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March 20 2001
IPN-01-024

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, DC 20555-0001

Subject: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
License No. DPR-64
**Request for Additional Information Regarding**
**Third Ten Year Inservice Inspection Interval Program Plan**

Reference: 1. NRC letter, "Request for Additional Information Regarding Third 10-Year Inservice Inspection Program (TAC No. MA9757)," dated February 13, 2001.

2. NYPA letter IPN-00-055 to NRC, "Third Ten Year Inservice Inspection Interval," dated July 18, 2000.

Dear Sir:

The purpose of this letter is to respond to a request for additional information, Reference 1, regarding the Inservice Inspection Program submitted in Reference 2. Attachment 1 provides a response to the information requests of Reference 1 and also identifies additional changes to the relief requests based on telephone discussions with the NRC staff. Attachment 2 contains revised relief requests as discussed in Attachment 1.

There are no new commitments made by this letter. If you have any questions, please contact Mr. Ken Peters.

Very truly yours,

Robert J. Barrett
Vice President - Operations
Indian Point 3 Nuclear Power Plant

**STATE OF NEW YORK**
**COUNTY OF WESTCHESTER**
Subscribed and sworn to before me
this 20 day of MARCH , 2001

**Notary Public**

Christina Leitmann
Notary Public, State of New York
Registration #01LE5070946
Qualified In Putnam County
My Commission Expires Jan. 6, 2003

A047

Attachments as stated

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475 Allendale Road
King of Prussia, PA 19406

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Mr. George F. Wunder, Project Manager
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Division of Reactor Projects I/II
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## REVISIONS TO THIRD 10-YEAR INSERVICE INSPECTION PROGRAM

### A. Response to Request For Additional Information (RAI)

### 1. Request for Information on Relief No. 3-2 (H) Revision 1

Pursuant to 10 CFR 50.55a(a)(3)(i), the licensee proposed an alternative essentially identical to Code Case N-546, *Alternative Requirements for Qualification of VT-2 Examination Personnel, Section XI, Division 1*. The licensee's proposed alternative contains one exception to Code Case N-546. The licensee proposed to use the vision test requirements of IWA-2321, 1989 Edition, which is the Inservice Inspection Code in effect for Indian Point 3 in lieu of the vision test requirements of IWA-2321, 1995 as required by Code Case N-546.

To find this alternative acceptable for use, the staff has determined that the following conditions must be met:

1) Use the Vision test requirements of IWA-2321, 1995 Edition;

2) Develop procedural guidelines for obtaining consistent, quality VT-2 visual examinations in accordance with IWA-2210;

3) Document and maintain records to verify the qualification of persons selected to perform VT-2 visual examinations, in accordance with IWA-1400(k);

4) Implement independent review and evaluation of detected leakage by persons other than those that performed the VT-2 visual examinations, in accordance with IWA-1400(n);

5) Qualify VT-2 examination personnel by examination on the material covered under item b of the requirements of Code Case N-546; and

6) Re-qualification of VT-2 examination personnel by examination every three (3) years to the requirements of item b of Code Case N-546.

Confirm that these conditions will be met.

**Response**

Relief 3-2(H), Revision 2, is in Attachment 2 to this letter. The revision meets the conditions stipulated above with one exception. Additional relief is requested to use the 1989 vision test requirements for a period up to November 30, 2001. This relief is requested to support the upcoming refuel outage (scheduled to begin April 27, 2001) without imposing hardship to re-qualify VT-2 personnel (both plant and incoming) to the new requirements of the 1995 Edition of the vision test.

**2. Request for Information on Relief No. 3-3 (H) Revision 1**

Paragraph IWA-5242(a) requires the removal of all insulation from pressure-retaining bolted connections in systems borated for the purpose of controlling reactivity when performing VT-2 visual examinations during system pressure tests. The licensee has proposed the following alternative examinations requirements (similar to those found in Code Case N-533) in lieu of the Code requirements as stated in IWA-5242(a) for Class 1 and Class 2 systems/components:

a) A system pressure test and VT-2 visual examination shall be performed each inspection **period** without removal of insulation.

b) The insulation shall be removed from the bolted connections each inspection **period**, and a visual examination shall be performed. The connections are not required to be pressurized. Any evidence of leakage shall be evaluated in accordance with the requirements specified in IP3 relief request RR 3-1.

The proposed alternative submitted by the licensee is similar to Code Case N-533, *Alternative Requirements for VT-2 Visual Examination of Class 1 Insulated Pressure-Retaining Bolted Connections*, with the exception that "(a), (b)" of the Code Case requires:

a) A system pressure test and VT-2 visual examination shall be performed each **refueling outage** without removal of insulation.

b) **Each refueling outage** the insulation shall be removed from the bolted connection, and a VT-2 visual examination shall be performed. The connection is not required to be pressurized. Any evidence of leakage shall be evaluated in accordance with IWA-5250.

In order for the proposed alternative for Class 1 and Class 2 bolted connections to be found acceptable, the following conditions must be met.

a) A system pressure test and VT-2 visual examination shall be performed each refueling outage for Class 1 connections and each period for Class 2 and 3 connections.

b) The insulation shall be removed from the bolted connections each refueling outage for Class 1 connections and each period for Class 2 and 3 connections, and a VT-2 visual examination shall be performed. The connection is not required to be pressurized. Any evidence of leakage shall be evaluated in accordance with IWA-5250.

In addition, neither the licensee or Code Case N-533, provides details of the examination parameters for the system pressure test. As an additional condition, the system pressure

test and corresponding VT-2 visual examination with the insulation in place will have to be performed with a minimum 4-hour hold time after attaining a test pressure of not less than the nominal operating pressure associated with 100 percent rated reactor power. The 4-hour hold allows time for leakage to penetrate the insulation, providing a means of detecting any significant leakage with the insulation in place.

Confirm that these conditions will be met.

**Response**

Relief 3-3(H), Revision 2, is in Attachment 2 to this letter. The revision incorporates conditions a) and b) as required by the RAI. In addition, the revision added a statement to address the details of the examination parameters for the system pressure test.

**3. Request for Information on Relief No. 3-4 (H) Revision 1**

It appears that this request is seeking relief from the same examination requirements as Request for Relief No. 3-3, Revision 1. Therefore, it is unclear what purpose this relief serves. Provide clarification/information describing the need for this relief as opposed to Request for Relief No. 3-3, Revision 1. Considering the conditions stated above for Request for Relief No. 3-3, Revision 1, determine if this request for relief is still required.

**Response**

Relief 3-4(H), Revision 2, is in Attachment 2 to this letter. The revision clarifies, through example, how Relief 3-3(H) and 3-4(H) would be used together to demonstrate the need for both reliefs.

**4. Request for Information on Relief Nos. 3-1 (H) Revision 1 and 3-5 (H) Revision 1**

The licensee submitted Requests for Relief Nos. 3-1, Revision 1, and 3-5, Revision 1, from the examination requirements of IWA-5250(a)(2). ASME Section XI, IWA-5250(a)(2) requires that if leakage occurs at a bolted connection, the bolting shall be removed, VT-3 examined for corrosion, and evaluated in accordance with IWA-3100.

Request for Relief No. 3-1, Revision 1 contained an alternative to evaluate the leakage at bolted connections taking into account the:

1. Location of leakage
2. History of leakage
3. Fastener materials
4. Evidence of corrosion, with the connection assembled.
5. Corrosiveness of the process fluid and
6. Other components in the vicinity that may be degraded due to the leakage.

Request for Relief No. 3-5, Revision 1 proposes no alternative but essentially states that

removal and visual inspection of bolting at a bolted connection will not be performed when leakage is discovered during a system pressure test when the bolting was replaced or inspected and found satisfactory during the same outage as the pressure test.

Considering that the licensee, in RR No. 3-1, Revision 1, proposed an alternative for leakage at bolted connections which takes into account multiple (see above items 1-6) items to be considered prior to removal of bolting, the need for Request for Relief No. 3-5, Revision 1 is unclear. Furthermore, it is the staff's opinion that an evaluation of each bolted connection found leaking is more appropriate, rather than generic acceptance of the bolted connection based solely on the fact that the bolting is either new or was recently inspected.

Provide additional information concerning the need for multiple requests for relief from the same Code requirement.

In addition, if Request for Relief No. 3-5, Revision 1 is deemed necessary, recognize that 10 CFR 50.55a(a)(3)(i) requires an alternative equivalent to the Code requirements or an explanation describing how the licensee's proposed alternative will provide an acceptable level of quality and safety. Request for Relief No. 3-5, Revision 1, as currently written provides no alternative examination. Therefore, provide:

1) An alternative equivalent to the Code requirements or,
2) An explanation describing how the licensees proposed alternative will provide an acceptable level of quality and safety, or,
3) Resubmit the Request for Relief under 10 CFR 50.55a(a)(3)(ii) [hardship], or 10 CFR 50.55a(g)(6)(i) [impracticality]

**Response**

Relief 3-5(H), Revision 2, is in Attachment 2 to this letter. The revision is resubmitted under 10 CFR 50.55(a)(3)(ii) and adds clarification, through example, of how Relief 3-3(H) and 3-4(H) would be used together to demonstrate the need for both reliefs.

**5. Request for Information on Relief No. 3-7 (I)**

The licensee's proposed alternative states "...JAF will implement ASME Code Case N-532...". It is understood that the licensee's submittal is for IP3, not the James A. FitzPatrick Nuclear Power Plant. Provide clarification to the licensee's alternative examinations.

**Response**

Relief 3-7(I), Revision 1, is in Attachment 2 to this letter. The relief has been corrected by changing the reference from NYPA to Entergy and changing the reference from JAF to IP3.

**6. Request for Information on Relief No. 3-10 (I)**

This Request for Relief is for all components subject to ultrasonic examination in accordance with the 1995 Editions and 1996 Addenda of ASME Section XI, Appendix VIII.

Appendix VIII, Subarticle VIII-2200 requires that personnel shall meet the requirements of Appendix VII. Subarticle VII-4240 of the 1995 Edition with the 1996 Addenda of ASME XI requires that supplemental training be performed on an annual basis to impart knowledge of new developments, material failure modes, and any pertinent technical topics as determined by the employer. The extent of this training shall be a minimum of 10 hours per year. A record of attendance and the topics covered during the training shall be maintained; however, no examination is required.

Paragraph 2.4.1.1.1 in the Federal Register (dated September 22, 1999) contains the following statement, "The NRC had determined that this requirement *(10 hours of training on an annual basis)* was inadequate for two reasons. The first reason was that the training does not require laboratory work and examination of flawed specimens. Signals can be difficult to interpret and, as detailed in the regulatory analysis for this rulemaking, experience and studies indicate that the examiner must practice on a frequent basis to maintain the capability for proper interpretation. The second reason is related to the length of training and its frequency. Studies have shown that an examiner's capability begins to diminish within approximately 6 months if skills are not maintained. Thus, the NRC had determined that 10 hours of annual training is not sufficient practice to maintain skills, and that an examiner must practice on a more frequent basis to maintain proper skill level...".

Based on public comments the NRC reconsidered its position. The Performance Demonstration Initiation (PDI) program has adopted a requirement for 8 hours of training, but it is required to be hands-on practice. In addition, the training must be taken no earlier than 6 months prior to performing examinations at a licensee's facility. PDI believes that 8 hours will be acceptable relative to an examiner's abilities in this highly specialized skill area because personnel can gain knowledge of new developments, material failure modes, and other pertinent technical topics through other means. Thus, the NRC has decided to adopt in the final rule the PDI position on this matter. These changes are reflected in 10 CFR 50.55a(b)(2)(xiv), which states, "All personnel qualified for performing ultrasonic examinations in accordance with Appendix VIII shall receive 8 hours of annual hands-on training on specimens that contain cracks. This training must be completed no earlier than 6 months prior to performing ultrasonic examinations at a licensee's facility."

