October 27, 2006

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: WATTS BAR NUCLEAR PLANT, UNIT 1 - RELIEF REQUESTS NOS.1-ISI-16, 1-ISI-17, 1-ISI-18, AND 1-ISI-19 REQUESTING RELIEF FROM THE INSERVICE INSPECTION PROGRAM (TAC NOS. MC9638, MC9639, MC9640, AND MC9641)

Dear Mr. Singer:

By letter dated January 25, 2006, supplemented by letter dated June 29, 2006, Tennessee Valley Authority (TVA, the licensee) submitted Relief Requests Nos, 1-ISI-16, 1-ISI-17, 1-ISI-18, and 1-ISI-19, for the Watts Bar Nuclear Plant (WBN), Unit 1, first 10-year inservice inspection (ISI) interval, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(g)(5)(iii). TVA requested relief from safety injection piping weld and reactor vessel weld examinations.

Based on our review of your submittals, the Nuclear Regulatory Commission staff concluded that compliance with the American Society of Mechanical Engineers (ASME) Code coverage requirements is impractical for the configurations identified in the subject relief requests. Therefore, relief is granted pursuant to 10 CFR 50.55a(g)(6)(i) for the first 10-year ISI interval for WBN, Unit 1. This grant of relief is authorized by law and will not endanger life or property, or the common defense and security, and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

All other ASME Code, Section XI requirements for which relief was not specifically requested and approved in this relief request remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

Sincerely,

/RA/

L. Raghavan, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-390

Enclosure: Safety Evaluation

cc w/enclosure: See next page

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Based on our review of your submittals, the Nuclear Regulatory Commission staff concluded that compliance with the American Society of Mechanical Engineers (ASME) Code coverage requirements is impractical for the configurations identified in the subject relief requests. Therefore, relief is granted pursuant to 10 CFR 50.55a(g)(6)(i) for the first 10-year ISI interval for WBN, Unit 1. This grant of relief is authorized by law and will not endanger life or property, or the common defense and security, and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

All other ASME Code, Section XI requirements for which relief was not specifically requested and approved in this relief request remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

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cc w/enclosure: See next page
Distribution: See next page
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OFFICE	LPD2-2	LPD2-2/PM	LPD2-2/LA	CVIB/BC	CPNB/BC	OGC	LPD2-2/BC
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DATE	10/11 /06	10/11/06	10/6/06	(by memo) 8/28/06	(by memo) 8/28/06	10/25/06	10/27/06

OFFICIAL RECORD COPY

Letter to Karl W. Singer from L. Raghavan dated October 27, 2006

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 1 - RELIEF REQUESTS NOS.1-ISI-16, 1-ISI-17, 1-ISI-18, AND 1-ISI-19 REQUESTING RELIEF FROM THE INSERVICE INSPECTION PROGRAM (TAC NOS. MC9638, MC9639, MC9640, AND MC9641)

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELIEF REQUESTS NOS. 1-ISI-16, 1-ISI-17, 1-ISI-18, AND 1-ISI-19

WATTS BAR NUCLEAR PLANT, UNIT 1

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-390

1.0 INTRODUCTION

By letter dated January 25, 2006, supplemented by letter dated June 29, 2006, Tennessee Valley Authority (the licensee), submitted Relief Requests Nos. 1-ISI-16, 1-ISI-17, 1-ISI-18, and 1-ISI-19, for the Watts Bar Nuclear Plant (WBN), Unit 1, first 10-year inservice inspection (ISI) interval, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(g)(5)(iii). The requests for relief were necessary because the required examination coverage could not be achieved due to the configuration of a safety injection system piping weld and the configuration of several welds on the reactor vessel. The weld examinations were conducted during the first 10-year ISI interval at WBN, Unit 1.

