

August 19, 2004

Mr. Karl W. Singer  
Chief Nuclear Officer and  
Executive Vice President  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3 — REQUEST FOR  
ADDITIONAL INFORMATION REGARDING ALTERNATIVE SOURCE TERM  
(TAC NOS. MB5733, MB5734 AND MB5735)

Dear Mr. Singer:

By letter dated July 31, 2002, as supplemented in letters dated December 9, 2002, February 12, March 26, July 11 and 17, 2003, May 17 and July 2, 2004, Tennessee Valley Authority submitted a request to revise the licensing and design basis to reflect the application of the alternative source term (AST) methodology for the Browns Ferry Units 1, 2 and 3. The submittal also requested changes to various technical specifications to reflect the adoption of AST.

Based on our review of your submittal, the Nuclear Regulatory Commission staff finds that a response to the enclosed request for additional information is needed before we can complete the review.

This request was discussed with your staff on August 16, 2004, and it was agreed that a response would be provided within 30 days of the issuance of this letter.

If you have any questions, please contact me at (301) 415-2315.

Sincerely,

**/RA/**

Eva A. Brown, Project Manager, Section 2  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-259, 50-260 and 50-296

Enclosure: Request for Additional Information

cc w/encl: See next page

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REQUEST FOR ADDITIONAL INFORMATION  
ALTERNATIVE SOURCE TERM IMPLEMENTATION  
TENNESSEE VALLEY AUTHORITY  
BROWNS FERRY PLANT, UNITS 1, 2, AND 3  
DOCKET NOS. 50-259, 50-260, AND 50-296

Recently, several indications were identified in the nonsafety portion of the main steam piping at Browns Ferry Nuclear Plant (BFN), Unit 1. Tennessee Valley Authority has determined that the indications were the result of the manufacturing process of the pipe and not service-induced. The alternative source term submittal and its supplements did not contain any discussion of these flaws and their potential impact on the structural integrity of that portion of the main steam piping system. Provide your response to the following questions:

1. At BFN, Unit 1, several indications were identified in the nonsafety portion of the main steam piping. One of the flaws identified showed a reduction in the wall thickness up to 34 percent. Provide a discussion on the impact of these localized reductions in the wall thickness on the existing structural and seismic calculations and how conformance to the existing and proposed licensing basis for that portion of the main steam piping is and will be maintained.
2. Given that flaws have been found in the main steam piping of Unit 1, discuss what assurances exist that other flaws that represent a 34-percent or greater reduction in wall thickness do not exist, not only on Unit 1, but Units 2 and 3 as well.

Enclosure

Mr. Karl W. Singer  
Tennessee Valley Authority

**BROWNS FERRY NUCLEAR PLANT**

cc:

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