

September 27, 2002

Mr. Douglas E. Cooper
Site Vice President
Palisades Plant
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

SUBJECT: PALISADES PLANT - EVALUATION OF CONTAINMENT INSERVICE
INSPECTION RELIEF REQUESTS (TAC NOS. MB4216 AND MB4218)

Dear Mr. Cooper:

By letter dated February 21, 2002, as supplemented May 6, 2002, the Nuclear Management Company, LLC (the licensee), submitted Containment Relief Request (CRR)-08 and CRR-09 for the Palisades Plant. The licensee is seeking relief from the requirements of the 1992 edition with the 1992 addenda of the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (the Code), Section XI, Subsections IWE and IWL. As an alternative, the licensee proposes to use the provisions of Subsections IWE and IWL of the 1998 edition of the Code, which has not yet been incorporated by reference into 10 CFR 50.55a.

As stated in the February 21, 2002, letter, CRR-08 and CRR-09 supercede CRR-01, CRR-02, CRR-03, CRR-05, and CRR-07, which were previously approved by the Nuclear Regulatory Commission in a letter dated July 26, 1999.

The licensee's proposed alternative to use the 1998 edition of Subsections IWE and IWL, as supplemented by commitments in the licensee's February 21, 2002, letter, will provide an acceptable level of quality and safety for ensuring the integrity of the pressure boundary of the containment at Palisades. Therefore, the proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(i). As requested, this relief is authorized for the balance of the current 10-year inspection interval.

Sincerely,

/RA/

L. Raghavan, Chief, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosure: Safety Evaluation

cc w/encl: See next page

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**No legal objection with changes

*Provided SE input by memo

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Palisades Plant

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March 2002

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO RELIEF REQUEST FROM THE REQUIREMENTS OF 10 CFR 50.55a
FOR CONTAINMENT INSERVICE INSPECTION
NUCLEAR MANAGEMENT COMPANY, LLC
PALISADES PLANT
DOCKET NO. 50-255

1.0 INTRODUCTION

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.55a(g)(6)(ii)(B) requires licensees of nuclear power plants to perform expedited examination of their primary containment structures in accordance with the requirements of Subsections IWE and IWL of the 1992 edition up to and including the 1992 addenda or the 1995 edition with the 1996 addenda of Section XI of the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code* (the Code), as modified by the requirements of 10 CFR 50.55a(b)(2)(viii) and 10 CFR 50.55a(b)(2)(ix). Licensees of all operating nuclear power plants were required to complete their first period inspections by September 9, 2001.

By letter dated February 21, 2002, as supplemented May 6, 2002, the Nuclear Management Company, LLC (the licensee) submitted Containment Relief Request (CRR)-08 and CRR-09 seeking relief from the requirements of the 1992 edition with the 1992 addenda of the ASME Code, Section XI, Subsections IWE and IWL. As an alternative, the licensee proposes to use the provisions of Subsections IWE and IWL of the 1998 edition of the Code, which has not yet been incorporated by reference into 10 CFR 50.55a. In the February 21, 2002, letter, the licensee provided a table comparing the requirements of the 1998 edition with the 1992 edition and addenda. This safety evaluation addresses the acceptability of the licensee's proposed alternative.

2.0 EVALUATION OF CRR-08

In CRR-08, the licensee proposes to use the 1998 edition of Subsection IWE as an alternative to the requirements of the 1992 edition with the 1992 addenda for inspection of Class MC components and the metallic shell and penetration liners of Class CC pressure-retaining components. The May 6, 2002, supplemental letter contained a comparison of the changes in requirements between the 1992 edition up to including the 1992 addenda and the 1998 edition of Subsection IWE. The table in Attachment 1 to this safety evaluation (SE) contains comparisons of these requirements and the NRC staff's assessment of these changes. Specifically, the four columns of the table provide the following information:

- Column 1 The paragraph (sometimes includes articles and subarticles) corresponding to the 1992 edition with the 1992 addenda of Subsection IWE.
- Column 2 Changes between the 1992 edition with the 1992 addenda and the 1998 edition.
- Column 3 The licensee's statement of significance and/or basis for use as an alternative inspection.
- Column 4 The NRC staff's assessment of the acceptability of the requirements of the 1998 edition of the Code in terms of quality and safety.

Based on its review of the comparative requirements, the NRC staff identified several significant issues that required additional commitments from the licensee. These issues are evaluated in Sections 2.1 through 2.5 of this SE.

2.1 Visual Examination Methods and Personnel Qualification, IWE-2300

The 1992 edition and addenda invoke the use of IWA-2200 for visual, surface, and volumetric examination methods, and IWA-2300 for qualification of personnel. For qualification of personnel, the 1992 addenda of IWA-2300 requires personnel to be qualified and certified using a written practice prepared in accordance with ANSI/ASNT CP-189. The 1998 edition of IWE-2300 requires licensees to define requirements for visual examination of containment surfaces, and for qualifying the personnel performing visual examinations. In general, use of consensus standards for performance of containment examinations is preferable to licensee-defined requirements. Additionally, IWE-2320 requires that a responsible individual (RI) be responsible for activities related to the containment surface visual examinations and personnel qualification. Allowing individual licensees to develop guidance for conducting these activities creates a potential for substantial inconsistencies and may not provide an adequate level of quality and safety. In its February 21, 2002, submittal, the licensee committed to supplement the requirements of the 1998 edition of IWE-2300 with the following provisions:

- a. The qualification program for personnel performing the general and detailed visual examinations will meet the applicable requirements of IWA-2210 of the 1992 Edition and Addendum of Section XI.
- b. Palisades' 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 VT-3 and VT-1, respectively.
- c. Performance requirements for general and detailed visual examinations will be included in the visual examination procedure. A performance demonstration will be developed and documented to establish the distances and illuminations for which the general and detailed visual examinations are sufficient to detect evidence of degradation that may affect the containment structure integrity or leak tightness. The Palisades visual examination procedure will be prepared by non-destructive examination (NDE) Level III personnel

and the RI, and demonstrated to the ANII [Authorized Nuclear Inservice Inspector].

