

WOLF CREEK

NUCLEAR OPERATING CORPORATION

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MAY 9 2000

ET 00-0020

U. S. Nuclear Regulatory Commission
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Reference: Letter ET 00-0002, dated February 25, 2000, from R. Muench, WCNOC, to USNRC

Subject: Docket No. 50-482: Revised Request to Use Alternative Requirements for Inservice Inspection - Relief Requests CI1R-01 and CI1R-02

Gentlemen:

The Wolf Creek Nuclear Operating Corporation (WCNOC) is revising its ASME Section XI relief requests submitted by the Reference. At the Staff's request, WCNOC has prepared paragraph-by-paragraph comparison tables discussing ASME Section XI Subsections IWE and IWL differences between the 1992 Edition with 1992 Addenda, and the 1998 Edition. These two tables, one for each relief request, are now included in the attached relief requests. Due largely in part to the inclusion of the comparison tables, revisions have been made to the previously submitted relief requests. Therefore, this letter and the attached relief requests supersede our request submitted by the reference.

Pursuant to the provisions of 10 CFR 50.55a(a)(3)(i), Wolf Creek Nuclear Operating Corporation (WCNOC) requests approval for use of an alternative to the requirements of ASME Section XI, 1992 Edition, with the 1992 Addenda, Subsection IWE, for the Inservice Inspection of Class MC and Metallic Shell and Penetration Liners of Class CC Pressure Retaining components and their integral attachments. Details of the proposed alternative and Relief Request CI1R-01 are provided in Attachment I. The proposed alternative provisions to ASME Section XI requirements provide an acceptable level of quality and safety for the inspection of Subsection IWE components.

In addition, pursuant to the provisions of 10 CFR 50.55a(a)(3)(i), WCNOC requests approval for use of an alternative to the requirements of ASME Section XI, 1992 Edition, with the 1992 Addenda, Subsection IWL, for the Inservice Inspection of Class CC components. Details of the proposed alternative and Relief Request CI1R-02 are provided in Attachment II. The

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proposed alternative provisions to ASME Section XI requirements provide an acceptable level of quality and safety for the inspection of Subsection IWL components.

A significant portion of the inservice inspection of the Wolf Creek Generating Station (WCGS) containment is scheduled to be performed during the WCGS eleventh refueling outage, which is scheduled to begin on September 30, 2000. Therefore, in order to provide sufficient time to incorporate programmatic changes to support the eleventh refueling outage, WCNOG requests that approval of these relief requests be completed by August 1, 2000.

Attachment III identifies commitments contained in this correspondence. If you have any questions concerning this correspondence, please contact me at (316) 364-4034, or Mr. Tony Harris at (316) 364-4038.

Very truly yours,



for Richard A. Muench

RAM/rlr

Attachments

cc: J. N. Donohew (NRC), w/a
W. D. Johnson (NRC), w/a
E. W. Merschoff (NRC), w/a
Senior Resident Inspector (NRC), w/a

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COMPONENT IDENTIFICATION

Code Class: MC and Metallic Liners of Class CC Components
Examination Category: All
Item Numbers: All
Description: Alternative Requirements for Inservice Inspection of Class MC and Metallic Shell and Penetration Liners of Class CC Pressure Retaining Components and Their Integral Attachments

CODE REQUIREMENTS

ASME Section XI, 1992 Edition with the 1992 Addenda, Subsection IWE

PROPOSED ALTERNATIVE PROVISIONS

Wolf Creek Nuclear Operating Corporation (WCNOC) will perform inservice inspection (ISI) of Class MC and metallic shell and penetration liners of Class CC pressure retaining components and their integral attachments in accordance with Subsection IWE of the 1998 Edition of ASME Section XI, supplemented with the applicable requirements of 10 CFR 50.55a(b)(2)(ix) and the following additional commitments related to the identified Section XI paragraphs:

- 1) IWE-2300: IWE-2300, 1998 Edition, requires the Owner to define requirements for visual examination of containment surfaces and for qualifying personnel performing visual examinations. The following provisions define the general and detailed visual examinations to be performed as part of the WCNOC Containment ISI Program, as well as personnel qualification requirements:
 - a) The general and detailed visual examinations will be performed by certified examination personnel.
 - b) The qualification program for personnel performing the general and detailed visual examinations will meet the applicable requirements of IWA-2300 of the 1992 Addenda.
 - c) WCNOC procedures will include the general and detailed visual examinations in the functional task descriptions for the VT-3 and VT-1 methods, respectively. Personnel performing the general and detailed visual examinations will be certified to a minimum Level II VT-3 and VT-1, respectively.
 - d) The acceptance criteria for general and detailed visual examinations for various items in the containment system are discussed in Item 2) below.
 - e) Performance requirements for general and detailed visual examinations will be included in the visual examination procedure. The detailed visual examination will meet the resolution requirements for VT-1 in Table IWA-2210-1 in the 1992 Addenda. A performance demonstration will be developed and documented to establish the distances and illumination for which the general and detailed visual examinations are sufficient to detect evidence of degradation that may affect the containment structural integrity or leak tightness. The WCNOC visual examination procedure will be prepared by Non-destructive Examination (NDE) Level III personnel and the Responsible Individual and demonstrated to the Authorized Nuclear Inservice Inspector.
 - f) Personnel performing augmented ultrasonic thickness examinations will be qualified in accordance with the requirements of IWA-2000 in the 1992 Addenda.

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- 2) IWE-3510.1 and IWE-3511.1: These paragraphs in the 1998 Edition were revised to require the Owner to define acceptance criteria for general and detailed visual examination of containment surfaces. The following provisions define the acceptance criteria for the general and detailed visual examinations to be performed as part of the WCNOG Containment ISI Program:

The general visual examination acceptance criteria will be included in the WCNOG Section XI visual examination procedure. The general visual examination of containment liner surfaces examines for indications of degradation that may affect the containment structural integrity or leak tightness. Containment liner welds and dissimilar metal welds are examined as part of the containment liner surfaces. Indications of flaking, blistering or peeling coating, excessive corrosion, general deformation, bulges, surface irregularities, or other signs of distress, will be recorded. The general visual examination of pressure retaining bolted connections examines for missing or loose bolting materials, corrosion, bolting deformation, or other indications that may affect the integrity of the bolted connection. All indications are recorded. The general visual examination of moisture barriers examines for wear, damage, erosion, tears, surface cracks or other defects that would permit intrusion of moisture into inaccessible areas. All indications are recorded. All recorded indications will be supplemented with a detailed visual examination.

