



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

June 23, 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) - STEAM DRYER STRESS REPORT
ADDENDUM (TAC NOS. MC3812, MC3743, AND MC3744)**

By letters dated June 28, 2004 (ADAMS Accession No. ML041840109) and June 25, 2004 (ML041840301), TVA submitted applications to the NRC for EPU of BFN Unit 1 and BFN Units 2 and 3, respectively. In support of the applications for EPU, TVA is providing certain engineering reports to demonstrate that the structural integrity of the BFN steam dryers will not be challenged under EPU conditions. These reports include steam dryer benchmarking, scale model testing, and stress analysis reports for the BFN steam dryers under EPU operating conditions. By letters dated March 9, 2006 (ML060720303), April 13, 2006 (ML061070627), and May 5, 2006 (ML061300436), TVA provided the GE scale model steam dryer benchmarking report, the BFN scale model test report, the CDI load definition benchmarking report, and the BFN steam dryer (unmodified) stress report, respectively.

This letter transmits an addendum to the BFN steam dryer stress analysis report, representing planned steam dryer modifications. The stress analysis results for the modified

D030

U.S. Nuclear Regulatory Commission
Page 2
June 23, 2006

steam dryer at EPU conditions demonstrate that the BFN steam dryer stresses are generally below the endurance level screening criteria. However, when conservative stress amplification factors are applied to address local stress intensification, a few dryer components are predicted to exceed design limits. This is a consequence of the conservative elements in the program used to develop the load definition. Due to the results of the stress analysis, and to verify steam dryer performance at EPU conditions, TVA is developing a Steam Dryer Monitoring Plan (modeled after the Steam Dryer Monitoring Plan of another BWR having recently achieved EPU) that will include limit curves to ensure that adequate structural margins are maintained during EPU power ascension. TVA expects to provide the steam dryer limit curves to the NRC by July 21, 2006.

Enclosure 1 is the addendum to the BFN steam dryer stress analysis report, entitled "Addendum to Browns Ferry Nuclear Units 1, 2, and 3 Steam Dryer Stress, Dynamic, and Fatigue Analyses for EPU Conditions," prepared by General Electric. This report provides a summary structural analysis of the modified steam dryer at EPU conditions.

Please note that the stress analysis report version in Enclosure 1 contains information that the General Electric Company (GE) considers to be proprietary in nature and subsequently, pursuant to 10 CFR 9.17(a)(4), 2.390(a)(4) and 2.390(d)(1), requests that such information be withheld from public disclosure. Enclosure 2 contains the redacted version of the report, with the GE proprietary material removed, which is suitable for public disclosure. Enclosure 1 contains an affidavit from GE supporting this request.

There are no new commitments contained in this letter. 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 23rd day of June, 2006.

Sincerely,



William D. Crouch
Manager of Licensing
and Industry Affairs

U.S. Nuclear Regulatory Commission

Page 3

June 23, 2006

Enclosures:

- 1: GE-NE-0000-0055-2994-R1-P (proprietary version)
- 2: GE-NE-0000-0055-2994-R1-NP (non-proprietary version)

U.S. Nuclear Regulatory Commission
Page 4
June 23, 2006

Enclosures

cc: (Enclosures):
State Health Officer
Alabama Dept. of Public Health
RSA Tower - Administration
Suite 1552
P.O. Box 303017
Montgomery, AL 36130-3017

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

Mr. Malcolm T. Widmann, Branch Chief
U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303-8931

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

NRC Unit 1 Restart Senior Resident Inspector
Browns Ferry Nuclear Plant
10833 Shaw Road
Athens, Alabama 35611-6970

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

Ms. 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 5
June 23, 2006

JEM:LTG:BAB

cc (w/o Enclosures):

- B. M. Aukland, POB 2C-BFN
- M. Bajestani, NAB 1A-BFN
- A. S. Bhatnagar, LP 6A-C
- J. C. Fornicola, LP 6A-C
- R. G. Jones, POB 2C-BFN
- G. V. Little, NAB 1A-C
- R. F. Marks, Jr., PAB 1C-BFN
- G. W. Morris, LP 4G-C
- B. J. O'Grady, PAB 1E-BFN
- K. W. Singer, LP 6A-C
- E. J. Vigluicci, ET 11A-K
- NSRB Support, LP 5M-C
- EDMS WT CA-K, (w/Enclosures)

s:lic/submit/EPU/TS 418 and 431 - steam dryer stress report.doc

ENCLOSURE 2
TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3

TECHNICAL SPECIFICATIONS (TS) CHANGES TS-431 AND TS-418 -
EXTENDED POWER UPRATE (EPU) - STEAM DRYER STRESS REPORT ADDENDUM
(TAC NOS. MC3812, MC3743, AND MC3744)

(NON-PROPRIETARY VERSION)

Attached is the **Non-Proprietary Version** of GE Report No. GE-NE-0000-0055-2994-R1-P, "Addendum to Browns Ferry Nuclear Units 1, 2, and 3 Steam Dryer Stress, Dynamic, and Fatigue Analyses for EPU Conditions."