It is the staff's opinion that the training requirements stipulated in 10 CFR 50.55a(b)(2)(xiv) is a stand alone requirement, independent of VII-4240 and CC-583.

Based upon the submittal it is unclear whether the licensee's intent is to obtain relief from the regulatory requirements as listed in 10 CFR 50.55a(b)(2)(xiv) for Appendix VIII

examinations, or from the Code requirements as listed in Subarticle VII-4240 or another annual training program.

Provide additional information clarifying this request for relief.

**Response**

Relief 3-10(I), Revision 1, is in Attachment 2 to this letter. The revision clarifies that the relief requested is from the 10 hours of training in Appendix VII-4240.

**7. Request for Information on Relief No. 3-12 (I)**

Examination Category B-A, Item Numbers B1.21, and B1.22 require volumetric examinations of the accessible length of all circumferential and meridianal head welds. Note 2 of Table IWB-2500-1 for Examination Category B-A states; "Includes essentially 100% of the weld length".

The licensee states that "Note 2 requires that the volumetric examination coverage stipulated by Figure IWB-2500-3 be provided for essentially 100% of one weld."

The staff believes that the licensee's statement is a non-conservative interpretation of the Code requirement. The staff interprets Note 2 as requiring volumetric examination of 100% of the accessible weld length for all circumferential and meridianal head welds. While this interpretation of Note 2 does not change the need for relief for the B1.21 and B1.22 welds, the licensee should recognize and utilize this interpretation for other Item Numbers which reference Note 2, (i.e. B1.10, B1.30, B1.40).

To support the determination that the subject Code requirements are impractical in accordance with 10 CFR 50.55a(g)(6)(i), the licensee must provide an adequate description/information to support that determination. The licensee states that complete examination of the subject welds is limited by physical obstructions, such as, interference from CRDM penetrations, or incore instrumentation. Information supplied in the licensee's submittal appears generic to multiple welds. In order to evaluate this request for relief provide weld identifications for the subject welds including the percentage of examination coverages achievable (if any). In addition provide drawings or sketches showing the specific configurations of the subject welds to demonstrate the impracticality of meeting the Code examination coverage requirements.

**Response**

Relief 3-12(I) is withdrawn.

**8. Request for Information on Relief No. 3-14 (I)**

Examination Category B-B, Item Numbers B2.11, and B2.12. The Code requires 100% volumetric examination of Pressurizer Circumferential and Meridional Head Welds.

To support the determination that the subject Code requirements are impractical in accordance with 10 CFR 50.55a(g)(6)(i), the licensee must provide an adequate description/information to support that determination. The licensee states that complete examination of the subject welds is limited by physical obstructions, specifically the subject welds are enclosed in a biological and missile shield. The information supplied in the licensee's submittal is generic to multiple welds. In order to evaluate this request for relief provide weld identifications for the subject welds. In addition provide drawings or sketches showing the specific configurations of the subject welds to demonstrate the impracticality of meeting the Code examination coverage requirements.

**Response**

Relief 3-14(I) is withdrawn.

**9. Request for Relief No. 3-16 (I)**

Examination Category B-D, Item Number B3.120. The Code requires 100% volumetric examination of Pressurizer Nozzle Inner Radius Sections.

To support the determination that the subject Code requirements are impractical in accordance with 10 CFR 50.55a(g)(6)(i), the licensee must provide an adequate description/information to support that determination. The licensee states that complete examination of the subject areas are limited by the physical characteristics of the nozzles, specifically nozzle geometry and as-cast properties . It appears that the information supplied in the licensee's submittal is generic to multiple nozzles. In order to evaluate this request for relief provide nozzle/component identifications for the subject areas. In addition provide drawings or sketches showing the specific configurations of the subject inner radius sections to demonstrate the impracticality of meeting the Code examination coverage requirements.

**Response**

Relief 3-16(I) is withdrawn.

**10. Request for Relief No. 3-18 (I)**

Examination Category B-F, Item Number B5.10. The Code requires 100% volumetric and surface examination of Reactor Vessel Nozzle to Safe End Welds.

To support the determination that the subject Code requirements are impractical in accordance with 10 CFR 50.55a(g)(6)(i), the licensee must provide an adequate description/information to support that determination. The licensee states that complete examination of the subject welds is limited by physical obstructions, specifically the subject welds are enclosed with limited access through the refueling cavity floor. In addition, the RPV Nozzle to Safe End welds are covered with fixed (non-removable) insulation.

The information supplied in the licensee's submittal is generic to multiple welds. In order to evaluate this request for relief provide weld identifications for the subject welds. In addition provide drawings or sketches showing the specific configurations of the subject welds to demonstrate the impracticality of meeting the Code examination coverage requirements.

**Response**

Relief 3-18(I) is withdrawn.

**11. Request for Relief No. 3-21 (I)**

Examination Category B-J, Item Number B9.11, of the Code requires 100% volumetric and surface examination of Circumferential Welds in Piping NPS 4 or Larger.

To support the determination that the subject Code requirements are impractical in accordance with 10 CFR 50.55a(g)(6)(i), the licensee must provide an adequate description/information to support that determination. The licensee states that complete examination of the subject welds is limited by physical obstructions, specifically the subject welds are enclosed with limited access through the refueling cavity floor. In addition, the welds are covered with fixed (non-removable) insulation.

The information supplied in the licensee's submittal appears to be generic to multiple welds. In order to evaluate this request for relief provide weld identifications for the subject welds. In addition provide drawings or sketches showing the specific configurations of the subject welds to demonstrate the impracticality of meeting the Code examination coverage requirements.

**Response**

Relief 3-21(I) is withdrawn.

**12. Request for Relief No. 3-22**

Examination Category C-A, Item Number C1.30, of the Code requires 100% volumetric examination of Tubesheet-to-Shell Welds.

To support the determination that the subject Code requirements are impractical in accordance with 10 CFR 50.55a(g)(6)(i), the licensee must provide an adequate description/information to support that determination. The licensee states that complete examination of the subject weld is limited by physical obstructions, specifically the proximity of the nozzle weld interferes with access to the subject weld.

In order to evaluate this request for relief provide weld identification for the subject weld. In addition provide drawings or sketches showing the specific configurations of the subject weld to demonstrate the impracticality of meeting the Code examination

coverage requirements.

**Response**

Relief 3-22(I) is withdrawn.

**13. Request for Relief No. 3-26 (I) Revision 1**

The licensee has stated that: "The following alternative testing requirements will be implemented as defined by ASME Section XI Code Case N-573, Transfer of Procedure Qualification Records Between Owners, Section XI, Division 1.

1. NYPA will perform a technical review of the supplying Owner's PQR.

2. The supplying Owner will state in writing that the PQR was performed under an acceptable Nuclear Quality Assurance program that meets ASME Section XI, IWA-1400 and that it was performed in accordance with ASME Section XI.

3. NYPA will generate a NYPA WPS using the variables established in the supplied PQR(s). NYPA PQR's may supplement these or other Owner supplied PQR's.

4. The WPS will be approved and signed by NYPA.

5. The WPS will be demonstrated successfully by NYPA by completing a welder performance qualification test using the parameters of the NYPA WPS.

6. NYPA will not transfer the supplied PQR to any other Owner.

7. NYPA will document the use of this Code Case on the appropriate NIS-2/2A form.

The alternative items listed above are similar to requirements (a)-(h) listed in the Code Case. However, it is not clear if the items listed by the licensee entirely meet the requirements of the Code Case. Confirm that Items (a)-(h) as listed in Code Case N-573 will be met.

**Response**

Relief 3-26(I), Revision 2, is in Attachment 2 to this letter. The revision clarifies that the above listed conditions 0f Code Case N-573 will be met.

**B. Additional Changes to Relief Requests**

1. Relief Request 3-8(I)

Relief 3-8(I), Revision 1 is in Attachment 2 to this letter. The revision, submitted as agreed in a January 9, 2001 conversation with NRC, provides justification for continuing

to perform initial certification and recertification of NDE personnel in accordance with the requirements of the 1989 Edition of Section XI until December 30, 2001.

2. Relief 3-24 and 3-25

Relief 3-24(C), Revision 1 and Relief 3-25 (C), Revision 1, are in Attachment 2 to this letter. Each relief has been revised to reflect the Wolf Creek and Comanche Peak relief requests recently approved by NRC per discussion with the NRC staff. The relief has also been revised to request additional relief from CP-189 requirements until December 31, 2001. These changes reflect conversation with the NRC on December 7, 2000.

3. Relief Requests 3-6(I), 3-9(I) and 3-20(I).

These request are withdrawn per discussions with the NRC on November 20, 2000 concerning generic positions.

**Docket 50-286**
**ATTACHMENT 2 TO IPN-01-024**

# THIRD TEN YEAR INSERVICE INSPECTION INTERVAL PROGRAM PLAN REVISED RELIEF REQUESTS

Relief 3-2 (H), Revision 2
Relief 3-3 (H), Revision 2
Relief 3-4 (H), Revision 2
Relief 3-5 (H), Revision 2
Relief 3-7 (I), Revision 1
Relief 3-8 (I), Revision 1
Relief 3-10 (I), Revision 1
Relief 3-24 (C), Revision 1
Relief 3-25 (C), Revision 1
Relief 3-26 (I), Revision 2

# Indian Point #3
# Third Inservice Inspection Interval
# Relief Request No. 3-2 (H), Revision 2

## A. ARTICLE IDENTIFICATION:

IWA-2300

## B. EXAMINATION REQUIREMENTS:

ASME Section XI 1989 Edition,IWA-2300, requirements for qualification and certification of VT-2 visual examination personnel.

## C. RELIEF REQUESTED:

Indian Point 3 requests relief from the requirements of IWA-2300. Pursuant to 10CFR50.55a(a)(3)(i) relief is requested on the basis that the proposed alternative would provide an acceptable level of quality and safety.

## D. BASIS FOR RELIEF:

As stated in Code Case N-546, plant personnel (e.g., licensed and non-licensed operators, system engineers, testing technicians) with the specified training and plant walkdown experience need not be qualified nor certified to comparable levels of competence in accordance with ANSI N45.2.6. Experience in identifying equipment problems and knowledge of operating conditions will enhance the ability of plant personnel to locate leakage during VT-2 examinations. With the specified four hours of training on Section XI requirements and plant specific procedures for VT-2 examinations, the designated plant personnel will understand how leaks should be identified and documented and be fully capable of performing VT-2 examinations.

Qualifying personnel for VT-2 examinations under Code Case N-546 is less burdensome than qualifying and maintaining the present VT-2 certification. Adopting this Code Case would make it feasible to train more people to perform these tasks. Furthermore, using personnel who are already required to perform functions in the plant will reduce the number of people required to enter into areas that may be radiologically restricted, resulting in fewer plant workers exposed to potential radiation dose and keeping radiation exposure as low as reasonably achievable.

Additionally, use of on-shift personnel will improve the process of returning systems to service. Prompt return of safety systems to service will improve the safety of the plant and the public.

## E. ALTERNATIVE EXAMINATIONS OR TESTS:

Indian Point 3 proposes the following alternative qualification requirements for VT-2 visual examination personnel:

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(1) Vision test requirements of IWA-2321, 1989 Edition, which is the ISI Code of Record for the IP3 ISI Program; for a period of up to November 30, 2001. Then vision test requirements of IWA-2321, 1995 Edition shall be used thereafter.

(2) Develop procedural guidelines for obtaining consistent, quality VT-2 visual examinations in accordance with IWA-2210.

(3) At least 40 hours of plant walkdown experience, such as that gained by licensed and non-licensed operators, local leak rate personnel, system engineers and inspection and nondestructive examination personnel.

Note: Documentation of the walkdown experience is a one-time effort and will be maintained in the personnel qualification records.