2.0 REGULATORY EVALUATION

Inservice inspection (ISI) of American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) Class 1, 2, and 3 components is performed in accordance with Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," and applicable edition and addenda as required by 10 CFR 50.55a(g), except when specific relief has been granted by the U.S. Nuclear Regulatory Commission (NRC) pursuant to 10 CFR 50.55a(g)(6)(i). As stated in 10 CFR 50.55a(a)(3), alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC, if the applicant demonstrates that: (i) the proposed alternatives would provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code, Class 1, 2, and 3 components (including supports) will meet the requirements, except the design and access provisions, and the preservice examination requirements, set forth in the ASME Code, Section XI, to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code, incorporated by reference in 10 CFR 50.55a(b), 12 months prior to the start of the 120-month

interval, subject to the limitations and modifications listed therein. The ISI Code of record for WBN, Unit 1, for the first 10-year ISI interval is the ASME Code, Section XI, 1989 Edition, No Addenda.

Pursuant to 10 CFR 50.55a(g)(5)(iii), if the licensee has determined that conformance with certain code requirements is impractical for its facility, the licensee shall notify the Commission and submit, as specified in 10 CFR 50.4, information to support the determinations. Pursuant to 10 CFR 50.55a(g)(5)(iv), where an examination requirement by the code or addenda is determined to be impractical by the licensee and is not included in the revised ISI program as permitted by 10 CFR 50.55a(g)(4), the basis for this determination must be demonstrated to the satisfaction of the Commission not later than 12 months after the expiration of the initial 120-month period of operation from start of facility commercial operation and each subsequent 120-month period of operation during which the examination is determined to be impractical.

Pursuant to 10 CFR 50.55a(g)(6)(i), the Commission will evaluate determinations under 10 CFR 50.55a(g)(5) that code requirements are impractical. The Commission may grant such relief, and may impose such alternative requirements as it determines is authorized by law and will not endanger life or property, or the common defense and security, and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

3.0 TECHNICAL EVALUATION

3.1 System/Component(s) for Which Relief is Requested

Relief Request 1-ISI-16: Class 1, Safety Injection System tee to elbow weld, SIF-D092-15.

Relief Request 1-ISI-17: Class 1 Reactor Pressure Vessel (RPV) Circumferential Welds.

- Bottom Shell to Lower Head weld, W02-03.
- Bottom Head Spherical Ring to Bottom Cap weld, W01-02

Relief Request 1-ISI-18: Class 1 RPV Meridional welds, W2A, W2B, W2C, W2D, W2E, and W2F.

Relief Request 1-ISI-19: Class 1 RPV Outlet Nozzle-to-Vessel welds, N15, N16, N17, and N18.

3.2 Applicable Code Requirements

The applicable code requirements are found in the ASME Code, Rules for ISI of Nuclear Power Plant Components, Section XI, 1989 Edition, No Addenda. Weld SIF-D092-15 falls within the scope of a Risk-Informed ISI Program, with the coverage requirements governed by ASME Code, Section XI, 1989 Edition, No Addenda.

3.3 Licensee's Request

Pursuant to 10 CFR 50.55a(g)(5)(iii), the licensee has determined that conformance with certain code requirements is impractical for its facility. Specifically, the licensee has submitted four

requests for relief addressing the inability to achieve required code volume coverage during examinations due to the components configuration and/or the presence of obstructions.

Relief Requests 1-ISI-16, 1-ISI-17, 1-ISI-18, and 1-ISI-19 request relief from the requirements listed below:

