Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

MAR 2 9 2000

10 CFR 50.55a

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) SECTION XI INSERVICE TESTING PROGRAM REQUEST FOR RELIEF PV-13 REVISION 1

The purpose of this letter is to request relief from ASME Section XI Code requirements, OM Standard, Part 10 Paragraph 4.3.2.4(c). Relief Request PV-13 was originally approved by NRC in NUREG-0847, WBN Supplemental Safety Evaluation Report 14 under 10 CFR 50.55a(f)(6)(i). The reason for the revision is to alter the stated time at which the valves are disassembled and inspected from "during refueling outages" to "once per fuel cycle." This would allow online disassembly and inspection of these valves.

The revision also deletes valves from the existing Relief Request PV-13 which do not need the relief request applied. A review of the test program applied to the two valves which were deleted, reveals that testing is being performed in accordance with the requirement of ASME Section XI and ASME Standard OM-10 and that it is not necessary to include them in the revised relief request.

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The Enclosure provides the revised relief request. TVA requests that NRC review and approve the relief request by September 1, 2000. This relief request is needed for the third refueling outage which is scheduled to begin mid-September 2000. If you should have any questions concerning this matter, please contact me at (423) 365-1824.

Sincerely,

P. L. Pace
Manager, Site Licensing
and Industry Affairs

Enclosure
cc (Enclosure):
NRC Resident Inspector
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

Mr. Robert E. Martin, Senior Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852

U.S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, Georgia 30303

ENCLOSURE

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1
REQUEST FOR RELIEF PV-13 REVISION 1

I. **Relief Request Number** - PV-13, Revision 1

Executive Summary - Relief is being requested to allow disassembly and inspection of the containment spray header check valves and the residual heat removal spray header check valves on a sampling basis, in accordance with the provisions of Generic Letter 89-04, "*Guidance on Developing Acceptable Inservice Testing Programs,*" Minutes of the Public Meetings on Generic Letter 89-04 dated October 15, 1989, Position 2, "*Alternative to Full Flow Testing of Check Valves.*" Use of the polar crane is impacted by the presence of the extensive scaffolding necessary to reach these four valves. During outages, use of the polar crane often becomes a critical path or near critical path item. Therefore, relief is also being requested from performing the valve disassembly "during the refueling outage" to "once per fuel cycle" in order to avoid conflicts with scheduling and use of the polar crane.

II. **Affected System(s)** - Containment Spray

III. **Affected Component(s)** - 1-CKV-72-548-A
1-CKV-72-549-B
1-CKV-72-562-A
1-CKV-72-563-B

IV. **ASME Code Class** - 2

V. **Category** - C-Active

VI. **Function of Affected Component(s)** - Opens to pass water from either the Containment Spray or the Residual Heat Removal pumps to the Containment Spray or RHR ring headers.

VII. **Impractical Requirement** - OM Standard, Part 10, paragraph 4.3.2.4(c) - "As an alternative to the testing in (a) or (b) above, [OM Standard, Part 10, Paragraph 4.3.2.4(a) and 4.3.2.4(b)] disassembly every refueling outage to verify operability of check valves may be used."

VIII. **Basis for Granting Relief** - Exercising valves 1-CKV-72-548-A, 1-CKV-72-549-B, 1-CKV-72-562-A, 1-CKV-72-563-B with water will result in deluging the containment area with borated water, introducing an unnecessarily hazardous problem with a high potential for physical

damage to auxiliary equipment and unreasonably prolonged cleanup efforts. Part stroke exercising with air during operation introduces the potential of inadvertently causing a unit trip, safety system actuation, phase B containment isolation, and containment spray actuation by exceeding the high-high containment pressure set point due to the pressure rise caused by the volume of air blown into containment during testing of the check valves. Exercising in conjunction with cold shutdowns is impractical due to the length of time required to construct the scaffolding necessary to obtain access to the valves and to drain and refill the piping from the test point to the check valves. Disassembly of all four valves each refueling outage is an excessive burden.

All four valves are located in the containment dome. Obtaining access to the valves requires construction of extensive scaffolding on top of the polar crane bridge. During refueling outages, the polar crane is frequently required to support various outage activities. However, the presence of the scaffold used to obtain access to these check valves restricts operation of the crane in support of other outage related activities. This restriction has the very real potential of extending outage duration. Therefore, pursuant to 10 CFR 50.55a(a)(3)(ii), it is requested that relief be granted.

IX. **Proposed Alternative** - Group the valves into groups not larger than four with all valves in each group being identical in: design, material, manufacture; environment (including physical orientation and radiological conditions); and function. Disassemble and inspect one valve from each group in accordance with the provisions of Generic Letter 89-04, Position 2 once per fuel cycle. This allows the option to perform this inspection online at a refueling cycle interval and not necessarily during refueling outage. If any single valve is found unacceptable, all valves in the associated group will then be disassembled and inspected.

X. **Frequency of Proposed Alternative** - Disassemble and inspect one valve per group each once per fuel cycle interval in accordance with Generic Letter 89-04, Position 2, but not necessarily during the refueling outage, to verify its continued operability.

ENCLOSURE

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1
REQUEST FOR RELIEF PV-13 REVISION 1

XI. **Summary** - Relief is being requested to allow disassembly and inspection of the four spray header valves on a sampling basis because of the burden of having to disassemble and inspect all four valves each outage. Additionally, relief is being requested under 10 CFR 50.55a(a)(3)(ii) to allow the disassembly and inspection to be performed outside the refueling outage window, however, testing will remain within the same fuel cycle interval. This relief would assist in avoiding schedule impacts caused by restrictions imposed on the polar crane use while the scaffolding necessary to reach these valves, is installed on the polar crane bridge.