(4) Independent review and evaluation of detected leakage shall be performed by personnel other than those that performed the VT-2 visual examinations, in accordance with IWA-1400(n).

(5) At least four (4) hours of training on Section XI requirements and plant specific procedures for VT-2 visual examination. VT-2 examination personnel shall be qualified by examination to demonstrate knowledge of Section XI and plant specific procedures for VT-2 visual examination.

(6) Re-qualify examination personnel every 3 years, in accordance with the requirements of item b of Code Case N-546.

**Indian Point #3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-2 (H), Revision 2**

## F. JUSTIFICATION FOR REQUESTING RELIEF

In accordance with the provisions of 10CFR50.55A(a)(3)(i), the proposed alternative qualification requirements will provide an acceptable level of quality and safety. The proposed alternative qualification requirements are similar to those of ASME Section XI Code Case N-546, with additional provisions based on further discussions with the NRC. The Nuclear Regulatory Commission has not generically approved Code Case N-546 in Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability ASME Section XI Division 1." This Relief Request is similar to a Relief submitted and approved for JAFNPP with similar provisions but for the 1989 vision test requirements. Our next refueling outage is currently scheduled for April 27, 2001. In concert with using Code Case N-546, this Request seeks additional relief to use the 1989 vision test requirement for a period of up to November 30, 2001 since all plant personnel and most of the staff on loan from our other Entergy plants to support R11 are currently qualified to the 1989 vision test requirements. This relief on the 1995 vision test requirement is requested on the basis that compliance with the specified requirements of this condition would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

## G. IMPLEMENTATION SCHEDULE:

The requirements as specified in this relief request will be incorporated into the IP3 Inservice Inspection Program during the 3rd 10-Year Interval.

## H. ATTACHMENTS TO THE RELIEF:

Code Case N-546.

# Indian Point #3
# Third Inservice Inspection Interval
# Relief Request No. 3-3 (H), Revision 2

## A. ARTICLE IDENTIFICATION:

IWA-5000, Section IWA-5242(a)

Class: 1 and 2

System: Reactor Coolant, Chemical and Volume Control, Safety Injection and Residual Heat Removal.

## B. EXAMINATION REQUIREMENTS:

ASME Section XI 1989 Edition, IWA-5242,

(a) For systems borated for the purpose of controlling reactivity, insulation shall be removed from pressure retaining bolted connections for VT-2 visual examination.

## C. RELIEF REQUESTED:

Indian Point 3 requests relief from all requirements of IWA-5242(a). Pursuant to 10CFR50.55(a)(3)(ii) relief is requested on the basis that compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

## D. BASIS FOR RELIEF:

Inside containment, the referenced systems are tested in an environment that is hazardous to personnel. Removing and reinstalling insulation under these conditions is difficult to perform and is not consistent with the ALARA (as low as reasonably achievable) concept when compared to the alternate approach. In addition, the removal and reinstallation of insulation is often a critical path activity which directly affects the duration of refueling outages, therefore placing a financial hardship on the plant.

The concern that led to the Section XI requirement for removal of insulation on bolted connections, while performing pressure testing and VT-2 examinations, is that a borated-water leak from a bolted connection could cause corrosion of the bolting materials. Thus, the structural integrity of a safety-related system could be compromised by a small leak that could be unnoticed if the insulation remains in place during the pressure testing and VT-2 examination.

This relief request addresses the structural integrity concerns while mitigating the personnel hazards and reducing the critical path impact of the testing. It divides the pressure testing and the VT-2 examination into two activities that need not be performed at the same time. The proposed alternate examination is supported by the following:

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**Third Inservice Inspection Interval**
**Relief Request No. 3-3 (H), Revision 2**

This relief request addresses the structural integrity concerns while mitigating the personnel hazards and reducing the critical path impact of the testing. It divides the pressure testing and the VT-2 examination into two activities that need not be performed at the same time. The proposed alternate examination is supported by the following:

(a) ASME Code Case N-533 was approved by the Section XI Code Committee, thus providing an alternative to the similar requirement for examination of insulated Class 1 pressure retaining bolted connections.

(b) Similar relief requests have been approved by the NRC for other nuclear power plants (V.C. Summer Nuclear Station, Surry Power Station and Shearon Harris Nuclear Plant).

(c) Pre-existing boric acid leaks will be detected at atmospheric or static pressures due to residue deposits.

## E. ALTERNATIVE EXAMINATIONS OR TESTS:

The following alternate rules for the pressure testing and VT-2 visual examination of pressure retaining bolted connections will be used:

a) A system pressure test and VT-2 visual examination shall be performed each refueling outage for Class 1 connections and each inspection period for Class 2 and 3 connections, without removal of insulation.

b) The insulation shall be removed from the bolted connections each refueling outage for class 1 connections and each period for class 2 and 3 connections, and a VT-2 visual examination shall be performed. The connections are not required to be pressurized. Any evidence of leakage shall be evaluated in accordance with IWA-5250.

c) As an additional condition, the system pressure test and corresponding VT-2 visual examination will be performed in accordance with the temperature, pressure, and hold time requirements of ASME Section XI.

## F. JUSTIFICATION FOR REQUESTING RELIEF

The proposed alternative provides an acceptable level of quality and safety since the insulated bolted connections still receive pressure testing and visual VT-2 examinations each inspection period. There are no changes being made neither to the areas that are inspected nor to visual VT-2 personnel qualifications. Neither are there any changes to acceptance criteria. The alternate reduces critical path time by allowing the insulation removal and inspection to be completed prior to the system leakage test required by ASME XI.

## G. IMPLEMENTATION SCHEDULE:

The requirements as specified in this relief request will be incorporated into the IP3 Inservice Inspection Program during the 3rd Ten-Year Interval.

## H. ATTACHMENTS TO THE RELIEF:

None

# Indian Point #3
# Third Inservice Inspection Interval
# Hydrostatic Relief Request No. 3-4 (H), Revision 2

## A. ARTICLE IDENTIFICATION:

IWA-5000, Section IWA-5242(a)

Class: 1 and 2

System: Reactor Coolant, Chemical and Volume Control, Safety Injection and Residual Heat Removal

## B. EXAMINATION REQUIREMENTS:

ASME Section XI 1989 Edition, IWA-5242,

(a) For systems borated for the purpose of controlling reactivity, insulation shall be removed from pressure retaining bolted connections for VT-2 visual examination.

## C. RELIEF REQUESTED:

Indian Point 3 requests relief from all requirements of IWA-5242(a). Pursuant to 10CFR50.55(a)(3)(ii) relief is requested on the basis that compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

## D. BASIS FOR RELIEF:

Inside containment, the referenced systems are tested in an environment that is hazardous to personnel. Removing and reinstalling insulation under these conditions is difficult to perform and is not consistent with the ALARA (as low as reasonably achievable) concept when compared to the alternate approach. In addition, the removal and reinstallation of insulation is often a critical path activity which directly affects the duration of refueling outages, therefore placing a financial hardship on the plant.

The concern that led to the Section XI requirement for removal of insulation on bolted connections, while performing pressure testing and VT-2 examinations, is that a borated-water leak from a bolted connection could cause corrosion of the bolting materials. Thus, the structural integrity of a safety-related system could be compromised by a small leak that could be unnoticed if the insulation remains in place during the pressure testing and VT-2 examination.

This relief request addresses the concern that a borated water leak at a bolted connection could go undetected. It recognizes that if a bolted connection leaks for a considerable amount of time, the leakage would be evident, even through the insulation. The proposed alternate examination would allow a VT-2 inspection to be performed, with insulation on, at Normal Operating Pressure/Normal Operating Temperature (NOP/NOT) after sustained system operation. The proposed alternate examination is supported by the following:

(a) Even a small leak will be visible through insulation if enough time passes.

(b) If an inspection is performed at NOP/NOT after sustained system operation and prior to any clean up activities (i.e. upon entering a refueling outage) any leakage would be evident.

(c) If insulation is removed to allow maintenance to be performed, a visual examination will be performed with the insulation removed in accordance with hydrostatic relief request 3-3(H).

## E. ALTERNATIVE EXAMINATIONS OR TESTS:

The following alternate rules for the pressure testing and VT-2 visual examination of pressure retaining bolting will be used:

(a) A system pressure test and VT-2 visual examination shall be performed with insulation installed at NOP/NOT after sustained system operation and prior to any clean up activities. If any evidence of leakage is detected, the insulation will be removed and any evidence of leakage shall be evaluated in accordance with IWA-5250.

## F. JUSTIFICATION FOR REQUESTING RELIEF

Relief Requests RR 3-3 and RR 3-4 are very similar and were written to be used in tandem by IP3 to allow for operational flexibility; to minimize radiation exposure; and to maximize personnel safety. The following is an illustrative example of how IP3 may use these Relief Requests in tandem: As an example, Relief Request RR 3-4 would be used to perform inspections on most Class 1 bolted connections, with insulation installed, at NOP/NOT at the start of a refueling outage. The only areas not inspected using Relief Request RR 3-4 would be two (2) Reactor Coolant Pumps, which are scheduled to have their insulation removed as part of scheduled maintenance, and 3 valves which are in areas of high heat stress and/or high radiation. For the two (2) Reactor Coolant Pumps and 3 valves, Relief Request RR 3-3 would be used to allow a VT-2 with the insulation removed while in the refuel outage and a VT-2 with insulation installed at startup.

In the example given, use of Relief Request RR 3-4 would reduce the amount of insulation which would require removal during the outage, thereby reducing radiation exposure. Similarly, Relief Request RR 3-3 would allow removal of insulation from certain areas where maintenance would require removal of insulation anyway, or where heat stress and/or high radiation fields could be encountered at NOP/NOT following sustained operation. By utilizing both Relief Requests, RR 3-3 and RR 3-4, IP3 will have the operational flexibility to minimize radiation exposure, and maximize personnel safety.

Compliance with the specified requirement would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The proposed alternative provides an acceptable level of quality and safety since leakage from a bolted connection would be detectable through insulation after sustained system operation. The proposed alternative inspection would be performed prior to any clean up activities to ensure that any evidence of leakage in the surrounding area (including floor areas or equipment surfaces located underneath the components) would be detected.

## G. IMPLEMENTATION SCHEDULE:

The requirements as specified in this relief request will be incorporated into the IP3 Inservice Inspection Program during the 3rd Ten-Year Interval.

## H. ATTACHMENTS TO THE RELIEF:

None

# Indian Point #3
# Third Inservice Inspection Interval
# Hydrostatic Relief Request No. 3-5 (H), Revision 2

## A. ARTICLE IDENTIFICATION:

IWA-5000, Section IWA-5250(a)(2)

Class: 1, 2 and 3
System: All

## B. EXAMINATION REQUIREMENTS:

ASME Section XI 1989 Edition, IWA-5250,

(a) The source of leakages detected during the conduct of a system pressure test shall be located and evaluated by the owner for corrective measures as follows:

(2) If leakage occurs at a bolted connection, the bolting shall be removed, VT-3 visually examined for corrosion, and evaluated in accordance with IWA-3100.

## C. RELIEF REQUESTED:

Indian Point 3 requests relief from all requirements of IWA-5250(a)(2). Pursuant to 10CFR50.55a(a)(3)(ii) relief is requested on the basis that compliance with the Code requirement would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

## D. BASIS FOR RELIEF:

Relief is requested from removal and visual inspection of bolting at a bolted connection for leakage discovered during a system pressure test when the bolting was replaced or inspected and found satisfactory during the same outage as the pressure test. Removal and reinspection of bolting replaced or inspected during the same outage will not add to the assurance of pressure boundary integrity, because there is insufficient time for any corrosion mechanism to degrade the bolting condition.

A similar relief request has been approved by the NRC for the Indian Point 2 Nuclear Plant (RR-33) by SER dated 6/3/97.