- d. The general visual examination acceptance criteria will be included in the Palisades 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. Indications of flaking, blistering or peeling coating; excessive corrosion; and general deformation, bulges, surface irregularities, or other signs of distress, will be recorded. The general visual examination of pressure retaining bolts connections examines for missing or loose bolting materials corrosion, bolting deformation, or other indications that may affect the integrity of bolted connection. Indications will be recorded. The general visual examination of moisture barriers examines for wear, damage, erosion, tears, surface cracks and other defects that would permit intrusion of moisture into inaccessible areas. Indications will be recorded. Recorded indications will be evaluated in accordance with IWE-3000, 1998 Edition.
- e. The detailed visual examinations will also be included in the Palisades Section XI visual examination procedure. The detailed visual examination assesses the initial condition of surfaces requiring augmented examinations, in accordance with the 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. 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.
- f. Results of a general visual examination are acceptable for continued service without further evaluation only when there is no evidence of damage or degradation of the inspected component or surface area.
- g. For IWE examinations, the Palisades Containment Inspection Program will continue to meet the requirements specified in the 1992 Edition of Section XI (ASNT-SNT-TC-1A, 1984 Edition or ANSI/ASNT CP-189, 1991 Edition) for the qualification of personnel performing examinations. In addition, the inspection and evaluation procedures that are used to perform inspections are reviewed and approved by a certified NDE Level III examiner and the ANII.

The NRC staff finds that complying with the 1998 edition of the Code, as supplemented by proposed provisions in the licensee's containment inservice inspection procedures, provides a technically adequate approach for performing visual examination and personnel qualification, and, thus, will provide an acceptable level of quality and safety.

2.2 Examination of Paint and Coatings, IWE-2500(b)

The requirement to examine paint or coating prior to removal was deleted in the 1998 edition of the Code. The NRC staff has no objection to this deletion. However, in the absence of any examination for detecting flaws or degradation in the containment base metal, the recoating may be applied to a degraded containment surface. The licensee's actions will assure that coatings will not be applied inappropriately to a degraded surface.

The licensee states that at Palisades, liner plate protective coating is maintained in accordance with administrative work requests and the work order program. As part of this program, the RI is required to perform a maintenance pre-review of any work order authorizing liner plate work. During this review, the RI enters inspection requirements to ensure the liner plate will continue to meet design-basis requirements. These inspection requirements will include detailed inspections, general visual examinations, and detailed visual examinations. Items not meeting the acceptance criteria of examination procedures will be evaluated in accordance with the Palisades Corrective Action Program and accepted by analysis or repaired or replaced in accordance with Palisades' programs.

The NRC staff finds that implementation of the licensee's proposed process provides reasonable confidence that base metal degradation will be identified, and appropriate action taken, prior to recoating the containment liner.

2.3 Visual Examination Acceptance Standards for Categories E-A and E-C

IWE-3510.1 and IWE-3511.1 of the 1998 edition of the Code state that the licensee is required to define the acceptance criteria for visual examination of containment surfaces when performing Category E-A and Category E-C examinations. The basic requirements for these examinations are provided in IWE-2310 and will be augmented by Palisades as described in Section 2.1 above.

The NRC staff finds that complying with the 1998 edition of the Code, augmented by the specific requirements in the licensee's containment inspection program, will provide reasonable assurance that significant flaws and degradation of the containment are adequately identified during Category E-A and Category E-C examinations.

2.4 Ultrasonic Examinations, IWE-3511.3

In Paragraph IWE-3511.3 of the 1998 edition of the Code, examination of metallic liners of Class CC components has been excluded from the acceptance criterion which requires disposition of areas where material loss exceeds 10 percent of the nominal wall thickness. Therefore, the 1998 Code is not acceptable for the metallic liners of Class CC components without augmentation by the licensee. The licensee states in its February 21, 2002, letter that NMC shall apply acceptance standards determined by an engineering analysis completed in accordance with Palisades' administrative procedures. This engineering analysis will document

the minimum required thickness for specific areas on the containment liner plate. The 1998 edition applies the criteria in IWE-3511.3 to Class MC pressure-retaining components, and not to metallic liners of Class CC components. The licensee states that the ultrasonic examinations criteria in IWE-3511.3 will apply to Class CC components as well as to Class MC components. This is equivalent to the requirements of the 1992 addenda. Therefore, the NRC staff concludes that the proposed acceptance criterion for material loss will ensure that the integrity of the liner plate is maintained and, thus, will provide an acceptable level of quality and safety.

2.5 Examination of Pressure Retaining Bolting, Table IWE-2500-1

The 1992 edition through the 1996 addenda requires licensees to perform a VT-1 visual examination on 100 percent of the pressure-retaining bolting. It also requires torque testing of each bolted connection. In the 1998 edition of IWE, the requirements for bolted connections have been moved to Examination Category E-A, Item E1.10, "Containment Vessel Pressure Retaining Boundary" and Item E1.11, "Accessible Surface Areas." The 1998 edition requires that 100 percent of the accessible surface areas of the containment vessel pressure-retaining boundary be visually examined (general visual) during each inspection period. This corresponds to an examination of all bolted connections three times per inspection interval. Included in the examination are bolts, studs, nuts, bushings, washers, and threads in base material and flange ligaments between fastener holes. The Code does not require that the bolted connection be disassembled for performance of the examination.

A general visual examination alone will not allow identification of flaws or degradation in inaccessible areas. In addition, the acceptance criteria for general visual examinations do not provide sufficient guidance for acceptance of flaws. Therefore, the NRC staff finds that the requirements for visual examination of bolted connections in the 1998 edition are not fully satisfactory. The NRC staff recommends the following guidelines:

A detailed visual examination should be performed for areas where flaws or degradation are indicated.

Damaged bolted connections should be disassembled and a detailed visual examination of the bolted connection components should be performed.

A general visual examination (or detailed visual examination if applicable) should be performed when a bolted connection is disassembled at the time of a scheduled general visual examination. All accessible surface areas of the connection (bushings, threads, ligaments in the base material of flanges) should be included in the examination.

A general visual examination (or detailed visual examination if applicable) should be performed when a bolted connection is disassembled at times other than a scheduled visual examination. Procedures should be used to ensure that the integrity of the reassembled bolted connections are maintained. The procedures should include acceptance criteria for the continued use of all parts of the connections including bolts, studs, nuts, bushings, washers, and threads in base material and flange ligaments between fastener holes.