The detailed visual examinations will also be included in the WCNOG Section XI visual examination procedure. The detailed visual examination assesses the initial condition of surfaces requiring augmented examinations, in accordance with IWE-1241, and determines the magnitude and extent of indications of degradation and distress of these containment surfaces. The detailed visual examination also determines the magnitude and extent of indications of degradation and distress of suspect containment surfaces initially detected by the general visual examination. The detailed visual examination criteria of IWE-2310(e) of the 1998 Edition are used, supplemented by additional criteria for bolted connections and moisture barriers, as defined in the general visual examination criteria above. The results of the examination will be recorded for evaluation by the Responsible Individual for acceptance by engineering evaluation or correction by repair/replacement activity.

- 3) IWE-3511.3: The 1998 Edition only applies the criteria in IWE-3511.3 to Class MC pressure retaining components, not to metallic liners of Class CC components. WCNOG will apply the ultrasonic examination criteria in IWE-3511.3 to both Class MC components and the metallic liners of Class CC components.

BASIS FOR RELIEF

In the Federal Register, on August 8, 1996 (61 FR 41303), the NRC amended its regulations to incorporate by reference the ASME Code Section XI, 1992 Edition with the 1992 Addenda of Subsection IWE, for expedited examination of containments. Based on the effective date of the rule change of September 9, 1996, licensees have until September 9, 2001, to establish a Containment ISI program and to complete the first period inspection requirements contained in Section XI.

In the Federal Register, on September 22, 1999 (64 FR 51370), the NRC further amended its regulations to incorporate by reference the ASME Code Section XI, 1995 Edition with the 1996 Addenda. However, in 10 CFR 50.55a(b)(2)(vi), the

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NRC allowed licensees to implement either the previously required 1992 Edition with 1992 Addenda, or the 1995 Edition with 1996 Addenda, as modified and supplemented by the requirements of 10 CFR 50.55a(b)(2)(ix). This 1999 amendment renumbered the previous 10 CFR 50.55a(b)(2)(x) in the 1996 regulation (containing the modifications and supplements to the 1992 Edition with 1992 Addenda of Subsection IWE) to 10 CFR 50.55a(b)(2)(ix).

Several changes have been made by the ASME to the Subsection IWE rules contained in the 1992 Edition with 1992 Addenda and the 1995 Edition with 1996 Addenda. These changes were published in the 1998 Edition of ASME Section XI and addressed implementation difficulties with the earlier editions and addenda of Subsection IWE. In a Safety Evaluation Report (SER) dated July 23, 1999, issued to Texas Utilities Electric Company for the Comanche Peak Steam Electric Station, Units 1 and 2, Docket Numbers 50-445 and 50-446, the NRC staff concluded that the 1998 Edition of Subsection IWE, supplemented by the licensee's commitments in responses to the NRC staff's Requests for Additional Information, provided an acceptable level of quality and safety for ensuring the pressure boundary integrity of the Comanche Peak containments.

The WCNOG proposed alternative utilizes the ASME 1998 Edition of Subsection IWE of Section XI in its entirety, supplemented with the applicable requirements of 10 CFR 50.55a(b)(2)(ix). The 1998 Edition of Subsection IWE incorporates exceptions and changes to the 1992 Addenda to address industry implementation difficulties and provides a more cohesive approach than could be achieved by requesting relief on multiple, individual issues. These requirements were developed in accordance with the ASME Code committee process with input from interested parties, including other licensees, manufacturers, engineering organizations, Authorized Nuclear Inspection Agencies, EPRI and the NRC. The updating of Subsection IWE requirements by this consensus process is intended to ensure the continued safe operation of nuclear power plants and the continued leak-tight structural integrity of metallic containment components. At the NRC's request, a paragraph by paragraph comparison of Subsection IWE requirements between the 1992 Edition with 1992 Addenda and the 1998 Edition has been included as Table 1 and is attached to this relief request.

However, in the SER for Comanche Peak, the NRC staff identified four changes between the 1992 Edition with 1992 Addenda and the 1998 Edition of Subsection IWE which were unacceptable to the NRC and for which additional Comanche Peak information was provided. WCNOG has addressed three of these four changes by including commitments in the Proposed Alternative Provisions section of this relief request. The fourth change involved the IWE-2500 deletion of a requirement to examine paint or coatings prior to removal. Information on this Code change is included in the attached Table 1.

Accordingly, the WCNOG proposed alternative utilizes the 1998 Edition of Subsection IWE of Section XI in its entirety, supplemented with: 1) additional commitments to address concerns the NRC staff had with changes in the 1998 Edition of Subsection IWE, as identified in the SER for Comanche Peak; and 2) the applicable requirements of 10 CFR 50.55a(b)(2)(ix).

Based on the information presented, WCNOG requests relief from the requirements in the 1992 Edition with the 1992 Addenda of Section XI. This information demonstrates that the proposed alternative provisions provide an acceptable level of quality and safety for the inspection of Subsection IWE components. Therefore, pursuant to 10 CFR 50.55a(a)(3)(i), relief is requested on the basis that the proposed alternatives to ASME Section XI requirements provide an acceptable level of quality and safety.

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PERIOD FOR WHICH RELIEF IS REQUESTED

Relief is requested for the first ten-year inspection interval of the Containment Inservice Inspection Program at Wolf Creek Generating Station.

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
1100	No change	N/A
1200	No change	N/A
1210	No change	N/A
1220	Changed "containment" to "containment system"	Nonsignificant
1230	No change	N/A
1231	<p>Removed item 3) - "single welded butt joints from the weld side" - as a specific item required to remain accessible for the life of the plant.</p> <p>Changed wording from "80% of the surface area" to "80% of the pressure retaining boundary" and stated exclusions from that 80%.</p> <p>Reworded paragraph b).</p>	<p>These single welded butt joints were removed as a separately listed examination item and are now included within the item for the pressure retaining boundary as discussed in the changes to Table IWE-2500-1 below.</p> <p>The exclusions from 80% incorporate an existing Table IWE 2500-1 note and clarify that areas made inaccessible during construction are also excluded.</p> <p>Change to b) is for clarity and is nonsignificant.</p>
1232	<p>ASME XI generic change from repair and/or replacement to repair/replacement activities.</p> <p>Deleted paragraph (a)(3) addressing inaccessible welded joints.</p>	<p>Nonsignificant</p> <p>Welded joints were removed as a separately listed examination items and are now included within the item for the pressure retaining boundary as discussed in the changes to Table IWE-2500-1 below.</p>
1241	Added stiffeners and, by reference to IWE-2420, flaws accepted by evaluation as areas requiring augmented examination.	The additional areas subject to augmented examination further assure containment integrity.
1242	Changed IWE-2500(b) to IWE-2500(c)	Nonsignificant
2000	No change	N/A