## E. ALTERNATIVE EXAMINATIONS OR TESTS:

None

## F. JUSTIFICATION FOR REQUESTING RELIEF

This Relief Request, although similar to RR 3-1, serves a different purpose. The following are two examples:

Example 1: A maintenance activity is performed on an ISI Class 2 flange and all the associated bolting is replaced. When the system is placed into service and the system pressure test is performed a small leak is noted at the flange. The bolting is snugged up and the leak stops. RR 3-1 (H) would require IP3 to perform a formal evaluation on the new bolting. This additional evaluation would be burdensome without a compensating increase in the level of safety and quality since these are recently inspected bolts and the leak was corrected.

Example 2: At the beginning of the refueling outage, an inspection is performed to meet the requirements of the GL 88-05 boric acid inspection program. A boric acid leak is detected on some ISI Class 1 bolting. The affected bolting is inspected, found satisfactory, and reinstalled. Later on during the system leakage test performed on the RCS prior to startup following refueling, as required by IWB-2500-1, Category B-P, B15.10, a small leak is noted at the same bolting. The bolting is snugged up and the leak stops. RR 3-1 (H) would require IP3 to perform a formal evaluation on the same bolting. This additional evaluation would be burdensome without a compensating increase in the level of safety and quality since these are newly replaced bolts and the leak was corrected.

If bolting is newly replaced or inspected and found satisfactory and a leak is detected during the pressure test performed during the same outage, there is no benefit to quality or safety by performing an evaluation.

## G. IMPLEMENTATION SCHEDULE:

The requirements as specified in this relief request will be incorporated into the IP3 Inservice Inspection Program during the 3rd Ten-Year Interval.

## H. ATTACHMENTS TO THE RELIEF:

None

**Indian Point Unit 3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-7 (I), Revision 1**

## A. ARTICLE IDENTIFICATION:

| | |
|---|---|
| Article IWA-4000 | Repair Procedures |
| Article IWA-6000 | Records and Reports |
| Article IWA-7000 | Replacements |

## B. CODE REQUIREMENTS:

IWA-4800 The records required by IWA-6000 shall be completed for all repairs.

IWA-7520 (a)(8) Completed Owner's Report for Repairs or Replacements, Form NIS-2

IWA-6210 (c) The Owner shall prepare inservice inspection summary report for Class 1 and 2 pressure retaining components and their supports.

IWA-6220 (c) Inservice Inspection summary reports shall be required at the completion of each inspection conducted during a refueling outage. Examinations, tests, replacements, and repairs conducted since the preceding summary report shall be included.

IWA-6220 (d) Each summary report shall contain the following:

(2) Owner's Report for Inservice Inspection, Form NIS-1

(3) Owner's Report for Repair or Replacement, Form NIS-2

IWA-6230 Within 90 days of the completion of the inservice inspection conducted during each refueling outage, the Owner shall file ISI Summary Reports with the enforcement and regulatory authorities.

## C. RELIEF REQUESTED:

Relief is requested from the following:

1. Preparation of the Owner's Report for Inservice Inspection, Form NIS-1
2. Preparation of the Owner's Report for Repair or Replacement, Form NIS-2.
3. Submittal of the summary report within 90 days following completion of the inservice inspection conducted during each refueling outage.

## D. BASIS FOR RELIEF:

Pursuant to 10 CFR 50.55a(a)(3)(ii), relief is requested on the basis that the specified

requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

IP3 feels that the summary report required by IWA-6000 does not contain the information necessary to demonstrate compliance with Code requirements, and therefore does not provide a compensating increase in the quality and/or safety at IP3.

The summary report does not furnish evidence of compliance with the ASME Boiler and Pressure Vessel Code, Section XI, Inspection Program B, percentage requirements as mandated by IWB-2412, IWC-2412, and IWD-2412.

Class 3 components are excluded from the summary report Submittal. Both a Final Report and Summary Report must be prepared, reviewed and approved in order to comply with Sub-articles IWA-6220 and IWA-6310 respectively.

The preparation, review, approval and certification of each record and report, within the time frame of 90 days following completion of each refueling outage, increases substantially the costs associated with inservice inspection activities, and puts an unreasonable time constraint on IP3 without an increase in assurance of Code compliance.

A similar relief request was approved for use at Entergy's James A. FitzPatrick Nuclear Power Plant. Refer to the NRC letter on JAF relief requests dated 11/25/98.

## E. ALTERNATIVE EXAMINATIONS OR TESTS:

As an alternate to the requirements of IWA-4800, IWA-6000, and IWA-7528(8), IP3 will implement ASME Code Case N-532, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000[1], Division 1", (Note: 1 - ASME 1992 Edition Section XI).

## F. IMPLEMENTATION SCHEDULE:

The Alternate Examination requirements of ASME Code Case N-532 will be incorporated into IP3 Inservice Inspection Program during the 3rd ten-year interval.

## G. JUSTIFICATION FOR RELIEF:

IP3 feels that the summary report required by IWA-6000 does not contain the information necessary to demonstrate compliance with Code requirements, and therefore does not provide a compensating increase in the quality and/or safety at IP3. The summary report does not furnish evidence of compliance with the ASME Boiler and Pressure Vessel Code, Section XI, Inspection Program B, percentage requirements as mandated by IWB-2412, IWC-2412, and IWD-2412. In addition, Class 3 components are excluded from the summary report Submittal.

The preparation, review, approval and certification of each record and report, within the time frame of 90 days following completion of each refueling outage, increases

substantially the costs associated with inservice inspection activities, and puts an unreasonable time constraint on IP3 without an increase in assurance of Code compliance and without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(a)(3)(ii), relief is requested on the basis that the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

A similar relief request was approved for use at Entergy's James A. FitzPatrick Nuclear Power Plant. Refer to the NRC letter on JAF relief requests dated 11/25/98.

## H. ATTACHMENTS TO THE RELIEF:

ASME Code Case N-532, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000, Division 1".

# Indian Point Unit 3
# Third Inservice Inspection Interval
# Relief Request No. 3-8 (I), Revision 1

## A. SYSTEM / COMPONENT(s) FOR WHICH RELIEF IS REQUESTED

All components subject to ultrasonic examination with Appendix VIII to the 1995 Edition with 1996 Addenda of ASME Section XI.

## B. CODE REQUIREMENTS

Sub-article IWA-2300 requires qualification of NDE personnel to CP-189, 1991 Edition, and the additional requirements of Division 1.

## C. CODE REQUIREMENTS FROM WHICH RELIEF IS REQUESTED

Relief is requested from the provisions of Sub-article IWA-2300, "Qualification of Nondestructive Examination Personnel. "This requires that personnel performing NDE shall be qualified and certified using a written practice prepared in accordance with CP-189, and the additional requirements of Division 1.

## D. BASIS FOR RELIEF

10 CFR 50.55a was amended in the Federal Register (Volume 64, No. 183 dated September 22, 1999) to require the use of the 1995 Edition, with the 1996 Addenda for Appendix VIII qualification requirements. This also imposes the requirements of IWA and Appendix VII of the 1995 Edition, with 1996 Addenda of Section XI. This includes Sub-article IWA-2300, which requires a written practice prepared in accordance with CP-189, 1991 Edition, as amended by the requirements of Division 1.

This requires development, implementation, and to the extent possible consolidation, of multiple certification requirements into one or more written practices. This is needed to address the various NDE certification requirements contained in SNT-TC-1A, for non-Appendix VIII applications and CP-189, for Appendix VIII applications. These are further modified by IWA-2300 and Appendix VII, as amended by respectively the 1989 Edition of Section XI or the 1995 Edition with 1996 Addenda of Section XI.

Relief is requested in accordance with 10 CFR 50.55a(a)(3)(ii) that compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. IP3's current Code of Record is the 1989 Edition, No Addenda, of the Section XI Code. The initial certification and recertification of ultrasonic examination personnel requirements are in accordance with the 1989 Edition of Section XI and include the use of ASNT SNT-TC-1A, 1984, as amended by IWA-2300 and Appendix VII of Section XI, 1989 Edition. An additional burden would be imposed on IP3 due to the short duration of time before the start of the upcoming Refueling Outage R11 which is currently scheduled for April 27, 2001. There are administrative/personnel constraints experienced by IP3 as a result of the transfer of the ownership of the plant from NYPA to Entergy, specifically a number of senior technical staff, including one of the two site Level IIIs had taken early retirement. IP3 is actively looking for a replacement but is limited in resources to implement a full CP-189 program before the upcoming refueling outage. The required procedural changes, manpower resources, and in some cases additional training and re-certification of personnel would place an unnecessary burden and hardship on the finite resources available before the outage. In addition, there are no scheduled Reactor Vessel UT examinations in the upcoming refueling outage scheduled to begin in April of 2001.

In lieu of developing and maintaining redundant programs, the proposed alternative of maintaining the current program for qualifications of UT personnel for a period of up to December 30, 2001 would simplify record keeping; satisfying the need to maintain personnel qualifications, eliminate redundant systems, and provide an acceptable level of quality and safety commensurate with the other NDE disciplines. It is noted that the Fitzpatrick Nuclear Power Plant also owned by Entergy was granted a similar relief with a 1-year extension.

A comparison of the implementation requirements for Appendix VIII examinations using the 1984 Edition of SNT-TC-1A as modified by IWA-2300 and Appendix VII of the 1989 Edition of Section XI with the 1991 Edition of CP-189 as modified by IWA-2300 and Appendix VII of the 1995 Edition and 1996 Addenda of Section XI is considered to be unwieldy and subjective because of their myriad differences. Therefore, three less complex comparisons of technically significant items are attached. One compares IWA-2300 from the 1995 Edition with the 1996 Addenda to the 1989 Edition. Another compares Appendix VII to the 1995 Edition with the 1996 Addenda to the 1989 Edition. The last compares the 1991 Edition of CP-189 with the 1984 Edition of SNT-TC-1A as modified by Appendix VII.

As written, there are a number of differences between CP-189 and SNT-TC-1A. However, as illustrated in the comparisons, these are minimized by the moderating effects of the applicable IWA-2300 requirements and especially the Appendix VII requirements. Compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. For example, the 1995 Edition with the 1996 Addenda requires near vision acuity of 20/25 or greater Snellen fraction while the 1989 Edition requires Jaeger No. 1 print. Development and administration of a second or consolidated program would not enhance safety or quality and would serve as a burden, particularly in developing an additional written practice, tracking of certifications, duplication of paperwork, etc. This duplication would also apply to NDE vendor programs.

Current certifications are not affected, paragraph IWA-2310 in the 1995 Edition with 1996 Addenda states that certifications based on SNT-TC-1A are valid until recertification is required.

## E. PROPOSED ALTERNATE

Initial certification and recertification of NDE personnel shall continue to be conducted in accordance with the requirements contained in the 1989 Edition of ASME Section XI, through December 31, 2001.

## F. IMPLEMENTATION SCHEDLUE

July 21, 2000 through December 31, 2001.

## G. ATTACHMENTS TO THE RELIEF

Comparison of the Qualification and Certification Requirements of Ultrasonic Examiners Certified to CP-189, 1991, and SNT-TC-1A, 1984, as modified by IWA and Appendix VII of 1989 and 95/96 Edition of Section XI respectively.

**Indian Point Unit 3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-8 (I), Revision 1**

**COMPARISON OF THE QUALIFICATION AND CERTIFICATION REQUIREMENTS OF ULTRASONIC EXAMINERS CERTIFIED TO CP-189, 1991, AND SNT-TC-1A, 1984, AS MODIFIED BY IWA AND APPENDIX VII OF 989 AND 95/96 EDITION OF SECTION XI RESPECTIVELY**

The following is a summary of pertinent technical aspects of the implementation requirements contained in Subparagraph IWA-2300 to the two Editions of ASME Section XI identified below.