Relief Request	Examination Category	Item No.	Component	Examination Requirement
1-ISI-16	R-A	R1.11 R1.16	SIF-D092-15	Volumetric Examination of Elements Subject to Fatigue and Intergranular Stress Corrosion Cracking.
1-ISI-17	B-A	B1.11	W02-03	Volumetric Examination of Reactor Vessel Shell Circumferential Welds
1-ISI-17	B-A	B1.21	W01-02	Volumetric Examination of Reactor Vessel Head Circumferential Welds
1-ISI-18	B-A	B1.22	W2A	Volumetric Examination of Reactor Vessel Head Meridional Welds
1-ISI-18	B-A	B1.22	W2B	Volumetric Examination of Reactor Vessel Head Meridional Welds
1-ISI-18	B-A	B1.22	W2C	Volumetric Examination of Reactor Vessel Head Meridional Welds
1-ISI-18	B-A	B1.22	W2D	Volumetric Examination of Reactor Vessel Head Meridional Welds
1-ISI-18	B-A	B1.22	W2E	Volumetric Examination of Reactor Vessel Head Meridional Welds
1-ISI-18	B-A	B1.22	W2F	Volumetric Examination of Reactor Vessel Head Meridional Welds
1-ISI-19	B-D	B3.90	N15	Volumetric Examination of Reactor Vessel Nozzle-to-Vessel Welds
1-ISI-19	B-D	B3.90	N16	Volumetric Examination of Reactor Vessel Nozzle-to-Vessel Welds
1-ISI-19	B-D	B3.90	N17	Volumetric Examination of Reactor Vessel Nozzle-to-Vessel Welds
1-ISI-19	B-D	B3.90	N18	Volumetric Examination of Reactor Vessel Nozzle-to-Vessel Welds

4.0 EXAMINATION LIMITATIONS FOR COMPONENTS

4.1 Code Requirements for Which Relief is Requested

4.1.1 Relief Request 1-ISI-16

Relief is requested from the examination coverage and qualification demonstration requirements for austenitic piping welds with single-sided access. Weld SIF-D092-15 falls under the Risk-Informed Inservice Inspection Program implemented at WBN, Unit 1. Applicable inspection categories R-A, item numbers R1.11 and R1.16, are defined in Westinghouse Owners Group WCAP-14572. These items refer to figure IWB-2500-8(c) of ASME Code, Section XI, 1989 Edition for the required weld inspection volume.

4.1.2 Relief Request 1-ISI-17

Relief is requested from the volumetric examination coverage of essentially 100 percent of one reactor vessel circumferential shell weld (W02-03) and one circumferential head weld (W01-02). Volumetric examination coverage requirements are defined by figure IWB-2500-1 for the reactor vessel circumferential shell weld, and figure IWB-2500-3 for the reactor vessel circumferential head weld.

4.1.3 Relief Request 1-ISI-18

Relief is requested from the volumetric examination coverage of essentially 100 percent of the reactor vessel meridional welds. Volumetric examination coverage requirements are defined by figure IWB-2500-3.

4.1.4 Relief Request 1-ISI-19

Relief is requested from performing the required volumetric examination of essentially 100 percent of the reactor vessel outlet nozzle-to-vessel welds. Volumetric examination coverage requirements are defined by figure IWB-2500-7(b).

4.2 Licensee's Proposed Alternative to Code

The licensee proposed the following alternatives:

> In lieu of the Code-required 100 percent volumetric examination, perform an ultrasonic examination to the maximum extent practical given the physical limitations present. For weld SIF-D092-15, in lieu of the Code-required examination coverage, perform a best effort ultrasonic examination, as qualified through the Performance Demonstration Initiative for Supplement 2 to ASME Code, Section XI, Appendix VIII with demonstrated best effort for single side examination.

4.3 Licensee's Basis for Relief

4.3.1 Relief Request 1-ISI-16

The 10 CFR 50.55a(b)(2)(xv)(A) requires that if access is available, the weld shall be scanned in each of the four directions (parallel and perpendicular to the weld) where accessible. Coverage credit may be taken for single side exams on ferritic piping. However, for austenitic piping, a procedure must be qualified with flaws on the inaccessible side of the weld. There are currently no qualified single side examination procedures for austenitic piping welds. Current technology is not capable of reliably detecting or sizing flaws on the far side of an austenitic weld for configurations common to United States nuclear applications. The Performance Demonstration Initiative (PDI) Program conforms to 10 CFR 50.55a(b)(2)(xv)(A) regarding single side access for piping. PDI Performance Demonstration Qualification Summary personnel certificates for austenitic piping list the limitation that single side examination is performed on a best effort basis. The best effort qualification is provided in place of a complete single side qualification to demonstrate that the examiners' qualification and the subsequent weld examination is based on application of the best available technology.