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
2100	Added new Subarticle 2100 - "General" - to provide reference to IWA-2000 with exceptions from IWA-2210, 2300, 2500 and 2600.	The additional general requirements invoked by reference to IWA-2000 where none were referenced previously further assure containment integrity. The exceptions provided are significant in that related requirements have been incorporated into IWE-2310, 2320 and 2330. These changes are discussed below. WCNOC's visual examination requirements are defined in Relief Request CI1R-01, Proposed Alternatives, item 1).
2200	<p>Deleted paragraph c) which provided allowances for the use of shop or field examinations in lieu of on site preservice examinations.</p> <p>Deleted paragraph g) which required the condition of new coating to be documented in the preservice examination record.</p> <p>ASME XI generic change from repair and/or replacement to repair/replacement activities.</p>	<p>The deletion of an allowance for an alternative examination ensures that proper preservice examinations are performed and documented.</p> <p>The deletion of the requirement to document the condition of "new" non pressure retaining coatings in the preservice examination record provides for more efficient program implementation without affecting component integrity. The WCNOC containment coating procedure adequately inspects new coating applications without the need for an additional Code examination.</p> <p>Nonsignificant.</p>
2300	Added new Subarticle 2300 - "Visual Examination, Personnel Qualification and Responsible Individual."	The paragraphs within this subarticle are considered significant and contain requirements that either did not previously exist or that were contained in other areas. Placing these requirements within Article IWE-2000 further ensures proper "Examination and Inspection" of areas important to containment integrity and provides consistency with Subsections IWB, IWC and IWD. The specific paragraphs

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
		<p>added are discussed below. Based on the NRC SER for Comanche Peak, WCNOG has submitted additional commitments, as detailed in Relief Request CI1R-01. Reference to the applicable additional commitments are identified in the discussion below.</p>
2310	<p>Added new paragraph 2310 - Visual Examinations - which a) states that the owner shall define requirements for visual examination of containment surfaces;</p> <p>b) and c) define general and detailed visual examinations; and</p> <p>d) and e) provide the requirements for the conditions of areas affected by repair/replacement activities, painted or coated areas, and non coated areas.</p>	<p>a) Adding requirements for the owner to define visual examination requirements provides for more efficient containment ISI program implementation by allowing examinations that may be more consistent with existing ISI, containment coating, maintenance rule and Appendix J programs. WCNOG's visual examination requirements are defined in Relief Request CI1R-01, Proposed Alternatives, item 1).</p> <p>b) and c): The general visual examination is performed to indicate the general condition of the containment. The detailed visual examination is performed to determine the magnitude and extent of any deterioration or distress. Referring to visual examinations by new general visual and detailed visual terms does not adversely affect the integrity of the containment components examined. The provisions of WCNOG's general visual and detailed visual examinations are defined in Relief Request CI1R-01, Proposed Alternatives, item 1).</p> <p>d) and e): Previously these examination requirements did not exist within Article IWE-2000 but rather only in the acceptance criteria of Article IWE-3000. Adding these specific attributes here ensure proper containment examinations. The WCNOG</p>

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
		acceptance criteria for general and detailed visual examination further defines the examination criteria to be used. The WCNOG acceptance criteria is defined in Relief Request CI1R-01, Proposed Alternatives, item 2).
2320	<p>Added new paragraph 2320 - "Responsible Individual" - which a) states the qualification requirements of the Responsible Individual and</p> <p>b) defines the responsibilities of the Responsible Individual for the development of plans and procedures; instruction, training and approval of visual examination personnel; performance or direction of visual examinations; evaluation of results and documenting results.</p>	<p>a) The details for the Responsible Individual qualification requirements were previously contained in the acceptance standards of IWE-3510.1.</p> <p>b) The added detailed responsibilities for the Responsible Individual ensure proper performance of those related activities. Having an individual possessing the qualifications described in paragraph 2320 a) performing the responsibilities defined in paragraph 2320 b) ensures the reliable detection of conditions adverse to containment integrity.</p>
2330	<p>Added new paragraph 2330 - "Personnel Qualification" - which a) states that the owner is responsible for defining the qualification requirements for personnel performing visual examinations and</p> <p>b) provides minimum qualification requirements that were previously contained in the acceptance criteria of IWE-3510.1.</p>	<p>a) Adding requirements for the owner to define personnel qualification requirements provides for more efficient containment ISI program implementation by permitting personnel performing containment examinations to be qualified to written practices that are more consistent to those used for other NDE personnel. WCNOG's personnel qualification requirements are defined in Relief Request CI1R-01, Proposed Alternatives, item 1).</p> <p>b) Providing these details in the qualification requirements paragraph focuses the containment visual qualification on areas important to containment integrity. WCNOG's personnel qualification and examination provisions that supplement the Code requirements are defined in Relief</p>

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
		Request CI1R-01, Proposed Alternatives, item 1).
2400	No change	N/A
2410	No change	N/A
2411	Deleted a subparagraph discussing decreasing and extending inspection periods.	The deleted subparagraph eliminates duplication with IWA-2400.
2412	Deleted a subparagraph discussing decreasing and extending inspection periods. Added a subparagraph detailing requirements for the scheduling of added welds or components.	The deleted subparagraph eliminates duplication with IWA-2400. The added requirements for the scheduling of added welds or components was added prior to the 1998 Edition rewrite of Subsection IWE and is of marginal value with the 1998 revisions to Table IWE-2500-1 (refer to the evaluation later in this table).
2420	<p>Revised (b) to remove repaired areas as areas requiring reexaminations during the next successive inspection period.</p> <p>Changed (c) to require that areas which remain essentially unchanged for the next inspection period no longer require augmented examinations. The 1992 Addenda required three consecutive examinations to reach this conclusion.</p>	<p>Repaired areas that are likely to experience accelerated degradation and aging are already subject to augmented examinations per IWE-1241. Some repairs may be located in non augmented areas and may be necessary to correct physical damage caused by construction or craft activities. Not having to repeat examinations of these non augmented repaired areas provides for more efficient program implementation without adversely affecting component integrity.</p> <p>This is now consistent with Class 2 successive inspections. The engineering evaluation of IWE-3122.3, along with the reexamination in the next inspection, is sufficient to assure that augmented examinations need not be continued.</p>
2430	Deleted the paragraph - Additional Examinations - which discussed adding examinations items of the same category if flaws or areas of degradation are identified	The changes to Table IWE 2500-1 eliminate several examination categories. The categories that remain all require 100% examination. Therefore no items are