The licensee's proposed alternative provisions for the examination of containment pressure boundary bolted connections as described in Item 5 of Attachment 1 of its letter dated February 21, 2002, is consistent with the NRC staff's guidelines and provides a reasonable and practical approach to ensure that degraded and damaged bolting is adequately identified. Therefore, the NRC staff finds that the licensee's proposed alternative provides an acceptable level of quality and safety.

3.0 EVALUATION OF CRR-09

In CRR-09, the licensee proposes to use the 1998 edition of Subsection IWL as an alternative to the requirements of the 1992 edition and addenda for inspection of Class CC components. The May 6, 2002, supplemental letter contained a comparison of the changes in requirements between the 1992 edition and addenda and the 1998 edition of Subsection IWL. The table in Attachment 2 to this SE shows this comparison and the NRC staff's associated assessment. Specifically, the four columns of the table provide the following information:

Column 1 The paragraph (sometimes includes articles and subarticles) corresponding to the 1992 edition and Addends of Subsection IWL.

Column 2 Changes between the 1992 edition and addenda and the 1998 edition.

Column 3 The licensee's statement of significance and/or basis for use as an alternative inspection.

Column 4 The NRC staff's assessment of the acceptability of the requirements of the 1998 edition of the Code in terms of quality and safety.

Based on its review of the comparative requirements, the NRC staff identified several significant issues that required additional commitments from the licensee. These issues are evaluated in Sections 3.1 through 3.3 of this SE.

3.1 Qualification of Visual Examination Personnel for Concrete Inspection, IWL-2300

The 1998 edition of IWL-2310(d) requires the licensee to define the qualification requirements to qualify personnel to perform visual examinations of concrete and tendon anchorage hardware, wires, or strands. Prior to the 1997 addenda, IWL-2310(c) required that visual examination personnel be qualified in accordance with IWA-2300 or IWA-2350, as applicable. In general, use of consensus standards for qualification of examination personnel is preferable to licensee-defined requirements. Allowing individual licensees to develop guidance for conducting these activities creates a potential for substantial inconsistencies and may not provide an adequate level of quality and safety.

In its February 21, 2002, letter, the licensee provided the following information on its personnel qualification requirements:

- a. The qualification program for personnel performing the general and detailed visual examinations will meet the applicable requirements of IWA-2300 of the 1992 Addendum.

- b. Palisades' procedure 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 VT-3 and VT-1, respectively.
- c. Performance requirements for general and detailed visual examinations will be included in the Palisades visual examination procedure. The detailed visual examination will meet the resolution requirements for VT-1 contained in Table IWA-2210-1 in the 1992 Edition and 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 Palisades visual examination procedure will be prepared by nondestructive examination (NDE) Level III personnel and the Responsible Engineer and demonstrated to the ANII.
- d. The visual examinations will be performed in accordance with the 1998 edition, Subsection IWL-2310, IWL-2510, and IWL-2524.1. Indication will be recorded, and subsequently evaluated, by the Responsible Engineer in accordance with IWL-2320, IWL-3200 and IWL-3300.

The NRC staff finds that complying with the 1998 edition of the Code, as supplemented by proposed provisions in the licensee's containment inservice inspection procedures, provides a technically adequate approach for performing visual examination and personnel qualification, and, thus, will provide an acceptable level of quality and safety.

3.2 Examination of Concrete, IWL-2510

The 1992 edition and addenda requires the use of visual examination procedures VT-3C and VT-1C for the examination of concrete. In the 1998 edition and addenda, IWL-2310, these procedures have been changed to "general visual" and "detailed visual" examinations. The 1998 Code requires the licensee to define the requirements for visual examination of tendon anchorage hardware, wire, and strands. Use of consensus standards for visual examination methods is preferable to licensee-defined requirements. Allowing individual licensees to develop guidance for conducting these activities creates a potential for substantial inconsistencies and may not provide an adequate level of quality and safety.

In its February 21, 2002, submittal, the licensee provided the performance requirements for general and detailed visual examinations:

The general visual examinations provide a screening mechanism to locate conditions that may be indicative of damage or distress. Containment surfaces are accepted on the basis of a general visual examination only when there are no indications of damage or distress that are a code concern.

IWL-detailed visual examinations are conducted when the criteria for acceptance by general visual examinations are not met, or when the surface or component is initially classified as suspect or otherwise requires augmented examination. Suspect areas are defined in Table IWL-2500-1, Categories L1.12 and L2.30. For IWL-detailed visual examinations, the surface may be accepted for continued service without further evaluation provided one of the following is demonstrated:

- a. The Responsible Engineer determines that the flaw or area of degradation is nonstructural in nature or has no unacceptable effect on the structural integrity of the containment, as determined by an evaluation of the magnitude and extent of the relevant indication from ACI 201.1R. Although not required by IWL-2310(a), ACI 349.3R may be used, as appropriate.
- b. The Responsible Engineer determines that the flaw or area of degradation is limited to the outermost concrete layer with no rebar exposure, or, if rebar is exposed, the rebar does not exhibit evidence of corrosion.
- c. The Responsible Engineer is able to accept the indication based on a review of a previous evaluation from historical record.

The NRC staff finds that complying with the 1998 edition of the Code, augmented by the specific requirements in the licensee's Containment Inspection Program, will provide reasonable assurance that significant flaws and degradation of the containment are adequately identified during IWL-2510 examinations and, thus, will provide an acceptable level of quality and safety.

3.3 Examination of Suspect Areas, Table IWL-2500-1

Table IWL-2500-1 of the 1998 edition of the Code requires a general visual examination for Item L1.12 (suspect areas). The 1992 addenda of the Code requires a VT-1 examination. The licensee states in February 21, 2002, letter that it "will perform detailed visual examinations of suspect areas addressed in Category L-A, Item L1.12." The licensee's proposal meets the intent of the 1992 Code requirements and, therefore, is acceptable.

4.0 CONCLUSION

The licensee's proposed alternative to use the requirements of the 1998 edition of Subsections IWE and IWL, as supplemented by commitments in the licensee's submittal of February 21, 2002, as supplemented May 6, 2002, provides an acceptable level of quality and safety for ensuring the integrity of the pressure boundary of the containment at Palisades. The licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the balance of the 10-year inspection interval.

