

May 25, 2005

10 CFR 54

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop: OWEN 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 ON CLARIFICATION ON GALL AUDIT
RAI 7.1.19-1 AND RAI 7.1.22-1 (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 April 7, 2005, identified additional information needed for clarification on GALL Audit RAI 7.1.19-1 and RAI 7.1.22-1.

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

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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 25th day of May, 2005.

Sincerely,

Original signed by:

T. E. Abney
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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s://Licensing/Lic/BFN LR Response Buried Piping and Tanks.doc

ENCLOSURE

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

RESPONSE TO NRC REQUESTS FOR ADDITIONAL INFORMATION (RAI) ON
GALL AUDIT RAI 7.1.19-1 AND RAI 7.1.22-1

(SEE ATTACHED)

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

**RESPONSE TO NRC REQUESTS FOR ADDITIONAL INFORMATION (RAI) ON
GALL AUDIT RAI 7.1.19-1 AND RAI 7.1.22-1**

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 April 7, 2005, identified additional information needed for clarification on GALL Audit RAI 7.1.19-1 and RAI 7.1.22-1. This enclosure contains the specific NRC request(s) for additional information and the corresponding TVA response(s).

NRC GALL Audit RAI 7.1.19-1

The applicant did not identify any enhancements in the BFN LRA. However, the staff noted that an enhancement, to achieve consistency with GALL AMP XI.M30, Element 4, is identified in the applicant's Aging Management Program Evaluation basis document. Specifically, the existing BFN fuel oil testing and monitoring program needs to be enhanced to include ultrasonic thickness measurements of the tank bottom surfaces, to ensure that significant degradation is not occurring.

The program description in BFN LRA, Appendix B, Section B.2.1.27, also identifies that a one-time inspection, in accordance with the One-Time Inspection Program (BFN AMP B.2.1.29), will be performed prior to entering the period of extended operation and will consist of thickness measurements of the 7-day diesel oil supply tanks' bottom surface. The staff reviewed the One-Time Inspection Program (LRA AMP B.2.1.29) and noted that it provides a general description of items to be included within the scope of the program, but does not specifically identify the 7-day diesel oil supply tank as an item to be inspected.

The staff identified this omission in Appendix B, Section B.2.1.27 and the UFSAR Supplement, Appendix A, Section A.1.24 to the applicant, and requested the applicant to address the need for an enhancement to AMP B.2.1.27.

By letter dated October 8, 2004 (ML042870428), the applicant submitted its formal response to the staff. The applicant responded that (generic statement) "TVA will provide a consolidated list of commitments for the BFN License Renewal Application consistent with NEI letter to NRC dated February 26, 2003 to Dr. P.T. Kuo in regards to the subject: "Industry Response * Consolidated List of Commitments for License Renewal, December 16, 2002." The FSAR supplement provides a level of detail ensuring AMP commitments will be implemented; the consolidated list of commitments will be transmitted to the NRC outside of the LRA."

TVA Response to GALL Audit RAI 7.1.19-1

The One-Time Inspection Program (B.2.1.29) has been revised to specifically identify ultrasonic thickness measurements of the fuel oil storage tank bottom surfaces to ensure that significant degradation is not occurring.

To implement this change, the "Program Description" section of LRA Appendix B.2.1.29, One-Time Inspection Program, has been revised to include the following item:

- Ultrasonic thickness measurements of tank bottoms to ensure that significant degradation is not occurring for those tanks specified in the Fuel Oil Chemistry Program (B.2.1.27) and the Aboveground Carbon Steel Tanks Program (B.2.1.26).

NRC RAI 7.1.22-1, Buried Piping and Tanks Inspection Program

The applicant provides its UFSAR supplement for the buried piping and tanks program in the BFN, Appendix A, Section A.1.28, Buried Piping and Tanks Inspection Program, which states that the buried piping and tanks program includes preventive measures to mitigate corrosion by protecting the external surface of carbon steel tanks with paint or coatings in accordance with standard industry practice. The program also relies on periodic inspections conducted in accordance with the 10 CFR 50.65 Maintenance Rule Program and the Systems Monitoring Program to monitor tank degradation.

The project team reviewed the UFSAR supplement and confirms that it provides an adequate summary description of the program, as identified in the SRP-LR UFSAR supplement table and as required by 10 CFR 54.21(d).

However, the project noted that the applicant relies solely on opportunistic inspections to check buried piping. Should there not be any opportunistic inspections the buried pipe would not be inspected. Therefore, the project team requested that the applicant agree to perform an inspection of buried piping within ten years after entering the period of extended operation, unless conclusive opportunistic inspection have occurred within this ten-year period which provides a representative sample. If not, BFN will conduct a focused inspection to allow that conclusion to be reached.

TVA Response to RAI 7.1.22-1

Buried piping within the scope of the Buried Piping and Tanks Inspection Program will be inspected when they are excavated for maintenance or when those components are exposed for any reason. BFN will perform an inspection of buried piping within ten years after entering the period of extended operation, unless an opportunistic inspection has occurred within this ten-year period. Before the tenth year, BFN will perform an engineering evaluation to determine if sufficient inspections have been conducted to draw a conclusion regarding the ability of the underground coatings to protect the underground piping from degradation. If not, BFN will conduct a focused inspection to allow that conclusion to be reached. Sections A.1.28 and B.2.1.31 are modified as described below to implement this change:

Paragraph (b) of LRA Appendix A.1.28, Buried Piping and Tanks Inspection Program, and paragraph (b) of the "Program Description" section of Appendix B.2.1.31, Buried Piping and Tanks Inspection Program have been revised to include the following statement:

"Before the tenth year of extended operation, BFN will perform an engineering evaluation to determine if sufficient inspections have been conducted to draw a conclusion regarding the ability of the underground coatings to protect the underground piping from degradation. If not, BFN will conduct a focused inspection to allow that conclusion to be reached."

Note that the last sentence of first paragraph in the NRC Question is in error. The Buried Tank and Piping Inspection Program does not rely on periodic inspections and does not credit the Systems Monitoring Program. The inspections are conducted in accordance with the 10 CFR 50.65 Maintenance Rule Program and are opportunistic inspections except for additional evaluations as described in this response.