The comparison is complicated because some of the requirements may be modified or omitted, simply because they are defined in another location or by another document. Several requirements, such as those for limited certification, differ somewhat but the differences are not considered technically relevant and they are not detailed in this technical comparison. These complications are representative of the increased burden when administering more than one program or a program based on varying requirements.

| 1995 Ed with 1996 Add of Section XI | 1989 Edition of Section XI |
|---|---|
| IWA-2310 – Written practice is prepared using ANSI/ASNT "Standard" CP-189, 1991 Edition. Certifications based on SNT-TC-1A remain valid until recertification. | IWA-2310 – Written practice is prepared using ASNT "Recommended Practice" SNT-TC-1A, 1984 Edition. Certifications based on earlier editions remain valid until recertification. |
| IWA-2311 – The written practice shall specify the duties and responsibilities of the Principle Level III. | |
| IWA-2312 – NDE methods listed in CP-1989 – Similar to 1989 IWA-2311. | IWA-2311 – NDE methods listed in SNT-TC-1A – Similar to 95/96 IWA 2312. |
| IWA-2313 – NDE methods not listed in CP-189 – Similar to 1989 IWA-2312. | IWA-2312 – NDE methods not listed in SNT-TC-1A – Similar to 1989 IWA-2313. |
| IWA-2314 – Level I and II re-certified every 3 years, Level III every 5 years by examination per CP-189. ASNT Level III not required. | IWA-2313 – Level I and II re-certified every 3 years, Level III every 5 years by examination per SNT-TC-1A. |
| IWA-2321 – Snellen 20/25 using lower case letters with a known pre-measured height (see IWA-2322). Per Administered in accordance with a procedure, and by personnel, approved by an NDE Level III designated by the employer. | IWA-2321- Jaeger number 1 or equivalent, conducted by personnel qualified to conduct the examinations. |
| IWA-2322 – Requires use of 10x magnifier to measure height of letters. | |
| IWA-2323 – Level III qualifications evaluated by Basic, Method, Specific, and Practical examinations and the Demonstration examination (Level II Practical). | IWA-2322 – Level III qualifications determined by Basic, Method, and Specific examinations per SNT-TC-1A. (Demonstration examination would be required by Section XI, Appendix VIII) |
| CP-189 General, Specific and Practical examinations administered and graded by a Level III. | IWA-2323 – Level I and II qualifications determined by General and Specific examinations, and a Practical hands-on examination administered by a Level III. |
| 95/96 Appendix VII is similar to 1989 | IWA-2324 – Defines requirements for |

| | |
|---|---|
| Appendix VII (See detailed comparison following). | administration of examinations. This is Modified by Appendix VII. |
| IWA-2330 – Level I responsibilities. Identical to 1989 IWA-2330. | IWA-2330 – Level I responsibilities. Identical to 95/96 IWA-2330. |
| IWA-2340 – Level III education. Similar to 1989 IWA-2340. | IWA-2340 – Level III education. Similar to 95/96 IWA-2340. |
| IWA-2350 – Defines limited certification. Provides more definition than 1989. | IWA-2350 – Defines limited certification requirements. |
| IWA-2360 – Allows certification directly to Level II. Defines additional Level III responsibilities. | Appendix VII allows certification directly to Level II. Defines similar Level III responsibilities. |
| IWA-2370 – Contains experience requirements for Level II candidates. | 1989 Appendix VII contains requirements that are more stringent. |

**Indian Point Unit 3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-8 (I), Revision 1**

The following is a summary of pertinent technical aspects of the implementation requirements contained in Subparagraph IWA-2300 to the two Editions of ASME Section XI identified below.

The comparison is complicated because some of the requirements may be Modified or omitted, simply because they are defined in another location or by another document. Several requirements, such as those for limited certification, differ somewhat but the differences are not considered technically relevant and they are not detailed in this technical comparison. These complications are representative of the increased burden when administering more than one program or a program based on varying requirements.

| **95/96 APPENDIX VII** | **1989 APPENDIX VII** |
|---|---|
| VII-1000 – Scope – Modifies the requirements of IWA-2300 for Ultrasonic examiners | VII-1000 - identical to 95/96 |
| VII-2000 – Qualification Levels – Identifies 5 qualification Levels as defined in CP-189 | VII-2000 – essentially the same. Defines NDE Instructor qualification since it is not included in SNT-TC-1A. |
| VII-3000 – Written Practice – Defines the written practice, including the definition of an "outside agency" as an independent company or a functionally independent organization within the same company. | VII-3000 Identical to 95/96 except "outside agency" is not defined. |
| VIII-4000 – | Qualification Requirements |
| CP-189 contains no simultaneous experience provisions. | Table VII-4110-1 states the simultaneous experience provision of SNT-TC-1A is not applicable. |
| Paragraph VII-4223 requires previously qualified individuals to meet the requirements for training | Both Appendices in paragraph VII-4300 state that to be considered for examination the Level I, II, and III candidates shall have successfully completed the training required in VII-4200. |
| Paragraph VII-4240 states that no examination is required for the annual retraining. | |
| Paragraph VII-4310 (a) states that a random selection process must be controlled by the written practice so no individual takes the same examination more than once. | |
| Paragraph VII-4310 (b) allows the use of "grading units" to produce a specimen bank for the practical examination | |
| Paragraph VII-4330 (a) Level III examinations per IWA-2300, Basic, Method, Specific, Practical, Demonstration, contains rules for Level II practical | While the 1989 Appendix VIII contains no requirements for a practical examination, it would be required for the mandatory Appendix VIII. |

| | |
|---|---|
| examination. An Appendix VIII practical is acceptable. | |
| Paragraph VII-4330 (b) allows recertification of Level III personnel using only the Method and Specific examinations. | IWA-2313 requires recertification using Basic, Method, and Specific written examinations |
| Not addressed | VII-6000 – Defines duties of the ANII |

**Indian Point Unit 3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-8 (I), Revision 1**

The following is a summary of pertinent technical aspects of the implementation requirements contained in CP-189, 1991; and SNT-TC-1A, 1984.

Comparisons are not detailed in those areas where CP-189 is modified by the requirements of Appendix VII. Please note that the word "should" typically identifies what is considered a requirement in SNT-TC-1A, while CP-189 typically uses the word "shall". Industry practice is to treat SNT-TC-1A recommendations as requirements. Several paragraphs are identified as similar. This is subjective. For example, while SNT-TC-1A does not specifically require suspension of an examiners certification for a lapsed vision examination, it is considered to be implied, and it is industry practice to do so.

| CP-189 | SNT-TC-1A |
|---|---|
| 1.0 – Scope – CP-189 is a standard that establishes the minimum requirements. | 1.0 – Scope – SNT-TC-1A is a recommended practice establishing guidelines. |
| 2.0 – Definitions – More inclusive (19 terms) and more concise. Some Modified by Appendix VII. | 2.0 – Definitions – Less inclusive (7 terms) |
| 3.0 – Levels | Of Qualification |
| 3.1 – Classification | Modified by Appendix VII |
| 3.2 – Level III | 4.3 (3) – Similar to CP-189 |
| 3.3 – Level II | 4.3 (2) – Similar to CP-189 |
| 3.4 – Level I | Modified by Appendix VII |
| 3.5 – Trainee | 4.2 – Similar to CP-189 |
| 3.6 – NDE Instructor | Modified by Appendix VII |
| 4.0 Qualification | Requirements |
| 4.1 – Training | Modified by Appendix VII |
| 4.2 – Experience | Modified by Appendix VII |
| 4.3 – Previous Training and Experience | Modified by Appendix VII |
| 4.4 – NDT Instructor | Modified by Appendix VII |
| 4.5 – Outside services | Modified by Appendix VII |
| 5.0 – Qualification | And Certification |
| 5.1 – Procedure | Modified by Appendix VII |
| 5.2 – Procedure requirements | Modified by Appendix VII |
| 5.3 – Approval – "written practice" approved by Level III | Modified by Appendix VII – Requires that "written practice" specify responsibilities. |
| 6.0 Examinations | |
| 6.1 – Vision | Modified by IWA-2300 |
| 6.2 – Level III Examination | Modified by Appendix VII |
| 6.3 – Level I and II Examination | Modified by Appendix VII |
| 6.4 – Administration and grading | Modified by Appendix VII |
| 6.5 – Reexamination | Modified by Appendix VII |
| 6.6 – Administration of Examinations – prohibits one's self or one's subordinate from preparing or administering an examination. | Not specifically addressed |

**Indian Point Unit 3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-8 (I), Revision 1**

| 7.0 Expiration, Suspension, Reinstatement of Employer | Revocation, and Certification |
|---|---|
| 7.1 – Expiration | Similar to CP-189 |
| 7.2 – Suspension | Similar to CP-189 |
| 7.3 – Revocation | Similar to CP-189 |
| 7.4 – Reinstatement | Similar to CP-189 |
| 8.0 Employer | Recertification |
| 8.1 – NDT Level I and II | Modified by Appendix VII |
| 8.2 – NDT Level III | Modified by Appendix VII |
| 9.0 | Records |
| 9.1 – Responsibility for Documentation | Modified by Appendix VII |
| 9.2 – Contents of Certification Record | Modified by Appendix VII |
| | |

**Indian Point Unit 3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-10 (I), Revision 1**

## A. SYSTEM / COMPONENT(s) FOR WHICH RELIEF IS REQUESTED

All components subject to ultrasonic examination in accordance with the 1995 Editions and 1996 Addenda of ASME Section XI, Appendix VIII.

## B. CODE REQUIREMENTS

The 1995 Edition and 1996 Addenda of ASME Section XI, Sub-article VII-4240 requires a minimum of 10 hours of annual training.

10 CFR 50.55a(b)(2)(xiv) requires that all personnel qualified for performing ultrasonic examinations in accordance with Appendix VIII shall receive 8 hours of hands-on training on specimens that contain cracks. The training must be completed no sooner than 6 months prior to performing ultrasonic examinations at a licensee's facility.

## C. BASIS FOR RELIEF

Pursuant to 10 CFR 50.55a(a)(3)(i), relief is requested on the basis that the proposed alternative provides an acceptable level of quality and safety. IP3 proposes that annual ultrasonic examination training be conducted in accordance with 10 CFR 50.55a(b)(2)(xiv) in lieu of Section XI, Appendix VII, paragraph VII-4240.

10 CFR 50.55a was amended in the Federal Register (64 FR 51370) to require the 1995 Edition, with the 1996 Addenda of Section XI for Appendix VIII qualification requirements. This also imposes the requirements of Appendix VII of the 1995 Edition, with 1996 Addenda of Section XI. This includes Sub-article VII-4240, which requires a minimum of 10 hours of annual training.

Paragraph 2.4.1.1.1 in the Federal Register contained the following statement, "The NRC had determined that this requirement *(10 hours of training on an annual basis)* was inadequate for two reasons. The first reason was that the training does not require laboratory work and examination of flawed specimens. Signals can be difficult to interpret and, as detailed in the regulatory analysis for this rulemaking, experience and studies indicate that the examiner must practice on a frequent basis to maintain the capability for proper interpretation. The second reason is related to the length of training and its frequency. Studies have shown that an examiner's capability begins to diminish within approximately 6 months if skills are not maintained. Thus, the NRC had determined that 10 hours of annual training is not sufficient practice to maintain skills, and that an examiner must practice on a more frequent basis to maintain proper skill level. The PDI program has adopted a requirement for 8 hours of training, but it is required to be hands-on practice. In addition, the training must be taken no earlier than 6 months prior to performing examinations at a licensee's facility. PDI believes that 8 hours will be acceptable relative to an examiner's abilities in this highly specialized skill area because personnel can gain knowledge of new developments, material failure modes, and other pertinent technical topics

through other means. Thus, the NRC has decided to adopt in the final rule the PDI position on this matter. These changes are reflected in § 50.55a(b)(2)(xiv) of the final rule".

