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 Nos. 50-260 Tennessee Valley Authority) 50-296

BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 2 AND 3 - NOTIFICATION OF INTENT TO PERFORM EVALUATIONS USING VENDOR SAFETY ANALYSES CODES

As requested in Generic Letter (GL) 83-11, Supplement 1, "Licensee Qualification for Performing Safety Analyses," TVA is notifying the NRC of our intent to perform safety analyses using NRC-approved methods supplied by Framatome. Specifically, TVA intends to begin performing cold shutdown margin evaluations for BFN Units 2 and 3 using the methodology from EMF-2158(P)(A), "Siemens Power Corporation Methodology for Boiling Water Reactors: Evaluation and Validation of CASMO-4/MICROBURN-B2." TVA has reviewed the guidelines provided in GL 83-11, Supplement 1, for licensee use of vendor methods and has implemented the guidelines as described in the Enclosure to this letter.

GL 83-11, Supplement 1 establishes a three-month guideline for prior NRC notification of the use of applicable safety evaluation processes. TVA intends to begin performing cold shutdown margin evaluations commencing with BFN Unit 3 Cycle 13, currently scheduled to begin operation in March 2006; thus this guideline is satisfied.

U.S. Nuclear Regulatory Commission Page 2 August 30, 2005

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

Sincerely,

Original Signed by:

William D. Crouch
Manager of Licensing
and Industry Affairs

Enclosure
Compliance with Generic Letter 83-11, Supplement 1

Enclosure

cc: (Enclosure)

(Via NRC Electronic Distribution)
 U.S. Nuclear Regulatory Commission
 Region II
 Sam Nunn Atlanta Federal Center
 61 Forsyth Street, SW, Suite 23T85
 Atlanta, Georgia 30303-3415

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

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

U.S. Nuclear Regulatory Commission Page 3 August 30, 2005

BCM:BAB Enclosure

Cc (Enclosure):

- B. M. Aukland, POB 2C-BFN
- A. S. Bhatnagar, LP 6A-C
- J. C. Fornicola, LP 6A-C
- R. G. Jones, NAB 1A-BFN
- R. F. Marks, PAB 1C-BFN
- G. W. Morris, BR 4X-C
- N. M. Moon, LP 6A-C
- B. J. O'Grady, PAB 1E-BFN
- J. R. Rupert, NAB 1A-BFN
- K. W. Singer, LP 6A-C
- E. J. Vigluicci, ET 11A-K

NSRB Support, LP 5M-C

EDMS WT CA - K

s:lic/submit/Notification of Intent to Perform Analyses Using Vendor Safety Analyses Codes

Enclosure

Browns Ferry Nuclear Plant (BFN) Units 2 and 3

Notification of Intent to Perform Evaluations Using Vendor Approved Safety Analyses Codes

Compliance with Generic Letter 83-11, Supplement 1

Eligibility

The CASMO-4/MICROBURN-B2 code system and associated methodologies were approved by the NRC in the Safety Evaluation Report (SER) dated October 18, 1999, for topical report EMF-2158(P)(A), "Siemens Power Corporation Methodology for Boiling Water Reactors: Evaluation and Validation of CASMO-4/MICROBURN-B2." Framatome has been using these methods for the reload design and licensing analysis activities for BFN Units 2 and 3 beginning with Unit 3, Cycle 12 operations in March 2004. TVA intends to use the portion of the methodology applicable to cold shutdown margin (CSDM) as approved by the NRC, observing all applicable SER restrictions. No changes to the methodology or applications as approved by the NRC will be made. TVA will first use the CSDM methods for in-house calculations for the upcoming BFN Unit 3 refueling outage in Spring 2006.

Application Procedures

TVA has generated a procedure for use in CSDM analyses that provides sufficiently detailed instructions on performing the calculations for both refueling shuffle and design cycle core configurations in a manner consistent with the aforementioned NRC-approved methodology.

Training and Qualification of Licensee Personnel

Framatome provided formal training to selected TVA Nuclear Fuel employees. The qualification of TVA personnel will be maintained on a task-specific basis.

Comparison Calculations

TVA performed benchmarking calculations for all CSDM calculations included in the scope of this notification.

These benchmarking calculations were based on BFN Unit 2, Cycle 14. Analysis results were obtained from Framatome and independent calculations were performed by TVA. The comparisons of the results, which were documented in a calculation file in accordance with our quality program, demonstrate TVA's ability to use the software for this purpose.

Quality Assurance and Change Control

Framatome provides quality assurance and change control for CASMO-4/MICROBURN-B2 using a formal software development record. Once received, software is installed and controlled accordance with TVA software quality assurance procedures.

Our software quality assurance program is in compliance with the 10 CFR 50, Appendix B requirements. As part of this program, Framatome is obliged to notify TVA of any software errors. Error corrections or code upgrades are provided to TVA along with applicable documentation, and these software upgrades are evaluated under TVA's software control procedures and implemented as appropriate prior to use. TVA will likewise report any TVA-identified errors to Framatome.

The CSDM evaluations performed with CASMO-4/MICROBURN-B2 will be conducted under the control of TVA's quality assurance program.