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	during an examination.	available for additional examinations.
2500	<p>Reworded the existing subparagraphs consistent with the previous paragraph changes and with Table IWE-2500-1 changes.</p> <p>Deleted the requirement to examine paint or coatings prior to removal.</p> <p>Replaced the requirement for one foot square grids in thickness measurements with a reference to Table IWE 2500-2.</p> <p>Added a reference to IWE-5000 for pressure tests.</p>	<p>The reworded subparagraphs add clarity and provide consistency within IWE.</p> <p>The 1998 Edition increases the frequency of examination when compared to the 1992 Addenda. During examinations, the general and detailed visual examinations of coated areas will identify flaws and degradation in the containment base metal and result in appropriate corrective actions per the Code requirements. Should a coating be removed between required inservice inspections, the WCNOG nuclear coatings pre-application inspections, and nonconformance and corrective action programs, would identify and resolve any base metal conditions that could challenge the structural integrity of the containment. As a result, there is no anticipated benefit from a separate Code requirement to inspect coatings prior to removal. This deletion provides for a more efficient program implementation without affecting component integrity.</p> <p>The new Table IWE 2500-2 provides more detailed requirements for thickness measurements and is discussed below.</p> <p>The added reference to IWE-5000 provides direction for the performance of pressure tests.</p>
2600	Deleted a sentence discussing compatibility of paint and coating systems and a requirement to examine the new paint.	The removal of this sentence addressing "new" non pressure retaining paint and coatings provides for more efficient containment ISI program implementation without adversely affecting component

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
		integrity. The compatibility of paint and coating systems with the existing system, and the examination of newly applied coatings, is addressed in the WCNOG containment coating specification and procedure.
3100	Removed the word nondestructive from the heading.	Nonsignificant
3110	No change	N/A
3111	Replaced the reference to Table IWE-3410-1 with a reference to subarticle IWE-3500. Removed reference to paragraph IWE-3115.	Table IWE-3410-1 and paragraph IWE-3115 have been deleted and are discussed below. IWE-3500 adequately captures all of the information previously contained in the deleted table and paragraph.
3112	Replaced the reference to Table IWE-3410-1 with a reference to subarticle IWE-3500. ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
3114	Replaced the reference to Table IWE-3410-1 with a reference to subarticle IWE-3500. ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
3115	Deleted subparagraph which addressed repair programs and evaluations being subject to review by authorities.	Nonsignificant - there were no submittal or retention requirements changed by the deletion of the subparagraph.
3120	Removed the word nondestructive from the heading.	Nonsignificant
3121	Removed the word nondestructive and deleted references to IWE-3124 and IWE-3125 for the acceptance of flaws for continued service.	The removal of nondestructive is nonsignificant. The referenced subparagraphs did not actually apply to the acceptance of flaws for continued service.
3122	Replaced the references to Table IWE-2500-1 and to IWE-3000 with a reference to subarticle IWE-3500. ASME XI generic change from repair and/or replacement to	Nonsignificant - the changes are for clarity and to reconcile paragraph numbering. There were no submittal or retention requirements changed by the deletion of the sentence

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	repair/replacement activities. Reworded several sentences. Deleted sentence which addressed evaluations being subject to review by authorities.	addressing evaluation reviews.
3124	Replaced the reference to Table IWE-3410-1 with a reference to subarticle IWE-3500. ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
3125	Deleted subparagraph which addressed repair programs and reexamination results being subject to review by authorities.	Nonsignificant - there were no submittal or retention requirements changed by the deletion of the subparagraph.
3130	No change	N/A
3200	Added a statement to the end of the paragraph that states supplemental surface or volumetric examinations are required when specified by the engineering evaluation.	The added statement clarifies requirements and eliminates potential duplication or contradiction of requirements in stating that the engineering evaluation requirements of IWE-3122 determine what and when supplemental examinations are required.
3410	Replaced the reference to Table IWE-3410-1 with a reference to subarticle IWE-3500.	Nonsignificant
3430	No change	N/A
3500	No change	N/A
3510	<p>Reconciled acceptance standards with the IWE-2300 changes discussed above and the Table IWE-2500-1 changes discussed below by:</p> <p>Adding the requirement that the owner shall define acceptance criteria for visual examination of containment surfaces;</p> <p>Removing the wording for Responsible Individual and for personnel qualifications;</p>	<p>Previously examination requirements were contained in the acceptance standards of IWE-3500. This has been corrected by the addition of IWE-2300 as discussed above.</p> <p>This change directly corresponds to the addition of IWE-2310(a) discussed above. WCNO's visual examination acceptance criteria is defined in Relief Request CI1R-01, Proposed Alternatives, item 2).</p> <p>This change directly corresponds to the addition of IWE-2320 discussed above.</p>

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	<p>Combining 3510.2 and 3510.3 and removing specific VT-1 and VT-3 examination attribute wording; and</p> <p>Incorporating IWE-3511;3513,3514 and 3515 with changes into IWE-3510.</p> <p>By the incorporation of 3515 the acceptance standards for bolting were changed from referencing material specs and torque or tension limits to conditions affecting leak tight or structural integrity.</p>	<p>These changes directly correspond to the addition of IWE-2310(e)(1) and (2) discussed above.</p> <p>These changes correspond to the changes in the examination categories of Table IWE-2500-1 as discussed below and to the removal of examination requirements from the acceptance standards paragraphs.</p> <p>The resulting acceptance standards for bolting provide for more practical containment ISI program implementation without adversely affecting containment leak tight or structural integrity.</p>
3511	Deleted subparagraph which addressed examination category E-B.	Examination category E-B has been incorporated into examination category E-A per the changes to Table IWE-2500-1 discussed below.
3512	<p>Renumbered subparagraph to IWE-3511. Reconciled acceptance standards with the IWE-2300 changes discussed above and the Table IWE-2500-1 changes discussed below</p> <p>Added the requirement that the owner shall define acceptance criteria for visual examination of containment surfaces;</p> <p>Combined 3512.2 and 3512.3 with changes into 3511.2 and removed specific VT-1 examination attribute wording; and</p>	<p>The subparagraph was renumbered based on the deletion of previous IWE-3511 as discussed above. Previously examination requirements were contained in the acceptance standards of IWE-3500. This has been corrected by the addition of IWE-2300 as discussed above.</p> <p>This change directly corresponds to the addition of IWE-2310(a) discussed above. WCNO's visual examination acceptance criteria is defined in Relief Request CI1R-01, Proposed Alternatives, item 2).</p> <p>These changes directly correspond to the addition of IWE-2310(e)(1) and (2) discussed above and eliminate potential duplication or contradiction of requirements.</p>