The ultrasonic examination resulted in no recorded indications. The personnel that performed the single-sided examination were PDI-qualified, with the above limitations noted.

The design configuration and materials used in fabrication of the weld precludes an ultrasonic examination of the required volume because there are no current qualified single side examination procedures that demonstrate equivalency to two-sided examination procedures on austenitic piping. In order to examine the welds in accordance with the code requirements, the Safety Injection system would require extensive modification.

Radiographic examination as an alternate volumetric examination method was determined to be impractical due to the material thickness variation and the Risk Informed ISI Program (RI-ISI) requirement of extended coverage (weld plus 1/2-inch of base material from the transition point). The radiographic density variation does not lend for compliance with ASME Code, Section V requirements without extensive radiographic exposures to obtain the density for the base material on the fitting side. The additional radiography required would increase personnel radiation exposure which would be impractical.

4.3.2 Relief Request 1-ISI-17

The design configuration of the reactor vessel precludes ultrasonic examination of essentially 100 percent of the bottom head to lower shell circumferential weld, W02-03 and bottom head cap to bottom head spherical ring circumferential weld, W01-02.

Examination of the bottom head to lower shell circumferential weld, W02-03, is obstructed by the core barrel stabilizing lugs. The design configuration allows for ultrasonic examination of approximately 72 percent of the required volume. A total of six core support lugs are welded to the reactor vessel inside surface and are equally spaced circumferentially adjacent to weld W02-03. Each core support lug attachment is approximately 12.80 inches in width and 23.30 inches in length. Due to location of the support lugs in relation to weld W02-03, the lugs limit two direction parallel and transverse coverage from the lug side of the circumferential weld. The support lugs restrict the ultrasonic search unit scan surface where attached to the vessel.

Examination of the bottom head cap to bottom head spherical ring circumferential weld W01-02, is obstructed by the bottom head penetrations. The design configuration allows for ultrasonic examination of approximately 60 percent of the required volume. A total of fifty-eight instrumentation tubes penetrate the bottom head. The bottom head penetrations limit two direction parallel and transverse coverage of the circumferential weld, restricting the ultrasonic search unit scan surface where the instrumentation tubes are near weld W01-02.

In order to examine the circumferential welds in accordance with the code requirement, the reactor vessel would require extensive modification. This modification would be impractical to implement.

Reactor vessel circumferential welds W02-03 and W01-02, received limited two-directional parallel and two-directional transverse coverage. The results of these examinations recorded no reportable indications in welds W02-03 and W01-02. The best effort ultrasonic examination provides reasonable assurance of an acceptable level of quality and safety. The information and data obtained from the volume examined provides sufficient information to judge the overall integrity of the circumferential welds.

The licensee has concluded that conformance with the ASME Code requirement is impractical.

4.3.3 Relief Request 1-ISI-18

The design configuration of the reactor vessel core barrel stabilizing lugs and bottom head penetrations precludes ultrasonic examination of essentially 100 percent of the meridional welds. Examination of the meridional welds is obstructed by the core barrel stabilizing lugs and lower head penetrations. The design configuration allows for ultrasonic examination of approximately 67 percent to 85 percent of the required volume.

The core barrel stabilizing lugs and bottom head penetrations limit two-direction parallel and transverse coverage of the meridional welds, restricting the ultrasonic search unit scan surface.

Other examination techniques were determined to be impractical for this configuration. Due to the design configuration of the lower head penetrations, ultrasonic examination from the outside surface of the vessel provides less coverage than ultrasonic examination from the inside surface and the outside surface has limited access. Use of automated ultrasonic equipment from the inside surface reduces personnel radiation exposure.

The meridional welds received limited two-direction parallel and transverse coverage with the sound beam directed toward the weld. The results of these examinations recorded no reportable indications in Welds W2A, W2B, W2C, W2D, W2E, and W2F. The best effort ultrasonic examination provides reasonable assurance of an acceptable level of quality and safety. The information and data obtained from the volume examined provides sufficient information to judge the overall integrity of the meridional welds.