Attachments: 1. Palisades Plant -- IWE Comparison
2. Palisades Plant -- IWL Comparison

Principal Contributor: G. Bedi

Date: September 27, 2002

PALISADES PLANT -- IWE COMPARISON

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
1100	No change	N/A	
1200	No change	N/A	
1210	No change	N/A	
1220	Changed "containment" to "containment system"	Nonsignificant	Editorial change has no safety or quality significance. Acceptable.
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>	<p>Examination of welds is optional in 10 CFR 50.55a. Acceptable.</p> <p>Wording of IWE-1231 changed to be consistent with the existing Table IWE-2500-1. Acceptable.</p> <p>Editorial change has no safety or quality significance. Acceptable.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
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>	<p>Editorial change has no safety or quality significance. Acceptable.</p> <p>Examination of welds is optional in 10 CFR 50.55a. Acceptable.</p>
1240	No Change	N/A	
1241	Added stiffeners and, by reference to IWE-2420, flaws accepted by evaluation as areas requiring augmented examination.	Clarifies the intent of the Code that areas identified in IWE-2420(b) require an augmented exam in the next period.	Adding stiffeners in IWE-1241(a) requiring examination and adding reference to IWE-2420(b). The additional areas subject to augmented examination further assure containment integrity. Acceptable.
1242	Changed IWE-2500(b) to IWE-2500(c)	Nonsignificant	Editorial change has no safety or quality significance. Acceptable.
2000	No change	N/A	
2100	Added new Subarticle IWE-2100 - "General" - to provide reference to IWA-2000 with exceptions from IWA-2210, 2300, 2500 and 2600.	The containment examinations are completely defined within the jurisdiction of IWE, thus reference to IWA-2210, and IWA-2300 are not applicable.	By adding additional general requirements of IWA-2100, further assures containment integrity. Also, IWE-2310, 1998 covers the visual examinations as identified in

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
2100 (cont)		<p>The exceptions to IWA-2500, and IWA-2600 are to weld base exams that do not apply to IWE. The NMC Containment Inspection Program will specify the requirements for personnel certification in accordance with CP-189 and SNT-TC-1A. Therefore, the examinations in the 1998 Edition provide acceptable level of quality and safety as defined in IWE of the 1992 Edition.</p>	<p>IWA-2210. Acceptable.</p> <p>Per the 1998 Code, personnel will not have to be certified to CP-189 (IWA-2300) - Licensee committed to certify inspection personnel in accordance with CP-189 and SNT-TC-1A.</p> <p>Acceptable.</p>
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>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.</p> <p>The NMC work order process requires notification of Responsible Engineer (RE) who will ensure thorough ISI and PSI examinations of containment surface including condition of base metal.</p>	<p>The deletion of paragraph (c) ensures that proper preservice examination is performed per Table IWE-2500-1. Acceptable.</p> <p>The licensee's work order process requires notification of Responsible Engineer (RE) who will ensure thorough ISI and preservice inspection (PSI) examinations of containment surface including condition of base metal without the need for an additional Code examination. Acceptable.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
2200 (cont)	ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant.	This is editorial change. Acceptable.
2300	Added new Subarticle 2300 - "Visual Examination, Personnel Qualification and Responsible Individual."	"Visual Examination, Personnel Qualification and Responsible Individual" - The philosophy of IWE to be an engineering inspection under the direction of the Responsible Individual is contained in this new sub-article. The most significant change is the definition of the roles and responsibilities of the Responsible Individual. 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.	IWE 2300 -"Visual Examination, Personnel Qualification and Responsible Individual" is newly added subarticle. The specific paragraphs IWE-2310, IWE-2320, and IWE-2330 added are discussed below. The NMC has submitted additional commitments, as detailed in Containment Relief Request CRR-08. Reference to the applicable additional commitments are identified in the discussion below.
2310	Added new paragraph 2310 - Visual Examinations - which a) states that the owner shall define requirements for visual examination of containment surfaces;	a) The VT-3 and VT-1 inspections of IWA have been replaced by Responsible Individual defined general and detailed visual exams, respectively. The definition of critical examination items and acceptable conditions has not changed, such that any conditions adversely	Consistency with existing ISI visual examination requirements provide for an efficient internal program; that coupled with the program established for NMC will provide uniformity and consistency industry wide. NMC's visual examination requirements are

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
2310 (cont)	<p>b) and c) defines general and detailed examinations.</p> <p>d) and e) provides the requirements for the conditions of areas affected by repair/replacement activities, painted or coated areas, and non-</p>	<p>affecting quality or safety are not impacted by this change.</p> <p>b) and c): The general visual and detailed examinations are equivalent to the VT-3 and VT-1 exams in terms of assessing the general condition and potential for deterioration within the containment system. The use of owner defined inspection types allows for the involvement of qualified engineering personnel with background in programs such as Maintenance Rule, containment coating, and Appendix J. This provides for a containment inspection program that is performed by individuals with knowledge in containment degradation mechanisms.</p> <p>d) and e): Previously these examination requirements did not exist within Article IWE-2000 but</p>	<p>defined in Containment Relief Request CRR -08, Proposed Alternatives, item 1). The 1998 Code with the specific commitments are acceptable.</p> <p>The 1998 Edition does not specify acceptance criteria since the examination requirements are defined by the owner. The staff does not find this to be acceptable. The licensee provided specific acceptance criteria for the general visual and detailed examinations defined in Containment Relief Request CRR-08, Proposed Alternatives, item 1), in its February 21, 2002, submittal. This is acceptable.</p> <p>NMC has provided acceptance criteria for general and detailed visual examinations are defined in the Containment Relief Request</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
2310 (cont)	coated areas.	were contained in the acceptance criteria of Article IWE-3000. Adding these specific attributes here ensure proper containment examinations. There are no acceptance criteria specified since the proposal maintains owner defined examination requirements.	CRR-08, Proposed Alternatives, items 1) and 3), in submittal dated February 21, 2002. The 1998 Code with the specified commitments and acceptance criteria are acceptable.
2320	<p>Added new paragraph 2320 - "Responsible Individual" - which</p> <p>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>The qualification along with the roles and responsibilities of the Responsible Individual are clearly delineated within this sub-article. This section clearly states the expectations for the Responsible Individual, and brings accountability for the entire program to an individual knowledgeable in containment and their degradation mechanisms. This individual will develop the inspection plans, train personnel, direct to perform inspections, and finally evaluate the results. The cohesiveness of the inspection program has been improved by addition of this sub-article, resulting in an increase in level of quality and thus no adverse impact on safety.</p>	<p>a) The details for the Responsible Individual qualification requirements were previously contained in the acceptance standards of IWE-3510.1. This is editorial change. Acceptable.</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.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
			The philosophy of the 1998 Edition give the responsible individual complete control over the program. This provides consistency in all the plan and procedure; performance and direction of examination; evaluation of results and documentation. Acceptable.
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 is consistent with the philosophy that the Responsible Individual must qualify the inspection personnel. The code recognizes that the qualification may differ depending on the containment type and even the inspection period in question. This change is consistent with the other changes discussed above and serves to improve the level of quality and thus has no adverse impact on safety.</p>	<p>The staff finds owner-defined personnel qualification requirements to be unacceptable. Personnel should be qualified in accordance with Subsection IWA requirements. The licensee states that qualification program for personnel will be in accordance with Subsection IWA, and will be qualified in accordance with ASNT-SNT-TC-1A, 1984 Edition or ANSI/ASNT CP-189, 1991 Edition This is acceptable.</p>
2400	No change	N/A	
2410	No change	N/A	