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	Reworded ultrasonic examination subparagraph and limited the UT to Class MC components.	This change eliminates the need to perform the UT examinations on metallic liners of Class CC components. WCNOG will apply the provisions of IWE-3511.3 to both Class MC components and metallic liners of Class CC components, as stated in Relief Request CI1R-01, Proposed Alternatives, item 3).
3513 3514 3515	Deleted subparagraphs IWE-3513, 3514 and 3515 which addressed examination categories E-D, E-F, and E-G, respectively.	Examination categories E-D, E-F and E-G have been incorporated into examination category E-A per the changes to Table IWE-2500-1 discussed below.
4100	No change	WCNOG's relief request does not include using the 1998 Edition of IWA-4000. WCNOG will continue to use IWA-4000 from the 1992 Addenda as required by NRC clarification of the 10 CFR 50 regulations that mandated implementation of IWE and IWL.
5200	No change	N/A
5210	No change	N/A
5220	ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
5221	ASME XI generic change from repair and/or replacement to repair/replacement activities. Removed the quotation of 10 CFR 50 Appendix J paragraph IV.A.	Nonsignificant - the requirement to meet the requirements of the Appendix J paragraph referenced is not affected by removing the quoted Appendix J paragraph.
5222	ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
5240	Replaced a reference to IWA-5240 with requirements to perform detailed visual examination of repair/replacement areas during pressure tests.	The addition of specific IWE examination requirements during pressure testing in lieu of referencing IWA general requirements focuses requirements on issues specific to containment integrity and therefore provides added assurance of the integrity of

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
		repaired/replaced areas.
5250	Changed Corrective Measures to Corrective Action in the heading. ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
7100	No change	N/A
Table 2411-1	No change	N/A
Table 2412-1	<p>Replaced the separate entries for 1st and successive intervals with one entry for All intervals.</p> <p>Changed minimum and maximum examination completion percentages and added Note (1) which states that if the first period completion percentage for any examination category exceeds 34%, at least 16% of required examinations shall be performed in the second period.</p>	<p>Nonsignificant - The previous requirements for the 1st and successive intervals were identical. Therefore combining the entries does not affect any requirements.</p> <p>Provides more flexibility in scheduling examinations, but ensures allocation of examinations are done throughout the 10 year interval. The IWE change is consistent with changes made in IWB, IWC, IWD, and IWF.</p>
Table 2500-1 Cat. E-A	<p>E1.11 Revised frequency of examination from "prior to each type A test" to "100% during each period".</p> <p>E1.12 Redesignated item from "accessible surface areas" to "wetted surfaces of submerged areas". Replaced examination method VT-3 with general visual.</p>	<p>Removing the requirement to coordinate examinations with type A tests allows for more efficient containment ISI program implementation without adversely affecting containment integrity. The requirement to perform general visual examinations every inspection period increases the total number of examinations on the containment surface in the interval.</p> <p>Replacing the accessible surface area designation (which is now included in E1.11) with wetted surface areas (which were previously included in E1.12 footnote 4) does not eliminate or reduce any required examination areas. The conditions of</p>

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 Revision 1
 Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	<p>E1.20 Added BWR to item description. Replaced examination method VT-3 with general visual.</p> <p>E1.30 Added item for moisture barriers with a general VT required each period.</p> <p>All item no.'s - Replaced reference to IWE-3510 for examination requirements with IWE-2310.</p> <p>Notes - Revised to specifically include welds and bolting as part of the pressure retaining boundary requiring examination.</p>	<p>distress which would be detected by a VT-3 examination are the same conditions that would be detected by a general visual examination (refer to the evaluation of IWE-2300 above). The requirement to perform a detailed examination on any suspect area has not changed. The new requirement in item E1.11 to perform general visual examinations every inspection period increases the total number of examinations on the containment surface in the interval. The overall impact of this change is to increase the level of quality and does not adversely affect the safety of the containment inspection program.</p> <p>This item is not applicable to the WCGS containment.</p> <p>Moisture barriers were previously included in examination category E-D with a VT-3 required each interval. Examining moisture barriers more frequently will assure reliable detection of conditions adverse to containment integrity.</p> <p>Nonsignificant - Previously some examination requirements were contained in IWE-3500. They now exist in IWE-2300 as discussed above.</p> <p>Welds and bolting were previously included in examination categories E-B, E-F and E-G. Including these items in the examination category for the containment pressure retaining boundary provides for more efficient program implementation without adversely affecting component integrity.</p>

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Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
Table 2500-1 Cat. E-B	Deleted examination category which addressed pressure retaining welds.	Pressure retaining welds are now included in examination category E-A as addressed above.
Table 2550-1 Cat. E-C	<p>E4.11 Replaced examination method VT-1 with detailed visual.</p> <p>E4.12 Added grid line intersections to description of parts examined. Changed examination method from volumetric to ultrasonic thickness.</p> <p>All item no.'s - Added examination requirement paragraph number references. Updated references in Acceptance Standard and Extent and Frequency columns.</p> <p>Notes - Changed note 2 from requiring augmented examination until an area remains unchanged for three consecutive inspection periods to the next inspection period. Deleted note 3 which discussed inspection deferrals.</p>	<p>The conditions of distress or deterioration which would be detected by a VT-1 are the same conditions that will be detected by the WCNOG described detailed visual examination, as discussed in IWE-2300 above.</p> <p>The added wording clarifies inspection requirements and ensures repeatability in the location of subsequent thickness measurement points.</p> <p>Previously no references existed for examination requirements. These requirements have been added to IWE-2300 and 2500 as discussed above. Adding new references and updating paragraph numbers ensure proper requirements are applied to examinations.</p> <p>Three inspection periods cover a ten year interval. Performing augmented examinations for at least two periods while continuing general visual examinations each period provides for more efficient program implementation without adversely affecting component integrity. Deletion of note 3 is nonsignificant.</p>
Table 2550-1 Cat. E-D	Deleted examination category which addressed seals, gaskets and moisture barriers.	Moisture barriers have been included in examination category E-A as addressed above. Seals and gaskets previously required examination once per an interval with effectively an acceptance criteria of leak

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Revision 1
Table 1: Subsection IWE Comparison

IWE Paragraph	Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed.	Significance of change and/or basis for use as an alternative examination
		tightness. Leak tight integrity is verified during each 10 CFR 50 Appendix J leak test. Removing these inspection items provides for more efficient program implementation without adversely affecting component integrity.
Table 2550-1 Cat. E-F	Deleted examination category which addressed dissimilar metal welds.	Dissimilar metal welds are now included in examination category E-A as addressed above.
Table 2550-1 Cat. E-G	Deleted examination category which addressed pressure retaining bolting.	Pressure retaining bolting is now included in examination category E-A as addressed above.
Table 2550-1 Cat. E-P	Deleted examination category which addressed 10CFR50 Appendix J testing for all pressure retaining components.	Appendix J testing is mandated by plant technical specifications. Removing this duplicate requirement from IWE does not adversely affect component integrity.
----	Added new Table IWE-2500-2 - Ultrasonic Thickness Measurements For Augmented Examinations - which details gridline spacing and thickness measurement requirements.	The new requirements provide for consistency and repeatability in obtaining thickness measurements and thus assure the reliable detection of conditions adverse to containment integrity.
Table IWE-3410-1	Deleted table.	Nonsignificant - the contents of the previous table are adequately addressed in IWE-3500.

