

June 15, 2005

10 CFR 54

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 -
LICENSE RENEWAL APPLICATION (LRA) - RESPONSE TO NRC REQUEST
FOR ADDITIONAL INFORMATION FOR THE TIME-LIMITED AGING
ANALYSIS (TLAAs) IDENTIFIED IN 4.7.2 AND 4.7.5 OF LRA (TAC
NOS. MC1704, MC1705, AND MC1706)**

By letter dated December 31, 2003, TVA submitted, for NRC review, an application pursuant to 10 CFR 54, to renew the operating licenses for the Browns Ferry Nuclear Plant, Units 1, 2, and 3. As part of its review of TVA's LRA, the NRC staff, through an informal request on June 9, 2005, requested that TVA provide additional information for the TLAAs identified in Sections 4.7.2 and 4.7.5 of the LRA.

The enclosure to this letter contains the specific NRC request for additional information and the corresponding TVA response.

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If you have any questions regarding this information, please contact Ken Brune, Browns Ferry License Renewal Project Manager, at (423) 751-8421.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 15th day of June, 2005.

Sincerely,

Original signed by:

William D. Crouch
Acting Manager of Licensing
and Industry Affairs

Enclosure:

cc: See page 3

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Enclosure

cc (Enclosure):

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(Via NRC Electronic Distribution)

Enclosure

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cc: continued page 4

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JEM:TLE:BAB

Enclosure

cc (Enclosure):

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- K. A. Brune, LP 4F-C
- J. C. Fornicola, LP 6A-C
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- NSRB Support, LP 5M-C
- EDMS, WT CA-K

s://Licensing/Lic/BFN LR Clarification of TLAAs in 4.7.2 and 4.7.5 of LRA.doc

ENCLOSURE

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3
LICENSE RENEWAL APPLICATION (LRA)

RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION FOR THE
TLAAs IDENTIFIED IN 4.7.2 AND 4.7.5 OF LRA

(SEE ATTACHED)

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3
LICENSE RENEWAL APPLICATION (LRA)

**RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION FOR THE
TLAAs IDENTIFIED IN 4.7.2 AND 4.7.5 OF LRA**

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NRC REQUEST

Describe the details of the 10 CFR 54.3 evaluation for the TLAAs identified in Sections 4.7.2 (Corrosion - Flow Reduction) and 4.7.5 (Corrosion - Minimum Wall Thickness) of the LRA.

TVA RESPONSE TO NRC REQUEST

a. Section 4.7.2

The last sentence of the *Summary Description* of Section 4.7.2 of the LRA states "*Thus, calculations using the design document's time dependent decreasing effective pipe diameter to verify 40-year flow requirements are TLAAs.*" This calculation evaluates the flow reduction due to corrosion in carbon steel piping used in raw water systems.

The functional basis for determining the acceptability of the piping in different systems at BFN is based on periodic flow testing as described in the following BFN site procedures:

- Technical Instruction 0-TI-171, RHRSW Sump Pump Flow Rate Test,
- Surveillance Instruction 0-SI-4.5.C.1(4), EECW System Annual Flow Rate Test,
- Surveillance Instructions 1/2/3-SI-4.5.C.1(3), RHRSW Pump and Header Operability and Flow Test, and

- Surveillance Instruction 0-SI-4.11.B.1.g, High Pressure Fire Protection System Flow Test.

Based on this further review, TVA has determined that the calculations should not be considered to be a TLAA, and all of Section 4.7.2 is deleted from the LRA.

b. Section 4.7.5

The *Summary Description* for Section 4.7.5 of the LRA states:

"Corrosion/erosion results in decreasing pipe wall thickness. This wall thickness reduction can result in the loss of the system pressure boundary. Corrosion allowance values specified in design documents were used to determine the minimum wall thickness values. These design documents specified corrosion allowance values for a 40-year service life. These calculations which used the corrosion allowance values specified in the design documents are considered a TLAA."

These calculations evaluate corrosion/erosion that result in decreasing pipe wall thickness.

The functional basis for ensuring the wall thickness acceptability is accomplished by inspection, testing, and monitoring activities performed by BFN site procedures that implement SPP-9.7, Corrosion Control Program.

Based on this further review, TVA has determined that the calculations should not be considered to be a TLAA, and all of Section 4.7.5 is deleted from the LRA.