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
2411	Deleted a subparagraph discussing decreasing and extending inspection periods.	The deleted subparagraph eliminates duplication with IWA-2400.	The deleted subparagraph requirements are similar to as of IWA-2400. The Code 1998 Edition invokes the requirements of IWA-2400 under newly added paragraph IWE-2100. This is Acceptable.
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).	The deleted subparagraph requirements are similar to as of IWA-2400. The Code 1998 Edition invokes the requirements of IWA-2400 under newly added paragraph IWE-2100. This is Acceptable.
2420	Revised (b) to remove repaired areas as areas requiring reexaminations during the next successive inspection period.	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. Changing duration of reexamination of areas that remain essentially unchanged from "three	Changing duration of reexamination of areas that remain essentially unchanged from "three consecutive inspection periods" to "the next successive inspection period" is consistent with the requirements for Class 2 components. Acceptable.

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	<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>consecutive inspection periods” to “the next successive inspection period” is consistent with the requirements for Class 2 components.</p> <p>The evaluation that determines that flaws or areas of degradation remain unchanged is sufficient to conclude that there are no active corrosion mechanisms present.</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. Acceptable.</p>
2430	<p>Deleted the paragraph - Additional Examinations - which discussed adding examination items of the same category if flaws or areas of degradation are identified during an examination.</p>	<p>The changes to Table IWE 2500-1 eliminate several examination categories. The categories that remain all require 100% examination. Therefore no items are available for additional examinations.</p>	<p>The 1998 Code does not rely on sampling as 100% of the containment surface is already examined. Therefore, elimination of this requirements is appropriate. Acceptable.</p>
2500	<p>Reworded the existing subparagraphs consistent with the previous paragraph changes and with Table IWE-2500-1 changes.</p>	<p>The reworded subparagraphs add clarity and provide consistency within IWE.</p>	<p>The rewording of the subparagraphs provides consistency between IWE-2500 and Table IWE2500-1. Acceptable.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
2500 (cont)	Deleted the requirement to examine paint or coatings prior to removal.	<p>The Code jurisdiction is the pressure retaining boundary, not the non-pressure retaining coatings. Eliminating this requirement does not adversely impact the level of quality or the safety of the containment inspection program. 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 Responsible Individual shall 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</p>	<p>Elimination of the paint or coatings examination prior to removal has been found acceptable provided adequate provisions exist in the licensee's program to examine the base metal prior to reapplication of the coating. The licensee addressed base metal examination in its February 21, 2002 submittals.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
2500(cont.)	<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>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>	<p>The ultrasonic gridline approach is a sampling methodology similar to that of other portions of the Code and other erosion/corrosion monitoring programs. Acceptable.</p> <p>This change provides direction for performance test. Acceptable.</p>
2600	Deleted a sentence discussing compatibility of paint and coating systems and a requirement to examine the new paint.	The jurisdiction of the Code does not include the quality and compatibility of the containment coating systems. This change has no impact on the scope of IWE inspections.	Elimination of this sentence is considered acceptable when covered by existing nuclear coatings program. Acceptable
3100	Removed the word nondestructive from the heading.	Nonsignificant	This is editorial change. Acceptable.
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 has been deleted and is discussed below. IWE-3500 adequately captures all of the information previously contained in the deleted table and paragraph.	This is editorial change. Acceptable.
			This is editorial change.

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
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	Acceptable.

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
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	This is editorial change. Acceptable.
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.	The regulations do not require the licensee to submit the containment inspection program. Acceptable.
3120	Removed the word nondestructive from the heading.	Nonsignificant. Consistent with IWB and IWC.	This is editorial change. Acceptable.
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 word nondestructive is nonsignificant. The referenced subparagraphs did not actually apply to the acceptance of flaws for continued service.	This is editorial change. Acceptable.
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 repair/replacement activities. Reworded several sentences. Deleted sentence which addressed	Nonsignificant - the changes are for clarity and to reconcile paragraph numbering. There was no submittal or retention requirements changed by the deletion of the sentence addressing evaluation reviews. Consistent with IWB and IWC.	This is editorial change. Acceptable.