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COMPONENT IDENTIFICATION

Code Class: CC
Examination Category: All
Item Numbers: All
Description: Alternative Requirements For Inservice
Inspection of Class CC Components

CODE REQUIREMENTS

ASME Section XI, 1992 Edition, with 1992 Addenda, Subsection IWL

PROPOSED ALTERNATIVE PROVISIONS

Wolf Creek Nuclear Operating Corporation (WCNOC) will perform inservice inspection (ISI) of Class CC components in accordance with Subsection IWL of the 1998 Edition of ASME Section XI, supplemented with the applicable requirements of 10 CFR 50.55a(b)(2)(viii) and the following additional commitments related to the identified Section XI paragraphs:

- 1) IWL-2300: IWL-2300, 1998 Edition, requires the Owner to define requirements for qualifying personnel performing visual examinations. The following provisions define the general and detailed visual examinations to be performed as part of the WCNOC Containment ISI Program as well as personnel qualification requirements:
 - a) The general and detailed visual examinations will be performed by certified examination personnel.
 - b) The qualification program for personnel performing the general and detailed visual examinations will meet the applicable requirements of IWA-2300 of the 1992 Addenda.
 - c) WCNOC procedures will include the general and detailed visual examinations in the functional task descriptions for the VT-3 and VT-1 methods, respectively. Personnel performing the general and detailed visual examinations will be certified to a minimum Level II VT-3 and VT-1, respectively.
 - d) Performance requirements for general and detailed visual examinations will be included in the WCNOC visual examination procedure. The detailed visual examination will meet the resolution requirements for VT-1 contained in Table IWA-2210-1 in the 1992 Addenda. A performance demonstration will be developed and documented to establish the distances and illumination for which the general and detailed visual examinations are sufficient to detect evidence of degradation that may affect the containment structural integrity. The WCNOC visual examination procedure will be prepared by NDE Level III personnel and the Responsible Engineer and demonstrated to the Authorized Nuclear Inservice Inspector.
 - e) The visual examinations will be performed in accordance with the 1998 Edition, Subsections IWL-2310, IWL-2510, and IWL-2524.1. Indications will be recorded, and subsequently evaluated, by the Responsible Engineer in accordance with IWL-2320, IWL-3200, and IWL-3300.
- 2) Table IWL-2500-1: The 1998 Edition of Table IWL-2500-1, Category L-A, Item L1.12 specifies the examination method as a general visual examination. This is a publication error in Section XI. The correct examination method should be a detailed visual examination. WCNOC

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will perform detailed visual examinations of suspect areas addressed in Category L-A, Item L1.12, in Table IWL-2500-1.

BASIS FOR RELIEF:

In the Federal Register, dated August 8, 1996 (61 FR 41303), the NRC amended its regulations to incorporate by reference the ASME Code Section XI, 1992 Edition with 1992 Addenda of Subsection IWL for expedited examination of containments. Based on the effective date of the rule change (September 9, 1996), Licensees have until September 9, 2001, to establish a Containment ISI program and to complete the first period inspection requirements contained in Section XI.

In the Federal Register, dated September 22, 1999 (64 FR 51370), the NRC further amended its regulations to incorporate by reference the ASME Code Section XI, 1995 Edition with the 1996 Addenda. However, in 50.55a(b)(2)(vi) of this regulation, the NRC allowed licensees to implement either the previously required 1992 Edition with 1992 Addenda, or the 1995 Edition with 1996 Addenda, as modified and supplemented by the requirements of 50.55a(b)(2)(viii). This 1999 amendment renumbered the previous 50.55a(b)(2)(ix) in the 1996 regulation (containing the modifications and supplements to the 1992 Edition with 1992 Addenda of Subsection IWL) to 50.55a(b)(2)(viii).

Several changes have been made by the ASME to Subsection IWL contained in the 1992 Edition with 1992 Addenda. These changes were published in several addenda between the 1992 Addenda and the 1998 Edition of the ASME Code Section XI, and address implementation difficulties with the 1992 Addenda. In a Safety Evaluation Report (SER) dated July 23, 1999, issued to Texas Utilities Electric Company for the Comanche Peak Steam Electric Station, Units 1 and 2, Docket Number 50-445 and 50-446, the NRC staff concluded that the 1998 Edition of Subsection IWL, supplemented by the licensee's commitments in responses to the NRC staff's Requests for Additional Information, provided an acceptable level of quality and safety for ensuring the pressure boundary integrity of the Comanche Peak containments.

The WCNOG proposed alternative utilizes the 1998 Edition of Section XI, Subsection IWL, in its entirety, supplemented with the applicable requirements of 10 CFR 50.55a(b)(2)(viii). The 1998 Edition of Subsection IWL incorporates exceptions and changes to the 1992 Addenda to address industry implementation difficulties and provides a more cohesive approach than could be achieved by requesting relief on multiple individual issues. These requirements were developed in accordance with the ASME Code committee process with input from interested parties, including other licensees, manufacturers, engineering organizations, Authorized Nuclear Inspection Agencies, EPRI and the NRC. The updating of Subsection IWL requirements by this consensus process is intended to ensure the continued safe operation of nuclear power plants and the continued structural integrity of containment components. At the NRC's request, a paragraph by paragraph comparison of Subsection IWL requirements between the 1992 Edition with 1992 Addenda and the 1998 Edition has been included as Table 1 and is attached to this relief request.

However, in the SER for Comanche Peak, the NRC staff identified two changes between the 1992 Edition with 1992 Addenda and the 1998 Edition

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of Subsection IWL which were unacceptable to the NRC, and for which additional Comanche Peak information was provided. WCNOG has addressed these two changes by including commitments in the Proposed Alternative Provisions section of this relief request.

Accordingly, the WCNOG proposed alternative utilizes the 1998 Edition of Subsection IWL of Section XI in its entirety, supplemented with: 1) additional commitments to address concerns the NRC staff had with changes contained in the 1998 Edition of Subsection IWL, as identified in the SER for Comanche Peak; and 2) the applicable requirements of 10 CFR 50.55a(b)(2)(viii).

Based on the information presented, WCNOG requests relief from the requirements in the 1992 Edition with the 1992 Addenda of Section XI. This information demonstrates that the proposed alternative provisions provide an acceptable level of quality and safety for the inspection of Subsection IWL components. Therefore, pursuant to 10 CFR 50.55a(a)(3)(i), relief is requested on the basis that the proposed alternatives to ASME Section XI requirements provide an acceptable level of quality and safety.

