

January 21, 1997

Mr. Oliver D. Kingsley, Jr.
President, TVA Nuclear and
Chief Nuclear Officer
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

SUBJECT: SECOND REQUEST FOR ADDITIONAL INFORMATION REGARDING THE WATTS BAR
NUCLEAR PLANT, UNIT 1 FIRST 10-YEAR INTERVAL INSERVICE INSPECTION
PROGRAM PLAN AND ASSOCIATED REQUESTS FOR RELIEF (TAC NO. M95440)

Dear Mr. Kingsley:

The NRC staff, with assistance from its contractor, Idaho National Engineering Laboratory, is reviewing and evaluating the first 10-year interval inservice inspection program plan and the associated requests for relief from the ASME B&PV Code, Section XI requirements for Watts Bar Nuclear Plant, Unit 1 that was submitted May 9, 1996. Additional information is required from Tennessee Valley Authority in order for the staff to complete its review.

The staff requests that a response be provided within 60 days of the date of this letter to meet the staff's inservice inspection program plan review schedule. In addition, to expedite the review process, please send a copy of the response to NRC's contractor, INEL, at the following address:

Michael T. Anderson
INEL Research Center
2151 North Boulevard
PO Box 1625
Idaho Falls, Idaho 83415-2209

Sincerely,

Original signed by

Robert E. Martin, Senior Project Manager
Project Directorate II-3
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: Request for Additional Information.

cc w/enclosure: See next page

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Dayton, TN 37321

County Executive
Meigs County Courthouse
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Ms. Jane A. Fleming
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Duxbury, MA 02332

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT
DOCKET NUMBER 50-390
CIVIL ENGINEERING AND GEOSCIENCES BRANCH
DIVISION OF ENGINEERING

Request for Additional Information - First 10-Year Interval Inservice Inspection Program Plan

1. **Scope/Status of Review**

By letter dated November 25, 1996, Tennessee Valley Authority submitted the response to the Nuclear Regulatory Commission's request for additional information on the *Watts Bar Nuclear Plant, First 10-Year Interval Inservice Inspection (ISI) Program Plan, Revision 0*. In this response, the licensee provided clarification to the program; submitted ISI boundary drawings, isometric and component drawings, and a listing of ultrasonic calibration blocks; and submitted two new requests for relief and two revised requests for relief.

The staff has reviewed the information provided by the licensee in response to the NRC request for additional information. Based on the review of this submittal, it has been determined that additional clarification is required.

2.0 **Additional Information Required**

2.1 It has been determined that the licensee has not cited appropriate paragraphs of 10 CFR 50.55a for each request or proposed alternative to CFR/ASME requirements. The licensee must state the specific paragraph of the Regulations under which each request or proposed alternative is submitted. The licensee should review the current submittal(s) and provide the required references to ensure that each request is evaluated in accordance with the appropriate criteria as discussed further in the Attachment.

2.2 Based on a review of the schedule of examinations for Examination Category B-G-1 and B-G-2, it appears that the licensee has not scheduled examinations for all applicable components. Describe the reason for the omission of the scheduling of bolting examinations for some components (the Code contains allowances for performing bolting examinations in place).

2.3 Based on the review of the schedule of examinations for component supports (Examination Category IWF), it appears that component supports have

not been scheduled for examination. Describe the reason for the omission of these components from the schedule.

2.4 In accordance with 10 CFR 50.55a(c)(3), 10 CFR 50.55a(d)(2), and 10 CFR 50.55a(e)(2), ASME Code cases may be used as alternatives to Code requirements. Code cases that the NRC has approved for use are listed in Regulatory Guide 1.147, *Inservice Inspection Code Case Acceptability*, with any additional conditions the NRC may have imposed. When used, these Code cases must be implemented in their entirety. Published Code cases awaiting approval and subsequent listing in Regulatory Guide 1.147 may be adopted only if the licensee requests, and the NRC authorizes, their use on a case-by-case basis. Use of Code Cases awaiting NRC approval may be acceptable when conditions deemed appropriate by the NRC are included. Therefore, a licensee proposing the use of currently unapproved Code Case(s) must commit to certain conditions, as applicable.

In Request for Relief 1-ISI-2, the licensee proposes to implement Code Case N-509 for the examination of integral attachments. The NRC staff finds this alternative to Code requirements acceptable only if the licensee commits to the examination of 10% of all integral attachments in nonexempt portions of Code Class 1, 2, and 3 systems.

In Request for Relief ISPT- 02, the licensee proposes to implement Code Case N-416-1 for welded repairs and replacements. The NRC staff finds this alternative to Code requirements acceptable only if the licensee commits to performing a surface examination of the root pass weld layer for welded repairs and replacements.

In Request for Relief ISPT - 04, the licensee proposes to implement Code Case N-522 for Class 2 containment penetration piping. The NRC staff finds this alternative to Code requirements acceptable only if the licensee commits to implementing a procedure for the detection and location of through-wall flaws.

In Request for Relief ISPT - 07, the licensee proposes to implement Code Case N-546 for alternative requirements for qualification of VT-2 Visual Examination personnel. The NRC staff finds this alternative to Code requirements acceptable only if the licensee commits to 1) developing procedural guidelines for obtaining consistent, quality VT-2 visual examinations; 2) documents, and maintains records to verify, the qualification of persons selected to perform VT-2 visual examinations; and 3) implements independent review and evaluation of leakage by persons other than those that performed the VT-2 visual examinations.

For the above requests for relief, the licensee should either confirm that the conditions will be adopted or provide the action the licensee proposes to take with regard to these requirements.

The schedule for timely completion of this review requires that the licensee provide, by the requested date, the above requested information and/or clarification with regard to the *Watts Bar Nuclear Plant, First 10-Year Interval Inservice Inspection (ISI) Program Plan*.

Attachment: Relief Criteria

RELIEF CRITERIA

A licensee may propose an alternative to CFR or Code requirements in accordance with 10 CFR 50.55a(a)(3)(i) or 10 CFR 50.55a(a)(3)(ii). When submitting a proposed alternative, the licensee must specify the appropriate regulatory basis. Pursuant to 10 CFR 50.55a(a)(3)(i), the proposed alternative must be shown to provide an acceptable level of quality and safety, i.e., essentially be equivalent to the original requirement in terms of quality and safety. Pursuant to 10 CFR 50.55a(a)(3)(ii), the licensee must show that compliance with the original requirement results in a hardship or unusual difficulty without a compensating increase in the level of quality and safety. Examples of hardship and/or unusual difficulty include, but are not limited to, excessive radiation exposure, disassembly of components solely to provide access for examinations, and development of sophisticated tooling that would result in only minimal increases in examination coverage.

A licensee may submit a request for relief from ASME requirements. In accordance with 10 CFR 50.55a(g)(5)(iii), if a licensee determines that conformance with certain Code requirements is impractical for its facility, the licensee shall notify the Commission and submit, as specified in §50.4, information to support that determination. When a licensee determines that an inservice inspection requirement is impractical, e.g., the system would have to be redesigned or a component would have to be replaced to enable inspection, the licensee should cite this portion of CFR. The NRC may, giving due consideration to the burden placed on the licensee, impose an alternative examination requirement.

The licensee is requested to review each request for relief and provide appropriate references to the Code of Federal Regulations and supporting documentation for the subject requests for relief.

ATTACHMENT