Implementation of the requirements contained in ASME Section XI and the Final Rule will result in redundant systems. The use of the Final Rule requirements in lieu of additional requirements will simplify record keeping, satisfy needs for maintaining skills, and provide an acceptable level of safety and quality.

## E. PROPOSED ALTERNATIVE

Annual ultrasonic examination training will be conducted in accordance with 10 CFR 50.55a(b)(2)(xiv) in lieu of Section XI, Appendix VII, paragraph VII-4240.

## F. JUSTIFICATION FOR RELIEF

Paragraph 2.4.1.1.1 in the Federal Register contained the following statement, "... Thus, the NRC had determined that 10 hours of annual training is not sufficient practice to maintain skills, and that an examiner must practice on a more frequent basis to maintain proper skill level.... The PDI program has adopted a requirement for 8 hours of training, but it is required to be hands-on practice. In addition, the training must be taken no earlier than 6 months prior to performing examinations at a licensee's facility. PDI believes that 8 hours will be acceptable relative to an examiner's abilities in this highly specialized skill area because personnel can gain knowledge of new developments, material failure modes, and other pertinent technical topics through other means. Thus, the NRC has decided to adopt in the final rule the PDI position on this matter."

Implementation of the requirements contained in ASME Section XI and the Final Rule will result in redundant systems. The use of the Final Rule requirements in lieu of additional requirements will simplify record keeping, satisfy needs for maintaining skills, and provide an acceptable level of safety and quality.

A similar relief request has been approved by the NRC for the Indian Point 2 Nuclear Plant (RR-55) by SER dated 10/27/00.

## G. IMPLEMENTATION SCHEDULE

Relief is requested for the 3rd 10-Year Interval, July 21, 2000 through July 20, 2009.

## H. ATTACHMENT TO THE RELIEF:

None

**Indian Point 3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-24 (C), Revision 1**

A. 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 |

B. CODE REQUIREMENTS

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

Indian Point 3 requests relief from the requirements of the 1992 Edition, including 1992 Addenda of the ASME Section XI, Subsection IWE. Pursuant to 10CFR50.55a(a)(3)(i) relief is requested on the basis that the proposed alternative would provide an acceptable level of quality and safety.

C. PROPOSED ALTERNATIVE PROVISIONS

Indian Point 3 Nuclear Power Plant 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, in lieu of the requirements of Section XI 1992 Edition, 1992 Addenda, Subsection IWE:

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 IP3 Containment ISI Program, as well as personnel qualification requirements:

   a) General visual examinations will be performed by Engineering personnel knowledgeable in the requirements for design, inservice inspection, and/or testing of Class MC and metallic liners of Class CC components. These personnel will be required to attend a Section XI Containment Inspection training class and pass an eye vision test examination as determined by the Responsible Engineer.

   b) Detailed visual examinations will be performed by personnel meeting the applicable requirements of IWA-2300 of the 1989 Edition, no Addenda, for a period of up to December 31, 2001, in accordance with SNT-TC-1A, 1984 Edition. Beginning January 1, 2002, the qualification program for personnel performing the detailed visual examinations will meet the applicable requirements of IWA-2300 of the 1992 Addenda, in accordance with CP-189, 1991 Edition.
   c) Applicable IP3 Containment Inspection program documents and/or procedures will be developed to include the aforementioned qualification requirements.

   d) Performance requirements for general and detailed visual examinations will be included in the applicable examination documents/procedures. The following methodology will be used for the demonstration:

i. The demonstration will include artificial and natural lighting. The general and detailed visual examination parameters will be verified (using a commercial light meter) as meeting the illumination requirements of Section XI, 1992 Addenda, Table IWA-2210-1 for VT-3 (general visual) and VT-1 (detailed visual) respectively. Both industrial halogen flashlights and halogen spotlights will be used.

ii. For direct general visual examination, the demonstration will determine the distance that could resolve the character height requirement of Section XI, 1992 Addenda, Table IWA-2210-1 for VT-3.

iii. Direct detailed visual examination will be demonstrated to meet the character height and distance requirements of Section XI, 1992 Addenda, Table IWA-2210-1 for VT-1.

iv. Remote visual examination will be demonstrated using commercial binoculars, spotting scope, and power zoom camera systems. The remote visual demonstration will be conducted both in artificial and natural lighting.

v. Remote general visual will demonstrate to resolve the character height for the VT-3 line of Table IWA-2210-1, at distances typical of the actual maximum remote examinations to be performed at the plant.

vi. Remote detailed visual will demonstrate to resolve the character height for the VT-1 line of Table IWA-2210-1.

vii. Demonstrations will be performed by qualified personnel and demonstrated to the Authorized Nuclear Inservice Inspector.

e) An alternate method may be used in future demonstrations which will prescribe the use of a "general visual reference standard, such as using the 18% neutral gray card in lieu of the character height standard". The alternate method, if used, will be demonstrated to meet the resolution requirement sufficient to detect defects or deterioration which may be identified during a general visual examination. The use of the reference standard complies with the provisions included in 10 CFR 50.55a(b)(2)(ix)(B). This "general visual reference standard" may also be used in future containment examination as applicable.

f) Personnel performing augmented ultrasonic thickness examinations will be qualified in accordance with the requirements of IWA-2000 in the 1992 Addenda.

2) IWE-2500(b): The requirement to examine paint or coatings prior to removal has been eliminated from the 1998 Edition. However, any work performed on the IP3 Containment boundary, including coated or painted surfaces is controlled under the work control process. If a containment pressure boundary surface coating is degraded, as a good practice, it is evaluated and dispositioned by the Coating Engineer (who is a member of the Civil Structure group under the direction of the Responsible Containment Engineer). Any base metal conditions that could challenge the structural integrity of the containment would be identified and resolved prior to coating removal and re-application. IP3 will include a requirement in the applicable procedures (e.g., Section XI Repair/Replacement procedure which covers maintenance activity such as coating; and the applicable Coating procedure) for the Responsible Engineer or designee to evaluate and disposition any containment related coating removal and application, including an examination of the base metal for acceptance.

3) 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 IP3 Containment ISI Program:

The general visual examination acceptance criteria will be included in the applicable IP3 Containment examination program documents or procedures. 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. Excessive indications of flaking, blistering or peeling coating, corrosion, general deformation, bulges, surface irregularities, or other signs of distress, which do not meet the acceptance criteria as determined by the Responsible Engineer will be recorded and evaluated for further disposition. General visual examination of pressure retaining bolted connections will be performed for missing or loose bolting materials, corrosion, bolting deformation, or other indications that may affect the integrity of the bolted connection. General visual examination of moisture barriers will be performed for signs of wear, damage, erosion, tears, surface cracks or other defects that would permit intrusion of moisture into inaccessible areas. Excessive indications will be recorded and evaluated by the Responsible Engineer or designee.

The detailed visual (VT-1) examinations will also be included in the applicable IP3 Section XI visual examination documents/procedures. 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.

4) 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. IP3 will apply the ultrasonic examination criteria in IWE-3511.3 to both Class MC components and the metallic liners of Class CC components.

5) Examination Category E-G, Pressure Retaining Bolting, has been removed from Table IWE-2500-1 in the 1998 Edition. The 1992 Edition requires a visual examination (VT-1) of bolting when a connection is disassembled. The 1998 Edition requires a general visual, performed in place, with no requirement for visual examination when the joint is disassembled. If a bolted connection within the IWE boundary is disassembled, a detailed visual examination will be performed once per inspection interval, consistent with the requirements of the 1992 Addenda of Section XI. This detailed visual (VT-1) examination will be performed on all accessible surface areas of the bolts, studs, nuts, bushings, washers, threads in base material, and flange ligaments between the fastener holes.

D. 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 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).

The ASME have made several changes 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. However, in the RAI for a Request for Relief submitted by 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, and for which additional Comanche Peak information was provided. The revised Comanche Peak Relief Request was then approved by the NRC. In a later request for relief submitted by the Wolf Creek Generating Station, the NRC identified additional issues which were addressed by the utility and the request for relief was also granted (Reference SER to TAC No. MA8393).

IP3 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) and additional commitments as related to specific subsections described under the Proposed Alternative Provisions section. These additional commitments addressed all of the issues raised by the NRC on the Comanche Peak and Wolf Creek relief requests. 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.

The 1992 Edition, 1992 Addenda of IWA-2300 requires the use of a written practice prepared in accordance with ANSI/ASNT CP-189 for the qualification and certification of containment nondestructive examination personnel. All other IP3 NDE and ISI activities, including those performed on the reactor vessel, will be performed by personnel qualified and certified to written practices prepared in accordance with the 1984 Edition of SNT-TC-1A as required by ASME XI 1989 Edition, No Addenda, which is the Code of record for the 3rd 10-Year Interval for the Class 1, 2, & 3 components at IP3. However, as required by a recent 10CFR50.55a amendment, UT personnel certification shall meet CP-189, 1991 edition requirements. A separate Relief Request RR 3-8 has also been submitted seeking relief through December 31, 2001 as well. Utilizing the

'92 Edition of IWA-2300 at this time would require the development of a separate written practice based on CP-189 requirements and the issuance and tracking of separate certifications for both IP3 and contractor personnel. A detailed comparison of the difference between SNT-TC-1A, 1984 edition and CP-189, 1991 edition was submitted as part of Relief Request RR 3-8, and demonstrated that the differences are mainly administrative in nature. As such, the administration of the resulting dual programs at this time would place an unnecessary burden and hardship on the finite resources available before the next Refueling Outage, without a compensating increase in the level of quality and safety.

Accordingly, IP3 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 SERs for Comanche Peak and Wolf Creek Stations; 2) the applicable requirements of 10 CFR 50.55a(b)(2)(ix); and 3) Qualification for NDE personnel shall follow the 1989 Edition of IWA-2300 requirements through December 31, 2001; after which date it shall be in accordance with the 1992 Addenda IWA-2300 requirements.

Based on the information presented, IP3 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.

E. PERIOD FOR WHICH RELIEF IS REQUESTED

Relief is requested for the first ten-year inspection interval, from September 1998 to September 2008, of the Containment Inservice Inspection Program at Indian Point 3 Nuclear Power Plant.