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	evaluations being subject to review by authorities.		
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	This is editorial change. Acceptable.
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.	This is editorial change. Acceptable.
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.	This is editorial change. Acceptable.
3410	Replaced the reference to Table IWE-3410-1 with a reference to subarticle IWE-3500.	Nonsignificant	This is editorial change. Acceptable.
3430	No change	N/A	

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
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; Combining 3510.2 and 3510.3 and removing specific VT-1 and VT-3 examination attribute wording; and</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) as discussed above.</p> <p>This change directly corresponds to the addition of IWE-2320; and the addition of IWE-2310(e)(1) and (2) as discussed above.</p>	<p>Owner-defined visual examination requirements do not provide uniformity and consistency industry wide. This is unacceptable unless the licensee provides specific acceptance standards. The licensee provided this information in its February 21, 2002, submittal. Acceptable.</p> <p>The licensee's visual examination acceptance criteria are defined in Containment Relief Request CRR-08, Proposed Alternatives, item 3). Acceptable.</p> <p>The is editorial change of rearranging the paragraph. Acceptable.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	<p>Incorporating IWE-3511;3513,3514 and 3515 with changes into IWE-3510.</p> <p>By the incorporation of IWE-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 correspond to the changes in the examination categories of Table IWE-2500-1 and to the removal of examination standards paragraphs per the addition of IWE-2310(e)(3) and (4).</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. The Appendix J, Type A test is considered sufficient for determining the leak-tight integrity of the penetration</p>	<p>This is editorial change of rearranging the paragraph. Acceptable.</p> <p>The examination of bolting, seals and gaskets to determine their ability to maintain containment leak tight integrity as a separate inspection is considered unnecessary. The Appendix J, Type A test is considered sufficient for determining the leak-tight integrity of the penetration. Acceptable.</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	Examination category E-B has been merged with E-A, which is with in consistent with the changes to Table IWE-2500-1. The details of changes in Table IWE-2500-1 are discussed in the below. Acceptable
3512	Renumbered subparagraph to IWE-3511. Reconciled acceptance	The subparagraph was renumbered based on the deletion of previous	This is editorial change as discussed in comments column under IWE-3511. Acceptable.

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	<p>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>Reworded ultrasonic examination subparagraph and limited the UT to Class MC components.</p>	<p>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 is based on regulatory requirements excluding containment welds, and elimination of any direct reference to containment weld examination in the Code.</p> <p>This change directly corresponds to the addition of IWE-2310(a) discussed above.</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> <p>This change eliminates the need to perform the UT examinations on metallic liners of Class CC</p>	<p>The licensee's visual examination acceptance criteria are defined in relief request CRR-08, Proposed Alternative, item 3), Acceptable.</p> <p>This is a editorial change of rearranging the paragraphs. Acceptable.</p> <p>Licensee states it will apply provisions of IWE-3511.3 to both Class MC and metallic liners of Class CC components. This is acceptable.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
		components.	
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.	Acceptable. The regulations do not require the examination of containment welds.
4100	No change	N/A	
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	Editorial change has no safety or quality significance. Acceptable.
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.	Editorial change has no safety or quality significance. Acceptable.
5222	ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	Editorial change has no safety or quality significance. Acceptable.
5240	Replaced a reference to IWA-5240 with requirements to perform detailed visual examination of repair/replacement areas during pressure tests.	The types of examinations performed in the containment program are all contained in IWE-2300. The requirements of IWA-5240 to detect evidence of leakage	Referencing IWE-2300, visual examination in lieu of IWA-5240, visual examination provides more focuses on containment integrity than the general requirements

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
		will be satisfied through the use of the detailed visual examination of IWE-2300.	(IWA-5240). Acceptable.
5250	Changed Corrective Measures to Corrective Action in the heading. ASME XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	Editorial change has no safety or quality significance. Acceptable
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>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 are identical. Therefore combining the entries does not affect any requirements.</p> <p>Ensures allocations of examinations are done throughout the 10-year interval. The IWE change is consistent with changes made in IWB, IWC, IWD, and IWF.</p>	<p>Editorial change has no safety or quality significance. Acceptable.</p> <p>This change provides more flexibility in scheduling examination, but ensures full examination. Acceptable.</p>
Table 2500-1 Cat. E-A	E1.11 Revised frequency of examination from "prior to each	Removing the requirement to coordinate examinations with type A	By removing the requirement to coordinate examinations with type

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
<p>Table 2500-1 Cat. E-A (cont)</p>	<p>type A test” to “100% during each period”.</p> <p>E1.12 Re-designated item from “accessible surface areas” to “wetted surfaces of submerged areas”. Replaced examination method VT-3 with general visual.</p>	<p>tests, and requiring a general visual every inspection period is more restrictive. This change corresponds with the rule as stated in 10 CFR 50.55a.</p> <p>Appendix J, Option A, requires periodic (one each period) Type A tests. Appendix-J, Option B, is based on historical performance and requires periodic visual inspection for Type A tests.</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 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</p>	<p>A tests allows for more efficient containment ISI program implementation without adversely affecting containment integrity.</p> <p>Also, the requirement to perform general visual examinations every inspection period increases the total number of examinations on the containment surface in the interval. Acceptable.</p> <p>Acceptable with licensee's commitments for general visual examination requirements and acceptance criteria as stated in its February 21, 2002, submittal.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
<p>Table 2500-1 Cat. E-A (cont)</p>	<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 visual required each period.</p> <p>All item no.'s - Replaced reference to IWE-3510 for examination requirements with IWE-2310.</p>	<p>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 Palisades' 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</p>	<p>N/A</p> <p>Acceptable with licensee's commitments for general visual examination requirements and acceptance criteria as stated in its February 21, 2002, submittal.</p> <p>This is editorial change. Acceptable.</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	Notes - Revised to specifically include welds and bolting as part of the pressure retaining boundary requiring examination.	<p>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>	This is editorial change. Acceptable.
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. 10 CFR 50.55a makes containment weld inspections optional.	10 CFR 50.55a makes containment weld inspections optional. Acceptable.
Table 2500-1 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.</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 described detailed visual examination, as discussed in IWE-2300 above.</p> <p>The added wording clarifies inspection requirements and</p>	<p>Acceptable with licensee's commitments for detailed visual examination requirements and acceptance criteria as stated in its February 21, 2002, submittal.</p> <p>The recommended ultrasonic</p>

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	<p>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>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. Change from three consistent with the requirements for class 2 components.</p>	<p>gridline sample requirements provide a more practical approach to augmented container examinations. Acceptable.</p> <p>This is editorial change. Acceptable.</p> <p>Change from three consecutive periods to one period is consistent with the requirements for Class 2 components. Acceptable.</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	Appendix J, Type A test is considered sufficient for determining the leak-tight integrity