The licensee has concluded that conformance with the ASME Code requirement is impractical.

4.3.4 Relief Request 1-ISI-19

The design configuration of the reactor vessel outlet nozzles precludes ultrasonic examination of essentially 100 percent of the outlet nozzle-to-vessel welds. Examination of the nozzle-to-vessel welds is obstructed by the outlet nozzle integral extension. The integral extension extends outward from the inside surface of the nozzle. The height and radius of this design prevent the transducers from mating to the surface, thereby, preventing sound from passing from the transducer to the inside surface of the reactor vessel. The design configuration allows for ultrasonic examination of approximately 76 percent of the required volume.

The ASME Code, Section XI requirements for reflectors oriented parallel and transverse to the weld stipulate that the angle beam search units shall be aimed, with the search unit manipulated, so that the ultrasonic beams pass throughout the entire volume of weld metal. The required examination volume A-B-C-D-E-F-G-H-I is depicted on ASME Code, Section XI Figure IWB-2500-7(b). The outlet nozzle integral extension limits two direction transverse coverage from the integral extension side of the nozzle-to-vessel weld. The integral extension restricts the ultrasonic search unit scan surface.

In order to examine the outlet nozzle-to-vessel welds in accordance with the code requirement, the nozzles would require extensive modification. This modification would be impractical to implement. Due to the design configuration of the outlet nozzle-to-vessel welds, ultrasonic examination from the inside surface of the vessel provides more coverage than ultrasonic examination from the outside surface where the outside surface has limited access. Use of automated ultrasonic equipment from the inside surface reduces personnel radiation exposure.

The outlet nozzle-to-vessel welds received 100 percent two-direction parallel coverage and 100 percent two-direction transverse coverage from the shell side of the nozzle-to-vessel weld with the sound beam directed toward the weld. Limited two-direction transverse scans were performed from the integral extension side. A one-direction parallel examination was also performed from the nozzle bore resulting in 100 percent coverage. The results of these examinations recorded no reportable indications in Welds N-15, N-16 and N-17. Two code allowable indications were recorded in Weld N-18. The best effort ultrasonic examination provides reasonable assurance of an acceptable level of quality and safety. The information and data obtained from the volume examined provides sufficient information to judge the overall integrity of the outlet nozzle-to-vessel welds.

The licensee has concluded that conformance with the referenced code requirement is impractical, therefore, this request for relief is submitted pursuant to 10 CFR 50.55a(g)(5)(iii).

4.4 NRC Staff Evaluation

The ISI Code of record for WBN, Unit 1 is the1989 Edition of the ASME Code, Section XI with approved alternative for Risk-Informed Inservice Inspection under WCAP-14572, “Westinghouse Structural Reliability and Risk Assessment (SRRA) Model for Piping Risk Informed Inservice Inspection”, Revision 1-NP-A, dated February 1999, Table 4.1-1. WCAP-14572 Table 4.1-1 and ASME Code, Section XI, Table IWB-2500-1, Code Categories R-A, B-A, and B-D require a volumetric examination, which includes 100 percent of the weld length, once during the 10-year interval. The examination volume is defined in Figures IWB-2500-1, IWB-2500-3, 7(b), and 8(c).

The staff review of the data submitted for the subject welds and inspection volumes noted that obstructions to complete coverages were present by the design of the components, specifically, the proximity of another component(s) which limited access to the welds requiring examination or the configuration of the component, which limited movement and/or coupling of the ultrasonic transducer to the scanning surface. The staff's evaluation of the limitations is listed in the tables below.

