

Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609-2000

August 17, 2001

10 CFR 50.55a(g)(4)(iv)

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk 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, DIVISION 1, INSERVICE INSPECTION PROGRAM - REQUEST APPROVAL TO UPDATE TO THE 1995 EDITION, 1996 ADDENDA FOR NONDESTRUCTIVE EXAMINATION OF CODE CLASS 1, 2, AND 3 WELDED ATTACHMENTS FOR VESSELS, PIPING, PUMPS, AND VALVES, EXAMINATION CATEGORIES B-K, C-C, AND D-A (TAC NO. MB2586)

This letter is to request NRC staff approval for TVA to update the BFN Unit 3 Inservice Inspection (ISI) Program for Code Class 1, 2, and 3 welded attachments for vessels, piping, pumps, and valves, to the selection and examination requirements of the 1995 Edition, 1996 Addenda of Section XI of the ASME Boiler and pressure Vessel Code.

BFN Unit 3 is currently in the second inspection period of the second ten-year ASME Section XI ISI interval. The current BFN Unit 3 Code of Record for the ISI Program is the 1989 Edition, no addenda, of ASME Section XI. BFN Unit 3 was granted NRC approval, by NRC letter dated February 11, 2000, to use the BFN Risk-Informed Inservice Inspection (RI-ISI) Program as an acceptable alternative to the existing ASME Section XI requirements for scope and frequency of piping weld inspections for the second and third inspection periods of this interval. The current BFN Unit 2 ISI program (third interval) is based on the 1995 Edition, 1996 Addenda, of ASME Section XI and utilizes a similar RI-ISI program.

A047

U.S. Nuclear Regulatory Commission Page 2
August 17, 2001

The 1989 Edition, of ASME Section XI for the examination of Class 1 Integral Welded Attachments, Article IWB-2000, "Examination and Inspection," Table IWB-2500-1, Examination Category B-H, "Integral Attachments for Vessels," Item No. B8.30, and B-K-1 "Integral Attachments for Piping, Pumps, and Valves," Item Nos. B10.10, B10.20, and B10.30, requires a volumetric or surface examination, as applicable, of integrally welded attachments. The required examinations are limited to only those integrally welded attachments that meet the qualifying factors of Table IWB-2500-1, Examination Categories B-H and B-K-1, and applicable notes.

The examination of Class 2 Integral Welded Attachments, Article IWC-2000, "Examination and Inspection," Table IWC-2500-1, Examination Category C-C, "Integral Attachments for Vessels, Piping, Pumps, and Valves," Item Nos. C3.10, C3.20, C3.30, and C3.40, requires a surface examination of integrally welded attachments. The required examinations are limited to only those integrally welded attachments that meet the qualifying factors of Table IWC-2500-1, Examination Category C-C, and applicable notes.

The examination of Class 3 Integral Welded Attachments, Article IWD-2000, "Examination and Inspection," Table IWD-2500-1, Examination Category D-A, "Systems in Support of Reactor Shutdown," Examination Categories D-B, "Systems In Support of Emergency Core Cooling, Containment Heat Removal, Atmosphere Cleanup, and Reactor Residual Heat Removal;" and D-C "Systems In Support of Residual Heat Removal From Spent Fuel Storage Pool," requires a visual VT-3 examination of integrally welded attachments. The visual VT-3 examinations are limited to only those integrally welded attachments that meet the qualifying factors of Table IWD-2500-1, Examination Categories D-A, D-B, and D-C and applicable notes.

TVA is requesting approval, pursuant to 10 CFR 50.55a(g)(4)(iv), to update during the second and third periods of the second ten-year ISI interval of the BFN Unit 3 Inservice Inspection Program for Code Class 1, 2, and 3 welded attachments for vessels, piping, pumps, and valves, to the 1995 Edition, 1996 Addenda of ASME Section XI for the selection and examination requirements by adopting the following from the 1995 Edition, 1996 addenda of the Code:

U.S. Nuclear Regulatory Commission Page 3 August 17, 2001

- Article IWB-2000, "Examination and Inspection," Table IWB-2500-1, Examination Category B-K, "Welded Attachments for Vessels, Piping, Pumps, and Valves"
- Article IWC-2000, "Examination and Inspection," Table IWC-2500-1, Examination Category C-C, "Welded Attachments for Vessels, Piping, Pumps and Valves," and
- Article IWD-2000, "Examination and Inspection," Table IWD-2500-1, Examination Category, D-A, "Welded Attachments for Vessels, Piping, Pumps and Valves."

All portions of each examination category, including notes, will be utilized. TVA is also currently updating ASME Section XI nondestructive examination procedures, personnel qualifications, and evaluation of examination results to the requirements of the 1995 Edition, 1996 Addenda (excluding Subsections IWE and IWL) for all TVA nuclear units. TVA provided notification of these pending actions to the NRC staff by letter dated August 10, 2001.

BFN Unit 3 component supports (excluding snubbers) are selected for examination in accordance with Code Case N-491. TVA will continue to utilize Code Case N-491 for the remainder of the second ten-year inspection interval.

TVA had intended to use the requirements of ASME Code Case N-509, "Alternative Rules for the Selection and Examination of Class 1, 2, and 3 Integrally Welded Attachments" rather than update to a later edition of the Code. Code Case N-509, which was approved for use in Regulatory Guide 1.147, Revision 12, reduces the number of integrally welded attachments requiring examination, and provides a more efficient use of manpower and reduces radiation exposure to examination personnel. However, Code Case N-509 was incorporated into the 1995 Edition, 1996 addenda of the ASME Section XI Code and subsequently expired on May 20, 2001.

The 1995 Edition, 1996 Addenda, of ASME Section XI has been incorporated by reference in 10 CFR 50.55a. The 1995 Edition, 1996 Addenda, of Section XI reduces the number of piping welded attachments requiring examination. Also, this addenda states that the "examination of surface areas may be limited to the portions of these areas that are accessible

U.S. Nuclear Regulatory Commission Page 4 August 17, 2001

without removal of support members." This criteria will provide a more efficient use of manpower by eliminating the labor intensive requirement of clamp removal to increase the examination coverage by an insignificant amount. This will reduce radiation exposure to craft and examination personnel. TVA considers the alternative examination requirements of the 1995 Edition, 1996 Addenda, of ASME Section XI, to provide an acceptable level of quality and safety.

TVA will implement the 1995 Edition, 1996 Addenda, of ASME Section XI requirements, for the Code articles described above, in accordance with 10 CFR 50.55a(g)(4)(iv). TVA is requesting approval of this request by October 1, 2001, to support preplanning for the BFN Unit 3, Cycle 10 refueling outage (Spring 2002) and pre-outage examinations scheduled to begin in January 2002.

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

Simcerely

Manager of Licensing and Industry Affairs

cc: See Page 5

U.S. Nuclear Regulatory Commission
Page 5
August 17, 2001

cc:

(Via NRC Electronic Distribution):
 Mr. Paul E. Fredrickson, Branch Chief
 U.S. Nuclear Regulatory Commission
 Region II
 Sam Nunn Atlanta Federal Center
 61 Forsyth Street, S.W., Suite 23T85
 Atlanta, Georgia 30303-8931

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

Mr. Kahtan N. Jabbour, Senior Project Manager U.S. Nuclear Regulatory Commission One White Flint, North 11555 Rockville Pike Rockville, Maryland 20852-2739