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
		gaskets previously required examination once per an interval with effectively an acceptance criteria of leak 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.	of seals and gaskets. Acceptable.
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.	10 CFR 50.55a makes containment weld inspections optional. Acceptable.
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. 1992 Edition required VT-1 of bolting when a connection is disassembled. The 1998 Edition requires general visual, in place, with no requirement when joint is disassembled.	1992 Edition required VT-1 of bolting when a connection is disassembled. Licensee has committed to this. The licensee provided this additional information regarding inspection of bolted connections when connection is disassembled in its February 21, 2002, submittal.
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	Deleting Examination Cat. E-P, provides relief to licensee without affecting component integrity. Since Appendix J test is already

IWE Paragraph (1992 Ed.)	Changes between IWE 1992 Edition/Addenda. and the 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
		component integrity.	required by Technical Specification. Acceptable.
----- Table IWE-3410-1	Added new Table IWE-2500-2 - Ultrasonic Thickness Measurements For Augmented Examinations - which details gridline spacing and thickness measurement requirements. Deleted table.	The new requirements provide for consistency and repeatability in obtaining thickness measurements and thus assure the reliable detection of conditions adverse to containment integrity. Nonsignificant - the contents of the previous table are adequately addressed in IWE-3500.	The new requirements provide consistency and repeatability in obtaining thickness measurements and thus assure the reliable detection of conditions adverse to containment integrity. Acceptable. This is a editorial change. Acceptable.

PALISADES PLANT -- IWL COMPARISON

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
1100	ASME Section XI generic wording change from repair, replacement and/or modification terms to repair/replacement activities	Nonsignificant	This is editorial change. Acceptable.
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.</p>	<p>This is editorial change. Acceptable.</p> <p>IWL examinations will not require the visual examinations identified in IWA-2100. Personnel will not have to be certified to CP-189 (IWA-2300), whereas the NMC Containment Inspection Program will specify the requirements for personnel certification in accordance with SNT-TC-1A and CP-189 as specified in its February 21, 2002, submittal. This is acceptable.</p>

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
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 associated with a subsequent inquiry.	This is editorial change. Acceptable.
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	This is editorial change. Acceptable.
2300	No change; content changes are in IWL-2310.	The philosophy of Subsection IWL to be an 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	The specific paragraphs IWL-2310, and IWL-2320 are changed as discussed below. The NMC has submitted additional commitments, as detailed in Containment Relief Request CRR-09. Reference to the applicable additional commitments are identified in the discussion below.

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
		1992 Edition.	
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,</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.</p> <p>(b) Direct visual examination is not practical on all areas of</p>	<p>The owner-defined visual examination requirements of the 1998 Edition do not provide uniformity and consistency throughout the industry. 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 licensee provided details of its visual examination methods in its February 21, 2002, submittal. The licensee's proposed alternative is acceptable.</p> <p>The licensee's visual examination requirements addressing illumination,</p>

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	<p>examination distances and resolution requirements.</p> <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>containment surfaces. The previous VT-3 requirements precluded the ability to demonstrate that remote visual 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.</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.</p>	<p>examination distances, and resolution requirements are defined in Containment Relief Request CRR-09, Proposed Alternatives, item 2), in its February 21, 2002, submittal. This is acceptable.</p> <p>The licensee will meet all the requirements of IWA-2300 of the 1992 Addendum as specified in Containment Relief Request CRR-09, Proposed Alternative, item 2, in its February 21, 2002, submittal. This is acceptable.</p>
	<p>(d) Added requirement for the Owner to define requirements for visual examination of tendon anchorage hardware, wires, or stands.</p>	<p>(d) Examination of wires or strands are performed by qualified subcontract quality control personnel as part of a tendon surveillance inspection contact. The examinations meet the</p>	<p>The licensee will meet all the requirements of IWA-2300 of the 1992 Addendum as specified in Containment Relief Request CRR-09, Proposed Alternative, item 2, in its February 21, 2002, submittal. This is</p>

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
		requirements of IWL-2523.2.	acceptable.
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>	<p>This is editorial change. Acceptable.</p> <p>This is editorial change. Acceptable.</p> <p>The added additional responsibility for the Responsible Engineer ensures completeness and consistency in pressure testing activities. Acceptable.</p>
2400	No change	N/A	N/A
2410	Added to paragraph (c) a condition which allows for deferral of concrete visual examinations to the next scheduled plant outage for inaccessible portions of concrete surface.	This change insures that all surfaces that can be inspected are examined, but recognizes the personnel safety of the inspectors.	Acceptable, licensee states that credit for both intervals will not be taken.
2420	No change	N/A	
2421	Changed wording for sites with more than one plant. Changed	Nonsignificant - clarifies wording and accommodates plant life	This is editorial change. Acceptable.

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	frequencies by adding "and every 10 years thereafter".	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 requirements for tendon anchorage areas.</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 50.</p>	<p>This is editorial change. Acceptable.</p> <p>This is editorial change. Acceptable.</p> <p>This is editorial change. Acceptable.</p> <p>The added details ensure proper tendon anchorage area examinations. The addition of (c) is consistent with the rule in 10 CFR 50. Increase level of quality and safety of examinations. Acceptable.</p>
2520	No change	N/A	
2521	Changed random sample	Nonsignificant - the random	This is editorial change. Acceptable.

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	wording in (a)	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.	The added details ensure proper tendon examinations. Acceptable.
2523	No change	N/A	
2524	Changed wording consistent with the changes to IWL-2310 addressed above.	Nonsignificant	Acceptable with licensee's commitments for visual examination requirements and acceptance criteria as stated in its February 21, 2002, submittal.
2525	Changed wording for sample analysis.	Nonsignificant	This is editorial change. Acceptable.
2526	Added a subparagraph addressing replacement of corrosion protection medium.	The added details ensure tendon integrity and provide the Responsible Engineer options from which to specify corrosion medium replacement.	The added details ensure tendon integrity . Acceptable.
3100	No change	N/A	
3110	No change	N/A	
3111	ASME Section XI generic change from repair and/or	Nonsignificant	This is editorial change. Acceptable.

