year interval

Note: Code references in this section are from the 2001 Edition/2003 Addenda.