



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

October 13, 2006

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

10 CFR 50.90

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 |) | 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) - NPSH REQUIREMENTS - PUMP VENDOR
REPORT (TAC NOS. MC3812, MC3743, AND MC3744)**

By letters dated June 28, 2004 and June 25, 2004 (ADAMS Accession Nos. ML041840109 and ML041840301, respectively), TVA submitted license applications to the NRC for the EPU of BFN Unit 1 and BFN Units 2 and 3, respectively. In support of those applications, this letter provides additional information regarding net positive suction head requirements for residual heat removal (RHR) and core spray (CS) pumps.

TVA has previously provided calculations and analyses of RHR and CS pump performance during accident and transient events under EPU conditions. The enclosed engineering report from the manufacturer of the RHR and CS pumps provides the basis for the NPSH requirements used in the calculations for the postulated events.

Enclosure 1 to this letter is the pump vendor report entitled "NPSH Transient Study." Enclosure 2 is an earlier draft version of the same report, which was discussed with the NRC staff.

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U.S. Nuclear Regulatory Commission

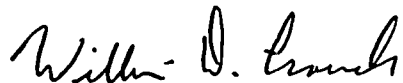
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No new regulatory commitments are made in this submittal. If you have any questions regarding this letter, please contact me at (256)729-2636.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 13th day of October 2006.

Sincerely,



William D. Crouch
Manager of Licensing
and Industry Affairs

Enclosures:

1. NPSH Transient Study, Rev. 1
2. NPSH Transient Study, Rev. 0 (Draft)

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Enclosures

cc: (Enclosures):

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