F. ATTACHMENT TO THE RELIEF:

None

**Indian Point 3**
**Third Inservice Inspection Interval**
**Relief Request No. 3-24 (C), Revision 1**

Table 1 – Subsection IWE Comparison

| IWE Para-Graph | 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 | 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.<br><br>Changed wording from "80% of the surface area" to "80% of the pressure retaining boundary" and stated exclusions from that 80%.<br><br>Reworded paragraph b). | 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.<br><br>The exclusions from 80% incorporate an existing Table IWE 2500-1 note and clarify that areas made inaccessible during construction are also excluded.<br><br>Change to b) is for clarity and is nonsignificant. |
| 1232 | ASME XI generic change from repair and/or replacement to repair/replacement activities.<br><br>Deleted paragraph (a)(3) addressing inaccessible welded joints. | Nonsignificant<br><br>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. |
| 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 |
| 2100 | Added new Subarticle 2100 - "General" - to provide reference to IWA-2000 with exceptions from IWA-2210, 2300, 2500 and | The additional general requirements invoked by reference to IWA-2000 where none were referenced previously further assure |

| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| | 2600. | 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. IP3's visual examination requirements are defined in Relief Request RR 3-24, Proposed Alternatives, item 1). |
| 2200 | Deleted paragraph c) which provided allowances for the use of shop or field examinations in lieu of on site preservice examinations.<br><br>Deleted paragraph g) which required the condition of new coating to be documented in the preservice examination record.<br><br>ASME XI generic change from repair and/or replacement to repair/replacement activities. | The deletion of an allowance for an alternative examination ensures that proper preservice examinations are performed and documented.<br><br>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. IP3 coating procedure covers containment coating applications without the need for an additional Code examination.<br><br>Nonsignificant. |
| 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 added are discussed below. Based on the NRC SER for Comanche Peak, IP3 has submitted additional commitments, as detailed in Relief Request RR 3-24. Reference to the applicable additional commitments are identified in the discussion below. |
| 2310 | Added new paragraph 2310 - Visual Examinations - which a) states that the | a) Adding requirements for the owner to define visual examination requirements |

| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| | owner shall define requirements for visual examination of containment surfaces; | 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. IP3's visual examination requirements are defined in Relief Request RR 3-24, Proposed Alternatives, item 1). |
| | b) and c) define general and detailed visual examinations; and | 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 IP3's general visual and detailed visual examinations are defined in Relief Request RR 3-24, Proposed Alternatives, item 1). |
| | d) and e) provides the requirements for the conditions of areas affected by repair/replacement activities, painted or coated areas, and non-coated areas. | 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. IP3's acceptance criteria for general and detailed visual examination further define the examination criteria to be used. The IP3 acceptance criteria are defined in Relief Request RR 3-24, Proposed Alternatives, item 3). |
| 2320 | Added new paragraph 2320 - "Responsible Individual" - which a) states the qualification requirements of the Responsible Individual and | a) The details for the Responsible Individual qualification requirements were previously contained in the acceptance standards of IWE-3510.1. |
| | 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 | 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) |

| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| | visual examinations; evaluation of results and documenting results. | performing the responsibilities defined in paragraph 2320 b) ensures the reliable detection of conditions adverse to containment integrity. |
| 2330 | 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<br><br>b) provides minimum qualification requirements that were previously contained in the acceptance criteria of IWE-3510.1. | 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. IP3's personnel qualification requirements are defined in Relief Request RR 3-24, Proposed Alternatives, item 1).<br><br>b) Providing these details in the qualification requirement paragraph focuses the containment visual qualification on areas important to containment integrity. IP3's personnel qualification and examination provisions that supplement the Code requirements are defined in Relief Request RR 3-24, 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 | 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 |

| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| | | 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. |
| | Changed (c) to require that areas which remain essentially unchanged for the next inspection period no loner require augmented examinations. The 1992 Addenda required three consecutive examinations to reach this conclusion. | 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. |
| 2430 | 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. | 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. |
| 2500 | Reworded the existing subparagraphs consistent with the previous paragraph changes and with Table IWE-2500-1 changes. | The reworded subparagraphs add clarity and provide consistency within IWE. |
| | Deleted the requirement to examine paint or coatings prior to removal. | 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 IP3 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. |

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| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| | Replaced the requirement for one-foot square grids in thickness measurements with a reference to Table IWE 2500-2.<br><br>Added a reference to IWE-5000 for pressure tests. | The new Table IWE 2500-2 provides more detailed requirements for thickness measurements and is discussed below.<br><br>The added reference to IWE-5000 provides direction for the performance of pressure tests. |
| 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 integrity. The compatibility of paint and coating systems with the existing system, and the examination of newly applied coatings, is addressed in the IP3 containment coating specification and procedures |
| 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 has been deleted and is 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 |
| | | |

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| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| 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 repair/replacement activities. Reworded several sentences. Deleted sentence which addressed evaluations being subject to review by authorities. | 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. |
| 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 | Reconciled acceptance standards with the IWE-2300 changes discussed above and the Table IWE-2500-1 changes discussed below by:<br><br>Adding the requirement that the owner shall define acceptance criteria for visual | 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.<br><br>This change directly corresponds to the addition of IWE-2310(a) discussed above. |

| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| | examination of containment surfaces; | IP3's visual examination acceptance criteria are defined in Relief Request RR 3-24, Proposed Alternatives, item 3). |
| | Removing the wording for Responsible Individual and for personnel qualifications; | This change directly corresponds to the addition of IWE-2320 discussed above. |
| | Combining 3510.2 and 3510.3 and removing specific VT-1 and VT-3 examination attribute wording; and | These changes directly correspond to the addition of IWE-2310(e)(1) and (2) discussed above. |
| | Incorporating IWE-3511;3513,3514 and 3515 with changes into IWE-3510. | 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. |
| | 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. | The resulting acceptance standards for bolting provide for more practical containment ISI program implementation without adversely affecting containment leak tight or structural integrity. |
| 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 | Renumbered subparagraph to IWE-3511. Reconciled acceptance standards with the IWE-2300 changes discussed above and the Table IWE-2500-1 changes discussed below | 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. |
| | Added the requirement that the owner shall define acceptance criteria for visual examination of containment surfaces; | This change directly corresponds to the addition of IWE-2310(a) discussed above. IP3's visual examination acceptance criteria are defined in Relief Request RR 3-24, Proposed Alternatives, item 3). |
| | Combined 3512.2 and 3512.3 with changes into 3511.2 and removed specific VT-1 examination attribute wording; and | These changes directly correspond to the addition of IWE-2310(e)(1) and (2) discussed above and eliminate potential duplication or contradiction of requirements. |
| | | This change eliminates the need to perform |

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| IWE Para-Graph | 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. | the UT examinations on metallic liners of Class CC components. IP3 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 RR 3-24, Proposed Alternatives, item 3). |
| 3513<br>3514<br>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 | IP3's relief request does not include using the 1998 Edition of IWA-4000. IP3 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 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 |
| | | |

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| IWE Para-Graph | 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 2411-1 | No change | N/A |
| Table 2412-1 | Replaced the separate entries for 1st and successive intervals with one entry for All intervals.<br><br>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. | Nonsignificant - The previous requirements for the 1st and successive intervals were identical. Therefore combining the entries does not affect any requirements.<br><br>Provides more flexibility in scheduling examinations, but ensures allocation of examinations is done throughout the 10-year interval. The IWE change is consistent with changes made in IWB, IWC, IWD, and IWF. |
| Table 2500-1 Cat. E-A | E1.11 Revised frequency of examination from "prior to each type A test" to "100% during each period".<br><br>E1.12 Re-designated item from "accessible surface areas" to "wetted surfaces of submerged areas". Replaced examination method VT-3 with general visual. | 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.<br><br>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 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. |

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| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| | E1.20 Added BWR to item description. Replaced examination method VT-3 with general visual. | This item is not applicable to the IP3 containment. |
| | E1.30 Added item for moisture barriers with a general visual required each period. | 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. |
| | All item no.'s - Replaced reference to IWE-3510 for examination requirements with IWE-2310. | Nonsignificant - Previously some examination requirements were contained in IWE-3500. They now exist in IWE-2300 as discussed above. |
| | Notes - Revised to specifically include welds and bolting as part of the pressure retaining boundary requiring examination. | 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. |
| 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 | E4.11 Replaced examination method VT-1 with detailed visual. | 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. |
| | E4.12 Added grid line intersections to description of parts examined. Changed examination method from volumetric to ultrasonic thickness. | The added wording clarifies inspection requirements and ensures repeatability in the location of subsequent thickness measurement points. |
| | All item no.'s - Added examination requirement paragraph number references. | Previously no references existed for examination requirements. These |

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| IWE Para-Graph | Changes between IWE 1992 Ed. w/'92 Ad. and IWE 1998 Ed. | Significance of change and/or basis for use as an alternative examination |
|---|---|---|
| | Updated references in Acceptance Standard and Extent and Frequency columns.<br><br>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. | 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.<br><br>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. |
| 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 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. |

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| IWE Para-Graph | 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 IWE-3410-1 | Deleted table. | Nonsignificant - the contents of the previous table are adequately addressed in IWE-3500. |

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## A. COMPONENT IDENTIFICATION

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

## B. CODE REQUIREMENTS

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

Relief is requested from the requirements of the 1992 Edition, including 1992 Addenda of the ASME Section XI, Subsection IWL. Pursuant to 10CFR50.55a(a)(3)(i) relief is requested on the basis that the proposed alternative would provide an acceptable level of quality and safety.

## C. PROPOSED ALTERNATIVE PROVISIONS

IP3 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, in lieu of the requirements of Section XI 1992 Edition, 1992 Addenda, Subsection IWL:

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 IP3 Containment ISI Program as well as personnel qualification requirements:

   a) General visual examinations will be performed by Engineering personnel knowledgeable in the requirements for design, inservice inspection, and/or testing of Class CC components. These personnel will be required to attend a Section XI Containment Inspection training class and pass an eye vision test examination as determined by the Responsible Engineer.

   b) Detailed visual examinations will be performed by personnel meeting the applicable requirements of IWA-2300 of the 1989 Edition, no Addenda, for a period of up to December 31, 2001, in accordance with SNT-TC-1A, 1984 Edition. Beginning January 1, 2002, the qualification program for personnel performing the detailed visual examinations will meet the applicable requirements of IWA-2300 of the 1992 Addenda, in accordance with CP-189, 1991 Edition.

c) Applicable IP3 Containment Inspection program documents and/or procedures will be developed to include the aforementioned qualification requirements.

d) Performance requirements for general and detailed visual examinations will be included in the applicable examination documents/procedures. The following methodology will be used for the demonstration:

i. The demonstration will include artificial and natural lighting. The general and detailed visual examination parameters will be verified (using a commercial light meter) as meeting the illumination requirements of Section XI, 1992 Addenda, Table IWA-2210-1 for VT-3 (general visual) and VT-1 (detailed visual) respectively. Both industrial halogen flashlights and halogen spotlights will be used.

ii. Direct general visual examination, the demonstration will determine the distance that could resolve the character height requirement of Section XI, 1992 Addenda, Table IWA-2210-1 for VT-3.

iii. Direct detailed visual examination will be demonstrated to meet the character height and distance requirements of Section XI, 1992 Addenda, Table IWA-2210-1 for VT-1.

iv. Remote visual examination will be demonstrated using commercial binoculars, spotting scope, and power zoom camera systems. The remote visual demonstration will be conducted both in artificial and natural lighting.

v. Remote general visual will demonstrate to resolve the character height for the VT-3 line of Table IWA-2210-1, at distances typical of the actual maximum remote examinations to be performed at the plant.

vi. Remote detailed visual will demonstrate to resolve the character height for the VT-1 line of Table IWA-2210-1.

vii. Demonstrations will be performed by qualified personnel and demonstrated to the Authorized Nuclear Inservice Inspector.

e) An alternate method may be used in future demonstrations which will prescribe the use of a "general visual reference standard, such as using the 18% neutral gray card in lieu of the character height standard". The alternate method, if used, will be demonstrated to meet the resolution requirement sufficient to detect defects or deterioration which may be identified during a general visual examination. The use of the reference standard complies with the provisions included in 10 CFR 50.55a(b)(2)(ix)(B). This "general visual reference standard" may also be used in future containment examination as applicable.

f) 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. IP3 will perform detailed visual examinations of suspect areas addressed in Category L-A, Item L1.12, in Table IWL-2500-1.

3) IWL-2410: IWL-2410 allows for deferral of concrete visual exams to the next scheduled plant outage for portions of the concrete surface which cannot be examined within the IWL-2410 stated time frames. IP3 understands that it is not the intent of Section XI to allow this deferral to be utilized such that the visual examination could be credited to two different ten year intervals. If such a deferral was necessary, the visual examination would only be credited to the interval in effect at the time the deferral was necessary.

## D. 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. However, in the RAI for Comanche Peak's Relief Request, the NRC staff identified two changes between the 1992 Edition with 1992 Addenda and the 1998 Edition of Subsection IWL which were unacceptable, and for which additional Comanche Peak information was provided. 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. In a later request for relief submitted by the Wolf Creek Generating Station, the NRC identified two additional issues which were addressed by the utility and the request for relief was granted (Reference SER to TAC No. MA8393).

