

May 24, 2006

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. 50-259
Tennessee Valley Authority)

**BROWNS FERRY NUCLEAR PLANT (BFN) - UNIT 1 - NOTIFICATION OF
INTENT TO PERFORM EVALUATIONS USING VENDOR SAFETY ANALYSES CODES**

As specified in Generic Letter (GL) 83-11, Supplement 1, "Licensee Qualification for Performing Safety Analyses," dated June 24, 1999; TVA is notifying the NRC of our intent to perform safety analyses using computer codes supplied by Global Nuclear Fuel. Specifically, TVA intends to begin performing cold shutdown margin evaluations for BFN Unit 1 using methodology from NEDE-24011-P-A-15, "General Electric Standard Application for Reactor Fuel." 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 analyses for BFN Unit 1, which is scheduled to resume operation in Spring 2007. Thus, this guideline is satisfied.

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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

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Enclosure

cc: (Enclosure)

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BCM:BAB

Enclosure

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s:lic/submit/Unit 1 - Notification of Intent to Perform Analyses Using Vendor Safety Analyses
Codes

Enclosure

Browns Ferry Nuclear Plant (BFN) Unit 1

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

Compliance with Generic Letter 83-11, Supplement 1

Eligibility

The Global Nuclear Fuel (GNF) PANAC11 core analysis code system and associated methodologies were approved in November 1999 (ADAMS Accession No. ML993230184) by the NRC as part of Item 2 of Amendment 26 to NEDE-24011-P-A-15, "General Electric Standard Application for Reactor Fuel." TVA intends to use the portion of the methodology applicable to cold shutdown margin (CSDM) calculations as approved by the NRC, observing all applicable SER restrictions. No changes to the methodology or applications will be made. TVA will first use the CSDM methods for in-house calculations for BFN Unit 1 Cycle 7 activities. Unit 1 Cycle 7 is scheduled to begin in Spring 2007.

Application Procedures

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

Training and Qualification of Licensee Personnel

Formal training from GNF serves as the method of qualifying TVA Nuclear Fuel employees in the use of the methods. The qualification of personnel will be maintained on a task-specific basis.

Comparison Calculations

TVA performed benchmarking calculations for the CSDM calculations included in the scope of this notification. These benchmarking calculations were based on BFN Unit 1, Cycle 7 fuel design. Analysis results were obtained from

GNF for the reference core loading pattern and independent calculations were performed by TVA. The comparisons of the results, which are documented in a calculation file in accordance with our quality assurance program practices, demonstrate TVA's ability to use the computer codes for this purpose.

Quality Assurance and Change Control

GNF provides quality assurance and change control for the PANAC11 code using a formal software development record. Once received, software is installed and controlled accordance with TVA software quality assurance procedures.

TVA's software quality assurance program is in compliance with the 10 CFR 50, Appendix B requirements. Also, as part of this program, GNF 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. TVA will likewise report any TVA identified errors to GNF.

The CSDM evaluations performed with PANAC11 will be conducted under the control of TVA's quality assurance program.