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

June 16, 2008

TVA-BFN-TS-418
TVA-BFN-TS-431

10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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Washington, D. C. 20555-0001

Gentlemen:

In the Matter of	)	Docket Nos. 50-259
Tennessee Valley Authority	)	50-260
		50-296

BROWNS FERRY NUCLEAR PLANT (BFN) – UNITS 1, 2, AND 3 - TECHNICAL SPECIFICATIONS (TS) CHANGES TS-431 AND TS-418 – EXTENDED POWER UPRATE (EPU) – SCHEDULE REGARDING EPU (TAC NOS. MD5262, MD5263, AND MD5264)

By letters dated June 28, 2004 and June 25, 2004 (ADAMS Accession Nos. ML041840109 and ML041840301), TVA submitted license amendment applications to the NRC for the EPU of BFN Unit 1 and BFN Units 2 and 3, respectively. The proposed amendments would change the operating licenses to increase the maximum authorized core thermal power level of each reactor by approximately 14 percent to 3952 megawatts.

The principal unresolved issue remaining for BFN EPU approval is the analyses regarding the structural integrity of the steam dryers at EPU conditions. TVA has met with the NRC staff several times recently to discuss the schedule for providing the remaining information required for approval of EPU for BFN Units 1, 2, and 3. As discussed in these meetings on November 30, 2007, December 10, 2007, January 25, 2008, March 20, 2008, and April 17, 2008, and provided in our letters dated December 14, 2007 (ML073510180) and February 11, 2008 (ML080430700), TVA has requested approval of EPU in time to support the next Unit 1 refueling outage scheduled for October 2008. Based on the ongoing resolution of issues associated with the steam dryer analyses, NRC notified TVA by letter dated May 2, 2008 (ML080500171), that the review for BFN EPU is estimated to be completed by December 2008.

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NRR

As outlined in the February 11, 2008, submittal, TVA planned to submit the completed Unit 3 steam dryer stress analysis by June 16, 2008. This analysis depended upon obtaining main steam line (MSL) strain gage data at full power during the startup from the Spring 2008 refueling outage. TVA performed installation of the MSL strain gages during the outage and conducted the testing as planned during startup. However, due to an installation error, the MSL strain gages experienced a high rate of failure. The set of operable strain gages (10 of 64) that remained useable is not sufficient to define a Unit 3 specific dryer load using the Acoustic Circuit Model (ACM) needed for performance of the Unit 3 steam dryer analysis as committed. Since these strain gages are located in the drywell, necessary repairs will require a plant outage of sufficient duration to allow troubleshooting and replacement of the instrumentation. Currently, the next such outage is scheduled for Spring 2010. Accordingly, TVA will be unable to provide the Unit 3 steam dryer stress analyses by June 16, 2008.

The Unit 3 MSL strain gage data available from the operable gages has been examined and confirms that the acoustic vibration suppressors (AVS) installed during the outage on the blind flange standpipes in the main steam flow stream did, in fact, eliminate the 218 Hertz (Hz) tone that was previously identified. Additionally, the Unit 3 MSL strain gage data has been compared with similar strain gage data from Unit 1 and shows that the frequency response is similar with no additional areas of concern such as resonances. The available Unit 3 MSL strain gage data will be provided with the response to RAI Round 17 on June 16, 2008.

TVA has decided on several modifications which increase margin and reduce uncertainty to steam dryer integrity. Acoustic side branches (ASB) will be installed on the MSLs to preclude safety relief valve (SRV) resonance at increased power levels and modifications are being made to the dryers to increase fatigue margin to approximately 100% above the applicable ASME endurance limits. This decision was discussed with the NRC staff during the April 17, 2008 meeting.

TVA is currently developing plans to address the delay in completing the Unit 3 steam dryer stress analysis and minimize the schedule impact on EPU approval for all three BFN units. The finalized responses to RAI Round 17 along with revised Unit 1 and Unit 2 steam dryer stress analyses that provide acceptable results are currently planned to be submitted by June 16, 2008. Resolution of the remaining issues on the Units 1 and 2 steam dryer stress analyses will lead to an acceptable methodology and acceptance criteria that can be clearly applied to the future completion of the Unit 3 steam dryer stress analysis.

TVA proposes a near-term meeting with the NRC to discuss the plans for completing the Unit 3 steam dryer stress analysis and minimizing the schedule impact on EPU approval. TVA continues to strive to resolve the outstanding issues associated with EPU approval and support implementation of EPU on Unit 1 during 2008.

No new regulatory commitments are made in this submittal. If you have any questions regarding this letter, please contact me at (256)729-2636.

Sincerely,

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and Industry Affairs

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