PERIOD FOR WHICH RELIEF IS REQUESTED

Relief is requested for the first and second five-year inspection intervals of the Subsection IWL Containment Inservice Inspection Program for Wolf Creek Generating Station.

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Revision 1
Table 1: Subsection IWL Comparison

IWL Paragraph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
1100	ASME Section XI generic wording change from repair, replacement and/or modification terms to repair/replacement activities	Nonsignificant
1200	No change	N/A
1210	No change	N/A
1220	No change	N/A
2100	<p>Changed "Inspection" to "General" in heading.</p> <p>Provided reference to IWA-2000 with exceptions from IWA-2210 and 2300 for visual examinations and for qualification of visual examination personnel.</p>	<p>Nonsignificant</p> <p>The additional general requirements invoked by reference to IWA-2000 where none were referenced previously further assure containment integrity. The exceptions from IWA-2210 and IWA-2300 are significant in that the related previous requirements have been changed and incorporated into IWL-2310. The IWL-2310 changes are addressed below. WCNO's visual examination requirements are defined in Relief Request CIIR-02, Proposed Alternatives, item 1).</p>
2200	Deleted reference to IWL-2500.	The reference to IWL-2500 in the 1992 Addenda was incorrect. The preservice examination requirements were always to be performed in accordance with IWL-2210, IWL-2220, and IWL-2230. This is a non-significant change.
2210	No change	N/A
2220	No change	N/A
2230	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
2300	No change	The philosophy of Subsection IWL to be an

RELIEF REQUEST CI1R-02
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Table 1: Subsection IWL Comparison

IWL Paragraph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
		<p>engineering inspection program under the direction of the Responsible Engineer is contained in this revised subarticle. This individual will be accountable for the entire inspection program which will meet or exceed the level of quality and safety defined in the 1992 Edition. The specific changes to IWL-2310 and IWL-2320 will be discussed below. Based on the NRC SER for Comanche Peak, WCNOC has submitted additional commitments, as detailed in Relief Request CI1R-02. Reference to the applicable additional commitments are identified in the discussion below.</p>
2310	<p>The changes to IWL-2310 are summarized by the following four items:</p> <p>(a) replaced VT-1C and VT-3C visual examination terminology with new general visual and detailed visual examination terms.</p> <p>(b) Eliminated reference to IWA-2210 for illumination levels, examination distances and resolution requirements.</p>	<p>(a) The VT-3C and VT-1C inspections of IWL have been replaced by Owner (Responsible Engineer) defined general and detailed visual examinations, respectively. The general and detailed visual examinations are equivalent to the VT-3C and VT-1C examinations in terms of assessing the general condition and potential for deterioration within the containment system. The definition of critical examination items and acceptable conditions has not changed. Therefore, any conditions adversely affecting quality or safety are not impacted by this change. The provisions of WCNOC's general visual and detailed visual examinations are defined in Relief Request CI1R-02, Proposed Alternatives, item 1).</p> <p>(b) Direct visual examination is not practical on all areas of containment surfaces. The previous VT requirements precluded the ability to demonstrate that remote visual</p>

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Table 1: Subsection IWL Comparison

IWL Paragraph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	<p>(c) Replaced reference to IWA-2300 for concrete examination personnel qualification requirements with provisions for the owner to define the examination personnel qualification requirements.</p> <p>(d) Added requirement for the Owner to define requirements for visual examination of tendon anchorage hardware, wires, or stands.</p>	<p>examination was equivalent to direct visual examination. Providing examination attributes in IWL as opposed to referencing the generic requirements of IWA focuses the visual examination on areas important to the verification of containment integrity. WCNOC's visual examination requirements addressing illumination, examination distances, and resolution requirements are defined in Relief Request CI1R-02, Proposed Alternatives, item 1).</p> <p>(c) Requiring an owner defined program provides for more efficient program implementation by permitting personnel performing containment examinations to be qualified to written practices that are more consistent to those used for other NDE personnel. WCNOC's personnel qualification requirements are defined in Relief Request CI1R-02, Proposed Alternatives, Item 1).</p> <p>(d) The provisions of WCNOC's detailed visual examinations, including tendon anchorage hardware, are defined in Relief Request CI1R-02, Proposed Alternatives, item 1). Examination of wires or stands are performed by qualified subcontract quality control personnel as part of a tendon surveillance inspection contract. The examinations meet the requirements of IWL-2523.2. Because neither the 1992 Addenda nor the 1998 Edition specify qualification requirements for these examinations, the NRC approved provisions of the WCNOC Quality Assurance Program for Operations contained in the Updated Safety Analysis Report, Section 17.2, are used to specify</p>

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Table 1: Subsection IWL Comparison

IWL Paragraph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
		minimum personnel qualifications.
2320	<p>Changed wording slightly.</p> <p>Made the ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p> <p>Added a responsibility for the Responsible Engineer to review certain pressure test procedures.</p>	<p>Nonsignificant - clarifies wording</p> <p>Nonsignificant</p> <p>The added pressure test responsibilities for the Responsible Engineer ensures proper performance of pressure testing activities.</p>
2400	No change	N/A
2410	A condition which allows for deferral of concrete visual examinations to the next scheduled plant outage for inaccessible portions of concrete surface was added to para. (c).	This change insures that all surfaces that can be inspected are examined, but recognizes the personnel safety of the inspectors.
2420	No change	N/A
2421	Changed wording for sites with more than one plant. Changed frequencies by adding "and every 10 years thereafter".	Nonsignificant - clarifies wording and accommodates plant life extension.
2500	No change	N/A
2510	<p>Changed heading.</p> <p>Changed wording consistent with the changes to IWL-2310 addressed above.</p> <p>In (a), eliminated the reference to the specific revision (R-68) of ACI 201.1.</p> <p>Added two new subparagraphs (b) and (c) providing more detailed examination</p>	<p>Nonsignificant</p> <p>Nonsignificant</p> <p>This is an editorial change for consistency in the Code. The revision of referenced documents are contained in Table IWA-1600-1 which still requires the same revision as specified in the 1992 Addenda.</p> <p>The added details ensure proper tendon anchorage area examinations. The addition of (c) is consistent with the rule in 10 CFR</p>

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Revision 1
Table 1: Subsection IWL Comparison

IWL Para-graph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	requirements for tendon anchorage areas.	50.
2520	No change	N/A
2521	Changed random sample wording in (a)	Nonsignificant - the random sample was always by type of tendon as shown in Table IWL-2521-1.
2522	Changed the heading and added a subparagraph to address tendon elongation.	The added details ensure proper tendon examinations.
2523	No change	N/A
2524	Changed wording consistent with the changes to IWL-2310 addressed above.	Nonsignificant
2525	Changed wording for sample analysis.	Nonsignificant
2526	Added a subparagraph addressing replacement of corrosion protection medium.	The added details ensure tendon integrity.
3100	No change	N/A
3110	No change	N/A
3111	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
3112	No change	N/A
3113	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
3120	No change	N/A
3200	No change	N/A
3210	Removed the word concrete from the heading.	Nonsignificant
3211	Added tendon end and anchorage areas to the scope of the subparagraph and added corrosion protection medium leakage and	The added details ensure proper tendon examinations.

