



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

August 31, 2007

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. 50-259
Tennessee Valley Authority)

BROWNS FERRY NUCLEAR PLANT (BFN) - UNIT 1 - AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) SECTION XI, INSERVICE INSPECTION, SYSTEM PRESSURE TEST, CONTAINMENT INSPECTION (IWE), AND REPAIR AND REPLACEMENT PROGRAMS - SUMMARY REPORTS (NIS-1 AND NIS-2) FOR CYCLES 6 AND 6R OPERATION

In accordance with paragraphs IWA-6220, IWA-6230, and IWA-6240 of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, TVA is submitting BFN Unit 1 outage summary reports for NRC review. The summary reports are for Inservice Inspection, System Pressure Test, (NIS-1 Report), and Repair and Replacement activities (NIS-2 Report) for Unit 1 Cycle 6 operation. Also included, in accordance with 10 CFR 50.55a, are areas of containment where indications were noted and subsequently evaluated for degradation.

The Cycle 6 refueling outage is the last outage in the third period of the first Inservice Inspection Interval. The first Inservice Inspection Interval was suspended from 1984 until startup on June 2, 2007, due to an extended shutdown and subsequent recovery effort. These outage summary reports (NIS-1 and NIS-2) contain the results of Cycle 6, the refueling outage in effect at the time of the Unit 1 extended shutdown, and Cycle 6R, the Unit 1 recovery

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effort. The first Inservice Inspection interval has been extended to June 2, 2008, in accordance with ASME Section XI, Subarticle IWA-2430(d).

The ASME Section XI Code of record for the BFN Unit 1 Cycle 6 refueling outage is the 1974 Edition with Addenda through Summer of 1975. The ASME Section XI Code of record for Cycle 6R is the 1995 Edition with 1996 Addenda, as amended by 10 CFR 50.55a "Mandatory Limitations and Modifications." ASME Section XI Code, Inservice examination, component selection remained in accordance with the 1974 Edition with Addenda through Summer of 1975.

TVA has determined that certain BFN Unit 1 components had nondestructive examination (NDE) coverage limitations (less than 90 percent coverage completed) which exceed that specified in NRC Information Notice 98-42, "Implementation of 10 CFR 50.55a(g) Inservice Inspection Requirements."

Specifically, three Reactor Pressure Vessel (RPV) longitudinal shell welds received ultrasonic examination (UT) coverage of less than essentially 100 percent (i.e., less than 90 percent). Also, 39 piping welds received UT coverage less than essentially 100 percent. In addition, 19 RPV nozzle-to-vessel welds and one RPV weld repair received UT examination coverage less than essentially 100 percent. These examination limitations will be addressed by TVA in requests for relief and submitted to NRC for staff review and approval at a later date.

Enclosure 1 of this letter contains the BFN Unit 1 Inservice Inspection, System Pressure Test, and Containment Inspection Summary Report (NIS-1) for Code Class 1 and 2 pressure retaining components and their supports. Enclosure 2 contains the Repair and Replacement Summary Report (NIS-2) for Code Class 1 and 2 components and supports.

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

Sincerely,

A handwritten signature in black ink, appearing to read "D. T. Langley". The signature is written in a cursive, flowing style with a large, prominent initial "D".

D. T. Langley
Manager of Licensing
and Industry Affairs

Enclosures
cc (see page 4)

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Enclosures

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JEE:JWD:BAB

Enclosures

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