The IP3 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) and additional commitments as related to specific subsections described under the Proposed Alternative Provisions section. These additional commitments addressed all of the issues raised by the NRC on the Comanche Peak and Wolf Creek relief requests. 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.

The 1992 Edition, 1992 Addenda of IWA-2300 requires the use of a written practice prepared in accordance with ANSI/ASNT CP-189 for the qualification and certification of containment nondestructive examination personnel. All other IP3 NDE and ISI activities, including those performed on the reactor vessel, will be performed by personnel qualified and certified to written practices prepared in accordance with the 1984 Edition of SNT-TC-1A as required by ASME XI 1989 Edition, No Addenda, which is the Code of record for the 3$^{rd}$ 10-Year Interval for the Class 1, 2, & 3 components at IP3. However, as required by a recent 10CFR50.55a amendment, personnel certification shall meet CP-189, 1991 edition requirements. A separate Relief Request RR 3-8 has also been submitted seeking relief through December 31, 2001 as well. Utilizing the '92 Edition of IWA-2300 at this time would require the development of a separate written practice based on CP-189 requirements and the issuance and tracking of separate certifications for both IP3 and contractor personnel. A detailed comparison of the difference between SNT-TC-1A, 1984 edition and CP-189, 1991 edition was submitted as part of Relief Request RR 3-8, and demonstrated that the differences are mainly administrative in nature. As such, the administration of the resulting dual programs at this time would place an unnecessary burden and hardship on the finite resources available before the next Refueling Outage, without a compensating increase in the level of quality and safety.

Accordingly, the IP3 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 SERs for Comanche Peak and Wolf Creek Stations; and 2) the applicable requirements of 10 CFR 50.55a(b)(2)(viii); and 3) Qualification for NDE personnel shall follow the 1989 Edition of IWA-2300 requirements through December 31, 2001; after which date it shall be in accordance with the 1992 Addenda IWA-2300 requirements.

Based on the information presented, IP3 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.

## E. PERIOD FOR WHICH RELIEF IS REQUESTED

Relief is requested for the first ten-year inspection interval, from September 1998 to September 2008, of the Subsection IWL Containment Inservice Inspection Program for IP3.

## F. ATTACHMENT TO THE RELIEF:

None

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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 |
|---|---|---|
| 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 | Changed "Inspection" to "General" in heading.<br><br>Provided reference to IWA-2000 with exceptions from IWA-2210 and 2300 for visual examinations and for qualification of visual examination personnel. | Nonsignificant<br><br>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. IP3 visual examination requirements are defined in Relief Request RR 3-25, Proposed Alternatives, item 1). |
| 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 | Nonsignificant |

| 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 |
|---|---|---|
| | repair/replacement activities. | |
| 2300 | No change | 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 1992 Edition. The specific changes to IWL-2310 and IWL-2320 will be discussed below. Based on the NRC SER for Comanche Peak, IP3 has submitted additional commitments, as detailed in Relief Request RR 3-25. Reference to the applicable additional commitments is identified in the discussion below. |
| 2310 | The changes to IWL-2310 are summarized by the following four items:<br><br>(a) replaced VT-1C and VT-3C visual examination terminology with new general visual and detailed visual examination terms. | (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 IP3's general visual and detailed visual examinations are defined in Relief Request RR 3-25, |

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| 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 |
|---|---|---|
| | | Proposed Alternatives, item 1). |
| | (b) Eliminated reference to IWA-2210 for illumination levels, examination distances and resolution requirements. | (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 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. IP3's visual examination requirements addressing illumination, examination distances, and resolution requirements are defined in Relief Request RR 3-24, Proposed Alternatives, item 1). |
| | (c) Replaced reference to IWA-2300 for concrete examination personnel qualification requirements with provisions for the owner to define the examination personnel qualification requirements. | (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. IP3's personnel qualification requirements are defined in Relief Request RR 3-25, Proposed Alternatives, Item 1). |
| | (d) Added requirement for the Owner to define requirements for visual examination of tendon anchorage hardware, wires, or stands. | (d) Does not apply to IP3 Containment. |
| 2320 | Changed wording slightly.<br><br>Made the ASME Section XI generic change from repair and/or | Nonsignificant - clarifies wording<br><br>Nonsignificant |

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| 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 |
|---|---|---|
| | replacement to repair/replacement activities.<br><br>Added a responsibility for the Responsible Engineer to review certain pressure test procedures. | The added pressure test responsibilities for the Responsible Engineer ensures proper performance of pressure testing activities. |
| 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 | Changed heading.<br><br>Changed wording consistent with the changes to IWL-2310 addressed above.<br><br>In (a), eliminated the reference to the specific revision (R-68) of ACI 201.1.<br><br>Added two new subparagraphs (b) and (c) providing more detailed examination requirements for tendon anchorage areas. | Nonsignificant<br><br>Nonsignificant<br><br>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.<br><br>The added details ensure proper tendon anchorage area examinations. The addition of (c) is consistent with the rule in 10 CFR 50. |
| 2520 | No change | N/A |
| 2521 | Changed random sample wording in (a) | Nonsignificant - the random sample was always by type of tendon as |

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| 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 |
|---|---|---|
| | | 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 end cap deformation as acceptance criteria attributes.<br><br>ASME Section XI generic change from repair and/or replacement to | Does not apply to IP3 Containment.<br><br>Nonsignificant. |

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| 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 |
|---|---|---|
| | repair/replacement activities. | |
| 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 pre-stress loss prediction, tendon elongation, free water content and corrosion protection medium reduction. | Does not apply to IP3 Containment. |
| 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 | Added applicability for other plants at the same site.<br>ASME Section XI generic change from repair and/or replacement to repair/replacement activities. | Nonsignificant<br><br>Nonsignificant |
| 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 changes from repair and/or replacement to repair/replacement activities. | Nonsignificant - all related repair and replacement requirements have been consolidated into IWL-4000. |
| 4100 | No change | N/A |
| 4110 | Exempted grease cups and installation screws from the scope.<br><br>ASME Section XI generic change from repair and/or replacement to | Nonsignificant - the exempted items are non structural items.<br><br>Nonsignificant |

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| 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 |
|---|---|---|
| | repair/replacement activities. | |
| 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 - IP3's relief request does not include using the 1998 Edition of IWA-4000. WCNOC 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. |
| 4200 | ASME XI generic change from repair and/or replacement to repair/replacement activities.<br><br>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<br><br>Nonsignificant |
| 4210 | 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.<br><br>Changed wording consistent with the changes to IWL-2310 addressed above.<br><br>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.<br><br>Changed repair material to new material in several places. | Nonsignificant<br><br>Nonsignificant<br><br>Nonsignificant<br><br>Nonsignificant |
| 4220 | Changed paragraph number to 4230. | Nonsignificant |
| 4230 | Changed paragraph number to 4240 and clarified by removing the word | Nonsignificant |

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| 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 |
|---|---|---|
| | repair.<br><br>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.<br><br>Added detailed requirements for the contents of a repair/replacement plan. | Nonsignificant<br><br>Does not apply to Ip3 Containment. |
| 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.<br><br>ASME Section XI generic change from repair and/or replacement to repair/replacement activities.<br><br>Changed visual examination terminology consistent with the changes to IWL-2310 addressed | The clarified role of the Responsible Engineer ensures proper pressure test procedures and examinations.<br><br>Nonsignificant<br><br>The visual examination terminology changes are discussed in IWL-2310 above. |

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| 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 |
|---|---|---|
| | above. | |
| 5260 | Changed heading from Corrective Measures to Corrective Action.<br><br>ASME Section XI generic change from repair and/or replacement to repair/replacement activities. | Nonsignificant<br><br>Nonsignificant |
| 5300 | ASME Section XI generic change from repair and/or replacement to repair/replacement activities. | Nonsignificant |
| 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. |
| Table 2500-1 | Changed item L1.11 from all areas to all accessible areas.<br><br>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". | Changing item L1.11 provides for more practical examination implementation than previous requirements.<br><br>The visual examination terminology changes are discussed in IWL-2310 above. As stated in IP3's Relief Request RR 3-25, Proposed Alternatives, item 2), IP3 will implement item L1.12 examinations using a detailed visual examination as intended by Section XI. |
| 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. |
| Table 2525-1 | Added optional test methods for corrosion protection medium analysis.<br><br>Added acceptance criteria for water content. | Nonsignificant - additional test method options provides for more practical test implementation.<br><br>Previous acceptance criteria was noted as "in course of preparation." Providing the acceptance criteria assures consistent implementation. |

# Indian Point 3
# Third Inservice Inspection Interval
# Relief Request No. 3-26 (I), Revision 2

## A. ARTICLE IDENTIFICATION:

Class: All
Identification of System: All

## B. CODE REQUIREMENTS:

Article IWA-4000, IWA-4400 and IWA-7000 welding and brazing procedure qualification requirements.

All welding shall be performed in accordance with Welding Procedures Specifications that has been qualified by the Owner or repair organization in accordance with the requirements of the codes specified in the Repair Program in accordance with IWA-4120.

## C. RELIEF REQUESTED:

Pursuant to 10CFR50.55a(a)(3)(i) relief is requested on the basis that the proposed alternative would provide an acceptable level of quality and safety. Relief is requested from the requirements of ASME Section XI, Article IWA-4000, IWA-4400 and IWA-7000.

## D. BASIS FOR RELIEF:

The basis for this relief is to implement ASME Code Case N-573, which eliminates the redundancy currently required by the Code for each organization to independently qualify all welding procedures even though they have met the qualification process at another facility. ASME XI Code Case N-573 recognizes and addresses this fact and proposes an alternative, which maintains an acceptable level of quality and safety.

## E. ALTERNATIVE EXAMINATIONS OR TESTS:

The following alternative testing requirements as outlined in ASME Section XI Code Case N-573, Transfer of Procedure Qualification Records (PQR) between Owners, Section XI, Division 1, will be implemented. Specifically,

a. The Owner that performed the procedure qualification test shall certify, by signing the PQR, that testing was performed in accordance with Section IX.

b. The Owner that performed the procedure qualification test shall certify, in writing, that the procedure qualification was conducted in accordance with a Quality Assurance Program that satisfies the requirements of IWA-1400.

c. The Owner accepting the completed PQR shall accept responsibility for obtaining any additional supporting information needed for WPS development.

d. The Owner accepting the completed PQR shall document, on each resulting WPS, the parameters applicable to welding. Each WPS shall be supported by all necessary PQR's.

e. The Owner accepting the completed PQR shall accept responsibility for the PQR. Acceptance shall be documented by the Owner's approval of each WPS that references the PQR.

f. The Owner accepting the completed PQR shall demonstrated technical competence in application of the received PQR by completing a performance qualification test using the parameters of a resulting WPS.

g. The Owner may accept and use a PQR only when it is received directly from the Owner that certified the PQR.

h. Use of this Case shall be shown on the NIS-2 form documenting welding or brazing.

## F. JUSTIFICATION FOR REQUESTING RELIEF:

The proposed alternative would provide an acceptable level of quality and safety as allowed by 10CFR50.55(a)(3)(ii) and the justification provided in Section E of this relief request.

A similar relief request has been approved by the NRC for Entergy's JAFNPP by SER dated 11/25/98 (TAC No. MA0711).

## G. IMPLEMENTATION SCHEDULE:

The Alternate Testing requirements of ASME Code Case N-573 will be incorporated into the IP3 Inservice Inspection Program for the 3rd Ten-Year Interval, July 21, 2000 thru July 20, 2009.

## H. ATTACHMENTS TO THE RELIEF:

ASME Code Case N-573, Transfer of Procedure Qualification Records Between Owners, Section XI, Division 1 Pressure Test of Containment Penetration Piping, Section XI, Division 1.