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Table 1: Subsection IWL Comparison

IWL Para-graph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	<p>end cap deformation as acceptance criteria attributes.</p> <p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p>	Nonsignificant.
3212	No change	N/A
3213	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
3220	No change	N/A
3221	Added acceptance criteria attributes for prestress loss prediction, tendon elongation, free water content and corrosion protection medium reduction.	The added details ensure proper tendon examinations.
3222	No change	N/A
3223	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
3300	No change	N/A
3310	<p>Added applicability for other plants at the same site.</p> <p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p>	<p>Nonsignificant</p> <p>Nonsignificant</p>
3320	Deleted paragraph which addressed engineering evaluations being subject to review by authorities.	Nonsignificant - there were no submittal or retention requirements changed by the deletion of the subparagraph.
4000	ASME Section XI change from repair and/or replacement to repair/replacement activities.	Nonsignificant - all related repair and replacement requirements have been consolidated into IWL-4000.

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Revision 1
Table 1: Subsection IWL Comparison

IWL Para-graph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
4100	No change	N/A
4110	<p>Exempted grease cups and installation screws from the scope.</p> <p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p>	<p>Nonsignificant - the exempted items are non structural items.</p> <p>Nonsignificant</p>
4120	<p>Reworded to use the new repair/replacement activity wording and combined paragraph (a) and (b). Changed the paragraph reference to the Repair/Replacement Program and Plan to address paragraph renumbering in IWA-4000.</p>	<p>Nonsignificant - WCNO's relief request does not include using the 1998 Edition of IWA-4000. WCNO will continue to use IWA-4000 from the 1992 Addenda as required by NRC clarification of the 10 CFR 50 regulations that mandated implementation of IWE and IWL.</p>
4200	<p>ASME XI generic change from repair and/or replacement to repair/replacement activities.</p> <p>Added a paragraph number (IWL-4210) to the information included under IWL-4200 and changed terminology from repair and/or replacement to repair/replacement activities.</p>	<p>Nonsignificant</p> <p>Nonsignificant</p>
4210	<p>Changed paragraph number to 4220, removed the word repair from heading and changed referenced paragraph numbers consistent with the addition of a new paragraph 4210 above.</p> <p>Changed wording consistent with the changes to IWL-2310 addressed above.</p> <p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p> <p>Changed repair material to new material in</p>	<p>Nonsignificant</p> <p>Nonsignificant</p> <p>Nonsignificant</p>

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Table 1: Subsection IWL Comparison

IWL Paragraph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	several places.	Nonsignificant
4220	Changed paragraph number to 4230.	Nonsignificant
4230	<p>Changed paragraph number to 4240 and clarified by removing the word repair.</p> <p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p> <p>Added detailed requirements for the contents of a repair/replacement plan.</p>	<p>Nonsignificant</p> <p>Nonsignificant</p> <p>The added detailed requirements ensure proper repair/replacement plan development for post-tensioning systems.</p>
4300	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
5100	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
5200	No change	N/A
5210	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant
5220	No change	N/A
5230	Changed wording by removing some specific IWE related requirements while maintaining the reference to IWE-5000.	Nonsignificant - the removed wording was IWE specific and is contained in IWE-5000.
5240	Deleted paragraph which addressed the scheduling of pressure tests.	Nonsignificant - the schedule of pressure tests are contained in IWE-5000 as referenced in IWL-5230.
5250	Changed wording regarding the role of the Responsible Engineer in pressure test activities.	The clarified role of the Responsible Engineer ensures proper pressure test procedures and examinations.

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Revision 1

Table 1: Subsection IWL Comparison

IWL Paragraph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
	<p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p> <p>Changed visual examination terminology consistent with the changes to IWL-2310 addressed above.</p>	<p>Nonsignificant</p> <p>The visual examination terminology changes are discussed in IWL-2310 above.</p>
5260	<p>Changed heading from Corrective Measures to Corrective Action.</p> <p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p>	<p>Nonsignificant</p> <p>Nonsignificant</p>
5300	<p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p>	<p>Nonsignificant</p>
7000	<p>Deleted Article including IWL-7100, 7110, 7120 consistent with the IWL-4000 changes above.</p>	<p>Nonsignificant - all related repair and replacement requirements have been incorporated into IWL-4000.</p>
Table 2500-1	<p>Changed item L1.11 from all areas to all accessible areas.</p> <p>Changed visual examination method terminology consistent with the paragraph IWL-2310 changes above. Note: the item L1.12 examination method in the 1998 Edition contains a publication error. The "general visual" should be "detailed visual".</p>	<p>Changing item L1.11 provides for more practical examination implementation than previous requirements.</p> <p>The visual examination terminology changes are discussed in IWL-2310 above. As stated in WCNO's Relief Request CI1R-02, Proposed Alternatives, item 2), WCNO will implement item L1.12 examinations using a detailed visual examination as intended by Section XI.</p>
Table 2521-1	<p>Changed inspection periods to state every 5th year in lieu of listing out each year and changed note 2 for having to meet acceptance criteria from "each of the earlier inspections" to "for the last 3 inspections".</p>	<p>Nonsignificant - accommodates plant life extensions for tendon examinations.</p>

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Table 1: Subsection IWL Comparison

IWL Paragraph	Changes between IWL 1992 Ed. w/'92 Ad. and IWL 1998 Ed.	Significance of change and/or basis for use as an alternative examination
Table 2525-1	Added optional test methods for corrosion protection medium analysis. Added acceptance criteria for water content.	Nonsignificant - additional test method options provides for more practical test implementation. Previous acceptance criteria was noted as "in course of preparation." Providing the acceptance criteria assures consistent implementation.

LIST OF COMMITMENTS

The following table identifies those actions committed to by Wolf Creek Nuclear Operating Corporation (WCNOC) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Mr. Tony Harris, Manager Regulatory Affairs at Wolf Creek Generating Station, (316) 364-4038.

COMMITMENT	Due Date/Event
The programmatic changes noted in the "Proposed Alternative Provisions" of Attachments I and II of this letter will be made to implement Relief Requests CI1R-01 and CI1R-02 prior to the start of the eleventh refueling outage.	09/30/2000