



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

April 13, 2006

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

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) CHANGE NOS. TS-418 AND TS-431 - REQUEST FOR EXTENDED POWER UPRATE (EPU) OPERATION - STEAM DRYER SCALE MODEL TEST REPORT (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.

During a teleconference between NRC and TVA on February 13, 2006, it was agreed that TVA would provide the NRC with steam dryer benchmarking, scale model testing, and stress analysis reports for BFN under EPU operating conditions. By letter dated March 9, 2006 (ML060720303), TVA provided the BFN steam dryer benchmarking report.

This letter transmits the BFN Unit 1 steam dryer scale model test report, which documents a series of scale model tests performed on a BFN Unit 1 model to determine the acoustic loading of steam dryer operating loads. The BFN Unit 1 scale

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model testing was conducted by General Electric (GE) and is based on the steam dryer scale model test methodology developed by GE for BWR steam dryers. As noted in the March 9, 2006, transmittal, benchmarking of the scale model test data against the instrumented Quad Cities Unit 2 plant data illustrates the ability of this methodology to provide useful input for the development of load definitions.

TVA, with its contractors, is using the BFN steam dryer load definition to perform stress analyses of steam dryer components at EPU conditions. As noted in TVA's letter of March 9, 2006, the results of the associated steam dryer stress analyses for all three BFN units under EPU conditions will be provided to the NRC by May 5, 2006.

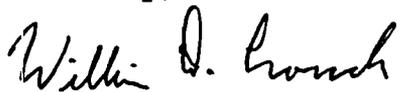
The results of the BFN Unit 1 scale model testing are expected to be applicable to the development of steam dryer load definitions for all three BFN units. An evaluation is underway to confirm these expectations. The applicability of scale model testing to all three BFN units will be addressed in the May 5, 2006, submittal.

Enclosed is "GENE-0000-0052-3661-01, Test Report # 1, Browns Ferry Nuclear Plant, Unit 1, Scale Model Test." Please note that the 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 1 contains an affidavit from GE supporting this request. Enclosure 2 contains the redacted version of the report, with the GE proprietary material removed, which is suitable for public disclosure.

There are no 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 13th day of April, 2006.

Sincerely,



William D. Crouch
Manager of Licensing
and Industry Affairs

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Enclosures:

- 1: GE-NE-0000-0052-3661-01P (proprietary version)
- 2: GE-NE-0000-0052-3661-01NP (non-proprietary version)

cc (w. Enclosures):

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