Component ID	Exam Category/Item No. Figure No. Coverage Obtained	Coverage Limitation	Recordable Indications (Yes/No)
SIF-D092-15	R-A/R1.11 & R1.16 IWB-2500-8(c) 50 percent	Design configuration and materials of fabrication limit examination to one side.	No
W02-03	B-A/B1.11 IWB-2500-1 72 percent	Configuration of Core Barrel Stabilizing Lugs and Lower Head Penetrations limit examination.	No
W01-02	B-A/B1.21 IWB-2500-3 60 percent	Configuration of Core Barrel Stabilizing Lugs and Lower Head Penetrations limit examination.	No
W2A	B-A/B1.22 IWB-2500-3 79 percent	Configuration of Core Barrel Stabilizing Lugs and location of Lower Head Penetrations limit examination.	No
W2B	B-A/B1.22 IWB-2500-3 84 percent	Configuration of Core Barrel Stabilizing Lugs and location of lower head penetrations limit examination.	No
W2C	B-A/B1.22 IWB-2500-3 85 percent	Configuration of Core Barrel Stabilizing Lugs and location of lower head penetrations limit examination.	No
W2D	B-AB1.22 IWB-2500-3 85 percent	Configuration of Core Barrel Stabilizing Lugs and location of lower head penetrations limit examination.	No
W2E	B-A/B1.22 IWB-2500-3 69 percent	Configuration of Core Barrel Stabilizing Lugs and location of lower head penetrations limit examination.	No
W2F	B-A/B1.22 IWB-2500-3 67 percent	Configuration of Core Barrel Stabilizing Lugs and location of lower head penetrations limit examination.	No
N15	B-D/B3.90 IWB-2500-7(b) 76 percent	Configuration of Reactor Vessel Outlet Nozzles. Outlet Nozzle Integral Extension limits exam.	No

Component ID	Exam Category/Item No. Figure No. Coverage Obtained	Coverage Limitation	Recordable Indications (Yes/No)
N16	B-D/B3.90 IWB-2500-7(b) 76 percent	Configuration of Reactor Vessel Outlet Nozzles. Outlet Nozzle Integral Extension limits exam.	No
N17	B-D/B3.90 IWB-2500-7(b) 76 percent	Configuration of Reactor Vessel Outlet Nozzles. Outlet Nozzle Integral Extension limits exam.	No
N18	B-D/B3.90 IWB-2500-7(b) 76 percent	Configuration of Reactor Vessel Outlet Nozzles. Outlet Nozzle Integral Extension limits exam.	Yes

The staff has determined that the information provided by the licensee supports the licensee's conclusions that access to obtain Code-required coverages would only be gained through redesign of the components, or for weld SIF-D092-15, qualification of a single-sided inspection procedure, which would be impractical based on current available technologies.

As stated by the licensee, as supplemented by letter dated June 29, 2006, there were no recordable indications identified with the amount of coverages obtained, with the exception of weld N-18. This weld contained two indications which, when evaluated using ASME Code, Section XI criteria specified in IWB-3512, were acceptable for continued service with no repair or further evaluation required. The volume containing these flaws was adequately scanned from the inner diameter of the nozzle to ensure an accurate depiction of the weld flaw size and orientation. The staff concludes, from the information provided by the licensee, that the examination coverages obtained would have identified any pattern of degradation should one have developed, and that a change of component design would be necessary to obtain the increased coverages. Requiring the licensee to redesign the subject components in order to obtain the Code-required volumetric coverages would result in a significant burden which the NRC staff considers to be impractical. The staff concludes that the alternatives provide an acceptable level of quality and safety.

4.5 Conclusion

Based on the above discussion, the staff concludes that compliance with the ASME Code coverage requirements is impractical for the configurations identified in the subject relief requests. Therefore, relief is granted pursuant to 10 CFR 50.55a(g)(6)(i) for the first ISI interval for Relief Request Nos. 1-ISI-16, 1-ISI-17, 1-ISI-18, and 1-ISI-19 for WBN Unit 1. This grant of relief is authorized by law and will not endanger life or property, or the common defense and security, and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

All other ASME Code, Section XI requirements for which relief was not specifically requested and approved in this relief request remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

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Date: October 27, 2006

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