

April 28, 1993

Docket Nos. 50-390  
and 50-391

Tennessee Valley Authority  
ATTN: Dr. Mark O. Medford, Vice President  
Nuclear Assurance, Licensing and Fuels  
3B Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

Dear Dr. Medford:

SUBJECT: WATTS BAR NUCLEAR PLANT - LEAK-BEFORE-BREAK EVALUATION OF  
THE PRESSURIZER SURGE LINE (TAC NOS. M3837 AND M83838)

By letter dated June 22, 1992, and supplement dated March 26, 1993, the Tennessee Valley Authority (TVA) requested approval for eliminating rupture of the pressurizer surge line as the design basis for Watts Bar Units 1 and 2. The request was based on the leak-before-break (LBB) analysis of the pressurizer surge piping as permitted by the revised General Design Criterion 4 (GDC-4) of Appendix A to 10 CFR Part 50.

The staff reviewed and evaluated TVA's submittals. The staff concludes that TVA's LBB analysis complies with GDC-4 and hence, TVA may eliminate pressurizer surge line rupture from the design basis for Watts Bar Units 1 and 2. Details of the staff's review are delineated in the enclosed safety evaluation; the same safety evaluation will be published in the Watts Bar Safety Evaluation Report (NUREG-0847), Supplement 12.

Sincerely,

Original signed by

Peter S. Tam, Senior Project Manager  
Project Directorate II-4  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosure:  
Safety Evaluation

cc w/enclosure:  
See next page

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| NAME    | MSanders <i>ms</i> | PTam:as <i>PST</i> | FHebdon <i>FH</i> |
| DATE    | 4/27/93            | 4/27/93            | 4/28/93           |

DOCUMENT NAME: PZRLBB

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Tennessee Valley Authority  
ATTN: Dr. Mark O. Medford

cc:

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Watts Bar Nuclear Plant

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Dayton, Tennessee 37321

The Honorable Johnny Powell  
County Judge  
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