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	replacement to repair/replacement activities.		
3112	No change	N/A	
3113	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	This is editorial change. Acceptable.
3120	No change	N/A	
3200	No change	N/A	
3210	Removed the word concrete from the heading.	Nonsignificant	This is editorial change. Acceptable.
3211	<p>Added tendon end and anchorage areas to the scope of the subparagraph and added corrosion protection medium leakage and end cap deformation as acceptance criteria attributes.</p> <p>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.</p>	<p>The added details ensure tendon integrity and provide the Responsible Engineer options from which to specify corrosion medium replacement.</p> <p>Insignificant</p>	<p>The added details ensure tendon integrity . Acceptable.</p> <p>This is editorial change. Acceptable.</p>
3212	No change	N/A	

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
3213	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	This is editorial change. Acceptable.
3220	No change	N/A	
3221	Added acceptance criteria attributes for pre-stress loss prediction, tendon elongation, free water content and corrosion protection medium reduction.	The additions to the acceptance criteria of IWL-3221 have provided further assurance that the Responsible Engineer will evaluate all potential conditions that could impact the post-tensioning system integrity. These enhancements to the 1998 Edition increase the level of quality of the inspection program and have no adverse impact on the safety of the inspection program described in 1992 Edition. These additions are consistent with the requirements of the rule as stated in 10 CFR 50.55a. .	This is enhancement to the acceptance examination. Acceptable.
3222	No change	N/A	
3223	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	This is editorial change. Acceptable.

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
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>The NMC is a single unit site. Nosignificant</p> <p>Nonsignificant</p>	<p>This nonsignificant change is for site with more than one unit. Acceptable.</p> <p>The is editorial change. Acceptable.</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. The regulations do not require licensees to submit their containment inspection programs.	Acceptable. The regulations do not require licensees to submit their containment inspection programs.
4000	ASME Section XI changes from repair and/or replacement to repair/replacement activities.	Nonsignificant - all related repair and replacement requirements have been consolidated into IWL-4000.	This is editorial change. Acceptable.
4100	No change	N/A	
4110	Exempted grease cups and installation screws from the scope.	Nonsignificant - the exempted items are non structural items.	The exempted items are non structural items. Acceptable.

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	This is editorial change. Acceptable.
4120	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.	Nonsignificant	This is editorial change. Acceptable.
4200	ASME XI generic change from repair and/or replacement to repair/replacement activities. 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.	Nonsignificant Nonsignificant, this is a paragraph numbering change from the 1992 Edition.	This is editorial change. Acceptable. This is editorial change. Acceptable.
4210	Changed paragraph number to 4220, removed the word repair from heading and changed referenced paragraph numbers	Nonsignificant	This is editorial change. Acceptable.

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	<p>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 several places.</p>	<p>Nonsignificant</p> <p>Nonsignificant</p> <p>Nonsignificant</p>	<p>This is editorial change. Acceptable.</p> <p>This is editorial change. Acceptable.</p> <p>This is editorial change. Acceptable.</p>
4220	Changed paragraph number to 4230.	Nonsignificant	This is editorial change. Acceptable.
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</p>	<p>Nonsignificant</p> <p>Nonsignificant</p> <p>The added detailed requirements ensure proper repair/replacement</p>	<p>This is editorial change. Acceptable.</p> <p>This is editorial change. Acceptable.</p> <p>The added detailed requirements ensure proper repair/replacement plan</p>

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	repair/replacement plan.	plan development for post-tensioning systems.	development for post-tensioning systems. Acceptable.
4300	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	This is editorial change. Acceptable.
5100	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	This is editorial change. Acceptable.
5200	No change	N/A	
5210	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	This is editorial change. Acceptable.
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.	This is editorial change. Acceptable.
5240	Deleted paragraph which addressed the scheduling of	Nonsignificant - the schedule of pressure tests are contained in	This is editorial change. Acceptable.

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	pressure tests.	IWE-5000 as referenced in IWL-5230.	
5250	<p>Changed wording regarding the role of the Responsible Engineer in pressure test activities.</p> <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>The clarified role of the Responsible Engineer ensures proper pressure test procedures and examinations.</p> <p>Nonsignificant</p> <p>The visual examination terminology changes are discussed in IWL-2310 above.</p>	<p>This is editorial change. Acceptable.</p> <p>This is editorial change. Acceptable.</p> <p>Acceptable with licensee's commitments for visual examination requirements and acceptance criteria as stated in its February 21, 2002, submittal.</p>
5260	<p>Changed heading from Corrective Measures to Corrective Action.</p> <p>ASME Section XI generic change from repair and/or replacement to</p>	<p>Nonsignificant</p> <p>Nonsignificant</p>	<p>This is editorial change. Acceptable.</p> <p>This is editorial change. Acceptable.</p>

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
	repair/replacement activities.		
5300	ASME Section XI generic change from repair and/or replacement to repair/replacement activities.	Nonsignificant	This is editorial change. Acceptable.
7000	Deleted Article including IWL-7100, 7110, 7120 consistent with the IWL-4000 changes above.	Nonsignificant - all related repair and replacement requirements have been incorporated into IWL-4000.	This is editorial change. Acceptable.
Table 2500-1	<p>Changed item L1.11 from all areas to all accessible areas.</p> <p>Changed the VT-3C, VT-1C, and VT-1 examinations with general and detailed visual examination respectively, to be consistent with the terminology in paragraph IWL-2310 changes above.</p> <p>Note: the item L1.12 examination method in the 1998 Edition contains a publication error. The "general visual" should be "detailed visual".</p>	<p>The addition of accessible areas provides consistency with the requirements of the scope, of IWL-1000.</p> <p>The visual examination terminology changes are discussed in IWL-2310 above. The acceptability of the change to the general and detailed visual inspections is discussed with IWL-2310.</p>	<p>The changed item L1.11 provides for more practical examination implementation than previous requirements. Acceptable.</p> <p>Acceptable with licensee's commitments for visual examination requirements and acceptance criteria as stated in its February 21, 2002, submittal.</p>

IWL Paragraph (1992)	Changes between IWL 1992 Edition/Addenda. and the IWL 1998 Edition	Licensee's statement of significance and/or basis for use as an alternative examination	Comments
Table 2521-1	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".	Nonsignificant - accommodates plant life extensions for tendon examinations.	The repetitive periods of tendon inspection every 5 th year is provided in Note 4 instead of previously shown in the table. Acceptable.
Table 2525-1 Table 2525-1 (cont)	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.	The additional test method options provides for more flexibility. Acceptable. Providing the acceptance criteria of water contents assures consistent in implementation. Acceptable.