

December 13, 1989

Docket Nos. 50-390
and 50-391

Mr. Oliver D. Kingsley, Jr.
Senior Vice-President, Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801
Dear Mr. Kingsley:

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SUBJECT: REQUEST FOR ADDITIONAL INFORMATION CONCERNING COMPLIANCE WITH
10 CFR 50, APPENDIX A, GENERAL DESIGN CRITERION 4 FOR WATTS BAR
NUCLEAR PLANT, UNITS 1 AND 2

The staff is reviewing the applicant's request to apply "leak-before-break" technology to the primary loop piping as permitted by 10 CFR 50, Appendix A, General Design Criterion 4. The review indicates the need for additional information about the primary loop piping before the request may be approved. The specific information necessary for the completion of our review is enclosed.

Please respond to this request on the time schedule consistent with the licensing of Watts Bar, Unit 1 and advise us of your proposed response date.

The reporting and/or recordkeeping requirements contained in this request affect fewer than ten respondents, therefore, OMB clearance is not required under P. L. 96-511.

If you have any questions concerning this request, please contact the Project Manager R. Auluck, at (301) 492-0759.

Sincerely,

Original signed by Gerald E. Gears for

Suzanne C. Black, Assistant Director
for Projects
TVA Projects Division
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

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PDR ADOCK 05000390
A PNU

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OFC	:NRR:TVA/PE	:TVA:AD/P	:	:	:	:	:
NAME	:PCor	:SBlack	:	:	:	:	:
DATE	:12/13/89	:12/13/89	:	:	:	:	:

OFFICIAL RECORD COPY

Mr. Oliver D. Kingsley, Jr.

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cc:

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Honorable Robert Aikman
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Honorable Johnny Powell
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ENCLOSURE

REQUEST FOR ADDITIONAL INFORMATION ON ELIMINATION OF DYNAMIC EFFECTS
OF POSTULATED PRIMARY LOOP PIPE RUPTURES FROM DESIGN BASIS
FOR WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2

By letter dated April 17, 1989, Tennessee Valley Authority (the applicant) requested the elimination of the dynamic effects of postulated primary loop pipe ruptures from the design basic for Watts Bar Nuclear Plant, Units 1 and 2. The applicant submitted the technical basis in Westinghouse Report WCAP-11985 dated November 1988. The staff requires the following additional information before continuing its review:

1. Table 4-3 in WCAP-11985 shows that the primary loop piping material has yield and ultimate tensile strength values lower than the ASME Code specified minimums. Justify compliance with ASME Section III requirements.
2. Provide the inner or outer diameter and wall thickness of the primary loop piping for each weld location in Table 3-1 in WCAP-11985.

There is a discrepancy in the cold leg piping dimension. On Page 3-1 and Figure 3-1 in WCAP-11985, the cold leg piping has an outer diameter of 32.13 in. and a wall thickness of 2.21 in. On Page 7-1 of WCAP-11985, the cold leg piping has an outer diameter of 32.52 in. and a wall thickness of 2.52 in. Provide clarification.

3. Verify the units for the modulus of elasticity of Page 4-2 on WCAP-11985.